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Release Notes

Bioid SDK Version 3.1

Contents

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1.	SDK Contents Overview	3
2.	What's new	4
2.1.	Operating Systems	4
2.2.	Algorithmic changes	4
2.3.	Enhanced Active-X control	4
2.4.	Offline Face Recognition	4
2.5.	Management Console additions	4
2.6.	Enhanced BioAPI BSP	5
2.7.	Samples	5
2.8.	Security	5
2.9.	BioID Configuration Panel	5
2.10.	Installation	6
2.11.	Licensing	6

10.04.2003

Page 2 of 6

1. SDK Contents Overview

BioID SDK 3.1 offers multimodal biometrics in the form of a software development kit. It is therefore targeted towards developers who want to integrate BioID technology into their applications.

The target market therefore is defined by

- a) Developers of Integrators
- b) Integrators who want HumanScan to do the integration, but want to evaluate the power of BioID technology
- c) OEMs who plan to subcontract HumanScan to develop customized applications, but also want to evaluate the software first

To meet the demands of the market, BioID SDK 3.1 not only offers flexible modules for any kind of biometric usage, but also examples of the majority of the functions. After installation, BioID technology can be demonstrated just by running the BioID Demo application. Nevertheless, this is just a demo application – the flexibility of an SDK like BioID 3.1 can never be fully shown by just this one demo application.

BioID SDK 3.1 offers three biometrics:

- Face recognition
- Voice recognition
- Lip movement recognition

Since BioID uses true multimodality, the preferred way of using it is by using all of the three biometrics altogether. But BioID can be easily configured (using e.g. the Control Panel) to use any of the above three biometrics standalone or in any combination. Therefore, with BioID SDK one can for example just build a face recognition application, if needed.

2. What's new

BioID SDK has undergone many changes since version 3.0, mostly because of the few problems that had been reported to us during the 3.0 developer's test. Nevertheless, although quite a few interface changes had to be made to ensure stability, adapting an existent 3.0 project shouldn't take much more than a recompilation and very few minor changes in the code.

2.1. Operating Systems

BioID SDK and its major components Server, Client and Admin support the Microsoft operating systems:

- Windows 2000 SP1
- Windows XP
- Windows NT4 SP 6

2.2. Algorithmic changes

- New features for face recognition yield better face accuracy
- New scoring for voice yields better voice accuracy
- New template compression yields smaller template size
 - New face template: ~ 2 KByte
 - New voice template: ~ 1 KByte
 - New flow template: ~ 1 KByte

2.3. Enhanced Active-X control

Bug fixes now allow the integration of the BioID OCX into any application like e.g. MS PowerPoint. Also, when using voice only, a real-time spectrum visualization has been added.

2.4. Offline Face Recognition

With the new "FaceOff" Module, the SDK contains an interface to enroll single bitmap images, store the biometric templates at the BioID server, and allow verification/identification again of single bitmap images.

2.5. Management Console additions

The new management console replaces the wizards of version 3.0 and allows for administration of

- Servers
Displays a list of all BioID servers and allows editing.
In order to add or delete BioID servers the BioID Server Setup is used.
- Clients
Displays a list of all BioID clients and allows for creation, editing and deleting.

Additionally a comparison of security level and required channels exists between clients and servers.

- Users
Displays a list of all BioID users and allows for creation, editing and deleting.
Additionally a comparison of security level and required channels exists between clients, servers and users.
Besides adding users, it is possible to import several users or groups at once.
Further on the administrator can review and delete patterns of users and can train a single user or all. A search function to find a user by his UserID is also implemented.

2.6. Enhanced BioAPI BSP

In version 3.0, the [BioAPI](#) BSP of BioID only supported the mandatory functions "Enroll" and "Verify". In version 3.1, the following functions are supported:

- Capture
- CreateTemplate
- Enroll
- Process
- VerifyMatch
- Verify
- Identify (with some restrictions, please refer to the complete 3.1 SDK documentation)
- Database Operations (read only)
- Import

Additionally, the following options are supported:

- Payload
- VerifySamples
- DefaultDatabase

2.7. Samples

Due to the many customers' requests, new sample code is provided in the 3.1 SDK. Especially examples for Visual Basic Script have been requested for and are included now. The complete source of "BioID Demo" is also included.

2.8. Security

BioID 3.0 always assumed administrative rights for usage of any BioID component. Now in version 3.1, normal users can also use certain functions.

2.9. BioID Configuration Panel

All administrative client configuration tasks are collected within the BioID ConfigPanel.

2.10. Installation

The former complete setup has been split into the following single components:

- Client
- Server
- Admin
- SDK

Therefore, applications developed by SDK users can choose which components to integrate. In version 3.0, sometimes it was necessary to manually insert the BioID database – this can now be done by the BioID Server Setup.

Additionally, the new setups do not require the original packages for un-installation.

All setup log files now hide password information.

2.11. Licensing

A new licensing scheme using the MAC-address of a PC allows mass rollouts of the software. Additionally, BioID is now using “delayed trigger codes”, meaning that it is no longer necessary to keep the licensing window open until the license key is obtained.