Historically, deploying biometric matching servers in a new or existing application using complicated SDKs can be challenging and expensive—particularly for small to midsize projects. Unfamiliar technology, complicated development tools, expensive licensing schemes, and lack of vendor software development support is the norm. Industry research demonstrates that projects undertaken by skilled developers using low level development tools can take months to implement instead of days or weeks.

FbF bioServer takes the complexity and high cost out of implementing biometric identification in any sized project.

FbF bioServer has been built from the ground up to be a powerful multi-biometric identity matching engine. Leveraging the performance and versatility of Microsoft’s Windows Embedded 7, the entire FbF bioServer installation process is seamlessly incorporated into a complete OS installation. There are no configuration steps, no administrative headaches! FbF bioServer simply enables the easiest biometric server deployment process possible, hands down. FbF bioServer is ideal for:

- Small, large and nation-scale deployments
- Mobile, desktop and web-based applications
- AFIS or ABIS implementations
- Premise-based or hosted service
FbF® bioServer
A True Multi-Biometric Matching Engine

FbF bioServer can be delivered as a full operating system (OS) installation that you can run on your own hardware or as a turnkey appliance. It is complemented by a suite of off-the-shelf FbF modules used for developing web-based biometric applications.

In order to ensure maximum system compatibility with external applications, the FbF bioServer supports numerous industry standards including NIST Finger Image Quality (NFIQ), Wavelet Scalar Quantization (WSQ) image compression, and template import/export to US and International standards-based templates.

FbF bioServer Classes

Lite Class - The FbF bioServer Lite Class is designed for small, single server systems supporting a single biometric modality. Developers can choose between finger and face identification as the default options. Iris identification may be selected as an upgrade feature. FbF bioServer Lite is perfect for applications with less than 10,000 enrolled records.

Standard Class - FbF bioServer Standard Class supports deployment of a client/server based multi-biometric, iris-face-finger identification applications on a single server (with or without redundancy). This solution is suitable for network-based and web-based systems with database size ranging from several thousand records to 100’s of thousands of records.

Extended Class - FbF bioServer Extended Class supports the deployment of large-scale, network-based AFIS or multiple biometric identification applications. The fault-tolerant, scalable cluster software allows integrators to achieve fast parallel matching, process high numbers of identification requests, and handle databases with practically unlimited size. The Extended Class includes software for deploying a clustered server model with one or more cluster servers and up to hundreds of cluster nodes. The Extended Class is designed for systems with up to a few million records.

Accelerated Class - The FbF bioServer Accelerated Class is the next step beyond the Extended Class. All features of the Extended Class are supported with the addition of custom hardware accelerators designed to provide scalability beyond 10 million records and to provide rapid responses in high throughput 1:N identification systems.

Supported Template Formats

- Neurotechnology
  - VeriFinger
  - VeriLook
  - VeriEye
  - MegaMatcher
- ISO/IEC
  - 19794-2
  - 19794-4
- ANSI/INC ITS
  - 381-2004
  - 385-2004
- ANSI/NIST
  - ITL-1-2000

Specifications

- Can be deployed on most desktop & higher class machines
- Intel® Pentium® IV, 2GHz or faster processor (or equivalent)
- 2GB of RAM or higher
- Microsoft SQL Server 2008 R2 or higher

Optional System Components

- FbF mobileOne fingerprint accessory for iPhone, iPod touch and iPad devices
- FbF Live Scan
- FbF Demographica
- Face Recognition Camera
- Eye/Iris Recognition Camera
- USB Single/Dual Fingerprint Scanner

Founded in 2002, Fulcrum Biometrics is a leading provider, distributor and integrator of biometric identification technologies and devices for commercial, civil and military customers in more than 88 countries worldwide. Fulcrum’s offerings include industry-leading biometric software development tools, fingerprint scanners and other biometric sensors as well as custom software development for multiple platforms, custom integration and implementation of identity management applications and access control systems. Fulcrum is the developer of the Fulcrum Biometric Framework (FbF®), a rapid biometric application deployment suite which includes the FbF bioServer, FbF Silverlight Library, FbF Listener, FbF mobileOne and the FbF mobileOne iOS Library.

Fulcrum Biometrics, LLC (USA)
1862 W. Bitters Road #100
San Antonio, TX 78248
Office: +1-800-430-4601
Intl: +1-210-348-3687
Fax: +1-210-348-3691
Email: sales@fulcrumbiometrics.com

Fulcrum Biometrics Pvt. Ltd. (India)
729, Udyog Vihar - Phase - V
Gurgaon - Haryana, INDIA 122016
Office: +91-124-3305990/1
Fax: +91-124-3305994
Email: indiasales@fulcrumbiometrics.co.in