SBC Communications, Dell Announce Initiative To Develop And Deliver ADSL Services On Dell PCs For High-Speed Internet Access

Joint Initiative Can Bring Internet And Data Access At A Rate 50 Times Faster Than Today's Traditional Modems

San Antonio, Texas, September 23, 1998

It will soon be easier for SBC Communications Inc. and Dell Computer Corp. customers to experience lightning-fast ADSL service. The two companies today announced a joint initiative to provide consumers and businesses with high-speed Internet access on Dell Dimension desktop PCs equipped with ADSL modems and services. The two companies plan to begin implementing the arrangement early next year.

Factory-installing ADSL modems in Dimension desktop PCs is a component of Dell's new ConnectDirect program, which will offer easy, fast and personalized access to the Internet. SBC and Dell will plan to jointly market ADSL (Asymmetrical Digital Subscriber Line). What this means for customers is that they will be able to purchase ADSL-ready computers and ADSL service in a single transaction by contacting Dell.

When combined with SBC ADSL services and modems, the Dimension PCs are expected to provide Internet access at speeds up to 50 times faster than today's traditional modems, all over existing phone lines

"We're making faster Internet access and 'work at home' connections available to our customers through ADSL, a high speed data service," said Dave Gallemore, executive vice president of strategic marketing for SBC Operations. "This alliance with Dell is an example of our desire to build a relationship with technology providers to help us further enhance the value we provide our data communications customers."

"Dell's initiative with SBC is the latest step in Dell's ConnectDirect strategy to provide fast and easy Internet access to our customers," said Carl Everett, senior vice president, Dell personal systems group. "By speeding up Internet and corporate network access through ADSL-ready desktop PCs, we will offer consumers a tremendous opportunity to enhance their online experience."

The joint initiative comes on the heels of SBC's May 27

announcement regarding the availability of ADSL service in more than 180 California communities. By the end of this month, it is planned that all 87 central offices - which currently serve approximately 4.4 million households and 650,000 business customers throughout the Golden State - will be equipped. Additionally, the company has signed agreements with 22 ISPs which will act as authorized sales representatives for Pacific Bell's ADSL service and offer the service to their business and residential customers. SBC plans to continue deployment of ADSL technology in its service region.

The SBC-Dell initiative is designed to increase the availability and accessibility of ADSL services, giving desktop computer buyers the ability to rev' up their PCs at the time of purchase. By developing desktop PCs already furnished with ADSL equipment, SBC and Dell help lessen the complexity of onsite ADSL installations and will potentially reduce the need for new wiring or installation visits at customer locations.

SBC's ADSL digital technology moves data over existing copper phone lines at speeds up to 1.5 megabits per second (Mbps). Designed primarily for Internet and telecommuting applications, it enables businesses of all sizes to work smarter and home Internet enthusiasts to surf faster. ADSL can be used to provide an always-on, direct Internet access solution that enables users to download data, graphics, audio and video files over existing telephone lines while simultaneously using a phone or fax machine.

ADSL allows telecommuting employees and after-hours home workers to connect to their employers' corporate networks via dedicated links. Used with Internet service, ADSL can provide online consumers and small businesses with accelerated access to the World Wide Web. For example, it would take a 28.8 kilobits per second (Kbps) analog modem - the most common modem used today - 41 minutes to download a short 72-megabyte video clip, compared to 48 seconds using ADSL.

This joint initiative helps advance the Universal ADSL Working Group's (UAWG) goal of accelerating high-speed data and Internet access to the mass market. The UAWG is comprised of !eading telecommunications, personal computer and networking companies.

Ranked No. 125 in the Fortune 500 companies, Dell Computer Corporation is the world's leading direct computer systems company, based on revenues of $13.6 billion for the past four quarters. Dell designs and customizes products and services to end-user requirements, and offers an extensive selection of peripherals and software through the DellWare ® program. Information on Dell and its products can be obtained through its toll-free number 1-800-388-8542 or by accessing the Dell World Wide Web server at www.dell.com.

SBC Communications Inc. is a global leader in the telecommunications industry, with more than 34 million access lines and over 5.8 million

wireless customers across the United States, as well as investments in telecommunications businesses in 10 countries. Under the Southwestern Bell, Pacific Bell, Nevada Bell and Cellular One brands, SBC, through its subsidiaries, offers a wide range of innovative services, including local and long-distance telephone service, wireless communications, paging, Internet access, and messaging, as well as telecommunications equipment, and directory advertising and publishing. SBC (www.sbc.com) has more than 119,000 employees and reported 1997 revenues of nearly $25 billion. SBC's equity market value of $74 billion (as of June 30, 1998) ranks it as one of the largest telecommunications companies in the world.

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Exhibit A.3
Pacific Bell xDSL News Releases

PACIFIC BELL
NETWORK

FasTrak DSL

Buckle up. The speed limit on the Info-bahn is going up again.

Internet usage is growing at a phenomenal rate. Telecommuting from remote locations is growing even faster. And with this growth comes a demand for even faster connection speeds.

It's time for *FasTrak* DSL.

Click here for the latest news about ADSL and information on Pacific Bell's new ADSL ISP Partner Program.

FasTrak DSL (Digital Subscriber Line) is a new digital service developed by Pacific Bell that allows you to connect to the Internet, or to your company's LAN, at speeds up to 50 times faster than a 28.8 modem -- over regular copper phone lines -- right from your home, home office or small business.

And to save you even more time, *FasTrak* DSL offers data over voice capability -- so you can talk on the phone and use your data connection at the same time.

FasTrak DSL -- the fastest way to communicate from your home, home office or small business.

- Applications
- Equipment Requirements
- Network Diagram
- Check for *FasTrak* DSL Availability
- Frequently Asked Questions
- Glossary of Terms

benefits and features | pricing and availability
service and support | how to order

related products
Bandwidth Simulator
FasTrak ATM
FasTrak ISDN

special offers
How do you like the new look of www.pacbell.com? We're eager to hear your feedback.

stories
Everyone has a story. Here's your chance to tell yours. Post your story of how you use a Pacific Bell product or service.

go to fastrak video & data services

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PACIFIC BELL
NETWORK

News Center

Pacific Bell's ADSL-Internet Access Packages Now Available To 180 California Communities

Company Delivering On Promise To Provide Communities With High-Speed Data And Internet Solutions To More Than 5 Million California Residential And Business Customers

Pacific Bell Also Announces New ADSL ISP Partner Program

San Francisco, California, September 1, 1998

Underscoring Pacific Bell's commitment to deliver high-speed Internet and data access to Californians, the company today announced the immediate availability of Asymmetric Digital Subscriber Line (ADSL) technology in approximately 180 communities through 75 central offices - more than 85 percent of the planned 87 central offices it announced it would equip this summer. All 87 central offices will be equipped by September 8.

This deployment is the first step in Pacific Bell's plans to deliver ADSL service to more than 200 communities across California, as announced in May. In July, Pacific Bell received approval from federal regulators to begin providing the service.

ADSL is a high-speed, always-on service that enables customers to transfer data, graphics, audio and video files at speeds up to 1.5 megabits per second (Mbps). ADSL runs over existing telephone lines, allowing customers to simultaneously make a phone call and access information via the Internet or an office local area network (LAN).

"Our ADSL service in California is geared toward customers who rely heavily on access to the Internet and LANs for personal or professional use," said Ray Wilkins, president of business communication services at Pacific Bell. "Expanding the information pipeline is essential to the future of the Internet, and Pacific Bell's now widely available ADSL packages answer this need for our customers."

Internet Packages
The cornerstone of the ADSL deployment is the immediate availability of two new Internet access packages from Pacific Bell Internet Services. The new packages -- "ADSL Home Pack" and "ADSL Internet Access Pack" -- provide customers with new features and a single source for all of their high-speed Internet access needs -- including hardware, installation services and customer support.

ADSL Home Pack

"ADSL Home Pack" includes Pacific Bell Internet Services' **Basic ADSL Internet Access** and is designed for the single workstation home or office user who requires greater bandwidth to effectively search, manage and retrieve information online.

- Basic ADSL Internet Access provides customers with a dedicated link to their Internet account and one Internet Protocol (IP) address.
- *Total start-up cost for the "ADSL Home Pack" begins at $299. It combines the following into one package: on-site service installation; Basic ADSL Internet Access; and ADSL equipment, including an ADSL modem, an ethernet network interface card, a splitter, and inside wiring.
- "ADSL Home Pack" begins at speeds from 384 kilobits per second (Kbps) downstream and 128 Kbps upstream. Monthly service price for this offering is $89 per month (includes $59 ADSL service and $30 Internet access from Pacific Bell Internet).

ADSL Internet Access Pack
"ADSL Internet Access Pack" is designed to increase online productivity by giving businesses higher speed and secure connections to the Internet over their home or office LANs. It includes either Pacific Bell Internet Services' **Enhanced ADSL Internet Access** for home offices, or **Business ADSL Internet Access** for small and mid-sized business customers.

- Enhanced ADSL Internet Access provides home office customers with a dedicated link to their Internet account, five IP addresses, and the option of a custom domain name.
- Business ADSL Internet Access offers small and mid-sized businesses a dedicated link to a customers' Internet account, a minimum of 29 IP addresses, and 24-hour proactive network monitoring.
- *Total start-up cost for the "ADSL Internet Access Pack" begins at $449. It combines the following into one package: on-site service installation; Basic ADSL Internet Access; and ADSL equipment, including an ADSL modem, a splitter, and inside wiring.
- "ADSL Internet Access Pack" is available at three different speed options:
    - Up to 384 Kbps upstream and 128 Kbps downstream, at a monthly service price starting at $139 (includes a $59 ADSL connection and $80 Internet access from Pacific Bell Internet Services.)
    - Up to 384 Kbps upstream and downstream, at a monthly service price starting at $199 (includes $99 ADSL connection and $100 Internet access from Pacific Bell Internet Services).
    - Up to 1.5 megabits per second Mbps downstream and 384 Kbps upstream at a monthly service price starting at $339 (includes $189 ADSL connection and $150 Internet access from Pacific Bell Internet Services).

As part of its initial roll out of ADSL, Pacific Bell has deployed the high-speed service in communities that have been traditionally underserved by technological innovation.

"Because of this investment, students, teachers, community leaders and ordinary consumers in all parts of California will have access to a high-speed state-of-the-art telecommunications network, not just those who are in high-tech centers," said Jacquelyn Brand, founder and former executive director, Alliance for Technology Access, Universal Service Alliance, San Rafael. "It means more opportunities and a better future for more Californians."

In related news, Pacific Bell also announced the creation of its ADSL Internet Service Provider Partner Program. This program, which will include prominent ISPs, will increase the availability of ADSL in California and enable participating ISPs to package their online

services with Pacific Bell's ADSL transport services.

About ADSL
Due to existing technical and distance limitations, ADSL will not be available to some customers served by the ADSL-equipped central offices. Initially, the service will be available to approximately 70 percent of the households and businesses in each service area. To use the service, customers must be located within 17,500 feet of a ADSL-equipped central office and their lines must meet certain transmission criteria.

Additional charges may apply for purchases of customer premise equipment and network integration services. For more information on ADSL and to order the service, California residents can call 1-888-884-2ADSL or visit the Pacific Bell Web site at **www.pacbell.com/products/business/fastrak/adsl/**.

* Prices based upon one-year term agreements; prices will increase on month-to-month contracts. With Business ADSL Internet Access package, discounts are available with one, two or three year agreements

Pacific Bell is a company of SBC Communications Inc., a global leader in the telecommunications industry, with more than 34 million access lines and over 5.8 million wireless customers across the United States, as well as investments in telecommunications businesses in 10 countries. Under the Southwestern Bell, Pacific Bell, Nevada Bell and Cellular One brands, SBC, through its subsidiaries, offers a wide range of innovative services, including local and long-distance telephone service, wireless communications, paging, Internet access, and messaging, as well as telecommunications equipment, and directory advertising and publishing. SBC (www.sbc.com) has more than 119,000 employees and reported 1997 revenues of nearly $25 billion. SBC's equity market value of $74 billion as of June 30, 1998, ranks it as one of the largest telecommunications companies in the world.

Pacific Bell
ADSL Central Offices
September 8, 1998 Deployment

The following central offices cover all or part of more than 200 communities in California.

Alameda	Los Angeles (5)
Albany	Milpitas
Alhambra	Mountain View
Anaheim (2)	National City
Arcadia	Newport Beach
Berkeley	Northridge
Beverly Hills	North Hollywood

Burbank
Burlingame
Canoga Park
Colma
Compton
Concord
Costa Mesa
Culver City
Danville (2)
El Toro
Escondido
Fair Oaks
Fremont (2)
Fullerton
Garden Grove
Glendale
Hayward
Hollywood
Irvine
La Crescenta
La Jolla
La Mesa
Laguna Nigel
Livermore
Los Altos
Oakland (3)
Palo Alto (2)
Pasadena
Pleasanton
Redwood City
Reseda
Sacramento (4)
San Bruno
San Carlos
San Diego
San Francisco (5)
San Gabriel
San Jose (5)
San Mateo
San Ramon
Santa Ana (2)
Santa Clara (2)
Sherman Oaks
Simi
Sunnyvale
Tustin
Van Nuys
Ventura (2)
Walnut Creek

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news center

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- contact us
- home page

search center

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Exhibit A.4
Southwestern Bell xDSL News Releases

Hit the "highway" without leaving home

It's one thing to cruise the information super-highway--it's another to hit the real highway at rush hour. But you need to get to the office if you want high-speed access to the network--don't you? What if you had a network connection at home as fast as the one at work? One that lets you use your phone AND computer on the same line? It isn't magic--it's a technology called **Asymmetrical Digital Subscriber Line (ADSL)**. We call it *FasTrak* **DSL** And it's available now from Southwestern Bell

***FasTrak* DSL will:**

- Provide ultra high-speed network accessibility from your home or small office
- Enable you to efficiently download large files, attachments and even Web pages from remote locations
- Provide constant connectivity to your Host LAN or your Internet Service Provider
- Work over existing lines, so there's no need to add new phone lines

Related Products

- Frame Relay
- ISDN

How will it help me? | Who else uses it? | How does it work? | Prices & Ordering
Product Showcase Home | Product List | Product Search

About Southwestern Bell	In Your Area	Products & Services
News Center	Career Opportunities	Customer Service
Search	Feedback	Home

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Southwestern Bell

Prices & Ordering

How will it help me? | How does it work? | Product Overview | Who else uses it?

Asymmetrical Digital Subscriber Line (ADSL)

Where is *FasTrak* DSL available?
Right now, Southwestern Bell is offering *FasTrak* **DSL** service in Austin, Texas on an experimental trial basis. After the Austin trial concludes, we plan to offer *FasTrak* **DSL** in additional locations. We'll announce those locations on this Web site as soon as possible

To place an order, if you're in Austin, Texas:
Your Southwestern Bell account team can help you put *FasTrak* **DSL** to work--so you can start cruising the information super-highway without backing out of your driveway. For more information if you live in Austin, please call 1-888-SWB-DSL1 (1-888-792-3751)

Do I need any expensive equipment?
You'll need a *FasTrak* **DSL** modem, but this technology works over your existing phone lines. That keeps installation costs to a minimum. Initially you'll need to use Alcatel modems for the Austin trial of *FasTrak* **DSL**; you can purchase the modem from Southwestern Bell or eventually from a third party.

We offer two options for *FasTrak* **DSL**:

- one with up to 384 Kbps both downstream and upstream
- one with up to 1.5 Mbps downstream and up to 384 Kbps upstream

How long will it take to get it?
Typical time frames to install *FasTrak* **DSL** service range from 5 to 17 days. We'll work with you to coordinate ordering your modem, connecting to a LAN or ISP, and delivery and installation of *FasTrak* **DSL** as well as making sure you have the necessary equipment.

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CERTIFICATE OF SERVICE

I hereby certify that on this 5th day of October 1988, copies of the foregoing OPPOSITION of xDSL NETWORKS, INC.; CC Docket No. 98-147, were served via Messenger* or First-Class Mail, U.S. postage prepaid. to the parties on the attached service list.

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