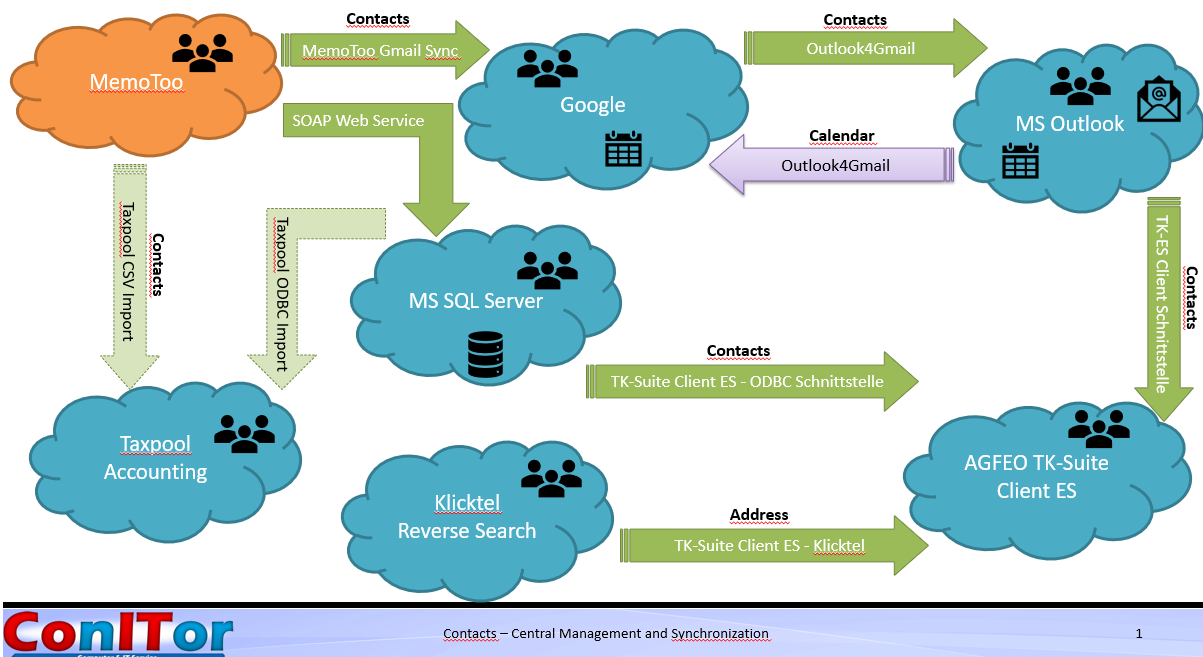# Central Management of Contacts and Interfaces to other Apps

In an office environment, multiple apps require contact data for various tasks. Here are some examples:

Email Programs   Managing names, email address, further contact details

PC Contacts   Accessing contact information like name, phone, email

Smartphone   Accessing contact information like name, phone, email

Phone Systems   Accessing names and Phone number for softphone dialing

CRM Systems   Managing customer data like names, email, phone, …

Accounting Systems   Managing customer data like names, address, email, phone, …

To avoid replicating information and reducing time for data entry, an environment to manage and synchronize the contact data is highly appreciated.
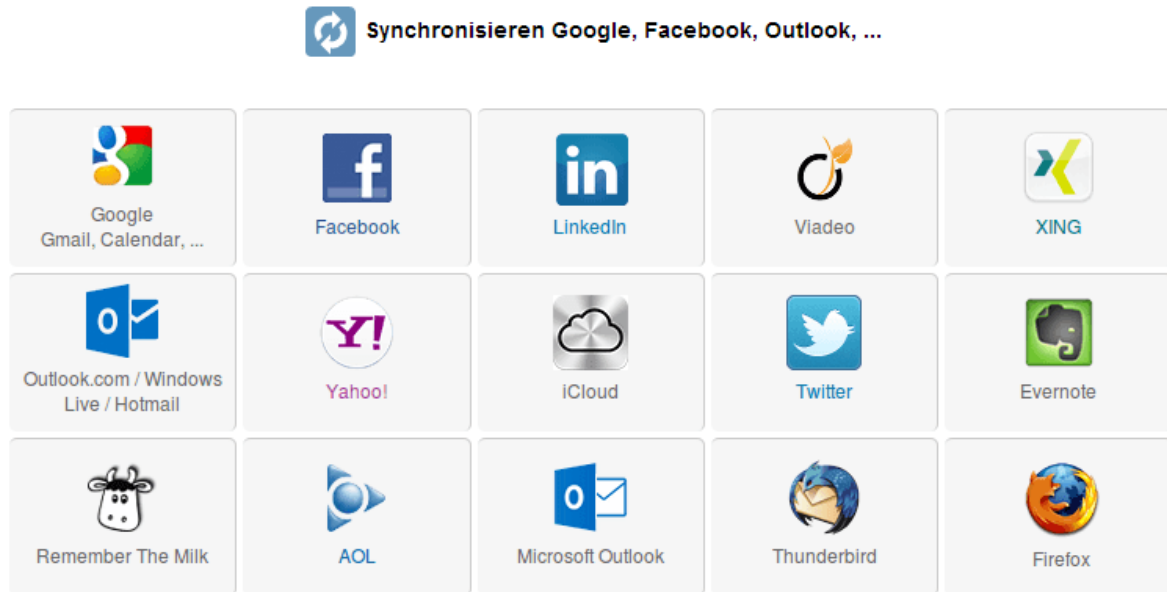
The image below shows a typical environment of different apps and services, as well as interfaces to synchronize the data between the systems.

For the central management of all contact data, I decided for the app MEMOTOO. This app can be downloaded and for a small fee, you get full capabilities.

The biggest advantage with Memotoo is, that you have all required fields, can even extend with user specific attributes, and the app has many interfaces to synchronize, import and export data. Beyond contacts, Memotoo can also handle emails, calendars, bookmarks, files.

With the link to Memotoo, you can see the various ways to interact and exchange data.

The Memotoo interfaces I have used are:

- Google Contact Synchronization
- Memotoo Contact Export (CSV)
- Memotoo SOAP Web Services

Using the Memotoo Web Service WSDL to synchronize data from Memotoo to a SQL Server Database

As other apps can synchronize contact data via ODBC database interface, I decided to synchronize the Memotoo contacts into a SQL Server database.

The base for accessing the SOAP Web Service and writing the data to the SQL Server database is a Powershell script.

The main blocks are:

1. Access all contacts from Memotoo via Memotoo Webservice
2. Check the SQL Server database if the contact is already available
3. If the contact is available, check if the contact has been modified since compared to the entry in the SL Server database.
4. Insert or update the contact in the SQL Server database

The Google contact synchronization is straight forward. You just name the Google account to use with the contacts and decide if contacts are updated in both directions or only in one. I decided to update contact only from Memotoo to Google and maintain the contact data inside Memotoo.

Using Outlook4Gmail to synchronize contacts and calendars

Outlook4Gmail is a service-based app, which can synchronize contacts, calendars and tasks between Microsoft Outlook and Google. You can decide to synchronize in both directions or only in one. Here I decided to

- Synchronize contacts from Memotoo to Outlook
- Synchronize calendars form Outlook to Google

Synchronizing Calendars from Outlook to Google only, allows me to have business and private calendar entries inside the Google calendar, but to have only business calendar entries inside Outlook. The Google calendar is used on the PC and with the smartphone.

Synchronizing contacts with the phone system

I have an AGFEO ES516 phone management system in place. The TK-Suite ES Client app allows to monitor incoming and outgoing calls, see contact information when somebody calls. TK-Suite Client ES also has different interfaces to manage and synchronize contacts. After having the contacts in the SQL Server database, I switched from the previous interface (Outlook to TK-Suite) to the ODBC interface. I started the ODBC interface with the SQL Server and within the TK-Suite, you can easily map the database fields to the TK-Suite fields (by drag & drop) and store the configuration.

TK-Suite also supports a reverse contact search via phone number in the klicktel (11880.com) phone book. This helps to see some contact information with a call, without having the contact information in my own systems.

Managing contacts with the Taxpool Buchhalter Accounting System

Taxpool Buchhalter has some interfaces, mainly to import contacts, but plans to add some more database SQL capabilities in the near future to allow better synchronization of contact data.