

# Gemalto Cogent Live Face Identification System (LFIS)



## Product Description

Gemalto Cogent Live Face Identification System (LFIS) includes 2 major components—Core LFIS and LFIS Check SDK (Software Development Kit). Core LFIS provides video based face recognition designed to recognize faces in a crowd in real-time or post-event and searched against a built-in person of interest list. LFIS Check SDK is a robust software development kit that allows developers to create applications that use face as a biometric identifier. The SDK comes with a demonstration application that shows how the SDK can be integrated with a Gemalto document reader to match live faces with faces from documents.

LFIS has been designed to be scalable and is built on top of a configuration of stable technologies.

Traditionally, large scale distributed biometric systems require highly experienced product specialists to configure. LFIS has a convenient configuration system and a rich set of RESTful (representational state transfer) web services that allow customers to extend functionality as required.

Gemalto provides the licenses to run LFIS and you are free to use your own LFIS compliant cameras on-premises and behind your firewalls to create a solution that is tailored to your specific end customer needs.

## LFIS Licensing Options

Gemalto's flexible licensing options allow you to purchase Core LFIS, LFIS Check SDK or both of these components. There are also a number of licensing options for both of these products that are designed to allow you to select the capacity and features so best suit a specific deployment. Speak to your Gemalto sales contact for further information.

## Core LFIS Features

### OPERATIONS GUI

The Operations GUI (Graphical User Interface) is a built-in password-protected, web-based user interface accessible via a web browser. The following table highlights some of the key features that can be accessed via the Operations GUI screens.

#### FEATURES

- > Inspect all attached cameras within the network through live feeds and receive real-time information about persons of interest as well as those who are not known to the system.
- > See recent encounter information
- > Where video clipping has been set within the configurations - watch video clips of encounters
- > View faces detected by the system ordered by date and time
- > View dynamically generated reports on historical results
- > Filter historical results according to matching confidence
- > Inspect consolidated list of all faces detected by the system
- > Drill down into particular encounters to find more specific associated information
- > Export historical data from customised date ranges
- > Text search for names of identities within the list of persons of interest
- > Add or remove identities from the list of persons of interest, add or remove photos and move identities from watch list to another
- > Bulk import appropriately configured data from external sources automatically using the import tool
- > View all encounters of a person of interest since the time that they were added to a watch list
- > Search historic encounters using images collected from external sources
- > Search watch list using images & video collected from external sources
- > Conveniently launch multiple searches in parallel
- > Monitor search progress
- > View interim search results

*Note: LFIS supports a face image resolution down to 24 pixels between the eyes, but recommends using images with at least 48 pixels between the eyes for best performance*

## MANAGEMENT GUI

The Management GUI is a built-in password-protected, web-based administrative interface accessible via a web browser. The following table highlights some of the key features that can be accessed via the Management GUI's screens.

### FEATURES

- > View live system summary statistics – overall running status, number of running services, cameras configured, persons of interest list statistics, average extraction time, average tracking time, average record saving time, average identification time, up time, number of hits, number of searches, number of faces qualified, number of faces detected, frames tracked and frames processed
- > Product key management
- > Summary information to show product features enabled through current product key
- > Automatic rebalancing of Core LFIS processes to make use of available servers
- > Add new servers to Core LFIS network (servers must have agent software installed)
- > Remove servers from Core LFIS network
- > View server utilization information
- > View current configuration information – which processes running on which servers
- > Manage product license
- > Reconfigure the system – simple and advanced configurations can be accessed by authorised users through the user interface for those who wish to experiment and optimise system
- > Change various thresholds (including matching thresholds)
- > Change business rules associated with video clip capture
- > Experiment with algorithm settings
- > Automated IP camera discovery for ONVIF compliant cameras available to Core LFIS servers
- > Add new cameras using manual RTSP address
- > Create convenience virtual cameras to aid software development using supported video file(s) and/or supported local USB camera
- > Remove or disable cameras
- > Add meta data to cameras such as camera name
- > View list of all configured cameras
- > Provision and deprovision role-based user accounts
- > View audit logs
- > Search audit logs

## DEVELOPER MICROSITE

The Developer Microsite can be accessed via a web-based interface. It is designed to help developers who wish to make use of the powerful and rich set of Core LFIS RESTful web services. Developers can also find help if they are planning on connecting to the notifications web socket. These resources are accessible via the web browser on machines that have the permissions required to connect to your instance of Core LFIS. The following table highlights some of the key features that can be accessed via the Developer Microsite.

### FEATURES

- > Technical description of web services
- > View list of operations
- > View interface technical details
- > Graphical interface that can be used to interact with web services
- > Main groups of functionality available via RESTful web service: authentication, system configuration, face matching, database data access, file access and history access
- > API summary for developers
- > Online working example for LFIS model creation (includes sample code)
- > Online working example for matching (includes sample code)
- > Online working example for searching (includes sample code)
- > Online working example for alert subscription web socket (including sample code)
- > Download for sample Android application that uses Core LFIS web services

## LFIS Check SDK Features

### DEMONSTRATION APPLICATION AND SAMPLES

LFIS Check SDK includes a demonstration application that shows the kind of application that could be built with LFIS Check SDK. The demonstration application uses a Gemalto document readers to match live faces with faces from documents for 1:1 or 1:1:1 verification. The LFIS Check SDK also includes simple sample code.

### .NET LIBRARIES

LFIS Face Matching	Provides functions to carry out matches between 1 face model and another face model using Gemalto's matching library. This library lets you know if the faces in the 2 models are likely to be the same person.
LFIS Face Tracking	Provides functions to simplify the face capture process using a local web cam. This library has been designed to help developers create an auto-capture capability.
LFIS Agent	Provides functions to connect to an available Core LFIS instance. This library can send a model of an applicant to a Core LFIS instance for searching against the Core LFIS persons of interest list.

#### Important Notice

All statements, technical information and recommendations contained herein are based on tests we believe to be reliable as of the date of this publication, but the accuracy or completeness thereof is not guaranteed, and the following is made in lieu of all warranties, or conditions express or implied. Seller's and manufacturer's only obligation shall be to replace such quantity of the product proved to be defective. Neither seller nor manufacturer shall be liable for any injury, loss or damage, direct, special or consequential, arising out of the use of or the inability to use the product. Before using, user shall determine the suitability of the product for his/her intended use, and user assumes all risk and liability whatsoever in connection therewith. Statements or recommendations not contained herein shall have no force or effect unless in an agreement signed by officers of seller and manufacturer.