

# Open-Xchange™ - DPAG

## Reference customers overview



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## **1. Introduction/Overview**

This document gives an overview of the successful implementations of Open-Xchange projects. The following selected reference projects are each characterized by the Open-Xchange ability to always integrate in very large, highly scalable and complex IT infrastructures from the customer side, and the fact that the Open-Xchange "customer" is not the end user of the Open-Xchange application.

## **2. Basics**

Open-Xchange Server 6 is based on a modular architecture built on OSGi. This makes it now possible to replace individual parts of the application (such as access to a mail store) with specific implementations.

The other listed reference projects give an overview of Use Cases already implemented in real life, that have worked in real, everyday business.

Initially, all customers had basically the idea to develop themselves a web-based messaging and collaborative solution. These ideas were, however, after being compared with an Open-Xchange solution, discarded on three main grounds:

1. Too long time frame for developing their own solution
2. Inability to estimate the initial and all follow-up costs
3. Missing or still to be built up expertise in messaging and collaboration solution environments

For all these projects, the implementation has only been made possible by the availability of extensive APIs.

In all projects, Open-Xchange has been integrated into an existing highly scalable email backend. Furthermore, Open-Xchange, in the framework of the various projects, has been integrated seamlessly into existing user administration and billing systems.

To implement successfully these customer integrations and specific requirements, collaboration with internal and external R&D departments and partners was always essential. This was consistently provided by the Open-Xchange project team.

### **3. Open-Xchange reference customers overview**

#### **Network Solutions ([www.networksolutions.com](http://www.networksolutions.com), USA)**

##### **Customer situation and starting point**

Network Solutions is a leading provider of e-business solutions and a pioneer in domain registration. Network Solutions offers an extensive portfolio of Internet services such as web hosting, web design, e-commerce software, search engine marketing, SSL certificates, email services and domain registration. Since 29 years, Network Solutions customers receive IT services "from a single source".

Network Solutions is thus one of the most renowned and best-known Internet companies in the world, and is among the five largest web hosting companies worldwide. Network Solutions has been for years the only ISP providing the worldwide .com domains. Network Solutions manages more than 7 million Internet domains and over 1.5 million email accounts.

Particular attention is given to "business-class email", offering ambitious private users as well as small and medium-sized companies high-quality email services, including email encryption.

In the US, the presence of Google and Microsoft is particularly ubiquitous, and Network Solutions was almost forced to provide email services equivalent to these competitors'.

Since Network Solutions so far only provided an outdated web mailer of the first generation - without modern AJAX technology - the urgent goal of Network Solutions was to discard it, and to replace it with an easy-to-use modern web client. In addition, Network Solutions customers also have the opportunity to upgrade basic functions to higher-level features such as groupware, online document management and mobility services.

An existing untouchable infrastructure component - a system developed on the basis of the open-source Qmail mail server - had also to be integrated. The particular challenge was that, to achieve an outstanding performance and scalability, a special C-library for Qmail was designed, which Open-Xchange webmail should also access.

The sensitive point was thus clearly that this special Qmail technology had been made through a purchase of InQuent Technologies in Toronto, Canada. Under Open-Xchange leadership, this company should develop appropriate connectors for the Qmail integration, as well as for the user management and billing system.

## **Open-Xchange solution and implementation**

Open-Xchange developed together with Network Solutions a concept to replace the existing webmail clients, and to integrate seamlessly the Open-Xchange solution into the Network Solutions infrastructure without any user migration.

The success of the solution was largely dependent on the capacity of decentralized R&D departments working independently of each other in an agile development process to contribute various coordinated components to the complete solution.

The connection of the Network Solution Qmail-based email server cluster was especially a critical success factor, with the following points to consider:

Within the project Network Solutions high-performance, index-based mail storage had to be linked to Open-Xchange. Since the complete development of that part was to be done locally in Toronto, Canada, communication through regular telephone conferences and electronic communications (mail and chat) was essential. A local stay was only necessary once for the developers throughout the project. This proved, in particular through the chat, and the specially setup mailing list, to be very smooth, as these two asynchronous communication workflows of developers didn't break, and a high level of response was still given.

To access the mail store, a C-API was made available by Network Solutions to Open-Xchange, which was integrated in the Java-based Open-Xchange system through a specific OSGi bundle. As the integration of an external mail store in our system through a special layer (Mail Abstraction Layer) is made transparent to the rest of the application, it allows the core system to work independently of this bundle. Furthermore, it also minimizes the integration effort.

## **1&1 Internet AG ([www.1und1.de](http://www.1und1.de), Germany)**

### **Customer situation and starting point**

1&1 Internet AG is, with around 7.46 million customer contracts, a leading Internet provider and makes available to individuals, professionals and freelancers a comprehensive range of sophisticated online applications. 1&1 is present on the market in Germany, Austria, England, France, Spain and in the

US, and hosts currently around 10 millions Internet domains. The world's largest Internet service provider launched in February 2007 the hosted groupware offering based on Open-Xchange. The commercialization of the Open-Xchange Hosting Edition is done under the brand name "1&1 Mail Xchange".

In December 1&1 extended the Mail Xchange offering to support mobile devices based on the interplay between Open-Xchange Hosting Edition and Funambol technology.

### **Initial situation:**

The previous standard offerings of Internet service providers, such as email access, website hosting and making web space available will be increasingly comparable and interchangeable. Customers can freely switch to other ISPs. Differentiation from competition is becoming increasingly difficult, in a context of falling prices for always more services.

To go against this trend, 1&1 decided to build a new Open-Xchange based offering for existing and new customers, with the following major objectives:

- Strengthen customer retention through additional functionality/value
- no change to other ISPs is possible without functional and/or data loss.
- Addressing new customer groups - small and medium businesses should be especially attracted to the new offering.
- The offering should be a base for additional value-added services in the area of Personal Information Management - such as connecting mobile devices.
- Integration of the new offering in the existing ones and into the existing infrastructure - no need to build an additional, redundant infrastructure for email service, data storage and user management.

In particular, the existing "Nemesis" email system, self-developed over the years by 1&1, had to be integrated in the Open-Xchange solution. The same requirements existed for the also self-developed MySQL-based user administration system, as well as the integration into the complex 1&1 billing system with millions of customers reliably managed and billed.

## **Open-Xchange solution and implementation**

The Open-Xchange Hosting Edition met fully 1&1 Internet AG requirements.

The modular, open standards-based architecture of OX allowed the use and integration of the existing email infrastructure and services, and integration into the provisioning/billing services and administration backend in a way that would not have been possible with other solutions.

In particular, the decentralized cooperation with the 1&1 R&D department on the basis of OX APIs proved to be effective, since the 1&1 developers could integrate the solution in their portals completely decoupled from the Open-Xchange software development, and thus a very tight project schedule could be kept. An extensive migration of existing data was not necessary.

The customer are offered additional functions, such as a shared appointment calendar, resource planning and the use of the Open-Xchange InfoStore (document management), a file repository with version management. With the use of the additional features, the customer cannot switch to other ISPs without losing again this added value, leading to increased customer retention. The groupware functionality opens new customer groups to 1&1 Internet, especially small business customers. The Open-Xchange based 1&1 product 1&1 mail Xchange is now available in Germany, in the US, the UK and in Romania.

Towards the end of 2008, 1&1 will also abandon its own previously developed 1&1 webmail in favor of Open-Xchange webmail. Open-Xchange webmail will then be available to more than 6 million 1&1 users.

## **Hostpoint AG ([www.hostpoint.ch](http://www.hostpoint.ch), Switzerland)**

### **Customer situation and starting point**

Hostpoint is the leading Swiss hosting provider. Hostpoint offered so far its 250,000 customers an outdated Horde-based web mailer.

In addition to competitive pressures by increased comparability of offerings for Internet service providers, Hostpoint needed to modernize the existing webmailer.

Hostpoint was no longer meeting the increased customer expectations of a modern webmailer. The existing web mailer was slow, had an outdated user interface and was not corresponding anymore to the modern user behavior. The reworking and introduction of a new version of the web mailer would have been very costly, so an alternative was sought.

In addition to customer demand, there was a need to make potential additional offerings to increase the revenue per customer, improve customer retention and address new customer groups.

Hostpoint formulated the following core requirements:

- Modernizing of the existing web mailer / alternatively introduce a new one. The web mailer should become the main mean for customers to edit their mails, as a replacement for desktop mail clients.
- Fast display and editing of emails
- Up to date usability such as drag and drop functionality to allow the customer to work almost like with a desktop application
- Easy integration into existing Hostpoint email (Dovecot) and user management (LDAP-based), as well as in the order system infrastructure

In addition, the new web mailer should be the basis for further offerings with the following aims:

- offer additional functionality
- on the basis of the additional functionality, which goes beyond pure mail, switching to competitors should become more difficult
- Attracting new customers, additional value offerings for existing customers

## **Open-Xchange solution and implementation**

The Open-Xchange Hosting Edition met these Hostpoint requirements. Through the open architecture and the benefits of Internet standards, as they are used by Hostpoint, a replacement of the existing web mailer was possible without big expenditures. Customers get a fast, modern web mailer with additional features. Hostpoint is very excited by the speed of the OX web mailer, saving an expensive investment in new hardware.

With the click of a mouse, Hostpoint customers can upgrade the new OX web mailer into a fully-fledged groupware solution for all users in their domain, without having to install this software themselves, or learn a new user interface.

Technically, Open-Xchange was able to integrate with the Dovecot mail server via IMAP in the AJAX GUI, and thus to drastically reduce the load on the mail backend computer, which consequently gave the users a tremendous performance boost. The LDAP plug-in developed by Hostpoint could be used on the Open-Xchange user plug-in interface in standard fashion, to integrate Hostpoint user management in Open-Xchange.

## **VAPS (Volkswagen and Audi Partner Services)**

### **Customer situation and starting point**

VAPS (Volkswagen Audi partner service) EDV-Service & Vertrieb GmbH is the purchasing and service company of German Volkswagen and Audi partners for the information technology, lubricants and advertising business sectors. Overall, VAPS GmbH represents about 3000 VW and Audi dealers.

ACS is a subsidiary of VAPS GmbH, which is principally in the field of IT infrastructure services.

Today, ACS provides also central email to car dealerships. This service is currently used by approximately 26,000 mail accounts.

ACS currently offers IMAP as well as a webmail (the open-source SquirrelMail).

Besides the pure mail routing, ACS also takes over spam filtering and virus scanning for customer mail accounts. Likewise, ACS runs the complete, very strictly protected intranet of car dealerships and manages the entire Internet access. ACS has a market share of 80% for the Volkswagen and Audi car dealerships.

To enhance the attractiveness of the current offer and further expand existing customer relationships, ACS intended to develop its service portfolio in the field of email according to market demands and to further strengthen Software as a Service offerings in its portfolio. In addition, the revenue per customer should be increased by the new offerings.

ACS intended to offer to the existing users of the mail service both a modern, user-friendly webmail as well as a complete groupware solution.

All existing ACS email accounts should be converted to Open-Xchange, with the existing ACS existing infrastructure services such as mail servers, storage systems, databases, user management/provisioning system and billing processes being integrated to the Open-Xchange side by existing APIs and tools. A data migration should be avoided.

ACS operates as a cooperative, and is accountable to the car dealerships for the revenue and expenditure.

### **Open-Xchange solution and implementation**

For the integration of Open-Xchange in the ACS infrastructure workshops, adaptations and tests had to be carried out. The modular, open standards-based architecture of OX allowed the integration of ACS's email services based on Cyrus IMAP server and the integration into the provisioning/billing services and

administration backend in a way that would not have been possible with other messaging and collaborative software solutions.

On the one hand, Open-Xchange was also working on the design and planning for a conversion of the old email server solution to a new version of Cyrus IMAP server, which thanks to its extensive open interfaces was possible almost without significant effort for the implementation.

On the other hand, the integration into the existing SAP software infrastructure was a critical success factor. Open-Xchange standard-based APIs made it possible to map all relevant order and billing processes in SAP within a very short time, without significant changes to the SAP system being necessary. Today ACS/VAPS can thus run a system fully integrated into its business processes, without any additional staff needed to operate efficiently.