AXIGEN Mail Server
Mobile Email Solutions Using Push Email & PIM Synchronization

1. An Introduction to Mobile Email

While the complexity and requirements that large scale solutions must achieve have greatly increased during the last few years, a growing number of service providers have also started to include support for enterprise functionalities in order to better meet and adapt to their customers' ever changing messaging needs.

With email quickly becoming the primary means of communication for both corporate and individual users, the competition in the market also gets tougher every day. Consequently, a new breed of email services has to be appended to already existing portfolios in order to attract new customers and keep current service subscribers happy. This is where offering mobile email functionalities such as the Push technology or PIM database synchronization can make the difference.

2. Push Email & PIM Synchronization

Instant access to messages, contacts, calendar, or tasks regardless of time and location makes it easier for mobile workers to manage business operations, to stay in touch with customers and partners, and abreast of the latest changes and events on the market. It also ensures a better balance between professional and personal lives, enabling frequent travelers to keep in close contact with family and friends at all times. As a result, instant email retrieval has become more and more popular in both business and personal communication environments.

Smartphones and PDAs have also raised the bar in this sense and personal information management along with wireless (GPRS, 3G etc.) email access are visibly embraced by a fast-growing community of users. This is a known fact and the trend seems to pick up the pace with each month.

➢ How It Works:

Email and PIM synchronization is the next best thing in email since the invention of the IMAP protocol. Through a technology, now known as "Push Email", the tables have turned on email servers and clients. Normally, the client (desktop or mobile) would connect to the server and log in with the account credentials. Once the authentication is complete the client would poll the account by asking the server if any new messages are available. As opposed to this, Push email instructs the server to instantly notify the client when a new email arrives. The main difference between these two approaches consists in the fact that the server will always know when a new message exists, while the client does not and has to check for them in a timely fashion. Push email is also much more economic in terms of data transfer amount and bandwidth usage. Establishing a single connection and maintaining it in an idle state is a very relaxed way to help the server contact the client whenever required.

Almost the same thing happens when speaking about PIM database synchronization. Appointments, tasks, notes and all of the data stored as PIM information are translated into email objects formatted in a special way, so that the contents can later be interpreted appropriately. So both emails and PIM data rely on the same standard and look a lot alike, despite some major differences that will not be detailed in the present whitepaper. What needs to be remembered is that from an email server's perspective, the above mentioned objects are considered emails in the general meaning of the word.

3. AXIGEN Mobility Services

At this time, quite a lot of PIM sync and email pushing technologies exist and they are all implemented differently, even though they perform the same task. By far, the most popular technology, used world-wide, is Microsoft's ActiveSync protocol. Therefore, AXIGEN has chosen to first implement support for this specific technology in order to reach and provide this feature to the largest base of users possible. The series of mobile devices and handsets that support the ActiveSync protocol includes Nokia / SymbianOS devices, Windows Mobile (since 2003 up to latest version), Apple iPhone and other devices that can have compatible software installed.

While using the ActiveSync protocol, handsets and PDAs will be able to get instant email notifications and save personal and contact data to and from the email server in real time. The transfer is performed just like the regular desktop synchronization between mobile devices and the Microsoft Outlook email client through the ActiveSync desktop application. It is automatically triggered by the server when a new event occurs or by the client if the modification or update is performed on the handset.

The Push email technology can definitely help you work more effectively and get mission-critical information in real time, right when you need it. However, this is not the only approach that an AXIGEN user has to take in order to access email-related information using a mobile device. AXIGEN's Mobile WebMail Interface (MWI) allows users to check their messages using the web browser on their handsets in a friendly and intuitive way. This service is mandatory if you plan on using the main account with ActiveSync, but still check your second email account via the MWI on demand. Also, the IMAP idle feature and regular IMAP/POP3 account polling are supported. So if you feel this is the best option, or should you like to test this old school method for checking your email on the handset, you can always give it a spin.

4. Conclusions

All in all, AXIGEN Mail Server brings the next generation technology in mobile email transfer, PIM synchronization and the industry proven IMAP and POP3 access under the same roof, bundling them together in the same package. Whether you plan to deploy mobility support into your enterprise environment, or just as an additional service to your already established portfolio as a telecoms service provider, this set of features should be at the top of your to-do list of improvements. Tap into the wonderful world of mobile computing and real time communication by using AXIGEN Mail Server's leading-edge mobility features.

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