

# Android Data Privacy

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# DISCLAIMER

- This is my experience. I am not an expert. YMMV.
- There is NOT a lot of information out there on this subject
- I'm sure this is not the only way to accomplish my goals
- This may not be the best way to accomplish my goals
- Alternatives are welcome!

# Why I moved from iPhone to Android

- I found myself not using my smartphone for things I should have been
- Keyboard too small
- Keyboard not replaceable
- Harassment of **BLU** members
- Requires iTunes/Windows/Outlook for syncing
- Syncing and updates failed regularly

# The Problem

- Android devices are designed, first and foremost, to be data collection devices for Google
- Under normal usage (if you're an average user not actively trying to prevent it), they get access to all of your contacts, calendar, configuration settings, Facebook contacts, etc
- Even if I were not a bit of a privacy nut, I don't feel I have the right to give out other peoples' contact information
- Not syncing your data is not an options because it can't practically be backed up without rooting

# The Solution

- Sync data with your own server(s)
- Use cross-platform programs
- Use programs that can back up or export their data
- Use programs with built-in web servers
- Use programs that are usable on your phone

# Limitations

- Decide what information you MUST protect and what data is OK to share if you must. Some data will be harder than others to protect
- Remember there's a time/labor/money cost to most things you'll do in the name of privacy
- What apps you install later can greatly affect your privacy
- The application-level permissions are VERY coarse-grained
- I do not want to steal content, data, media, etc



# Solution: OwnCloud

- Web-based calendar with CalDav server
- Web-based contacts with CardDav server
- File Sync with cross-platform clients\*
- Music sharing
- Bookmarks, notes, task list, and many other applications
- Requires your own server
- Needs a work-around for an Android bug to maintain account information



# Solution: AirDroid

- <http://airdroid.com/>
- Drag and drop file transfers over wireless
- Send text messages from your computer via phone
- View photos, videos on your phone
- Remote phone locking/locating
- Take pictures using your phone's camera
- Share clipboards
- Make calls

# Solution: mSecure Password Manager

- [https://msevensoftware.com/msecure\\_android](https://msevensoftware.com/msecure_android)
- 256 bit Blowfish Encryption
- Auto lock, auto field hiding, Optional self-destruct
- Password Generator to create unguessable passwords.
- Many templates, categories, for ease of use
- Many syncing options, including emailing encrypted DB
- Cross-platform (though not Linux)
- Built-in browser with auto-fill fields

# Solution: HanDBase

- <http://www.ddhsoftware.com/handbase.html>
- Powerful database application with views, filtering, sorting and (soon on Android) forms
- VERY usable right on the smartphone
- Lots of field types, including lookups into other databases
- Web server for upload/download of databases as well as import and export of records as CSV files
- Field-level and database-level encryption
- Cross-platform (though not Linux)

# Solution: Wiki

- The most reliable way to to securely sync data is to not sync data
- Information on a wiki is available and editable from everywhere
- I use **Foswiki** (<http://www.foswiki.org>), which is a branch of TWiki
  - Real user/group/permission authorization
  - MANY plugins enabling advanced functionality
  - Great support team on IRC and email
  - Pretty good WYSIWYG editor
  - Page metadata allows for “applications”

# Solution: Toodledo

- <https://www.toodledo.com/>
- Web-based task manager
- This does NOT run on my server. This was a compromise
- Many compatible client applications for smartphones, plus mobile website
- Back up and restore, export and import, so you're not locked into it

# Solution: AmazonMP3

- <http://www.amazonmp3.com>
- Amazon sells DRM-free MP3s that will work on any device. If you don't like lossy compression, then find another service.
- When you buy music from them it's available in the cloud, and accessible from their Android and IOS apps.

# Solution: Hardware IO

- Creating and editing content on the S4 is much easier for me than on the iPhone, but it's still challenging at times due to selecting, no delete, moving around
- Bluetooth keyboard works great, including arrow keys
- Bluetooth mouse works great
- USB mouse/keyboard work with OTG adapter