

The Federal Lawyer in Cyberia

MICHAEL J. TONSING

As You Consider Cloud Storage, Also Consider an iTwin™

Lately we have expended a lot of ink in this column on the subject of “the cloud.” We have discussed many cloud-based alternatives for those who are considering making the move to cloud storage. This month, I’d like to shift our attention a bit and talk about an approach to storage that has, in many respects, advantages that the cloud does not offer.

Many lawyers work both at home and at the office, and many do not have virtual private networks (VPNs). Many travel and use a laptop computer on the road. As I indicated in the last few months, the cloud offers opportunities to access files from our office at our home or in our hotel room that did not exist for most of us earlier. Is the cloud the answer? Perhaps.



Traveling with a simple USB flash drive works in many situations where we know in advance what we will need and where what we’ll need is a static file. However, sometimes I realize that I need a file only after I have arrived at my destination, be that my home or a hotel room. In such situations, a flash drive cannot help me. And, whenever I put a

flash drive in my pocket or my briefcase, the thought crosses my mind that this tiny device could be lost or misplaced. If a flash drive loaded with confidential client information were to be lost while on the road, it would be a potential double disaster. First of all, it would make it difficult for me to complete the work that had caused me to bring the flash drive in the first place. More horrific, it would open the door to a breach of security that could have very negative consequences for one or more of my clients.

In short, flash drives are not a perfect solution for accessing files when one is away from the office.

We have already discussed the concerns that many have expressed about the reliability of cloud storage and the risks that storing data in the cloud can present. I am well aware that some companies and some law firms bar the use of cloud drives because of security concerns.

It is true that data stored in the cloud is protected by a password. However, the password is stored on the cloud server, where it can be cracked. We all know from accounts in the daily newspapers that cloud servers are major hacking targets.

In short, cloud storage is not a perfect solution.

What if you could stretch a secure cable between your office computer and your laptop computer whenever you go on the road? Well, that alternative exists, but without the cable. It is called an iTwin™ remote access USB device. (Even though it uses the initial letter “I,” this product is not made by Apple.™) An iTwin device allows you to access your office computer remotely by means of a highly encrypted Internet connection. It is an ingenious device.

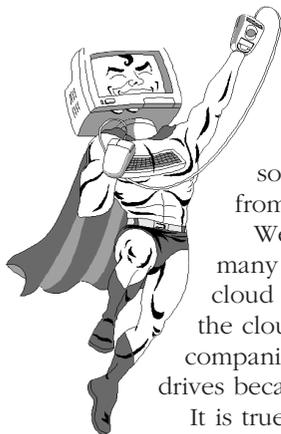
I know what you’re thinking. You’re thinking that when you go on the road it is tough enough to get an Internet connection set up without worrying about also setting up a means to encrypt data as it is transmitted back and forth. Not to worry. That is what makes the iTwin so attractive. It makes a complex series of tasks extremely simple.

An iTwin device resembles a USB flash drive, except that the iTwin has two identical halves that are joined together, and it has USB receptacles at both ends. When you see the iTwin, it may remind you of a gag gift—a pencil with erasers at both ends. When you take the device out of its box, you simply insert it into a USB port on your office computer and it will automatically copy a small program. Then, before it is put into use, you use the installed program to physically pair the two halves of your new device and establish a unique shared encryption code. All that can be done in a little more than the time it took you to read this paragraph. It is not difficult.

You then must designate the files on your office computer that you want to make available to your laptop computer what you’re on the road. You can designate a single file or you can designate your entire hard drive. Because you are not storing actual files on your iTwin, just links to the files, there is literally no limit to the number of files you can designate. And, because you are not actually copying them, the process of designating them takes virtually no time at all. Drag and drop individual files; drag and drop batches of files. It’s that simple.

Once that has been accomplished, you simply split the iTwin device into its two halves, leaving one in the office computer’s USB port and pocketing the other one. (As you leave your office, it is imperative that you leave your desktop computer running and connected to the Internet.)

When you are ready to connect your laptop to your office desktop computer, you merely take the half of the iTwin device you’ve been carrying in your pocket out and plug it into a USB port. Once your laptop



has an Internet connection, it will connect to your office computer regardless of firewalls, proxy servers, desktop passwords, dynamic Internet service provider addresses, and the like. Nifty. You can remotely access the designated files on the office computer's hard drive as well as network files or folders that are available to the office desktop computer, provided you have designated these files in advance.

If you wish to do so, you can establish a password of any length for added security. The password can be changed whenever the two halves of the device are physically paired together again.

It is important for me to note at this point that the remote access device has no programs on it, nor can it remotely operate programs that are on the desktop computer. Thus, if you have downloaded a PowerPoint™ presentation to your desktop and do not have PowerPoint installed there, you are out of luck. Of course, one could solve that problem either by installing the same programs on both computers or by accessing programs from the cloud.

The level of encryption that automatically protects the data that you are transferring is a level that is approved by the U.S. government for the encryption of top secret information. That's good enough for me.

When you access the designated files, which are displayed in the familiar pattern, you simply choose the particular file you want, and you simply drag and drop it into an iTwin virtual folder on the laptop computer. Then you can work on the file wherever you are, and when you are done, iTwin will synchronize the changes you have made with the original file on your office desktop computer's hard drive. (You can also transfer a wholly new file from the remote computer to the desktop computer, by the way, again utilizing the simplicity of drag and drop.)

It is possible to have someone working on the same file at the same time back at the office. When one of you attempts to save your changes, if you are the second one to do so, you will get a pop-up message indicating that the file on the desktop computer has already been changed and you will then have the option of assigning a new name to the edited file you have now completed before releasing it back.

OK, you ask, what if the half of the iTwin device that you are traveling with falls into the wrong hands? Isn't that just as disastrous as losing your USB flash drive? The answer is a resounding "no!" Fortunately, the makers of your iTwin have thought of that. When you set up your device you must provide them with an e-mail address. If you lose one of the two halves of your device, send them a message, and they will provide a code that will remotely disable both halves of your particular device, thus averting a potential security breach disaster. The disable code you enter immediately breaks the connection at both ends. Voilà! No security breach. (I suppose they have not yet figured out how to protect you from the other

outcome of losing the device—that is, the inability to complete your work. My suggestion would be for the manufacturer to produce the device in a way that allows you to attach the traveling half of an iTwin device to a key chain. I have been known to misplace my keys, so perhaps there truly is no way of fully protecting users against all possible mishaps.)

In my office and on my laptop computer, I am operating entirely in a Windows 7™ environment. However, I am told that an iTwin remote access USB device will work with Windows XP™, Windows Vista™, and MacOS™ 10 X 10.6 (Snow Leopard™ and Lion™) and above. And, like cloud-based alternatives, the iTwin works across platforms. I have seen various reviews that indicate that an iTwin sometimes struggles a bit in a Windows Vista environment, so if you're operating with that version, you may want to check this out before committing.

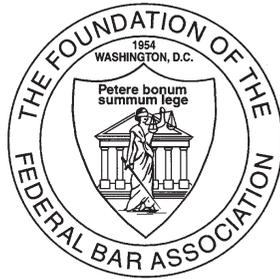
Transfer speeds are below what one would expect in a high-speed Internet connection generally. That is probably not an issue for most applications that a lawyer would use with this sort of device. Speeds of three megabytes per second are achievable with good connections at both ends. Obviously, though, the device is not intended to be used as a means for sharing large files between computers over the Internet.

One could view the iTwin as a virtual flash drive that has infinite capacity, though in a way that label sells the device short. (However, seeing it as a surrogate for a storage device does not make it a storage device! One should not mistake an iTwin device for a backup system. Since it does not store files, it definitely cannot be used as a backup drive.) However, that said, with the security of AES 256-bit encryption, the ability to use optional password protection, and the ability to disable a device remotely at any time, an iTwin remote access USB device may be a godsend for those who are still wary of transferring data using the cloud or carrying data in your pocket on a USB device when you go on the road. There is no security risk resulting from theft or loss—or nosy border guards, for that matter.

The newest breakthrough in iTwin technology is a device that allows you to link as many as three remote computers with your office desktop computer simultaneously. That would mean that several members of a team of lawyers would be able to collaborate in ways that would resemble what they could do using the cloud.

You can operate more than one iTwin, going tandem on the same office computer at the same time. That would enable you to have two associates on the road, each with an iTwin-equipped laptop computer, but each would have access only to the files on the office computer designated by his or her own paired half of the partner device. In certain firewall situations, that could be a very interesting feature. One

CYBERIA *continued on page 14*



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CYBERIA *continued from page 13*

could easily imagine it solving problems if the office uses contract lawyers, for instance.

One can purchase an iTwin from a number of sources, including Amazon™, as well as from the iTwin website (www.itwin.com). The device retails for about \$100 but can sometimes be found online for a price closer to \$80. (By the way, the iTwin website has helpful information and a few videos that would be worth watching if you're contemplating a purchase.)

As I weigh my own options as a sole practitioner, the only concern that remains troubling for me with respect to using an iTwin is the possibility that someone will disconnect my office computer while I am away or will break its connection with the Internet. If that happens and the office is closed, and I am relying on the iTwin in my pocket, I am dead in the water. I have not yet figured out how to insure myself against this possibility.

As I noted, flash drives are not a perfect solution. And the cloud is not a perfect solution. Every option has a downside risk or two, including the iTwin.

Conclusion

As Cyberian lawyers migrate to the cloud, they should give serious consideration to other alternatives that may present fewer possibilities of compromising data. An iTwin remote access USB device deserves to be considered as one option, either alone or in conjunction with other alternatives.

See you next month in Cyberia. **TFL**

Michael J. Tonsing practices law in San Francisco. He is a member of the FBA editorial board and has served on the Executive Committee of the Law Practice Management and Technology Section of the State Bar of California. See www.TonsingLawfirm.com. He also mentors less-experienced litigators by serving as a "second chair" to their trials (www.YourSecondChair.com). He can be reached at Mike@TonsingLawfirm.com.

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