

CBEFF

**Common Biometric Exchange
Framework Format**

CBEFF
Technical
Working
Group
Update

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Lawrence Reinert

lareine@alpha.ncsc.mil

CBEFF Topics

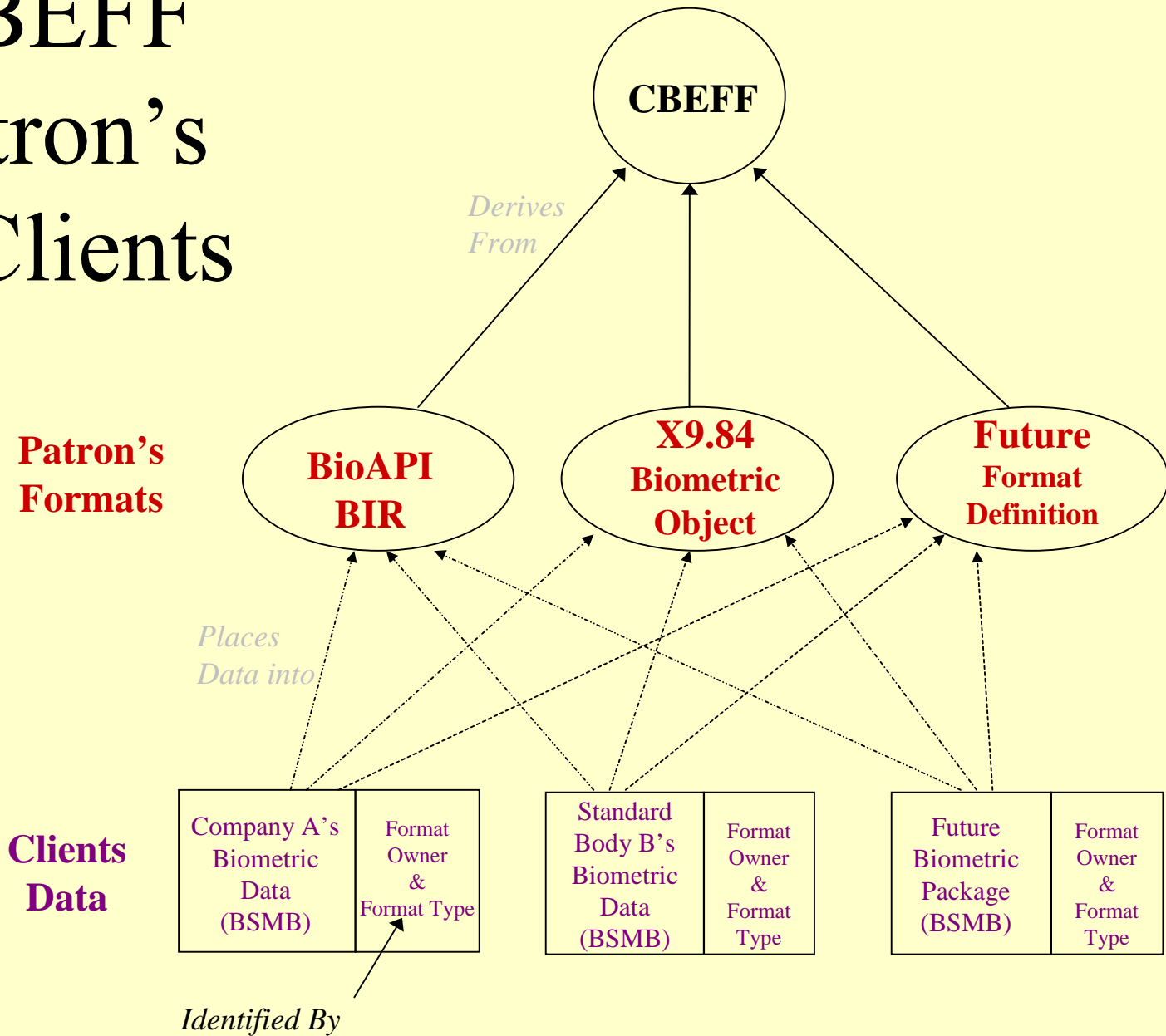
- CBEFF Recap
- Augmented CBEFF Changes
- ISO-7816 smart card format
- CBEFF Status

CBEFF in a Nutshell



- Defines Basic Fields used by Biometric Data
 - Security
 - Useful Biometric Processing Info
 - Biometric Data
- Doesn't constrain the encoding of data
- Registration of Biometric Data via IBIA
 - Registration of Biometric Data via IBIA
- Allows for new adaptations
- CBEFF Compliance can be met by “Patrons and Clients” model

CBEFF Patron's & Clients



Name Changes

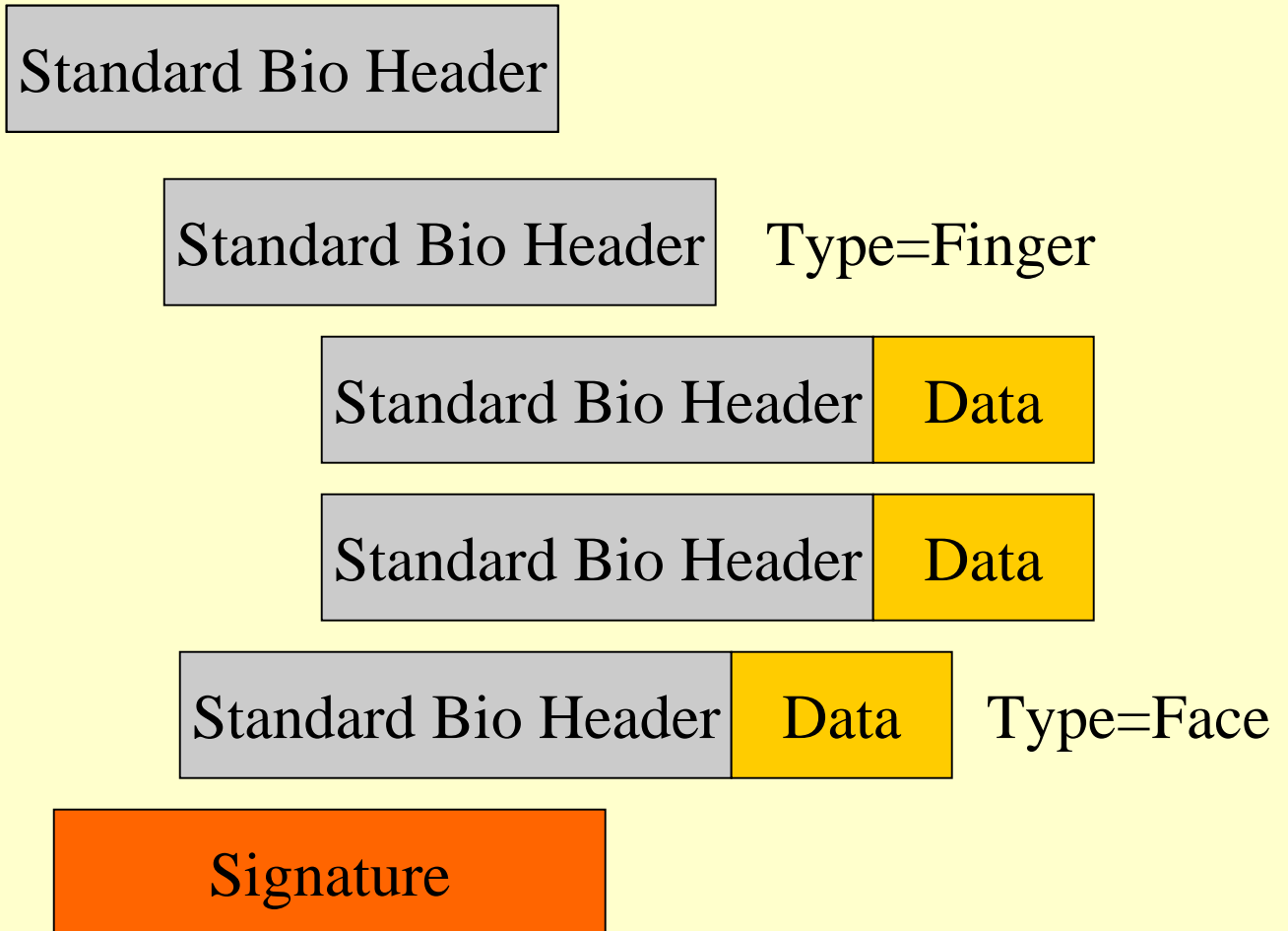
- File=> Framework
 - File implied “build to print” , but Patrons define Implementation
 - Framework Implies a construct to help build
- Biometric Specific Memory Block (BSMB) => Biometric Data Block (BDB)
 - BDB Format Owner
 - BDB Format Type

New Fields

- Validity Period 9 (valid from/to)
 - Adopt X9.84 definition: `YYYYMMDDHHMMSSZ`
- Creator Field with product identifier (PID)
- Challenge/Response
- Payload
- Nesting (Concept)

Nesting

Multiple biometrics templates of multiple biometric types can be handled by nesting biometric data



Smart Card Format

- Coordinated with ISO 7816-11
 - ISO 7816-11 Appendix C = CBEFF Appendix D
- Nesting (Multi-modal) Biometrics
- Supports On Card and Off Card matching



Format D



Example BIT group template with with nested BITs for applications with several reference data

Tag	L	Value						
'7F61'	Var.	Biometric information group template						
		Tag	L	Value				
		'B1'	Var.	BIT 1				
				Tag	L	Value		
				'83'	1	Reference data qualifier		
				'06'	Var.	OID of CBEFF standard body, see note 6 of Table C.1		
				'A1'	Var.	BHT		
						Tag	L	Value
						...		
						'81'	1-3	Biometric type, e.g. fingerprint
						'82'	1	Biometric subtype e.g. right pointer finger
						'87'	2	Format owner of the biometric verification data
						'88'	2	Format type of biometric verification data, specified by format owner
		'B2'	Var.	BIT 2				
				Tag	L	Value		
				'83'	1	Reference data qualifier		
				'06'	Var.	OID of CBEFF standard body, see note 6 of Table C.1		
				'A1'	Var.	BHT		
						Tag	L	Value
						...		
						'81'	1-3	Biometric type, e.g. fingerprint
						'82'	1	Biometric subtype e.g. left pointer finger
						'87'	2	Format owner of the biometric verification data
						'88'	2	Format type of biometric verification data, specified by format owner

Object Identifiers

- BCWG-CBEFF Development Team (CDT) is the CBEFF Patron and the ISO 7816-11 Tag allocation authority
- Computer Security Objects Register (CSOR) at NIST
 - CDT {joint-iso-itu-t (2) country (16) us (840) organization (1) gov (101) csor (3) bcwg (xx) cdt(1)}

CBEFF Status

- Format D co-ordinated with SC-17 WG4.
 - CBEFF Appendix D=>ISO 7816-11 appendix C
- Version 2.0 sent for approval to the BCWG
- Approved by M1 as a candidate for fast track.
- To be presented to SC37 as a fast track candidate
 - **M1 is the US TAG to JTC 1 SC 37**

Questions?

