Maxim Malevich, Fotolia

File sharing with Opera 10.10 Unite

UNITE!

Version 10.10 of the Opera web suite lets you put a server in your browser. **BY THOMAS LEICHTENSTERN**

A whole generation of new websites and social networking infrastructures let you share images, files, music, and text conversations with friends. These tools are mostly stable, and they are remarkably friendly for even the most technophobic user, but they also have some disadvantages. First, you have to upload your files, which can take time – for both the duration of the link as well as the extra measure of caution and editorial review you'll need to invest before placing your files on a public server.

The other problem with the web-based file sharing sites is the loss of control over the use of your content. Some of these sites freely admit that they use your files for various forms of data mining. Others track the visits to your site, and at a minimum, your files reside in

someone else's cloud, so ultimately, you don't really know what will happen with your data.

An alternative approach is simply to set up your own website the old fashioned way. If you host the site yourself, you can certainly maintain control of the files, but many users don't want to spend their social networking time administering an Apache server.

The Unite technology available with the recent Opera 10.10 browser provides a third option. Unite is designed to be as accessible and easy as a social networking site, but it serves the files from your own computer.

Unite is essentially a server within a browser. Remote users can access files on your Unite personal site from an ordinary browser window; those files then reside on your own home computer –

not in some unnamed data center. Although Opera does provide a proxy service for accessing servers that cannot receive a direct connection because of firewalls or dynamic addressing (Figure 1), the company does not actually host any

Unite Services

Opera currently provides the following services with Unite:

- file sharing
- web server
- media player
- photo sharing
- The Lounge (chat service)
- The Fridge (post notes as if you were taping them to the refrigerator)

According to the Opera website, "These six services represent the beginning of what is possible. Web developers can unleash their creativity to design unique web services and, in doing so, unlock the full potential of Opera Unite."
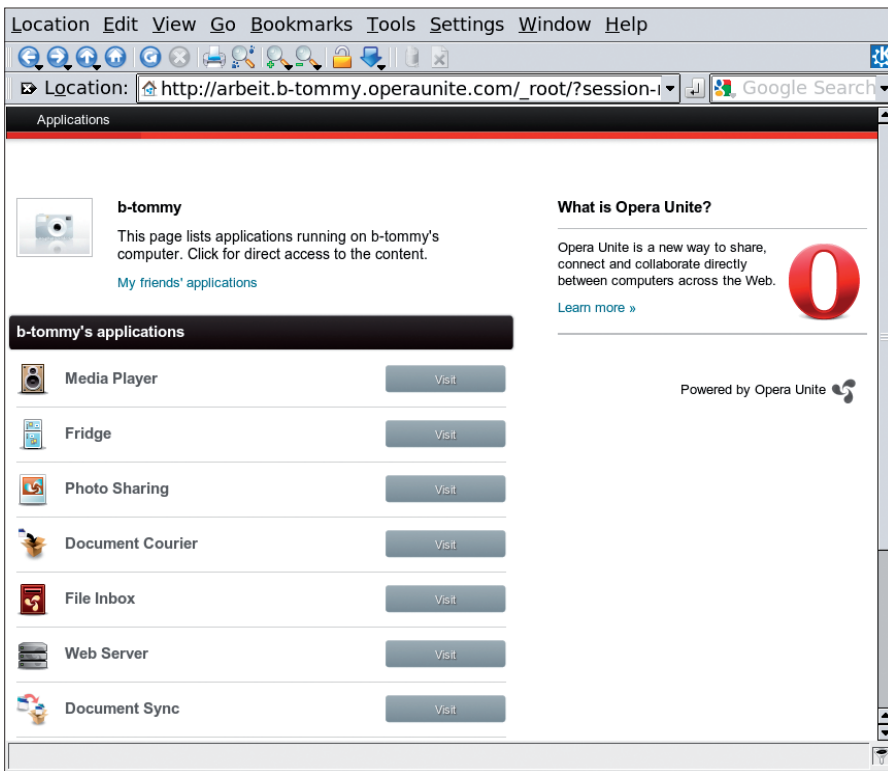
Figure 1: To make shared files directly accessible via the Internet, Opera offers an intermediate proxy server.

content, nor do they log any data on access attempts.

How It Works

The hub of Opera Unite is a web server integrated with the browser that runs add-ons for various tasks as web applications. Extensions that Opera includes out of the box are located in the */usr/share/opera/unite* directory (see the box titled "Unite Services."

Files with a *.ua* suffix are add-ons. Add-ons that you can install after setting up Opera are stored in */home/user_name/.opera/widgets/*. These add-ons are actually zip files that you can open easily with the Ark packer. A quick peak under the hood reveals that the extensions are a wacky collection of XML and JavaScript files that are customized to reflect the task at hand.

Getting Started

Before you can use Opera shares, you first need to create a free account with Opera. To help you do so, a registration window appears the first time you launch Unite. Here, you can enter the required data in the window. If your computer is hidden behind a router, Opera provides a proxy server for Unite users to help them access shared files. To

allow this to happen, Opera uses URLs with the syntax: *http://location_name. user_name.operaunite.com*. Both the location and the username are defined by the user. Opera assures users that they will not log traffic. If you have a direct Internet connection, Unite also supports direct access to shared resources via a URL based on the IP address:

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http://IP_address:8840
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This will only work if your router is set up for port forwarding. You need to specify in the configuration where users are allowed to access shares (via the Opera Unite website or the local network). In our lab, I discovered that Opera actually ignores these settings and displays shares both locally and externally. Opera does password-protect shares by default.

What Unite Can Do

Opera Unite is a kind of umbrella for a variety of applications that support various types of peer-to-peer exchanges. The distribution comes with a number of applications, including a file sharing module, a media player, a photo sharing tool (Figure 2), and a web server. The web server allows users to host their own
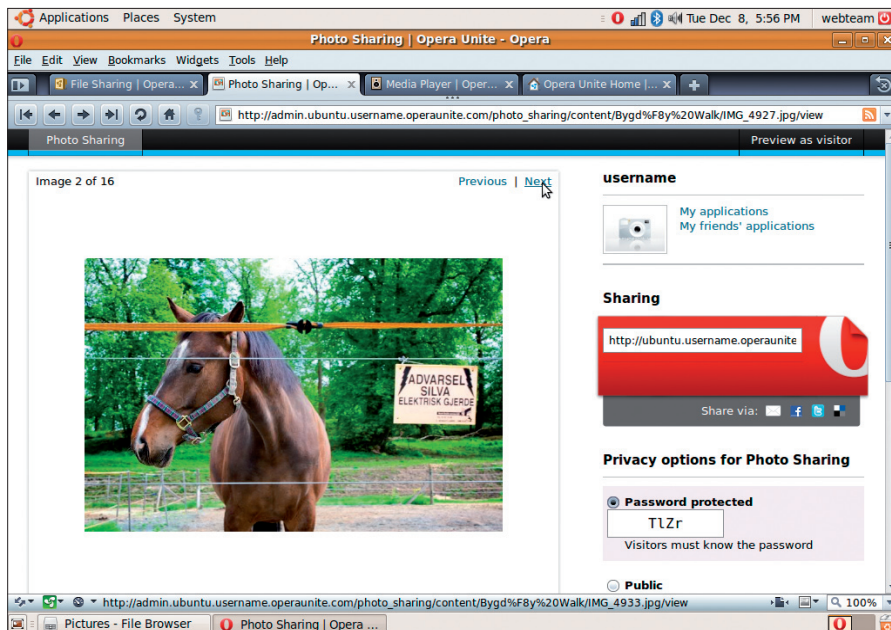
Figure 2: The photo sharing app lets you share your photo album without an online service.

websites. Opera assigns a random password for each of these modules by default, and you can change the password as needed.

Each add-on only lets you share a directory with its subdirectories. If you want to share more folders, Opera will let you do so by means of a parallel installation of the same module in the application database [2]. The database currently contains around 30 add-ons, which you can plug into the browser by clicking *Install Application* (similar to Firefox plugins). These additional modules allow users to extend Unite's feature set.

For example, if you are not happy with the virtual refrigerator for exchanging information, the *Tempbin* module gives you a rudimentary blog. If you prefer interactive communication, you can install the IRC-style chat module, *The Lounge*. If you want to let your visitors upload files to your server, you can use the *File Inbox*. To synchronize files between two machines at regular intervals, you might want to install the *Document Courier* on one of them and

the *Document Sync* on the other. However, you can only exchange files if Opera is running on both machines and both machines are online.

To let your guests download and play movies as well as music, you need to install *Stream media*. The client needs the Windows Media Player to play these files – in other words, Linux users can't benefit from this. On top of this, the module does not require password protection, and this means that anybody can access the files in the directory you share once you start the module.

Settings

The easiest way to access the global Unite configuration is to click the Unite icon at the bottom in the browser's
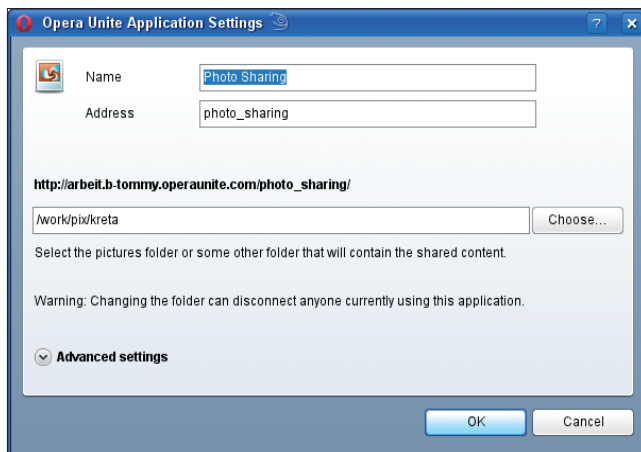

Figure 3: The individual module settings are restricted to visibility and the module and share names. All other configuration tasks use the module's web interface.

footer bar. To start and stop services, you need to visit the configuration area. Also, you can define the listening port and restrict the upload bandwidth as needed. To enable and disable individual modules, left-click the required entry and select *Start* or *Stop* in the drop-down list. Right-clicking the module pops up the administrator view in the browser window.

Each add-on you install has its own configuration window (Figure 3), which you can open by clicking the gear icon next to the add-on's name. However, the settings are restricted to changing the name, changing the shared directory, and setting the visibility options – which do not fully work. Module-specific settings, such as password assignments, are restricted to the add-on's web interface.

Side Effects

Because Opera only logs file access, attempts to attack the application will go unnoticed by the user. A potential attacker could exploit this to brute-force attack your password-protected shares without you even noticing, so make sure you choose a secure password.

On our lab machine, I was unable to disable the *Local network* option. In other words, if the machine is on a public network, an external user can see your file – and if password-protection is missing on top of this, the user can actually access the resources. Because you can expect the default port of 8840 to become a regular scanning target for script kiddies, you will want to change it.

Conclusions

Version 10.10 Unite of Opera has some interesting selling points that open up a huge number of opportunities for the exchange of information and files in an uncomplicated way. If you are cautious in the way you use the functions and settings, and if you are aware of the potential risks, you will definitely have a lot of fun with the extensions. One important feature that is still missing from Unite is a log that provides a detailed history of access attempts. ■

INFO

[1] Opera: *http://opera.com*

[2] Opera Unite extensions: *http://unite. opera.com/applications/*