Your online computer
- Your friends, files and digital life on any device

Xcerion delivers the CloudMe.com consumer service (with over 500 000 users world-wide from 170 countries). The CloudMe online computer (formerly known as iCloud) is the cloud computer for consumers, an online media and file server for streaming and sharing. It enables ubiquitous computing reaching out with connectivity to all kinds of devices.

With the CloudMe ubiquitous Cloud Convergence platform all devices can be connected.

Exchange – Thesis Description
The CloudMe service includes a virtual web browser based desktop with office productivity applications like Mail, Calendar, Contacts and Todo. The information is available once the desktop is opened and the corresponding application started. In order to become true ubiquitous this information need to also be integrated into smartphone devices, so the built in applications like Calendar and Mail in these devices can be used. If the back-end system of CloudMe were exposed using the Microsoft Exchange Protocol, it could all be true. Today smartphones can make use of CloudMe files using the WebDAV protocol implemented on top of its back-end API’s. An application is also provided for iPhone and Android.

This thesis will be about to survey the market for open source solutions providing Microsoft Exchange Protocol compliance that can be integrated to the back-end server API’s of CloudMe (currently over 100 state-less XML Web Service / REST API’s are available, whereof a fraction needs to be used to complete this thesis). In the end it might be better to implement the protocol directly and translate each Exchange call into the correct API calls of CloudMe. The solution that gives a stable result quickly will be favored.

All API’s of CloudMe are documented and should provide all functionality needed to implement an Exchange compliant protocol. The programming language to be used is C++, which will be run on Ubuntu Linux servers. The work of the thesis should result in at least a full implementation of one set of application API’s, prioritized in the following order; 1) Calendar, 2) Mail, 3) Contacts and 4) Todo. If verified to be fully working, the implemented functionality will be launched as part of the CloudMe service to all its users.

An iPhone will be used as the reference client for testing to see that the implementation is correct. The applications on the CloudMe desktop will be used to verify that input data from the smartphone is correct. Another service exposing its back-end in this way is Google Apps.

All work will be done from the Xcerion main office at Drottninggatan 23, Linköping.

Additional Thesis Work
Xcerion might have more thesis work if students are interested.

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