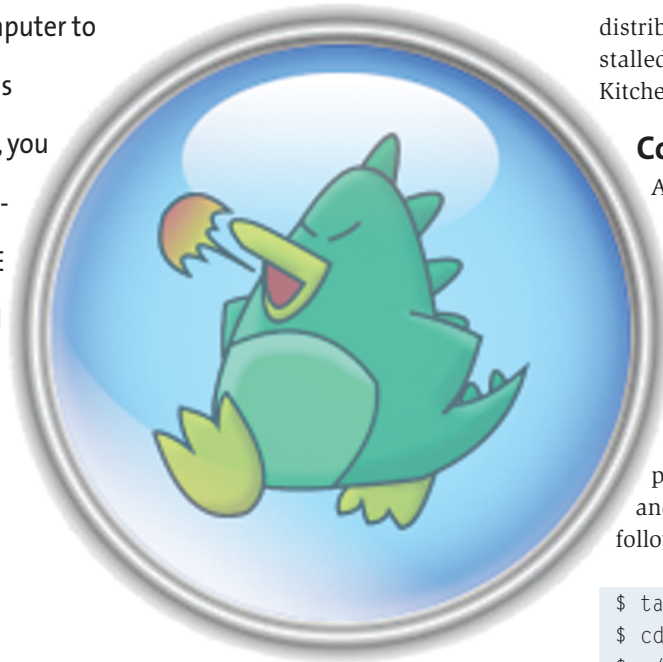


Universal Synchronizer

KitchenSync

If you use more than one computer to manage personal data such as addresses and appointments, you will definitely need a synchronization tool. For users of KDE 3.2 or later, KitchenSync could be the perfect answer you have been looking for.

BY CARSTEN NIEHAUS



Data synchronization can be an issue on Linux. The OPIE Team [1] needed a program to allow the KDE addressbook to exchange data with the OPIE counterpart. Holger Freyther wrote the KitchenSync tool to take care of that job.

From the outset, the developers concentrated on providing facilities that theoretically allow any PIM applications to interact, provided that appropriate filters are available.

With this expandability in mind the project was started and after just a short

amount of time has proved to be not just a concept, but a useful working tool.

By the time KDE 3.2 is released, filters will be available for most common PIM applications. The *Devices and Programs* box provides an overview of the filters that already work. In the following article we will be concentrating on synchronizing KAddressbook and KOrganizer.

You do not necessarily need KDE to run KitchenSync; however, you do need the KDE libraries *kdelibs* and *Qt 3.1.x*, which are typically supplied with most

distributions. Provided you have installed these libraries, you can run the KitchenSync on GNOME, for example.

Configuration

As KDE 3.2 has not yet been released, you will need to compile KitchenSync yourself. The OPIE team has kindly provided a current version for Linux Magazine readers at [3].

The following steps assume that you have already installed Qt and KDE, including the developer package, and have set the *\$KDEDIR* and *\$QTDIR* paths. Now enter the following commands:

```
$ tar xfvj ks-linuxuser.tar.bz2
$ cd kitchensync
$ ./configure -prefix=$KDEDIR
  --enable-debug
$ make
$ su -c "make install"
```

Type your root password, press [Enter] to confirm and install KitchenSync. After doing so, you can immediately launch the program by typing *kitchensync*.

To synchronize a PDA, such as a Sharp Zaurus or an iPAQ, you will of course need to connect it up to your computer. This is typically done by means of a USB net, that is a USB cable based network, although other connection types such as a serial port or even a compact flash network adapter will also do the job.

If your network is operational, your PDA should already have an IP address on your network. If you do not know your IP address, you can type *ifconfig* to discover it.

For security reasons, OPIE does not allow data to be exchanged from an external source address. This means

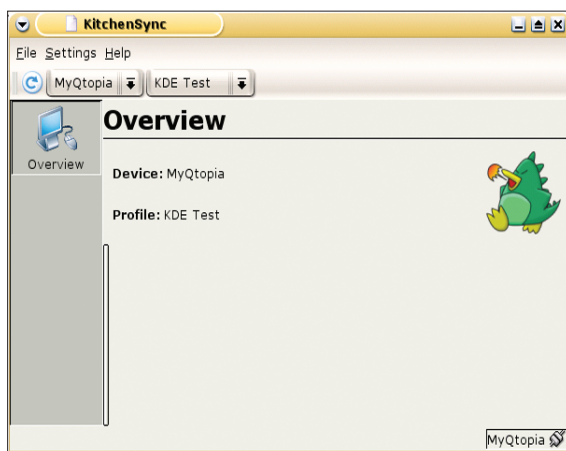


Figure 1: The KitchenSync interface is clear-cut and intuitive

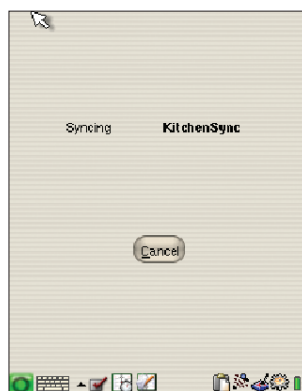


Figure 2: The connection between KitchenSync and an OPIE PDA has been established

GLOSSARY

PIM: PIM is the abbreviation for Personal Information Management, that is the management of personal data such as addresses and appointments.

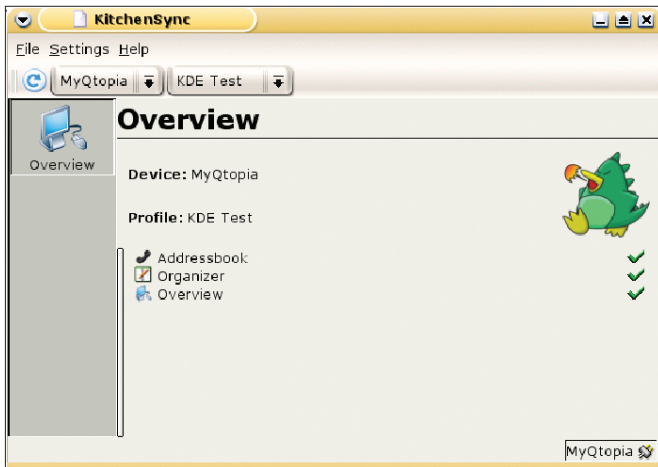


Figure 3: KitchenSync synchronizing files with an OPIE PDA

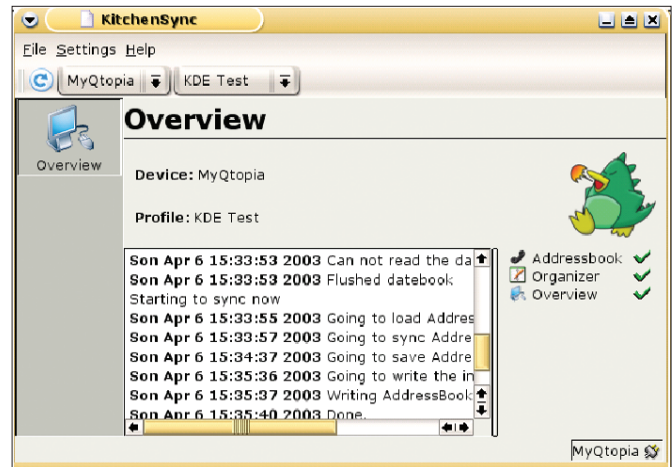


Figure 4: After synchronizing KitchenSync displays a summary

enabling data exchange operations for all your IPs, or at least your PC's IP, before starting to synchronize. The *Security* program is the place to do this.

Synchronization

This completes setting up your PDA; all you need to do now is set up KitchenSync itself. Launch KitchenSync and select *Settings / Configure Devices*. Then select *Add* to set up a new device, and select the Qtopia connector in the menu that appears.

KitchenSync will be able to communicate with programs like the Palm addressbook later; you would need a Palm connector to do so. Confirm by selecting *Next*, type *root* as your username, and *rootme* as your password – these are the OPIE defaults. Of course, if you have changed the defaults, you will need to type the password you assigned.

As previously mentioned, you do need to know the IP address for your PDA. Enter this address as the *Destination Address* and select either the OPIE or Sharp ROM. If you have a Sharp Zaurus and have not changed the software so far, use the Sharp ROM, otherwise use the new OPIE.

The connection you are setting up needs a Name, such as *My Zaurus*. To finish setting up the connection, simply click on *Finish* and enable the connection in the dialog box that appears.

You still need to tell KitchenSync what to synchronize. To do so, select *Settings / Configure Profiles* and then *Add* to define a new profile. Locate the applications you want to synchronize, such as your addressbook. Additionally, assign an intuitive Name for your profile, such as *OPIE Profile*. Enter the path to your files under *Settings / Configure Current Profile*, this could be the path to the KOrganizer calendar, for example: `/.kde/share/apps/korganizer/MyCalendar.ics`. This completes setting up KitchenSync.

To start synchronizing, click on the connector icon in the lower left corner. The *Successfully authenticated* message should appear to indicate that your computer has established a connection to the PDA. After clicking on the Sync icon with two interlaced arrows, KitchenSync should look like Figure 3.

Tips and Tricks

Some Zaurus users have reported problems setting up the network connection

between the Zaurus and their PCs. There are numerous HowTos that explain the necessary steps [4].

Synchronization between KDE and the OPIE programs is more or less perfect, the only restriction being that OPIE allows for a few data types that the KAddressbook and KOrganizer do not understand – and of course cannot synchronize.

If you use Evolution instead of the KDE applications, these steps should work in principle, however, it should be noted that one or two replication issues have been reported.

It is a good idea to backup your data before trying out KitchenSync. Remember that the software is at an early stage of its development and to help the developers with feedback. ■

INFO

- [1] OPIE: <http://www.opie.info>
- [2] KitchenSync: <http://www.handhelds.org/~zecke/kitchensync.html>
- [3] Download: <http://www.handhelds.org/~zecke/ks-linuxuser.tar.bz2>
- [4] Zaurus connections: <http://www.ruault.com/Zaurus/ethernet-over-usb-howto.html>

Devices and Programs

Not all of the filters planned for the release of KDE 3.2 work at present. However, the KitchenSync Team has completed one or two filters, or completion is at least imminent. In the following list KDEPIM and Evolution are interchangeable, although you can expect one or two issues.

| DEVICE/SOFTWARE 1 | DEVICE/SOFTWARE 2 | STATUS |
|-----------------------|-------------------|---|
| OPIE | KDEPIM | operational |
| Casio Pocket Viewer | KDEPIM | almost operational |
| Agenda Vr3 | KDEPIM | work in progress (needs <i>sqlite</i>) |
| SynCE | KDEPIM | work in progress |
| Siemens mobile phones | KDEPIM | work in progress |

THE AUTHOR

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