Gaming with **Drobo Case Study**

Storing Xbox One Games on Drobo for Expansion

Overview

John Barlow has been in IT for over 14 years. He has held positions ranging from network administrator, server adminis- trator, and software engineer in multiple firms during his career. He currently works for SugarCRM, a customer relationship management software company based in Cupertino, CA as a Senior Software Engineer.

John has a passion for gaming. He recalls how he's been an avid gamer since the first Nintendo Entertainment System came out. "I remember it clearly – my Nintendo was the first big thing I ever bought for myself. It took a few years of Christmas and Birthday money, but I bought it all on my own." Ever since, John has continued to collect different generations of consoles and various PC gam- ing rigs. John and his wife share a love for gaming. Their first dates consisted of the two of them playing Call of Duty on Xbox live and his wife beating him down on NBA 2K.

Challenge

John was first interested in buying a data storage solution device when he first heard about the Xbox One and their new digital download model. He was excited at the thought of not having to swap disks around as well as not having to buy multiple copies of games for him and his wife. However, with each game being up to 50GB in size, he realized very quickly that data storage space was going to be a problem.

While Microsoft did say was that it was possible to expand the storage with an Xbox One, you needed a USB3 and a drive greater than 250GB. John considered using external drives but decided against that because if the drives got full, he would have to move to a larger one. Furthermore, if he didn't copy the content over, he would be swapping drives – a major hassle.

From his IT background, John knew that the best way to handle this situation was to use a RAID. However, John was not fond of using RAID because he believed "managing a RAID is difficult and kludgy." Though you can extend RAID systems, the process is complicated and time consuming.

Determined to make it work, John experimented with RAID enclosures and the Synology line. However, to his disappointment, neither system met his needs. The basic enclosures couldn't be expanded and the Synology boxes were too complicated for his application. Thus, John was in the market for something that was easy to expand, had USB3, and a space greater than 250GB.

Challenge

Data storage space became a problem when John starting using the Xbox One with their new digital download model. He quickly realized he did not have enough space to store all of his games. Although he had the option to store the games on drives, he would constantly have to swap the drives and copy the content over. John experimented with RAID enclosures and the Synology line, however, these systems were too complicated to meet his needs and did not have enough expansion.

Solution

John needed a simple, storage solution with a space greater than 250GB. He starting using the Drobo 5D, which met all his needs and loves that it "just works." Using the hot cache option he can now have nearly native speeds with reads. He is now worry- free about data storage restrictions and able to try out games at his leisure.

❝ With Drobo I'm pretty much free to download all the free Games with Gold as I want without have to worry about space," John exclaimed. "I now never have to worry about running out of space in my Xbox One, or the data costly aspect of deleting a game to make room, then re-downloading it later. ❞

Solution

John found a solution to his Xbox One digital download model dilemma with the Drobo 5D. "I love the fact that it just works," said John. With the Drobo 5D, John is able to pop out a drive and replace or upgrade it without having to do anything to the array or log in to a console. Furthermore, he never has to worry about disconnecting the device from his Xbox to service it, as the hot cache option gives nearly native speeds with reads.

Results

Before, John had to be selective in choosing the games he wanted to play because of the limited storage safe. Now, he can try out games at his leisure without worrying about data storage restrictions. "With Drobo I'm pretty much free to download all the free Games with Gold as I want without have to worry about space," John exclaimed. "I now never have to worry about running out of space in my Xbox One, or the data costly aspect of deleting a game to make room, then re-downloading it later."

John's Steps to Make a Drobo Work with an Xbox One

- Set up Drobo with no partitions
- Boot a system with an Ubuntu live CD
- Plug in the Drobo
- Load gparted (this will take a while as it verifies the 16TB disk attached)
- Find and select the Drobo in the dropdown (it's the 16TB device :))
- Go to Device -> Create partition table
- Select GPT and wait for it to work (it seriously takes a bit)
- Right click on the unallocated space and create an unformatted partition – THIS IS IMPORTANT – if you select NTFS it will try to format and throw the device into a reboot loop
- Wait some more ...
- Drop to a root terminal and type the following for a quick format:
  - $ mkfs.ntfs -f /dev/<your new partition> (mine was sdd1)

After the disk is created, you need to download this tool to finish things up. This link explains how it works. After you set it to Xbox mode, the box picks it up and all is well (the Drobo firmware is also ok with the array and you can expand it also). This is what it looks like when it works.