



qClient™

qClient SDK | KDP

Key Management-Focused Software Development Kit

Enables the implementation of strong key and policy management

Works with third-party products and platforms throughout your organization

Straightforward API integrates with existing security systems

Overview

qClient is a highly capable and vendor neutral client software development kit, which provides an ideal solution for developers wanting to integrate powerful cryptographic key and random number management.

Integrating Key Management

qClient enables developers to integrate QuintessenceLabs' key and policy manager and true random number generator to deliver the strongest foundation for the most demanding encryption needs. It comes with all the components required for fast and efficient integration including libraries, header files and sample source code.

The OASIS Key Management Interoperability Protocol (KMIP) is a communication protocol to allow the manipulation of keys on a key management server. It facilitates the deployment of secure encryption across an organization by allowing cryptographic key management and random number management to be quickly and easily integrated into any application.

qClient supports a general purpose key management API for full KMIP functionality. Developers don't need to be KMIP experts to take advantage of qClient – the main API has a concise number of functions for acquiring, creating, checking and otherwise maintaining managed keys, certificates and related data.

qClient Deployment

qClient SDK: qClient can be delivered as a standalone interoperable client to allow developers to integrate key and random number management.

qClient is also a component product of the QuintessenceLabs data production platform, included in all qStream or qCrypt deployments.

qClient KMIP Development Platform (KDP): This combines qClient SDK with a not-for-resale license for the qCrypt 200V virtual machine.

qClient Capabilities

Proven compatibility with KMIP servers lets qClient take the guesswork out of interoperability, while a powerful key management API lets developers work without losing functionality. qClient comes with all the components required for fast and efficient integration, including binary libraries, header files, additional APIs for key management and PKCS#11, plus source code samples and detailed documentation.

qClient is designed to be embedded in applications, cross-platform interfaces, and platform-specific implementations. It can operate with secure transport, synchronous and asynchronous operations, and file system and network I/O.



SPECIFICATIONS

qClient™**qClient SDK | qClient KDP**

	qClient SDK	qClient KDP
Key Features	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Includes not-for-resale qCrypt 200V virtual machine license*
KMIP & PKCS#11	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> qClient is implemented in C .NET and Java APIs Other APIs available upon request 	
Supported Platforms	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> - Certificate - Opaque Object - Private Key 	<ul style="list-style-type: none"> - Public Key - Random Object - Secret Data
Supported KMIP Operations	<ul style="list-style-type: none"> - Objects Establishment - Object and Attribute Retrieval - Object and Operation Accessibility 	<ul style="list-style-type: none"> - Object Lifecycle - Attribute Management - Object Renewal - Asynchronous Operations - Server Initiated
Supported KMIP Profiles	<ul style="list-style-type: none"> - Baseline - Symmetric Key Lifecycle - Basic Symmetric Key Foundry - Intermediate Symmetric Key Foundry 	<ul style="list-style-type: none"> - Advanced Symmetric Key Foundry - Asymmetric Key Lifecycle - Basic Cryptographic - Advanced Cryptographic - RNG Cryptographic
Supported PKCS#11 Profiles	<ul style="list-style-type: none"> - Baseline Provider - Extended Provider - Authentication Token (“KMIP”, “Keystore software” provided with support for customers to provide their own token) 	

* Please see qCrypt 200V data sheet for more information



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