VU Face Recogn®

▶ What is it?

It is the first biometric platform oriented to the massive implementation of facial authentication. It analyzes landmarks, key points in the person's face and the distance between them to recognize the individual.

▶ Benefits

It identifies movements or actions, like a wink or a smile, to validate the identity.

It is multiplatform and can be integrated with Microsoft and Cisco systems
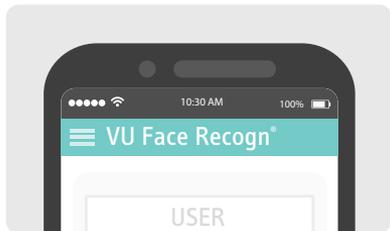
It prevents identity theft.

It can be deployed in the background, without disturbing the user.

▶ Differentials

VU Face Recogn®

USER

▶ It works with VU Application Server as identity manager to authenticate the user's identity automatically and inadvertently.

▶ It allows to compare a selfie against an ID and evaluates the video captures by cameras in real time, avoiding falsifications.

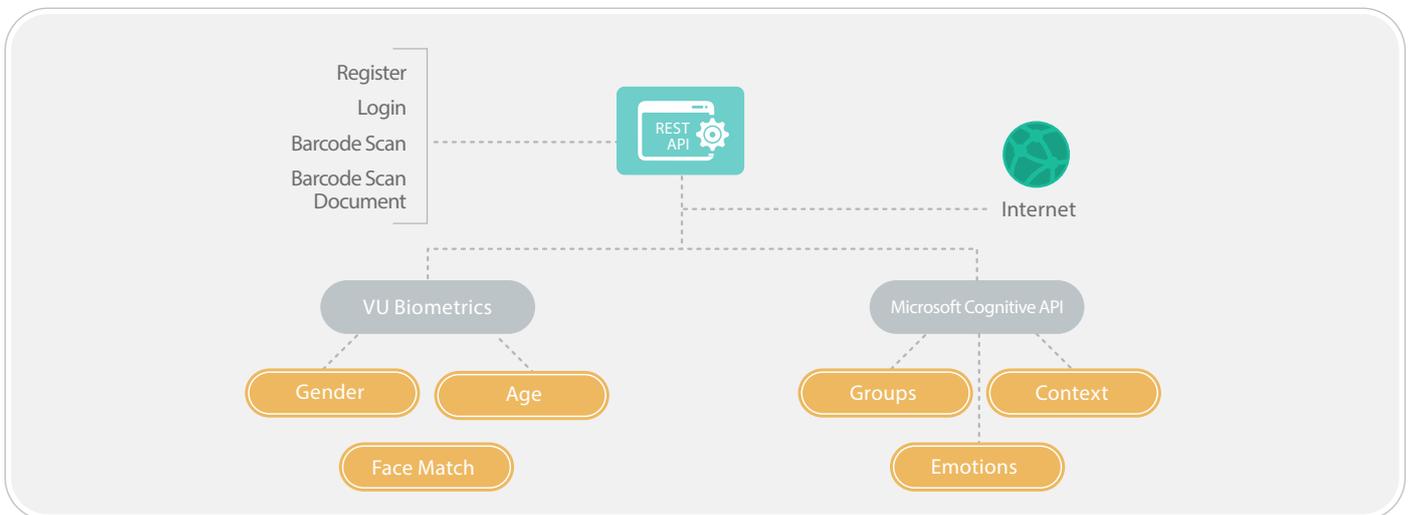▶ It is integrated with VU Secure Onboarding Process.

VU Face Recogn®

About VU Face Recogn®

It is the first biometric platform of massive implementation for facial authentication. It analyzes landmarks, key points in the face of the person and the distance between them, to recognize the individual. It authenticates identity recognizing movements and actions, like a wink or a smile, to avoid identity theft. It is cross-platform and can be integrated with Microsoft and Cisco systems. It can be implemented in the background, without bothering the user.

VU Face Recogn® works by evaluating in real time the video captured by the cameras with Intel® Real Sense™ technology making a correct capture even if the user is on the move, to see, understand, interact and learn from their environment.

Software requirements and compatibility

Operating System

Debian 7 or higher
Ubuntu 14.04 or higher
Red Hat RHEL 6 or higher
Suse 10 or higher
Solaris 10 x86
Solaris 10 Sparc
Windows 2008 R2 or higher

Databases

MySQL 5.6 or higher
PostgreSQL 9 or higher
Oracle 10 or higher
MS SQL 2008 or higher
MS SQL 5.6 or higher
MariaDB 5.5 or higher
DB2

Virtualization

VMWare
Citrix
Microsoft Hyper-V
RHEV
Virtual Box
Docker

High Availability

HA Proxy
KEEPALIVE
REPMGR
DRBD

Browsers

Firefox
Internet Explorer 10 or higher
Google Chrome
Apple Safari

Technologies

Java 1.7 or higher

Security

RSA / SHA1 / 3DES / AES 256
Security Certificates
EAP-PEAP-MSCHAP v2
TimeStamp
HOTP/OCRA/TOTP/HMAC

Web Server

Apache 2
Nginx
IIS
Weblogic
Jboss
Tomcat
WebSphere

Integrations	Access Management	Register & Report Management	Mobile OS
WS-I Basic Profile 2.0	Radius	Crystal Reports	iOS, Android, Windows
SOAP 1.1 or higher	Cisco ACS 4.2 or higher	Syslog	Phone, HTML5, USSD
WSDL 1.1 / WS-Security WSI	FreeRadius	Nagios	SMS, Push Notification
XML Schema 1.0	Active Directory		
TSL 2.0	Samba		
	Cisco ISE		

Technical Information

VU Face Recogn® SDK

VU provides the possibility of adding the VU Face Recogn® SDK to existent applications. It offers every method the clients need to use for:

• Registration

• Authentication

It is delivered along with a functions' set instead of a group of screens, so clients are free to create the user experience they wish for their products, besides maintaining the necessary conditions to preserve the product's security and integrity.

To improve the SDK deployment, a guide containing examples of the use of every function is delivered, so as to make the execution on a real scenario easier.

The SDK is developed on Java for Android, on Objective-C for iOS (compatible with Swift) and on JavaScript, which makes it possible to run on Web and Mobile hybrid developments, such as Cordova/ PhoneGap.

For Android, it compiles a project developed on Android Studio containing the SDK in the libs directory as an Android Archive (.aar), already attached to the project. This way, the file can be copied and incorporated to the client's project. At the same time, a Java Archive (.jar) can be delivered in case the client uses another Android development environment.

For iOS, it compiles an Objective-C project created on Xcode, with the SDK library in .a format, ready to work with all the available iOS architectures.

For Web or hybrid development, it compiles a Web HTML site that uses the SDK developed on JavaScript, along the required JavaScript premises.

Integration API

The integration infrastructure is designed to merge with any other platform, no matter its language, used through Web services (WSDL) published on VU App & Cloud Server®.

The application is composed of different methods, identified with functions destined to the administrative management and the use of final users. The communication between the presentation layers and the VU App & Cloud Server® is made with an SSL connection.

The allowed connections to VU App & Cloud Server® match with the definition of communication between the layers, particularly on the TCP 80 port or TCP 443 port, according to the integration.

The available methods make it possible to:

- Authenticate
- Register

- Block/ unblock users
- Delete Users

Operative Systems:

- Linux
- Solaris
- Windows Server 2003/R2, Windows
- Server 2008/R2 (32bit and 64bit),
- Windows Server 2012

Databases:

- PostgreSQL
- MySQL
- MS SQL
- Oracle
- Informix

Hardware Sizing*

Number of Users	Primary Instance		Secondary Instance		Transactions per second	Storage required	LOG Storage
	Processor	Memory	Processor	Memory			
1 to 10,000	8 processing threads	6 GB RAM	8 processing threads	6 GB RAM	16	60 GB - HD	178 GB - HD
10,000 to 50,000	16 processing threads	8 GB RAM	16 processing threads	8 GB RAM	32	120 GB - HD	890 GB - HD
50,000 to 100,000	32 processing threads	16 GB RAM	32 processing threads	16 GB RAM	64	240 GB - HD	4.4 GB - HD
100,000 to 250,000	64 processing threads	32 GB RAM	64 processing threads	32 GB RAM	128	480 GB - HD	6.3 GB - HD
250,000 to 1,000,000	128 processing threads	64 GB RAM	128 processing threads	64 GB RAM	256	1 TB - HD	24 TB - HD

* The present sizing estimation assumes a high availability setup.