Use of the Standard Within Biometric Web services
In the beginning...

- In reviewing the biometric-related standards portfolio and service oriented architecture (SOA) references, it became apparent that a gap existed in the availability of standards related to biometric services.
Use Cases – Biometrics in the Cloud

XML

SOAP
Use Cases – Biometrics as a Service
## Use Cases – Biometric Data Sharing

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<th>Use Case</th>
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<td>Cross-Program</td>
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<td>Cross-Agency</td>
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<td>Inter-state</td>
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<td>International</td>
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Initial Targets

- WS-BD
- BIAS

Biometric Sensor

Client devices

Backend Services
General Characteristics (1)

- **Purpose:**
  - Provide a method for performing biometric operations over a services-based framework

- **Desired functionality:**
  - Perform remote capture operations
  - Invoke remote biometric services
  - Access remote biometric resources
  - Exchange biometric data
General Characteristics (2)

• **Services:**
  - Capture biometric sample(s)
  - Control biometric device
  - Create/delete subjects
  - Set/list/update/delete/retrieve biographic, biometric, document data
  - Verify, identify, enroll
  - Process/transform data
    - (incl. compression, feature extraction, data format translation, etc.)
  - Quality assessment
  - Classification
  - Fusion
Sensor Description

Physically separated
WS-BD implementation

Physically integrated
WS-BD implementation
Video

- Insert video here
Both BIAS and WS-BD are XML based

BIAS is capable of carrying data in a variety of formats including:
- ANSI/NIST records
- NIEM
- ANSI/NIST profile files (e.g., EFTS/EBTS)

WS-BD supports return of captured sensor data in ANSI/NIST format

ANSI/NIST is a standard data format. Web services provides a method for moving that data.
Status

- **BIAS** is published as INCITS 442 & OASIS BIAS SOAP Profile.
  - International version in progress
  - NIST reference implementation available
  - 3 “statements of use”
- **WS-BD** is published as NIST SP 500-288
  - NIST reference implementation available
- **SBIR** demonstrated use of both in a video facial recognition application
Future Plans

- OASIS standing up new ‘Biometrics TC’
  - Broader in scope than previous BIAS TC
  - Will take over maintenance of the BIAS SOAP Profile
    - Possible REST version
  - First project will be based on WS-BD
- First meeting: Tuesday, 12 February, 11am-12 ET
  - Join by 5 Feb to gain voting rights
- Website:

Accelerating the use of biometrics through services and enhanced interoperability in distributed environments.