

SPECIFICATIONS

qClient™ SDK

Vendor-neutral software development kit (client SDK)

Key Features

- Allows for rapid development of key management applications
- Supports OASIS KMIP and PKCS#11 protocols
- Interoperates with qCrypt and compliant third-party key management servers
- Facilitates rapid development, relieving developers of the need for deep KMIP or PKCS#11 knowledge

KMIP & PKCS#11

- OASIS KMIP: Conformant with standards 1.0/1.1/1.2/1.3/1.4/2.0
- Supports all KMIP profiles and transport protocols: TTLV, TTLV over HTTPS, JSON, XML
- PKCS#11 version 2.40, Baseline Provider and Extended Provider profiles, Authentication Tokens

Languages

- qClient is implemented in C
- .NET and Java APIs
- Other APIs available upon request

Supported Platforms

- 32 bit Windows 7, 8+, Server 2008 R2+
- 64 bit Windows 7, 8+, Server 2008 R2+
- 32 bit Linux x86 Kernel 2.6+
- 64 bit Linux x86_64 Kernel 2.6+

Supported KMIP Managed Objects

- | | | |
|-----------------|-----------------|-----------------|
| - Certificate | - Public Key | - Symmetric Key |
| - Opaque Object | - Random Object | - Template |
| - Private Key | - Secret Data | |

Supported KMIP Operations

- | | | |
|--------------------------------------|---------------------------|------------------------|
| - Objects Establishment | - Object Lifecycle | - Discovery |
| - Object and Attribute Retrieval | - Attribute Management | - Crypto Operations |
| - Object and Operation Accessibility | - Object Renewal | - Split Key Operations |
| | - Asynchronous Operations | |
| | - Server Initiated | |

Supported KMIP Profiles

- | | | |
|--------------------------------------|----------------------------------|---|
| - Baseline | - Advanced Symmetric Key Foundry | - Opaque Managed Object |
| - Symmetric Key Lifecycle | - Asymmetric Key Lifecycle | - Storage Array with Self-Encrypting Drives |
| - Basic Symmetric Key Foundry | - Basic Cryptographic | - Tape Library |
| - Intermediate Symmetric Key Foundry | - Advanced Cryptographic | |
| | - RNG Cryptographic | |

Supported PKCS#11 Profiles

- Baseline Provider
- Extended Provider
- Authentication Token ("KMIP", "Keystore software" provided with support for customers to provide their own token)