

Linx Communications White Paper

Unified Communications: Giving Mobile Professionals Better Control

Communications has gotten out of control. The proliferation of telephone numbers, voice mailboxes, pagers, fax machines, and other devices where a person can be reached has had the exact opposite impact than originally intended: *People are harder to reach and they spend more time tracking down and responding to their messages.* If people have several telephone numbers, chances are their ability to communicate is suffering – they just may not have had time to realize it.

Office phone systems, mobile phones, personal digital assistants, multiple voice mailboxes, fax machines and pagers are all powerful tools that enable mobile workers to communicate with colleagues, customers and business associates. However, more tools do not necessarily translate to increased efficiency and productivity. The explosion of these tools has resulted in a big problem: managing disparate communications devices. Today's typical business card reveals just how confusing communications has become. Most professionals list up to five numbers that a caller may have to dial before reaching them on any given day (see Figure 1, below):

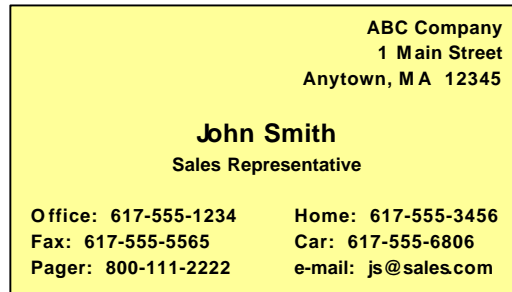


Figure 1: Before Unified Communications

Today, both the mobility and the pace of business have increased to the point that pagers and mobile phones have become the primary way of reaching someone. Despite this, important calls and messages still come in to office voice mail, home office phones, faxes or (even worse) a mobile phone with a dead battery or in an area without cellular coverage. And, sometimes, responding to a page is just not quick enough. In fact, *Fortune Magazine* reported that workers spend an average of 30 minutes each day in voice mail and that pager users spend an average of 50 minutes each day returning calls. What's needed is a smarter way of using these different business communications tools that integrates the way they work for a user.

An emerging solution to these problems that is receiving heightened attention is *unified communications*: a combination of unified messaging with real-time call connection and routing. Unified communications enables mobile workers to maintain on-the-fly contact with colleagues and customers using enhanced telephony services (such as universal number services) that tie together landline and mobile phones, pagers, faxing, and Internet messaging capabilities.

So, what is unified communications exactly? How does it work? And, can it really keep up with the hectic pace of business professionals today? This paper will examine today's mobile communications issues, then take a closer look at how unified communications can effectively improve business communications.

Mobile Communications: An Exercise in Frustration

Today's road warrior faces four big challenges:

1. Managing multiple communications tools
2. Putting an end to "voice mail jail"
3. Improving call connect ratios while outside of the traditional office
4. Integrating mobile communications with existing enterprise telecommunications infrastructure

Currently, if mobile workers need to be better connected, they purchase another communications device – either a pager or another mobile phone. According to AT&T, the average Fortune 1000 worker uses six different devices, many of which have their own voice mailbox. Despite all these tools, AT&T also reports that fewer than 25 percent of business calls reach their intended party: the caller gets voice mail, a busy signal, an assistant, or no answer at all. People find themselves missing important calls and then spending inordinate amounts of time checking multiple mailboxes, only to return calls and be forced to leave another message. Consequently, endless games of telephone tag and hours spent in voice mail jail have become commonplace. The painful reality of this predicament is particularly evident when a worker is out of the office.

Adding another device just means there is yet another phone number to distribute to business associates, another mailbox to check for messages, and ultimately more frustration since it doesn't accomplish the ultimate goal: being reachable regardless of time or location and having better real-time control over incoming calls. Increasing the complexity of this problem is the fact that most businesses mandate that its employees use the corporate voice mail system. So no matter how well a person juggles all his communications tools, he still has to check his voice mail back at the office.

Mobile workers accept this inconvenience and frustration because they are unaware that there is a better way. The bottom line: they need to integrate disparate communications tools and manage their incoming calls in real time, so that they can prioritize calls and be more productive, at any time and from any location.

Multiple Voice Mailboxes: Business Tool or Trap?

If one voice mailbox is a great business tool, then two or three must be even better, right? *Wrong*. Consider the following dangers of managing multiple voice mailboxes:

- Conscientious users must check every voice mailbox to ensure that they haven't missed a message – every time they check their messages
- Conscientious callers who are aware of multiple voice mailboxes may be tempted to leave their message in each mailbox to ensure delivery. The result? Users waste more time listening to multiple versions of the same message to make sure the messages aren't different.
- Multiple voice mailboxes often means multiple voice mail systems. Pressing "2" will save a message on one system but may delete it on another. The options? Waste time waiting for the system prompts or run the risk of deleting an important message by mistake.

Unified Communications: Stopping the Madness

One area showing great promise for increasing connectivity is unified communications – a superior form of unified messaging. Unified messaging is the technique of consolidating multiple business communications tools into a single mailbox. So, all the different phone numbers – office phone, cell phone, car phone, home office phone, pager, fax – are integrated into one single "universal" number and messages are stored in a single mailbox. According to Ovum, Inc., the unified messaging market is estimated to grow to \$31 billion by 2006. Additionally, the Pelorus Group reports that fewer than 200,000 unified messaging mailboxes were in use in 1998, but estimates that the number will grow to 9.6 million worldwide by 2002.

Growing popularity aside, unified messaging mainly tackles the problem of checking multiple voice mailboxes, *but does not address the larger issue of improving call connect ratios*.

Unified communications greatly enhances the value of unified messaging by giving users a single number for callers to reach them regardless of where they are (see Figure 2, below) and a single mailbox where all messages are sent and stored.

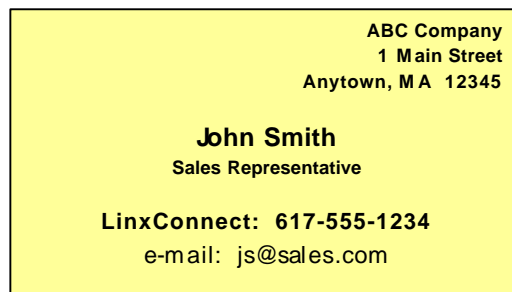


Figure 2: After Unified Communications

Most importantly, however, it adds real-time call connection, routing and even multi-party conference calling. Essentially, unified communications gives users a "pocket PBX" that offers advanced telephony

services that were previously only available through sophisticated corporate PBX and phone systems. The more advanced solutions can even be integrated into corporate voice mail systems, making them ideal for enterprises that mandate the use of corporate voice mail. This is critical since it has been a key obstacle to the adoption of unified communications at the enterprise level.

Real-Time Call Management

The heart of unified communications is real-time call management – it ensures that people maximize their time and productivity and gives control *back* to the user by enabling them to prioritize calls. How does this work? Callers dial the universal number and give their name to the system, which then calls multiple user-specified numbers simultaneously – office phone, car phone, home office, pager, meeting room, or even a customer's office. Because callers are announced, users now have the flexibility to take the call, send it to voice mail, redirect it to another colleague, or even initiate a conference call with additional parties.

Recall that in the absence of unified communications, fewer than 25 percent of business calls reach their intended party. If 75 percent of business calls are not reaching the intended party, one result is an overabundance of messages waiting for that party at the end of the day. So, what does real-time call management really mean for a user? It means that the user is able to exercise judgment over which calls to take, which calls to forward to someone who can address the caller's needs, and which calls to send to voice mail to deal with later. The result is better time management and prioritization of work. There are fewer messages to return at the end of the day because the user has routed each call appropriately *as it came in throughout the day*.

Enterprise Integration

A *truly* unified communications service for business cannot force users to check messages in more than one mailbox. It must allow messages to be routed and stored wherever the business or user chooses – either in the system's own mailbox or by integrating the unified communications system with an existing corporate voice mail system.

This decision often involves a cost-benefit analysis of the merits of keeping an organization standardized on a single voice mail platform versus a typically richer feature set offered in the unified communications mailbox (such as one-touch call return, message forwarding to others outside the system, Web access to voice and fax messages, etc.).

Who Needs Unified Communications

So, who needs unified communications? It is suited for all sizes of businesses – from large enterprises to virtual/home offices. It is invaluable for anyone who spends time on the road, who works outside a traditional office, or who needs to be accessible to important associates but needs better call control.

Here's a quick list of scenarios where people can benefit from unified communications:

- ✓ Spending a large part of the day away from their desk or on the road
- ✓ Working full or part-time in a non-traditional office – home office, remote office or mobile office
- ✓ Spending a lot of time playing telephone tag either because they're on the phone, away from their desk, or out of the office
- ✓ Using multiple communications devices – office phone, cell phone, pager, fax, e-mail
- ✓ Dealing with callers who can't effectively predict which phone number is the best way to reach them at any given time
- ✓ Needing to prioritize calls so they take important calls and leave less important calls for later

Unified Communications in the Real World

Unified communications is saving people from “device overload” and “voice mail jail” today. Here are some real world examples:

A sales manager for a leading data networking equipment manufacturer faces daunting communications challenges. “It is essential for my customers to reach me, any time, any where. Spending a lot of time on the road and working from home, customers used to make multiple calls to reach me.” With a unified communications service, his customers and key contacts can reach him without the aggravation of calling multiple numbers. “I can't afford to have my important calls go to voice mail. However, I am too busy to take calls that are not urgent,” he adds. “Unified communications is a competitive advantage for me. I know who is calling and can handle each call accordingly. Wherever I am, I have access to all my calls, messages and faxes. This increases my accessibility and allows me to provide first rate customer service.”

The president of a healthcare technology consulting firm has virtual offices with employees throughout the US and Canada. He finds the flexibility of unified communications most beneficial. Working at home and on the road no longer hinders his ability to communicate effectively. “If I choose to send a call to voice mail, I can retrieve the message and return the call easily from the road. I don't have to fumble with phone numbers when I am travelling because I can return calls with the push of a button,” he comments. The universal number's conferencing ability also adds value. “With our virtual office, it is extremely important for us to speak with each other and with customers over the phone. With the conference calling, I can speak with multiple employees anytime, no matter where they are.”

The benefits of unified communications are evident: Better control of in-bound calls, elimination of phone tag, ability to link voice and fax messages, time and money savings, and easy call management through the Web. Unified communications users have a high level of comfort and confidence knowing that callers can reach them anywhere and at anytime, but at the same time, they maintain control of whether or not to take the call. Unified communications makes the phone, once again, a valuable business utility. Mobile workers are empowered – not penalized – simply because they are out of the office. Home office and

virtual office environments now have the same robust and powerful telecommunications tools as the main office.

The Power of Unified Communications

So what does having a “pocket PBX” really do for users? Here are just some of the benefits of a universal number:

- Users can check their messages and return calls with a press of a button – no more finding a pen to write down a number to return a call. When they’re done returning the call, they’re brought back to their voice mailbox right where they left off.
- Users get more out of faxing because fax communications are integrated into their universal number (including fax store and forward, fax delivery and fax routing). They can eliminate dedicated fax machines and use the system to store and forward faxes to any fax machine or email address at any time.
- Users gain a Web-based personal communications portal that serves as an active hub for all their voice messages, faxes and other messages. They can easily and efficiently access and manage all in-bound and out-bound communications from any Web browser, including: retrieving voice messages, placing phone calls, initiating conference calls, and retrieving and forwarding voice mail and faxes as e-mail attachments.

Unified Communications: Key Considerations

The solutions that unified communications offer have people reaching for the phone to order these services instead of reaching for a bottle of antacid to deal with the side effects of missed calls and mountains of messages. These services are quickly gaining momentum in a wide range of businesses. However, it can be confusing to assess the differences among different services. To help judge which services best meet your specific needs, here are some key criteria to consider:

1. **Ease of Use** – Does the service offer quick, intuitive touch-tone and web interfaces?
2. **Real-Time Call Management** – Does it easily handle both in-bound *and* out-bound call connection/routing?
3. **Integration/Customization** – Can the service integrate with existing corporate voice mail systems? Can it be easily customized for different needs?
4. **Flexibility** – Does the service support real-time call connection, call routing, faxing, and conference calling?
5. **National Network** – Is the service available across the US regardless of where you travel?
6. **Local/Toll Free Access** – Does the service offer local access numbers so companies have a local number/presence? Does it offer toll-free numbers as well?

Linx Communications: Simplify. Connect. Communicate.

Linx Communications is a leader in a new class of communications companies: Communications Service Providers (CSP), providing access to all calls, messages, and faxes with local points of presence (POPs). Linx offers customized, web-enabled unified communications services that simplify communications and increase connectivity and user control. Linx services allow individuals to connect to important callers and provide access to messages with one local or toll-free phone number or Internet connection.

Linx' unified communication services are designed to be easy to use and to give people more control over the way they receive, prioritize and manage calls, faxes, and messages. Linx makes business people more accessible, yet more productive by taking advantage of today's leading-edge communications technologies and making them work for people in an innovative way. Customizable to meet an organization's specific requirements, Linx allows users to choose the services (or combination of services) that provide the most effective solution for their unique business and communications challenges.

LinxConnect™, Linx' flagship service, is the next step in the evolution of Linx' unified communications (see Figure 3). It is a powerful, Web-enabled unified communications service that makes its users accessible to all callers through a single number (local or toll free) and provides a single point of access, through the telephone or the Internet, for all voice messages, faxes and e-mail. This service is ideally suited for mobile professionals who need to be accessible to important contacts and clients. When a caller dials a user's LinxConnect number, the system rings up to three user-specified numbers simultaneously and announces the caller. The user can choose to take the call, send it to voice mail, or even transfer the call to a colleague. For faxes, users can send an incoming fax to specified fax machines or hold it in queue for printing later.

LinxWeb™, the latest addition to Linx' services, is a web-based unified communications portal that extends unified communications to take advantage of the flexibility and ubiquity of the Web (see Figure 4). LinxWeb offers an integrated platform for streamlining and managing a person's daily communications including phone calls (from any landline or mobile phone), voice mail, pages, faxes, and other messages. LinxWeb offers an intuitive, web-based interface for viewing messages, managing communications, and initiating real-time call connection/routing, which saves busy mobile professionals time and money while greatly improving their workday productivity.

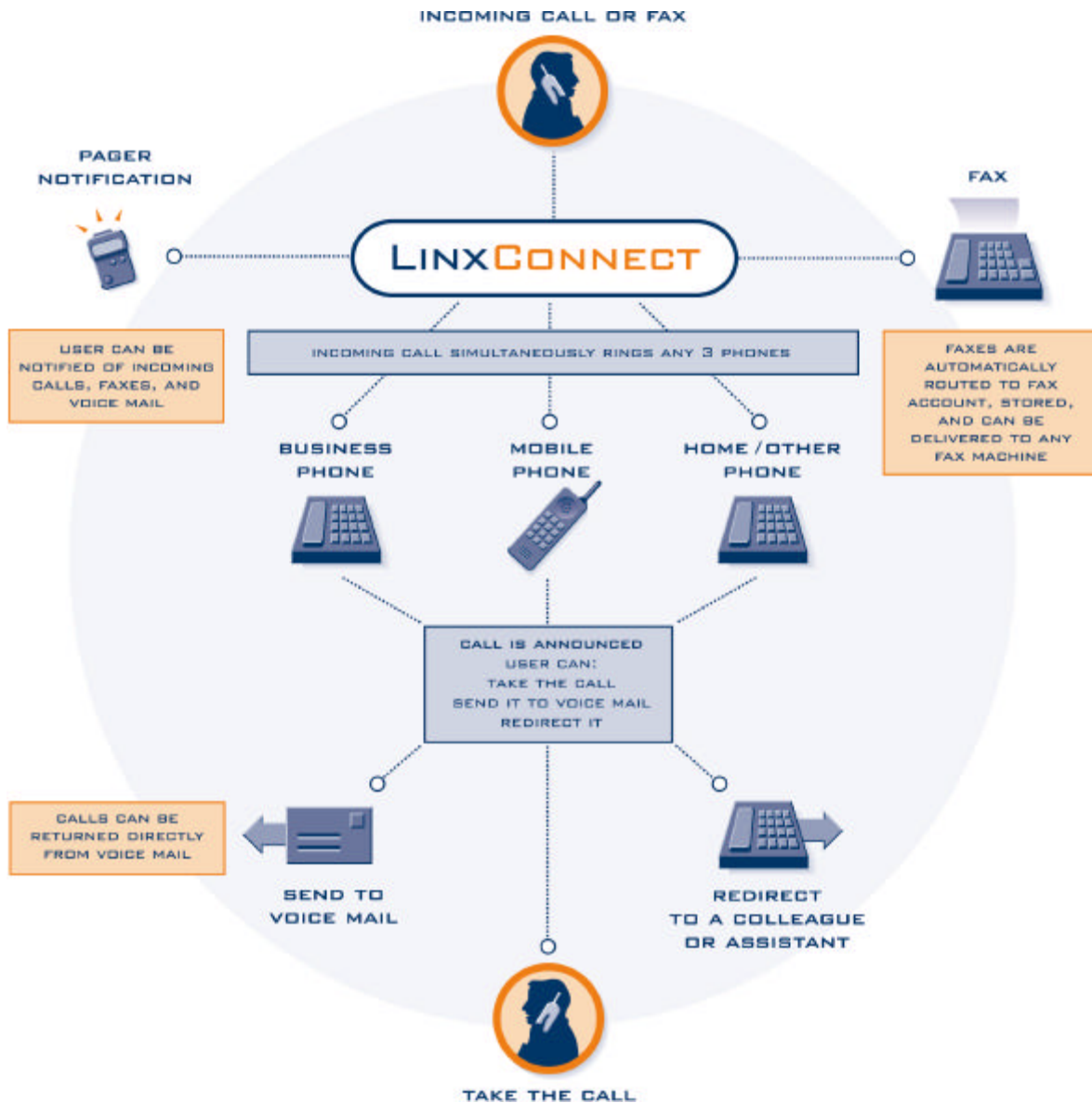


Figure 3: LinxConnect in Action

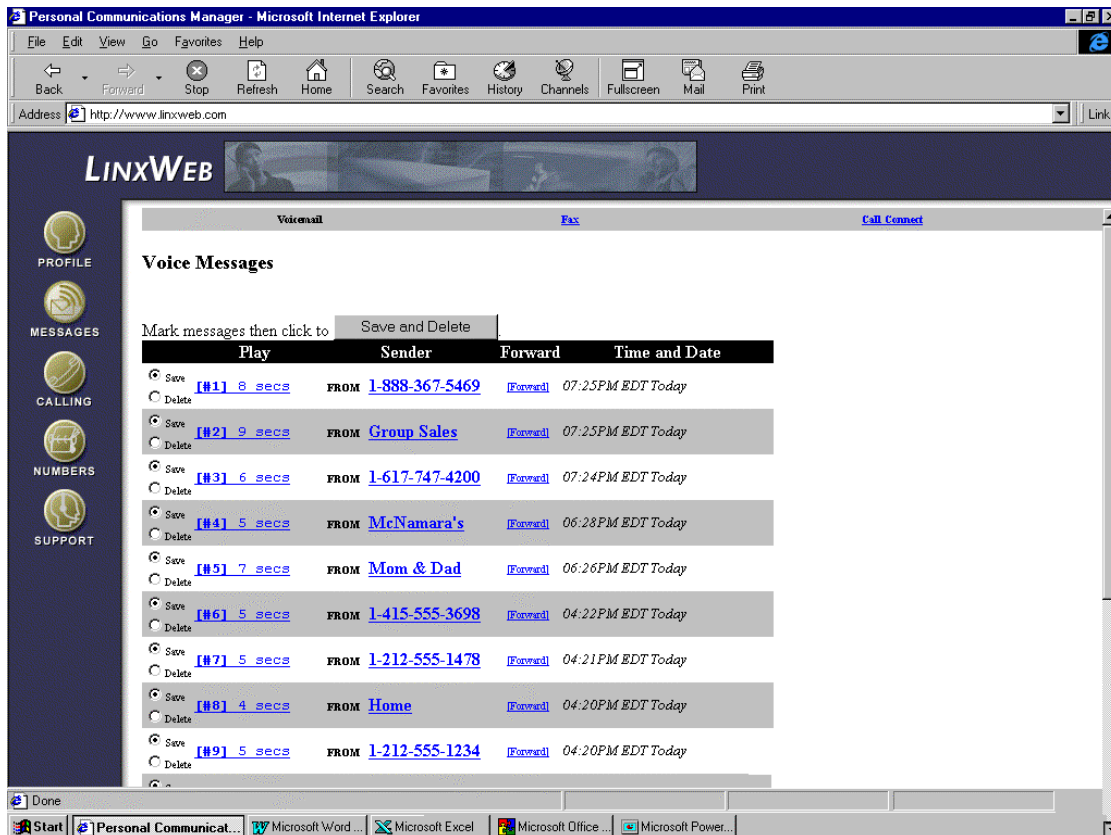


Figure 4: The LinxWeb User Interface

With LinxWeb, users have their own LinxWeb Personal Communications Home Page that is an active message hub for all phone, cellular, and fax correspondence. With the click of a mouse, users access their LinxWeb account from any standard web browser to visually manage and control all in-bound and out-bound communications more efficiently from any location, including:

- **Voice:** Retrieve and forward all phone messages from multiple devices, place phone calls
- **Fax:** Retrieve, print and forward faxes
- **E-Mail:** Send voice and fax correspondence as e-mail messages
- **Account Management:** Change LinxConnect settings and preferences (user availability, phone numbers, etc.)

In addition to LinxConnect and LinxWeb, Linx offers other enhanced communications services, including:

- **LinxFind™:** Voice messaging service which also allows users to receive calls from remote locations
- **LinxFax™:** Allows users to store faxes and print them on any fax machine at any time
- **LinxOffice™:** "Virtual PBX" that goes beyond most premise-based equipment
- **LinxConference™:** Simple and cost effective service for conference calls
- **LinxCard™:** Cost effective solution for placing local and long distance calls from any location

Please contact Linx Communications for more information about Linx' unified communications services.

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