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VyPRESS Research Solutions

Enterprise Instant Messaging and Emergence Alerts

*Effective, Scalable, Reliable and
Manageable Solutions*





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Introduction

Instant messaging is a problem that, in a variety of ways, dates all the way back to when the first computers networks made their appearance. It is easy to understand the desire to use additional connection channels for business communications between users. That's why the medium came into play early on in the computer technology continuum. The earliest versions of operating systems included such simple but useful utilities as "wall" and "talk." Since the very first versions of Novell NetWare, Windows and OS/2 debuted on the market, similar utilities (WinPopup, SEND.EXE, etc.) have been available. For a long time, these types of communication channels have been an everyday part of life for many enterprises.

Instant messaging programs debuted in 1996 as a new way for Internet users to communicate with each other in real-time. From there, they quickly found their way into the workplace and soon began to win over the business world's popularity. They allowed users (most of whom had access to Internet only through modem) to have presence control (presence/absence indicators), to real-time communicate, to share files instantaneously and to organize multi-users chat. In that way, these program products rolled all the best features of e-mail and Web chat into one: In the first case, you get usage reliability and convenience; in the latter, you get real-time communication and presence control. Owing to this successful combination, a conservative estimate now figures that such Consumer IM Clients (cIM) as ICQ, AOL Instant Messenger, Yahoo! Messenger and MSN Messenger are installed on the computers of more than 4 out of 5 active Internet users.

Business users didn't shy away from the vast development of instant messaging software either. They either introduced cIM or tried to optimize their standard built-in operative system programs to integrate with the leading directory services.

Because the use of cIM can discredit an enterprise's security policy (you can't be sure that sensitive data is not leaving the company), the majority of business administrators and management personnel already understood the necessity of introducing special enterprise IM tools into the workplace. The impossibility of ensuring that IM is not

being overused for personal purposes, thereby wasting company time and resources, caused a further need for such controls.

Software vendor solutions can be divided in two types: 1) adapting existing corporate network Internet tools made by CIM client software vendors (where both pay server and client versions are produced with communication encrypted and logged); or 2) developing alternative, special enhancement tools that take into consideration the specialties and advantages of current LAN (Local Area Network) and WAN (Wide Area Network) and that are compatible on the same protocol level as existing legacy software. Because this latter solution is built taking the corporate environment in consideration, always keeping LAN and WAN usage in mind, it is superior to the first type of solution, which generally just amounts to a “money made on the side” venture for the messaging developer. Since 1997, VyPRESS Research Company has been the leading solution supplier in the second of these categories of software resolutions.

Instant Messaging Benefits for Your Business

What can Enterprise Instant Messaging offer your company and employees?

Daily Business Routine

First of all, it can be said with certainty that EIM considerably facilitates everyday communications between users. It does so by freeing up phone lines, eliminating the necessity for copying information and rewriting, introducing presence control and enabling operative and chip communication with officers and other field employees. It also eliminates the need for a large number of time-consuming conferences and meetings. As a result, the amount of time wasted on gathering employees is significantly lowered. In addition to the above-mentioned, EIM also offers a lot of other corporate benefits.

Automatic Logging

Let's now emphasize another important EIM advantage: automatic compliant logging, with date, time and whole context fixation of all company project discussions between employees being archived. This is a truly priceless benefit for Healthcare, Finance, Juridical, Educational, Government organizations in particular. EIM logging is easier and cheaper than, for example, logging phone calls. What's more, thanks to its primordial textual appearance, EIM can be quickly introduced into any business environment using Microsoft BizTalk Server and other tools.



Group Communication and Messaging

Imagine that you need to promptly inform even just 30 employees about some important fact. How are you going to accomplish this task? Calling 30 persons on the telephone requires at least one hour of your time, not to mention the straining on your nerves (if a telephone happens to be busy) and the expenditure of money (if you use a company's paid cellular phone service). Taking all of this into consideration, the results of this method can't be rationalized. E-mail can't provide the necessary efficiency either. Paging doesn't permit specification of details and frequently it is inexpedient in an economic sense. Clearly, in such a situation EIM tools are indispensable. With them, you can securely notify your employees within just a few short seconds and immediately specify the details of your request, if necessary. This feature is difficult to overestimate for mass media, brokerage firms and other institutions working in today's dynamic business climate. When choosing an EIM solution for your enterprise, pay attention to the presence and scalability of its broadcast messaging tools: "Can you send a message to your network's entire 10,000 users?" With VyPRESS software, you most certainly can.

Everyday Agenda

Many EIM programs have built-in features for automatic sending of messages and/or for message failures, according to a self-assuming scheduling or the appearance of certain situations. With VyPRESS software, users can be automatically notified of, for example, lunch breaks, planned server maintenance, conferences, database updates, storage operations, etc. This simple measure often allows for a considerable amount of freed-up time and enables you to liberate your employees and office managers from routine work.

Backup Emergency Alerting Channel

In today's extremism- and terrorism-saturated world, business owners should not underestimate the opportunity of using EIM as an efficient and fault-tolerant alerting mechanism. Its variety of event tools makes it a worthy solution to such contingencies. Remember, the Internet was founded on military networks created especially for fail-safe communications. That's why it has no "central server" and is based on a distributed architecture. Hence, the deployment of a distributed instant messaging system, like VyPRESS's, can provide you with a bit of assurance.

Potential Problems

Everyone understands the practical benefits of EIM; however, when choosing an EIM system, a company administration's technical staff also has to be aware of some possible problems. Let's detail some of the EIM dilemmas you should be on the look out for:

Fault Tolerance

The more problems EIM resolves in your company, the stronger your company's work dependence on fail-safe EIM will become. That is why fault tolerance is so important and should be a carefully analyzed detail when choosing an EIM solution. For example, EIM systems with an external server on the Internet (like Yahoo Business Messenger or Enterprise AIM) are very easy to deploy and support. Nevertheless, breaking the connection between the intermediate server and the Internet can lead to the automatic loss of communication with all employees. In such instances, you will have **no way** of connecting or corresponding with them. In addition, such systems are often perfect targets for DoS attack (Distributed "Denial of Service" attack), because hackers like the possibility of simultaneously depriving many companies from around the world of connection.

In this way, one of VyPRESS's unique solution specialties is full fault tolerance via the special architecture built in to all our products. In spite of the fact that our products use such corporate services as Active Directory, WINS or Certificate Server, they don't entirely depend on them. As a result, we can successfully continue working, even when all of the company's servers are down, when there is no connection with the Internet or, particularly, when there is no link in WAN. Because of this feature, our products are used, for example, in many U.S. Army bases and in Dutch Railway Lines.

Compatibility

We offer a wider compatibility examination than usual:

Compatibility with existing operation systems. If your company has inherited client computers with Windows 95, then, obviously, your EIM clients have to support them. It is also desirable that any new features on an upgraded operating system could be fully put to use. Moreover, if you use Linux or Novell NetWare, your EIM solution should have the capability of sending and receiving messages from other OS. If your EIM provides the opportunity for integration with built-in alerting OS tools, then this is an additional advantage. You should get to know all of these capabilities during the selection stage.

Compatibility with network architecture. Does your EIM require permanent or periodical connection with the Internet? If your answer is "permanent," then how much Web traffic will you need and how much it will cost you? Will overload of EIM WANs restrict your company's speed and efficiency? Theoretically, certainly, EIM doesn't require a constant Internet connection or a maximum influence on network bandwidth – these were the conditions on which VyPRESS based our solutions development.

"Mental compatibility" with your users. A home user can afford the leisure of examining strange Instant messaging programs with



“irregular interface” or straggling with many clients’ software “barriers.” For business users, however, this could convert into additional spending on employee teaching of and introduction to the necessary solutions. For your peace of mind, estimate your EIM software solution from this point of view.

Overuse and Misusing

In the case of EIM compatibility with external (Internet-based) cIM, the problem of employees chatting on personal topics while working is principle. Even in spite of the fact that such EIM, as a rule, enables some “control access,” typically, such control rules are very limited and they frequently fail to either restrict incoming communications or allow division of users between “enabled” and “banned.” On the upside, one-way notification is often enough for many EIM users. For administrators, it is more desirable to be able to communicate with determinate users only, thus allowing employees to send messages. Such flexible customization options access rights to the application VyPRESS Research Solutions provides.

VyPRESS Solution

What, in fact, does our company offer? Our more than six years of EIM market experience leads us to the result that the majority of big company users can be divided into three different groups. For each of these three groups, we developed optimized and adapted software products, which together provide integrated, scalable, easy to deploy and flexible solutions. Let’s now detail these three types of groups.

Custom Users. These will comprise the biggest group of users. While these kinds of employees don’t generally need to send messages themselves, it is sometimes necessary to notify them of certain events or emergency procedures that require immediate attention, response or action. Moreover, these users are frequently subject specialists and are not professional computer users. As a result, they need programs with user-friendly interfaces that maximum protected against human mistakes (for example, from accidental closing of a program or from moving a program outside the display area or deactivating it). For these users especially, VyPRESS Research has addressed this challenge with our customized product, [Vypress Avis](#), which can receive messages and files from [Vypress Messenger](#) and [WinMessenger](#) as well as alerts from standard operating system applications. Avis is a very compact program, with a fully centralized configuration. It utilizes minimal computer resources and network bandwidth remains unused while it is in an inactive stage. Incoming message reaction is customized by the administrator, and can come in the form of a sound file playing, a

message window being displayed in a specified position on the desktop and so on.

Authorized Employees. This is intermediate group of users from which a response to incoming message is occasionally required. Generally, however, these types of employees should only be sending restricted messages. For example, they could be contracted employees, workgroups managers or technical staff. For this user group, we recommend our WinMessenger product with configuration in “replay only” or “peer-to-peer” modes. These modes allow maintenance of the necessary balance and resolve overuse problems.

Middle Managers, Administrators, Executives. Generally, this is a small group of users who are required to send messages. For this category of users, we offer our Vypress Messenger product. In Vypress Messenger, the ability to send messages (two priority levels) and attached files to employees (from the first and second levels) is integrated. This product contains versatile features to enable sending of quick, instant popup messages to any number of users in the directory (from 10 to 10,000 recipients). Delivery of such messages is guaranteed and full logging of all incoming and outgoing messages, with the ability to perform an archival search, is built in. Administrators can create scheduling for messages delivery to their broadcast groups and macros for one-click typical alerts. Everything works in full fault-tolerant mode, because this product neither depends on dedicated servers nor requires an Internet connection!

Thus, by determining all essential parameters for every employee, management can offer an optimized solution while obtaining the ability to control the whole system, without risk of interruption from exterior facts or interior overusage. In addition, such a customized system allows for greater spending optimization on EIM purchasing, deployment and maintenance.

A great number of our notable clients, such as NASA Headquarters, U.S. Army Cecom, Raiffeisen Zentralbank, Tweede Kamer der Staten-Generaal (The Lower House of Dutch Parliament), and a multitude of other large enterprises and organizations actively employ this scheme.

Examine our products' capabilities, estimate their adaptability and practicability and then perhaps you too can become our client.