



## Centrally Managed Access Control

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### Server Requirements





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### Host Design

#### Server Requirements Summary

For optimal system performance Keyscan recommends a distributed processing topology when designing and configuring a Host for Centrally Managed Access Control. Key performance indicators considered in the following server specifications include providing a seamless online customer experience and maximizing host expansion capabilities.

There are three fundamental systems that must be implemented at the Host, each of which are to be loaded on their own independent server. The system is comprised of the following elements:

- 1) Communications Receiver
- 2) Database
- 3) Web Server

#### 1) Communications Receiver Server:

The communications receiver runs complex encryption/decryption algorithms to validate access control panels that request connectivity via the internet. It also manages communication activity for panels that have been authenticated and have established a connection. One Communications Receiver Server supports up to 100 connections. One connection is equal to one NETCOM6 connection.

In practice, if a customer site has one or more access control panels with a single NETCOM6 to establish connection to the host this is considered one connection. Each additional NETCOM6 used on site will require one more host server connection.

Keyscan supports an unlimited number of Communications Receiver Servers to maximize system expansion.

#### Communications Server Specifications:

Processor: Intel Xeon X5550, 2.66Ghz, 8M Cache, Turbo, HT, 1333MHz Max Mem  
Memory: 4GB, 1333MHz  
Hard Drives: 160GB  
OS: Windows Server 2008 R2, x86, Standard Edition





## 2) Database Server:

The Database Server runs Keyscan System VII's Microsoft SQL Express Database along with the full System VII Client. The System VII Client is used for service, panel/customer site additions, card holder maintenance, timezone edits and all other System VII Client based administration.

### Database Server Specifications:

Processor: Intel Xeon X5540, 2.53Ghz, 8M Cache, Turbo, HT, 1066MHz Max Mem  
Memory: 4GB, 1066MHz  
Hard Drives: 160GB  
OS: Windows Server 2008 R2, x86, Standard Edition

## 3) Web Server:

The Web Server runs Keyscan System VII's K-WEB solution. The K-WEB webpage provides end-users the ability to perform regular day to day activity for their access control system including locking/unlocking doors, adding card holders, modifying time zone and permission levels, visitor management and full report generation.

### Web Server Specifications:

Processor: Intel Xeon X5520, 2.26Ghz, 8M Cache, Turbo, HT, 1066MHz Max Mem  
Memory: 4GB, 1066MHz  
Hard Drives: 160GB  
OS: Windows Server 2008 SP2, x86, Web Edition





### **Server Virtualization**

While Keyscan recommends the three individual servers outlined previously in this document it is understood that some may wish to implement Virtual Machine (VM) server topology. Each VM instance should fully consider the individual performance and system specifications previously outlined in the three server design recommendation. VM software is to be supported by the Host IT staff or contract personnel.

### **Reverse Network Licensing (K-RN)**

Expanding the number of customer accounts or connections to the Communications Receiver is offered through the Reverse Network License (K-RN). A single K-RN License provides an additional 10 accounts or connections. An unlimited number of K-RN licenses are supported based on the Communications Receiver Server capacity.

\*See Communications Receiver Server

### **Web Client Licensing (K-WEB-C10)**

Based on the number of end-user customers that utilize K-WEB for basic system administration\*, expanding the number of simultaneous web client connections may be necessary. The K-WEB-C10 license provides an additional 10 K-WEB connections. A periodic review of the number of accounts and customers logging into K-WEB is suggested to ensure a seamless end-user experience.

\*See Web Server

