



# Application Availability, Performance and Security

Whitepaper

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## **Application Availability**

ftwilliam.com strives to maintain five nine (99.999%) availability of its systems and software. During the course of the past year, all of the systems and applications have met or exceeded the requirements for five nine availability.

The ftwilliam.com servers are hosted in a secure data center which provides redundant power, cooling and paths to the Internet. The redundant systems at the data center help to ensure that the ftwilliam.com systems remain continuously available.

Continued availability of the ftwilliam.com software is assured through the use of application server pools. Each request to the ftwilliam.com systems is made to a pool of servers, which will automatically respond to the request. Should a server in one of the pools fail, the remaining servers in the pool will continue to process customer requests. The use of server pools also allows ftwilliam.com to add additional servers as necessary in order to meet customer demands. The ability to add additional servers to the pool allows ftwilliam.com to scale to an unlimited amount of users.

The availability of the applications and software is also increased through the use of RAID technology. RAID technology insures that all customer data is simultaneously written to multiple harddrives, which protect the data and allow the server to remain available and online should a harddrive fail.

## **Data Security**

ftwilliam.com utilizes SSL technology in order to protect all data while it is in transit from your web browser to the ftwilliam.com servers. SSL technology is the same technology and method of encryption that banks and other online merchants use to secure their transactions.

The data stored on the ftwilliam.com servers can only be accessed by those at your company who have a login name and password for the ftwilliam.com system.

## **Data Backups**

ftwilliam.com performs full system backups every hour. Twice a day these hourly backups are transferred off site. At the end of every business day an additional backup is performed and is stored off site. Additionally, at the end of every week a full system backup is performed and stored at a second off site location. All of the offsite backups are encrypted using industry grade 256-bit AES. The encrypted backups ensure that the data can not be accessed by any unauthorized parties.

## **System Monitoring**

All of the servers and applications at ftwilliam.com are continuously monitored for performance, availability and security. The servers are monitored using a combination of industry standard automated tools and manual review. The ftwilliam.com technical staff is instantly alerted by both email and pager should a partial or full system failure be detected.

The ftwilliam.com technical staff also monitors the performance of each of the servers. The data is analyzed and additional servers are added to the server pools as required. Additionally, should one of the automated systems detect a server exceeding one of the many threshold metrics established by the technical staff, the staff will be immediately alerted to the condition so that additional analysis may be performed, and if necessary additional servers can be added to the server pools.

The extensive monitoring of the ftwilliam.com servers helps to insure that the servers remain highly available and provide the highest level of performance available.