



Feature Sheet

SOFTWARE DEVELOPERS' KIT

The Acsys FRS Software Developers' Kit (SDK) contains face finding and face recognition technologies designed for use in one-to-one verification scenarios, such as access control or time and attendance, and one-to-many identification scenarios, such as identification of faces in a crowd.

Based on Distributed Component Object Model (DCOM) technology, Acsys FRS technology can track up to 16 people simultaneously in real time at 30 FPS (frames per second), recognize faces, and provide multimedia display and feedback (using both video and static images). It can be implemented in a stand-alone configuration, or within 3-tier architectures (FRS client/FRS server/central database). The SDK 2.2 release operates with both LAN and Web connectivity. The SDK Web service component, for fully Web-deployable solutions, has recently been released. Our SDK currently supports up to 4000 FRS client installations and over 1 million enrolled users.

Advanced utilities provide automated and/or manual synchronization of clients with the central database. Client machines can perform all functions (face tracking, verification, identification and enrollment) while disconnected from the FRS server and central database. Data synchronization occurs automatically upon reconnection of the client to the FRS network. Compatibility with Windows CE provides support for portable and mobile biometric solutions.

All technology is encapsulated as DCOM modules operating from a standard ATL interface for compatibility with Microsoft Visual C++, Microsoft Visual Basic and most other Windows application development environments.

SDK Components

The Acsys FRS API® SDK includes:

- **Acsys Multimedia Control:** DCOM support for image display/overlay using the latest DirectX 8.1 drivers and import of static images in most standard formats.
- **Acsys Enrollment Control:** enroll a person from video or static images (JPEG, BMP, etc.) and create a database of facial biometric templates for later use in verification (one-to-one authentication). The system allows the user to store enrolled images for later retrieval.
- **Acsys Verification Control:** finds faces within video input or static images (JPEG, BMP, etc.), and verifies them against a database of facial biometric templates.
- **Acsys Classification Control:** finds faces within video input or static images (JPEG, BMP, etc.), and generates a list of closest matches against a database of facial biometric templates. The



classification operation (one-to-many identification) is performed against 25,000 individuals/second.

- **Acsys Tracking Control:** finds and tracks faces within video input, and tracks up to 16 individuals simultaneously at a full 30 FPS. Provides pan/zoom/tilt control for autoscanning systems, tracking intruders, etc.
- **Acsys Database Control:** provides all interfaces necessary to add, delete, and retrieve biometric templates, images and users from the central database. Provides the ability to import/export users and related information between separate installations of the FRS system.
- **Acsys Communication Control:** provides support for LAN, WAN or Web-based communication between FRS server and central database server and up to 4000 FRS clients.
- **Demo Applications:** sample enrollment, verification and classification application source code written in Visual C++.

System Requirements

- Microsoft Windows NT/2000/XP Server edition
- Develop with either Microsoft Visual C++ 6.0 or higher, or Microsoft Visual Basic 5.0 or higher
- 3.2 GHz Intel Pentium4 DUAL compatible processor or higher
- 512 MB RAM minimum
- 20 GB free disk space
- Video for Windows (VFW) compatible capture system

