



PageMate® Version 3

PageMate is an electronic messenger that provides capabilities for paging, electronic mail, alphanumeric display, voice and fax delivery of time-critical messages

PageMate has evolved since 1984 from a utility for electronic paging to an integrated messaging application that now provides capabilities to track and deliver messages using a wide variety of media and technologies. In the mid-1980's, paging was confined to sending short numeric messages to devices commonly called "beepers". We think of this as being the first generation of electronic messaging to personal portable devices.

In the 1990's, the second generation of electronic messaging extended paging capabilities to include support for alphanumeric messages. Users were freed from the burden of being forced to try to interpret short, cryptic numeric messages. PageMate Version 2, introduced in 1993, provided early support for users and applications that required robust and reliable messaging to the new breed of alphanumeric pagers. By the end of the decade, PageMate's support for alphanumeric messaging had been extended to include client-server implementations with an interface to electronic mail and multi-threaded message queuing services in heterogeneous networks of Windows, UNIX and OpenVMS systems.

At the turn of the century, the development of new technologies for electronic messaging and digital communications, together with the explosive growth and popularity of the Internet, demanded that we take a fresh look at the services and messaging support provided by PageMate. From its inception, PageMate has provided unique capabilities to support messaging from other computer processes, including help desk, dispatch, process control and SCADA applications, that can impose variable and unpredictable demands in message volume. PageMate's client-server architecture, support for automatic server fail-over, and administrative capabilities for auditing and resource management have long made it the solution of choice for electronic messaging in mission-critical applications.

While continuing to support all of the existing services and capabilities of PageMate Version 2, Version 3 seeks to provide a wide variety of new features and functionality, designed and based largely on user requests and opportunities for improved and enhanced services provided by new technologies in the third generation of personal electronic messaging. An overview of some of the new functionality in PageMate Version 3 is provided in paragraphs immediately below.

- ❑ PageMate Version 3 provides new capabilities for message tracking, response and automatic escalation. A major initiative that begins with PageMate V3.0 is providing support for “closed loop” or “round trip” messaging. The software automatically tracks messages that are optionally marked as requiring response. Recipients can either positively acknowledge (accept or confirm) or negatively acknowledge (reject or refuse) individual messages. Messages that are negatively acknowledged or for which no response is received within a specified time-out interval can be automatically escalated.
- ❑ PageMate Version 3 provides options for message delivery using a wider variety of media and technologies. The software supports both one-way and two-way messaging to pagers, and new support for short message service adds GSM/SMS digital telephones to the list of portable devices that can receive messages from PageMate. Support for a telephony interface with speech synthesis (text-to-speech) means that PageMate can also now deliver messages spoken in English. In addition to calling a recipient to deliver a message, PageMate can receive inbound calls from subscribers, read messages to them in English, and accept responses. Other options for message delivery include facsimile, electronic mail, and pop-up displays on video monitors and LCD panels. If all of this is still not enough or doesn’t provide the functionality that you need for message delivery, PageMate Version 3 provides an option to run a site-specific application to deliver or respond to a message.
- ❑ To help you take advantage of PageMate’s wide variety of options for message delivery and response, PageMate Version 3 provides support for profiles. A profile is a data structure that, together with action records, can automatically determine how a message should be routed for delivery. A profile can route a message to different recipients, or use different technologies for delivery, based on things like the time of day, day of the week, content of the message, or any site or application-specific parameter that you specify.
- ❑ For users of prior versions of PageMate, a word about the relationship between pager names and profiles is in order here. The first version of PageMate provided support for delivery of messages to pagers defined in a catalog. Pagers were identified by pager names. PageMate Version 2 added support for group names. A group name is a kind of distribution list, a single name that stands for or represents a group of individual pager names. PageMate Version 3 re-defines and re-purposes pager names as subscriber names. So whereas a PageMate Version 2 catalog provides support for pagers and groups, a PageMate Version 3 catalog provides support for subscribers, groups and profiles. The basic difference between a pager record and a subscriber record is that a subscriber record can include optional specifications for password and authority level. Password and authority level are parameters that are useful in providing controlled access to PageMate via web browsers and in corporate intranet environments, but they won’t mean anything to you unless you are running the new variant of PageMate server known as PageMate Automated Messenger.

- ❑ We dislike forward references in documentation, so we will take this opportunity to explain that support for some of the new features and functionality in PageMate Version 3 are so fundamental that they require a completely new implementation of PageMate Server. So while we have recognized the need for a re-designed server, we also wanted to provide as much new functionality as possible in the existing server. At the same time, we wanted to provide a client that would be compatible with either server, so if a site decided to switch from one server to the other, there would not be any changes required in PageMate clients. PageMate Version 3 realizes these goals by providing two server variants and a single (common) client. The server variants are known as **PageMate Classic Server** and **PageMate Automated Messenger (PAM) Server**. PageMate Classic Server provides substantial new features and functionality in the well-known PageMate Server whose principal purpose is to deliver one-way messages for display on pagers and digital telephones. PAM Server is a superset of PageMate Classic Server that adds support for new messaging technologies and the kinds of new functionality that can be supported based on those technologies. Some of the new functionality in PageMate Version 3, such as support for messaging to GSM/SMS telephones, is common to both PageMate Classic Server and PAM Server. Other functionality, including two-way messaging, telephony with speech synthesis and support for profiles, requires PageMate Automated Messenger Server.
- ❑ Along with new technologies for message display and delivery, PageMate Version 3 provides new support, both in PageMate Classic and in PAM Server variants, for a new way of submitting messages to your paging system or paging service provider. Some customer-owned (on-site) paging systems provide an option to accept messages via TCP (stream) sockets, and some commercial paging service providers, including SkyTel, now provide an option to accept messages via socket connections on the Internet. Use of socket connections via the Internet can be an attractive alternative to dial-up services using modems on the switched telephone network. Delivery of a single message via dial-up (switched telephone network) services typically requires up to 60 seconds. Delivery of a message via socket connection typically requires less than 5 seconds. Sockets delivery is also much faster and much more reliable than message delivery via e-mail. We are pleased to be able to provide support for this important new functionality as a standard part of PageMate Version 3.
- ❑ As storage and display capabilities of electronic devices have increased, PageMate has provided support for longer and longer messages. The maximum message size supported by PageMate Version 3 is 500 characters.
- ❑ Improved statistics reporting capabilities has been a goal for PageMate Version 3, both in PageMate Classic and in PAM Server variants. Tracking success and failure rates of message delivery can help to ensure optimum utilization of resources and serve as an early warning of problems. PageMate Version 3 provides capabilities to report message statistics on a variety of bases, including tabulations by network, subscriber and modem, port or device names.

- Finally, and far from least, a new web interface has been implemented for PageMate Version 3 to provide access to PageMate services from any system that supports a web browser. The PageMate Web Connector, an option for PageMate Automated Messenger Server, provides functionality similar to that available in both PageMate Client and PageMate Administrator native graphic user interfaces (GUIs). The Web Connector addresses several needs of PageMate users in corporate environments. It provides an option to let PageMate users manage their own catalog records, and, with appropriate authority, create and manage catalog records for others. The scope of a user's authority can be limited, for example, to read-only access, modify access to owned records, create/modify/delete access to owned records, or create/modify/delete access to all records. Users who have operator or administrator authority can also send and receive messages on behalf of others. Users who have administrator authority can gain access to the full functionality of PageMate Administrator through a web interface from any system in the corporate network environment. Perhaps best of all, none of this functionality requires installation of any PageMate or other application-specific software on a client system.

PageMate software can be configured to support a wide variety of requirements, serving applications as simple as paging from a standalone system, or as complex as voice, fax, paging and electronic mail delivery of mission-critical messages in international corporate networks. A choice of servers and a variety of optional connectors allow PageMate configurations to be tailored for site-specific applications. Multi-threaded message queuing services with message tracking and audit trail are provided in all PageMate configurations. For mission-critical applications, the software can be configured to provide support for programmed message delivery, delivery confirmation, interactive voice response, automatic escalation, error notification and recovery, and redundant servers with automatic fail-over.

The latest PageMate software builds and distributions, updates, documentation, application notes and product news, together with technical support resources, can be found on Systemetrics' web site at <http://www.system.com>. Systemetrics welcomes and encourages your feedback and suggestions about our software, documentation, services and support. You are invited to call us with personal suggestions or send e-mail to support@system.com.

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