

qClient™

qClient 100 | 200

Key management-focused software development kit
and KMIP development platform

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

QuintessenceLabs' qClient™ software development kit 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

The qClient software development kit 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 that allows 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. The qClient software development kit supports a general purpose key management API for full KMIP functionality. Developers don't need to be KMIP experts to take advantage of the qClient software development kit— 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 100: The qClient 100 software development kit can be delivered as a standalone interoperable client to allow developers to integrate key and random number management. The qClient 100 software development kit is also a component product of the QuintessenceLabs' data production platform, included in all qStream™ quantum random number generator and Trusted Security Foundation® (TSF®) key and policy manager deployments.

qClient 200: The qClient 200 KMIP development platform combines the qClient 100 software development kit with a not-for-resale license for the TSF® 100 key and policy manager virtual machine.

qClient Capabilities

Proven compatibility with KMIP servers lets the qClient software developer kit take the guesswork out of interoperability, while a powerful key management API lets developers work without losing functionality.

The qClient software developer kit 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.

The qClient software developer kit 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™**100 | 200**

Software development kit and KMIP development platform

	qClient 100	qClient 200	
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 the Trusted Security Foundation® (TSF®) key and policy manager and compliant third-party key management servers Facilitates rapid development, relieving developers of the need for deep KMIP or PKCS#11 knowledge 	Includes not-for-resale TSF 100 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 100 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+ ARMv8 Debian 4.9.130 64 bit ESXi 6.5, 6.7 		
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 	<ul style="list-style-type: none"> - Symmetric Key - Template
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 	<ul style="list-style-type: none"> - Discovery - Crypto Operations - Split Key Operations
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 	<ul style="list-style-type: none"> - Opaque Managed Object - Storage Array with Self-Encrypting Drives - Tape Library
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) 		

* Refer to the TSF 100 product sheet for more information