

**DATA
STORAGE
SECURITY
SUMMIT**

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SANTA CLARA, CA



**EKM: The Real Story –
Q&A with EKM Storage
Vendors**

**Tony Cox – Chair - SNIA
Storage Security Industry
Forum
(Cryptsoft)**

- ❑ **Purpose:** To deliver candid answers to questions from the audience on various aspects of encryption, standardised key management via KMIP and some of the deployment issues and opportunities brought about through enterprise key management.
- ❑ **Session objective 1** - Explore perspectives of Enterprise Key Management (EKM) and KMIP
- ❑ **Session objective 2** – Answer questions from the floor related to EKM & KMIP

Tim Chevalier - NetApp



- ❑ Member of Technical Staff – NetApp
- ❑ Relevant NetApp Products:
 - ❑ Data ONTAP (various releases)
 - ❑ AltaVault: AVA 400/800
 - ❑ AltaVault: AVA-v2/4/8/16/32
 - ❑ AltaVault: AVA-c8/16

- ❑ CTO, Cryptsoft
- ❑ Relevant Cryptsoft Products:
 - ❑ KMIP Client SDKs (C, Java, C#, Python, C++)
 - ❑ KMIP Client Layered Protocol SDKs for Proprietary Protocols
 - ❑ KMIP Adapters
 - ❑ KMIP Interoperability Test Suites
 - ❑ KMIP Cloud Online Test Service

Sherif Fares – Hitachi Data Systems



- ❑ Senior Security Product Manager - HDS
- ❑ Relevant HDS Products:
 - ❑ Virtual Storage Platform
 - ❑ Unified Storage VM and
 - ❑ Unified Storage 100 family

Chuck White – Fernetix



- ❑ CTO - Fernetix
- ❑ Relevant Fernetix Products:
 - ❑ Key Orchestrator (Client)
 - ❑ Key Orchestrator (Agent)

Some questions:



- ❑ How are your customers approaching Enterprise Key Management?
- ❑ How important is standardised EKM to your company and your customers?
- ❑ How do you handle the difference between the pace of standards development and the pace of product development?

Storage & EKM: The Real Story – Q&A with KMIP Storage Vendors

Some questions:



- ❑ What are the most critical customer concerns that most often come up as barriers to adoption, or which create the most conflict, when deciding to implement standards-based key management for data encryption solutions?
- ❑ Can you describe the ease with which prospective and existing customers can actually deploy EKM in a heterogeneous environment?
- ❑ What is the biggest challenge one of your customers has posed to you?

Some questions:



- ❑ How do convince your customers that true interoperability is available and it's not just smoke, mirrors, rainbows and unicorns?
- ❑ How important is participation in standards to you as a company
- ❑ Please share your thoughts on the development of the KMIP specification, in particular of the last 2-3 years?

Thank you!

Download this presentation and others from
SNIA's Data Storage Security Summit at:
<http://www.snia.org/dss-summit>



KMIP standard developed and progressed in OASIS



KMIP implementations conformance tested in SNIA

KMIP Spec. History

PR = Public Review
CS = Committee Specification
OS = OASIS Standard



- ❑ OASIS KMIP 1.0 – PR Nov 2009, CS Jun 2010, OS Oct 2010
 - ❑ Specification 105 pages
 - ❑ Profiles 16 pages
 - ❑ *Usage Guide* 44 pages
 - ❑ *Use Cases (Test Cases)* 168 pages
- ❑ OASIS KMIP 1.1 – PR Jan 2012, CS Jul 2012, OS Jan 2013
 - ❑ Specification 164 pages +56%
 - ❑ Profiles 39 pages +143%
 - ❑ *Usage Guide* 63 pages +43%
 - ❑ *Test Cases* 513 pages +205%
- ❑ OASIS KMIP 1.2 – PR Jan 2014, CS Nov 2014, OS May 2015
 - ❑ Specification 188 pages +14%
 - ❑ Profiles (multiple) 871 pages +2133%
 - ❑ *Usage Guide* 78 pages +24%
 - ❑ *Test Cases* 880 pages +70%
 - ❑ *Use Cases* 130 pages

KMIP Spec. History

PR = Public Review
CS = Committee Specification
OS = OASIS Standard



- ❑ OASIS KMIP 1.3 – PR Aug 2016, CS Aug 2016, OS *Late 2016*
 - ❑ Committee Specification Complete
 - ❑ Specification - 221 Pages; Profiles 65 Pages + XML 15,000 lines
 - ❑ OASIS Specification process underway
 - ❑ Note: Test Cases externalised into separate XML files
- ❑ OASIS KMIP 1.4 – *Early 2017*
 - ❑ Committee Working Drafts almost finalised
- ❑ OASIS KMIP 2.0 – *Started – expect late 2017/early 2018*
 - ❑ Focus of future work
 - ❑ Many items discussed over last three face to face meetings deferred for KMIP 2.0

KMIP Event Progression

