

MTD Keystone's Multiple Service Platforms

Keystone uses the Microsoft Office platform and is an MS Access application with integration to the common Microsoft Office applications, namely Excel, Word, and Outlook. Keystone may be installed by the customer on a variety of Microsoft Office service platforms depending on the needs and budget of the affiliate. MoreThanData does not believe that "One Size Fits All" and our Subscription Pricing Policy allows our customer's to select and implement Keystone on the service platform that best meets their needs. This strategy allows MoreThanData to create one set of software code for all affiliates but allow the affiliate to choose the level of service and performance that meets their needs. There are five typical service platforms on which our customers have installed Keystone.

A. Stand-Alone Computer

The simplest implementation of MTD Keystone is on a single stand alone computer. While Keystone uses client server architecture, it can run on one computer. If you use this simple arrangement it is important to provide a way for Keystone to backup the database somewhere other than this single computer. Removable media such as a thumb drive would be an excellent choice.

B. Peer-To-Peer Network

Another popular arrangement is a peer-to-peer network within the affiliate's office. The computers in the affiliate's office normally share an internet connection through a router box and this creates a peer-to-peer network on which Keystone can operate. This may be referred as a workgroup network. For the majority of affiliates, no special server hardware or software is required. The Keystone central database is installed on one of the more robust desktop computers in the office and all of the other computers are connected to this central database. This is the most common Keystone service platform.

If an affiliate needs remote access to Keystone from outside the office, they can use a remote access service like **GoToMyPc** or **LogMeIn** for this purpose. These services can be obtained at reasonable prices. Normally no special technical skills are required for this service platform which leads to its popularity.

C. Cloud Computing Using Qbox for the File Server

One of the most attractive platform arrangements is to have the Keystone frontend program operate on the customer's computer while the keystone database is in the cloud service **Qbox**. This cloud service allows Keystone to be used in the Affiliate office as well as remote sites. This service was developed by CoralTreeTech with MTD and it is the only cloud based service that works correctly with MS Access. If you use a different service you may create duplicate Keystone data files which are impossible to reconcile. This service is currently in Beta Testing and is available to a few selected MTD customers. If you are interested please contact MTD sales for more information.

D. Server-Based-Network

Another typical service platform configuration is very similar to the peer-to-peer network above except the affiliate buys and installs a Windows Server to manage the central files. This server hardware is more robust than a typical desktop computer and comes with Microsoft Server software. This configuration will require some technical skills to install and manage which adds to the overall cost of running Keystone. This type of configuration may be required when the number of computers accessing the Keystone central database exceeds 10 computers. Again, this is a cost vs. performance issue. The most robust service platform is a hybrid of the Remote Desktop Server installed on the affiliates internal LAN. Very large affiliates have installed Keystone on a Windows Server located in their affiliate office and use the **Windows Server 2008/2012 R2** software to run both LAN access for internal located PC's as well as provide remote desktop access for remote PCs. Again, this requires specialized hardware and software and some level of technical expertise but this additional cost provides the best solution.

E. Internet Service Hosted Service

A service platform configuration that is not based on in-house equipment is to install Keystone on a hosted internet service and access Keystone remotely from any PC with internet access. This service platform is very attractive for small affiliates that do not have well secured office space or are located in rural area with long driving distances. With Microsoft's Windows Server 2008/2012 R2 software, formerly known as Terminal Services, Keystone can be installed on a commercial internet hosting service and accessed remotely from any PC via Remote Desktop services.

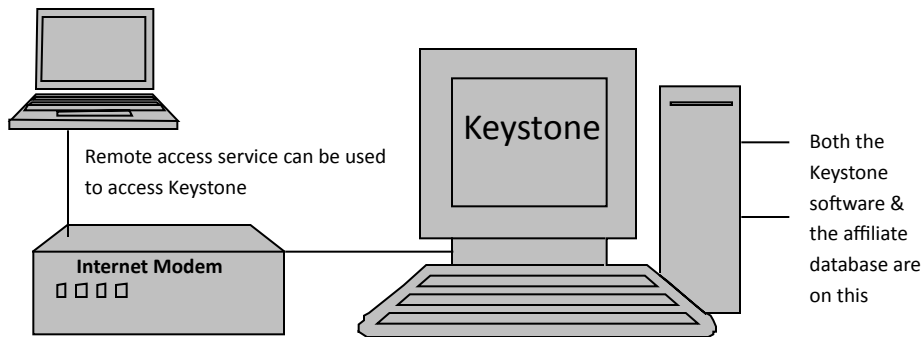
If the user's PC has the Windows 7 operating system, the remote and local desktop can be very integrated. You will be able to use the remote desktop just as easily as your local desktop. While this service platform seems ideal, it comes with additional costs. All web based or cloud services are dependent on the speed and performance of your internet service as well as the speed and service level of the hosting service. The additional cost comes from the monthly hosting service fees from the hosting service which are paid by the affiliate.

A. Stand-Alone Computer

The most basic Keystone implementation is one computer. Both the software and the database will reside on this single computer. The computer may be a desktop style computer located at the affiliate's office or it could be a laptop that travels around.

The following diagram depicts the desktop version.

Keystone on a Stand Alone Computer



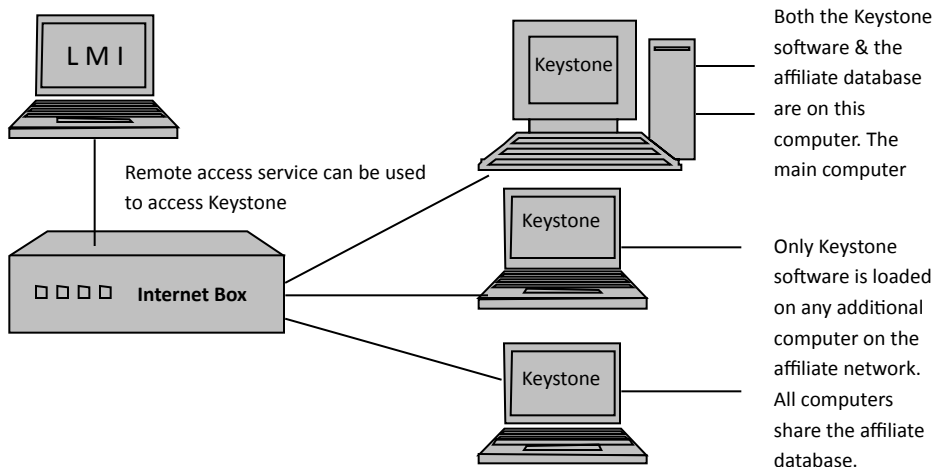
Since there is only one computer, it is recommended the Keystone database be backed up onto a thumb drive or external media device. An internet back up service like Carbonite or other internet backup service would also be a wise choice.

In addition to the single computer at the affiliate office, other affiliate users could access this single computer over the internet via remote access services like LogMeIn or GoToMyPC.

B. Peer-To-Peer Network

The progression from a single computer to multiple computers on a workgroup network within the affiliate office is a logical next step for expanding the use of Keystone. This allows multiple users to access the central database at one time. The intent of Keystone is to have all workers in the affiliate use Keystone as their central source of information in their daily work. Everyone can share vital contact information about Partner Families, Donors, Volunteers and all contacts of the affiliate. Having one central source of information should improve the affiliate operations. Strong security features allow the affiliate to share non-sensitive information while controlling access to sensitive information to those who have proper authority.

Keystone on Peer-To-Peer Network

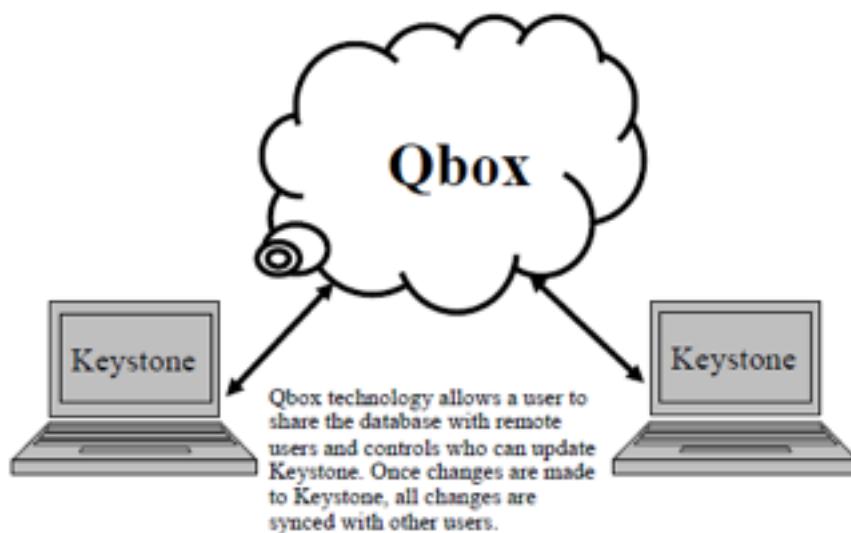


Since there are multiple computers in this operation, it is easy to backup keystone on a second computer. An internet back up service like Carbonite or other internet backup service could also be used and would protect against the loss of affiliate data if a fire or flood occurred. As with any configuration, the customer can always use a remote access service.

C. Cloud Computing Using Qbox

The progression from a single computer to multiple users sharing the Keystone data file via Qbox is a logical next step for expanding the use of Keystone. This allows multiple **remote** users to access the central database. The intent of Keystone is to have all workers in the affiliate use Keystone as their central source of information in their daily work. Everyone can share vital contact information about Partner Families, Donors, Volunteers and all contacts of the affiliate. Having one central source of information should improve the affiliate operations. Strong security features allow the affiliate to share non-sensitive information while controlling access to sensitive information to those who have proper authority.

Keystone on Qbox Cloud Service

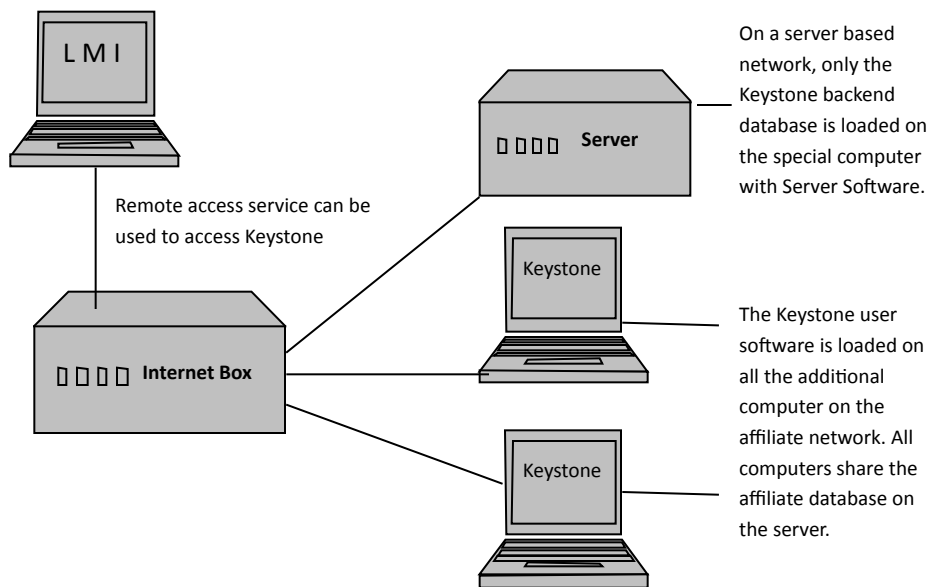


Since the Keystone database is stored both locally on each computer's hard drive as well as in their Qbox account, backup for Keystone is automatic. Qbox replaces other back up service like Carbonite or other internet backup service and would protect against the loss of affiliate data if a fire or flood occurred. Please refer to the CoralTreeTech Website for Qbox pricing.

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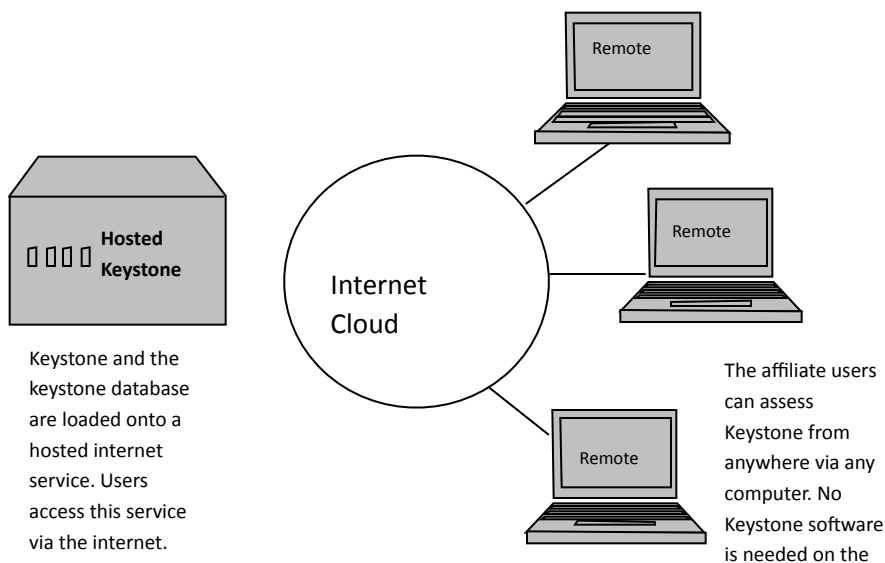
Keystone on Server Network



E. Keystone on Internet Hosting Service

A number of our customers have used Keystone on a hosting service for many years. With the improvement of Microsoft's operating systems as well as their new remote server software, **Windows Server 2008 R2**, this alternative has become more attractive for some affiliates.

Keystone on Hosted Service



In order to install Keystone on a web hosting service you will need four things:

1. A valid subscription to Keystone software. Keystone 7 uses Office Professional software and Access 2007/2010/2013 which has a higher level of performance in this remote environment than earlier versions.
2. A service agreement with an internet hosting service that host **Windows Server 2008/2012 R2** software. The hosting service licenses that software from Microsoft so you do not need to get involved with this issue. You will also need an affiliate credit card or PayPal account. Most of the hosting sites require efficient billing and while you can sign up for a full year at reduced rates, they normally require a credit card or PayPal. Monthly service costs vary so you may need to shop around. There are a variety of windows hosting services. Some reputable windows hosting services are:
 - Go Daddy
 - Rackspace
 - Softsys Hosting
 - Amazon Web Services
3. To use Remote Desktop services, you may need to acquire some Client Access Licenses (CALs). You should be able to acquire these at TechSoup.