

NETWORK DISCLOSURE NEWS No. 270

Broadband PC Interface

*700 West Mineral
Littleton, CO 80120*

Network Disclosure Announcement #270

Public Notice of Network Change(s), pursuant to CFR 47, subsections 51.325 - 51.335.
Qwest Communications Internet address: <http://www.qwest.com/disclosures>.

Broadband PC Interface

Disclosure Date: January 31, 1996

Summary: Qwest Communications is proposing a new offering called Broadband PC Interface (BBPC) Service in Omaha, Nebraska.

The BBPC Interface will provide an Internet Protocol (IP) interconnection between a customer's computer terminal and an Information Provider, allowing two-way data to be transported at high speeds over the existing broadband network in Omaha.

This announcement correlates with the Qwest Network Disclosure News No. 217, dated April 19, 1995, entitled "Video Dial Tone (VDT) Digital System - Broadband Network Interfaces."

**Locations and
Timing of
Deployment:**

This service will begin in Omaha, Nebraska in third quarter 1996. The service will be offered in the 135th Avenue Wire Center area (CLLI = OMAHNECEDS0) and will be served over the Omaha Video Dialtone (VDT) Broadband network.

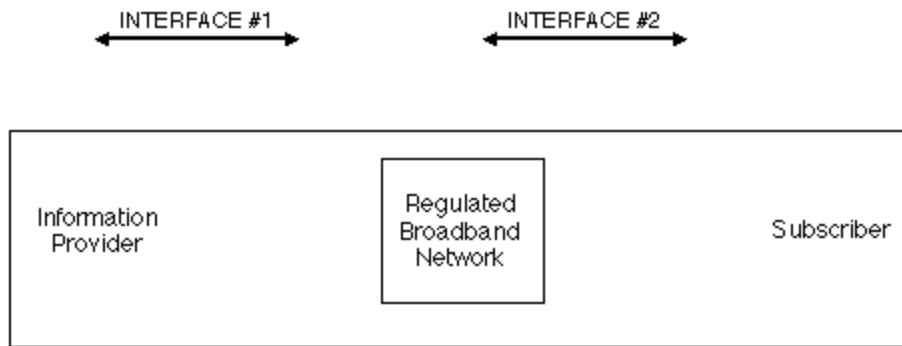
Pricing:

Qwest will develop and file a tariff for the regulated BBPC service that will be in effect for the duration that Qwest offers BBPC service in Omaha.

**Interface
Requirements:**

The diagram below represents the required interfaces followed by a description.

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INTERFACE #1: describes the Information Provider interface into the Qwest Communications regulated BBPC network. This interface uses the Qwest DS1 Service transporting an Internet Protocol (IP) connection at 1.544 Mbit/s. DS1 Service is a standard tariff service offered by Qwest Communications, Inc, available to customers and carriers. Procedures for ordering DS1 service can be found in Qwest Service Publication 77200, Issue D, October 1995.

Qwest Service Publication 77200, Issue D, October 1995 can be obtained by contacting:

Faison Office Products Company
 3251 Revere St., Suite 200
 Aurora, Colorado 80011
 Phone: 1-303-340-3672 or 1-800-777-3672
 Fax No. 303-340-1905
 Document Name: Qwest DS1 SERVICE AND QWEST DS1 RATE SYNCHRONIZATION SERVICE, Service PUB 77200, Issue D
 Price: \$48.00

INTERFACE #2: describes the interface at the network output to and from the subscriber's computer modem. This is a new interface that utilizes a 75 ohm coaxial cable and a female F connector as the physical component. In order to meet Cumulative Leakage Index (CLI) requirements and end-to-end specifications, the inside wiring must be RG-6, dual shield, 60% aluminum polypropylene braid with the following loss requirements:

- € 6.5 dB at 100 feet at 750 MHz
- € 5.35 dB at 100 feet at 750 MHz

All inside wiring must meet the 1993 National Electrical Code, Article 820, Section E requirements for Type CATV and CATVX available from the National Fire Protection Association (NFPA).

The National Electrical Code and handbook can be obtained by contacting:

National Fire Protection Association
 1 Batterymarch Park
 P.O. Box 9146
 Quincy, MA 02269-9959
 Phone: 1-800-344-3555
 Fax order to 1-800-593-6372 (add \$4.15 for ship & handling)
 Price: National Electrical Code (soft cover)
 \$35.50 for members, \$39.50 for non-members.
 National Electrical Code (hard cover)
 \$69.75 for members, \$77.50 for non-members.

Set (soft & hardcover)
\$84.25 for members, \$93.50 for non-members.

A 10 Mbit/s channel is derived on a 6 MHz RF envelope employing a radio frequency (RF) carrier modulation scheme of Quadrature Phase Shift Keying (QPSK). The 6 MHz RF envelope shall be assigned by Qwest Communications in the forward and reverse signal directions to complete the communications link for the customer. Interface #2 supports customer premises equipment (CPE) for the forward path QPSK electrical signal that is frequency agile between 54 MHz and 552 MHz. Interface #2 also supports CPE for the reverse path QPSK electrical signal that is frequency agile between 5 MHz and 42 MHz.

The minimum end-of-line signal requirements are as follows:

€ Carrier-to-Noise (for 1 in 10⁹ BER) 22 dB
€ Carrier-to-Interference (for 1 in 10⁹ BER) 25 dB

THE FOLLOWING REPRESENTS THE INTERNET PROTOCOL TRANSPORTED
ACROSS INTERFACES #1 AND #2:

LANcity Corporation document 560-0063 entitled "LANcity UniLINK II Network CPE Interface Specification" describes the physical layer and link layer transport and control procedures between the customer's computer modem and Qwest's network. Qwest will utilize Simple Network Management Protocol (SNMP) to monitor and manage BBPC Service.

Document 560-0063 can be obtained by contacting:

LANcity Corporation
100 Brickstone Square
Andover, MA 01810
Phone: 1-508-475-4050
Document #560-0063
LANcity UniLINK II Network CPE Interface Specifications
Version 1.4, November 14, 1995
Price: \$45.00

Other documents referenced in LANcity's 560-0063 that may be required for a complete understanding of the interface specifications are indicated below:

Request for Comment (RFC) documents:

RFC	Date	Title
768	8/80	User Datagram Protocol (UDP)
791	9/91	Internet Protocol (IP)
868	5/83	Time Protocol
1157	5/90	A Simple Network Management Protocol (SNMP)
1213	3/91	Management Information Base (MIB) for network management of TCP/IP based internets

- 1286 12/91 Definitions of Managed Objects for Bridges
- 1350 7/92 The Trivial File Transfer Protocol (TFTP)
- 1542 10/93 IP Address Allocation using BOOTP
- 1643 7/94 Definitions of Managed Objects for the Ethernet-like Interface Types

RFC 768, 791, 868, 1157, 1213, 1286, 1350, 1542 and 1643 can be obtained by contacting:

Internic Information Services

Email: mailserv@ds.internic.net

Web site: <http://www.internic.net/ds/rfc-index.html>

FTP site: ds.internic.net/rfc/rfc##### where ##### is the RFC number.

Price: Internet access of RFCs are free and generally available.

The Ethernet, A Local Area Network - Data Link Layer and Physical Layer Specifications, Version 2.0, November 1982, can be obtained by contacting:

Xerox Corporation

3333 Coyote Hill Road

Palo Alto, CA 94304

Phone: 1-415-812-4752

Part Number: XNSS-018211

Price: \$50.00

ANSI/IEEE Standard. 802.3, Local and Metropolitan Area Networks, Part 3, Carrier Sensed Multiple Access with Collision Detection, Access Method and Physical Layer Specifications, 1993 Edition can be obtained by contacting:

IEEE Document Number 8802-3: 1993

IEEE Customer Service

445 Hoes Lane

P. O. Box 1331

Piscataway, NJ 08855-1331

Phone: 1-800-678-4333

Price: \$150.00

**Additional
Information:**

Any Customer Premises Equipment vendor/manufacturer or Information Provider wanting to offer products and services in conjunction with these interfaces provided by Qwest may contact:

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