# KMIP Key Naming
## for Removable Media Interchange

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# Key Naming for Storage Media Interchange

- Use Cases and Problem Statement

- Visibility

- Proposal Outline

# Key Naming for Storage Media Interchange
## Use Cases and Problem Statement

Use Case.

- Interchange encrypted media between multi-vendor storage systems

Conditions.

- Media interchange exists normally – without encryption
- Encryption was transparent to host software
- Keys created by each vendor's solution are stored on a KMIP key server

Problem Statement.

Multi-vendor interchange breaks when media is encrypted, even though keys are stored on a KMIP key server.

# Key Naming for Storage Media Interchange
## Visibility of Issue

## Currently, the issue is not visible

- Keys are stored on separate servers.  No interchange is possible

## Issue will become visible after KMIP

- Multi-vendor clients will store keys on KMIP server

- Each vendor's KMIP client, or an admin, will create named keys

- Key names are currently vendor unique

- Even with KMIP, multi-vendor media interchange will remain broken

# Key Naming for Storage Media Interchange
## Outline of HP's Proposal

Propose adding a key attribute to assist clients resolve the key's name.

- Un-correlated. (default value).   The key is not used in removable media applications.  Or, none of the keys's names correlate to key name(s) stored on the removable media.

- Simple correlation.  One or more of the key's names is also stored on the media. The media and the server copies of the name can be matched  by simple string compare.

- Public correlation algorithm.  The server and media copies of the key name can only be matched using a publicly accessible algorithm.  The definition and use of these algorithms is outside the scope of KMIP.  The definition may specify a key attribute to identify the specific algorithm.

- Private correlation algorithm. The server and media copies of the key name can only be matched using a private algorithm.  The key may not be accessible in multi-vendor configurations.

Propose addition to the the KMIP usage guide to explain use cases for the name-resolution attribute