Over The Air Sync

SyncML Server
Google, ScheduleWorld, Funambol, Memotoo, Mobical, Synthesis, ZYB ...

SyncML (OMA DS): protocol vCard/vCalendar/iCalendar: payload

SyncEvolution - Sync PIM (Contacts, Events, Tasks, Notes)
SyncEvolution: spare time project for >3 years, full-time since 2009

So far: SyncML client for

- Evolution/Moblin
- iPhone+Mac OS X (need maintainer)
- Maemo (Ove Kaaven: Maemo 5)
- KDE (under development)

More to come in 1.0: direct synchronization
Synthesis

• Swiss company with >10y experience with SyncML, owned by the two main developers
• Synthesis SyncML Engine:
  • C++ implementation of client and server, data merging and conversion
  • LGPL 2.1+3.0
Next Steps

• 1.0 release: beta available, release end of March/beginning of April

• Beyond 1.0:
  • Device database ("config templates")
  • Support more local backends, including adaptors for other protocols (need contributors!)
  • Local sync between backends
Usage

- **Command line:**
  
  ```
  syncevolution --configure \
  --sync-property username=foo \
  --sync-property password=bar \
  scheduleworld
  ```

  ```
  syncevolution scheduleworld
  ```

  ```
  syncevolution --sync-properties ?
  ```

  ```
  syncevolution --source-properties ?
  ```

- **Applet: Genesis, by Frederik Elwert**

  ![Image of Genesis applet]

- **GTK GUI (“sync-ui”)**

  ![Image of GTK GUI]
Sync-UI: Setup

Supported services
To sync you'll need a network connection and an account with a sync service.
We support the following services:

- Memotoo - Launch website
- Mobical - Launch website
- ScheduleWorld - Launch website

ScheduleWorld enables you to keep your contacts, events, tasks, and notes in sync.

Username: ku@goto.f
Password: ********

Send changes to ScheduleWorld: On
Receive changes from ScheduleWorld: On

Sync
- Contacts: On
- Memo: On
- Appointments: On
- Tasks: On

Manual setup
If you don't see your service above but know that your sync provider uses SyncML,
you can setup a service manually.

Add new service
Sync-Ul: Houston, we’ve got a problem.

ScheduleWorld

Failed to login. Could there be a problem with your username or password?

Actions
- Sync again
- Change or edit sync service
- Fix a sync emergency

Appointments
Last time: No changes.

Contacts
Last time: No changes.

Memo
Last time: No changes.

Tasks
Last time: No changes.
Sync-UI: We’ve got a solution.

If something has gone horribly wrong, you can try a slow sync, start from scratch or restore from backup.

- Affected data: ScheduleWorld Appointments, Contacts, Tasks, Memo

**Slow sync**

A slow sync compares items from both sides and tries to merge them. This may fail in some cases, leading to duplicates or lost information.

**Start from scratch**

- Delete all your local data and replace with data from ScheduleWorld
- Delete all data on ScheduleWorld and replace with your local data

**Restore from backup**

Backups are made before every time we Sync. Choose a backup to restore. Any changes you have made since then will be lost.

- Restore backup from before syncing with scheduleworld on 01/27/2010 03:46:56 PM
- Restore backup from before syncing with scheduleworld on 01/27/2010 05:58:15 PM
I Want You

To Sync

http://syncevolution.org

Cross-desktop devroom, Sunday 15:15-16:00

Getting Involved
PIM Sync Challenges:

It can eat your data?!
1. No globally unique ID.
2. Different representation of data.
3. Offline updates allowed: what is the most recent data?
4. Must support standard formats, including legacy ones (vCalendar).
5. Must work with limited knowledge about peers (capabilities, behavior).
SyncML as Protocol

• “slow sync” – client sends all items, server compares, sends updates back
• “normal sync” – exchange of updates
• Resilient – suspend&resume (voluntarily or due to loss of connection), resend messages
• Device Capability description