

# FbF<sup>®</sup> bioServer 2.0



A true biometric server appliance

The FbF bioServer reduces the complexity and cost of implementing biometric identification in your project - expediting time to market.

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, nation-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.

## Biometric Appliance

FbF bioServer 2.0 is delivered as a turnkey appliance or alternatively as a full operating system (OS) installation. 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 templates.

Whether physically deployed at each location or centrally managed in a hosted environment, the FbF bioServer offers the greatest flexibility, speed of deployment, and ease of use of any biometric system currently available.

## Key Features

- Ability to segment out groups
- No need to interfere or integrate with existing databases
- Windows Embedded 7 Server
- SQL Server 2008 R2 Database Engine
- Easily scales from thousands to millions of people
- Standard Web Service Interface
- Advanced WCF Service Interface
- FbF Messaging Architecture
- Supports Clustering (Extended and Accelerated Class only)



## FbF bioServer Classes

The FbF bioServer comes in a variety of classes designed to meet your application needs no matter what size your organization may be.

### • Lite Class

FbF bioServer Lite Class is designed for small, single server systems supporting a single biometric modality. Developers can choose between finger or 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 application 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 several hundred thousand 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

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.

\*Note: Although optimized for Fulcrum provided hardware, the FbF bioServer can be deployed on most desktop and higher class machines. At installation of the operating system, SQL 2008 R2 database engine, IIS 7, and FbF bioServer application, services are installed and automatically configured to instantly handle biometric requests (no manual configuration required).

## Supported Template Formats

### Neurotechnology

- VeriFinger
- VeriLook
- MegaMatcher

### ANSI/INC ITS

- 381-2004
- 385-2004
- 378-2004

### ISO/IEC

- 19794-2
- 19794-4
- 19794-5

### ANSI/NIST

- ITL-1-2000

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