The BioSecure Network of Excellence

Presentation for the NIST 2005

Speaker Recognition Workshop

Last updated – 30 may 2005

The BioSecure
Network of Excellence (NoE)

§ Framework: European Information Society Technologies, FP6 call

  § 3 years project, starting date was June 2004

§ Partners: 29 European (mostly academic) and 2 US partners

§ Goal: federate the European biometric research

§ Now: Use common Evaluation Platforms for biometric experiments to evaluate existing research and define new research topics

  § Mono-modal biometric systems

  § Multi-modal biometric systems

  § With common evaluation platform composed of:

    – Reference open-source software

    – Publicly available databases and well defined evaluation protocols

    – Definition of benchmarking experiments to measure progress done

Common evaluation in the framework of BioSecure NoE

Articulated around

§ 1st Biosecure Residential workshop in august 2005 (internal event)

§ Test the BioSecure Integrated performance evaluation Framework

§ Define new missing databases to be collected for the 2nd evaluation campaign (planned for 2007)

§ Define the modalities for the 2nd evaluation campaign

§ 2nd open evaluation campaign : planned for 2007

1st BioSecure residential Workshop

When: August 2005 in Paris

Participants:

- § more then 30 BioSecure PhD
- § about 20 BioSecure seniors
- § about 10 invited speakers

Grouping of participants for mono-modal experiments

7 "Single" modalities working groups

- § speech
- § face
- § speaking face
- § signature
- § fingerprint
- § hand
- § iris

Multimodality

§ **combine modalities**

  § fingerprints + face : passport application

  § signature + face + speech

  § hand geometry + fingerprints

  § …..

§ **combine matchers**

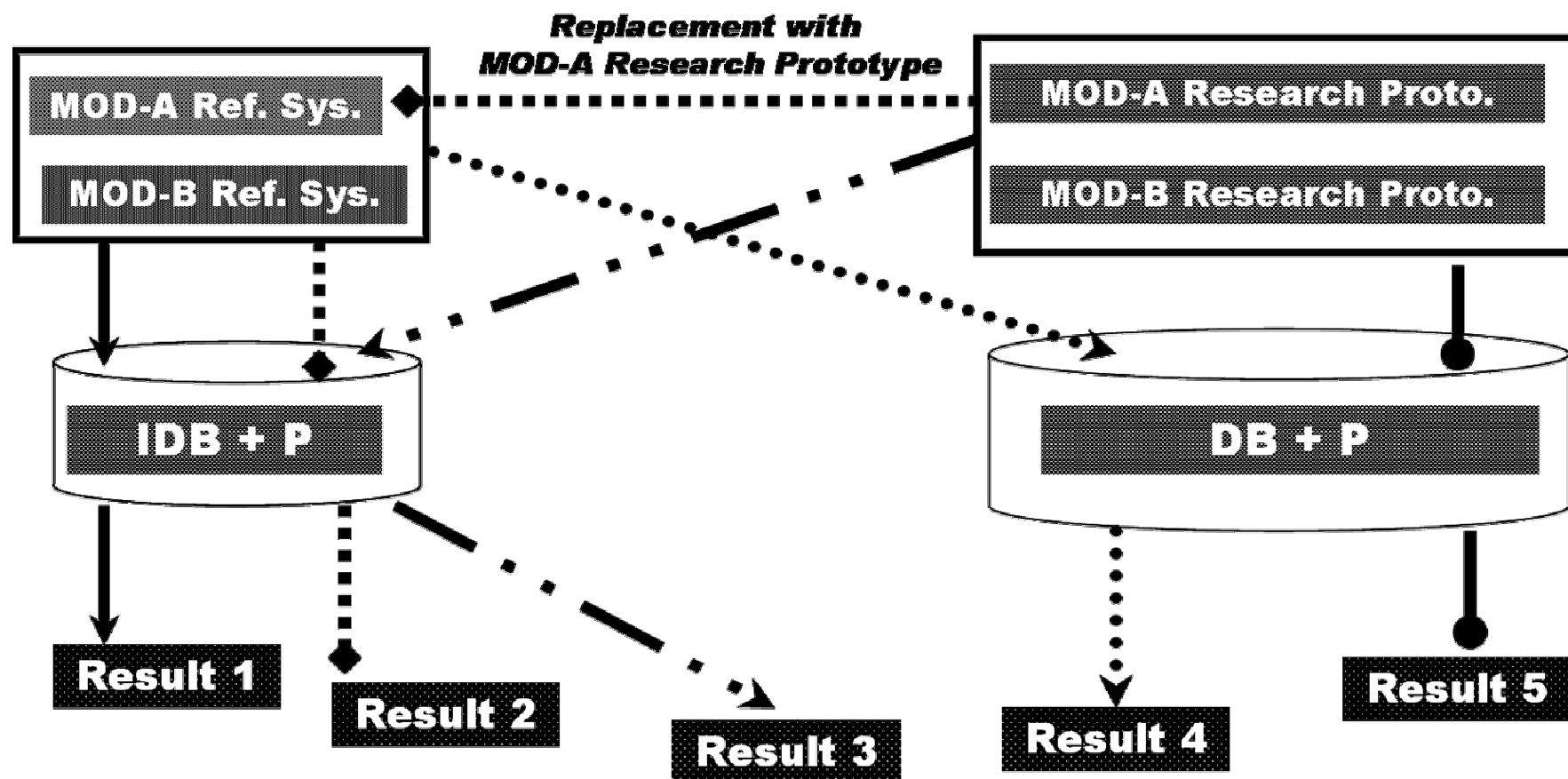# Commun evaluation framework

The BioSecure Refs Systems will be

§   cross-testing of BioSecure refs systems by at least 2 other labs

Use of the Integrated database(s) with assessment protocols

Evaluation of research prototypes

§ compared to refs systems (on Integrated and proprietary databases) AND

§ other existing databases with different characteristics (time variability, degraded conditions…)

Why refs systems, integrated DB (IDB) and assessment protocols (AP)

Reference Systems

Complete the existing open source packages

Ø For face and speech open-source software already exist

Ø Development of the non-existing open source software

§ Speaking-faces, iris, signature, hand shape

§ Multimodal experiments

Which Databases (DB) to use for the 1st BioSecure Residential workshop

- BANCA and XM2VTS (audio-video)

- BIOMET (five biometric modalities)

- MCYT (signature and fingerprint)

- CASIA iris databases

- ….

More details about the workshop

After august 2005 !