eOn™

MILLENNIUM®

Digital Communications Platform

Contents

Millennium® Digital Communications Platform

A communications system is the first point of contact between you and your customers, suppliers, and investors. At eOn Communications, we understand the importance of first impressions and designed our Millennium® Digital Communications Platform to make the first, and every, impression a good one. The Millennium system accomplishes this by providing a total communications solution for your business that blends voice, data, wireless, and CTI technology into a single, diverse telephony server.

eOn not only understands the importance of a good impression, but also we understand that every business is unique, and therefore designed the Millennium to be extremely flexible. Software-driven, modular, and featuring easy to install hardware components, the Millennium is easily customized to meet your application needs.

Furthermore, the Millennium's seamless upgrade path will allow your business to maintain its technological edge while increasing productivity and profitability. It's a system powerful enough to grow up to 1,024 ports in any combination of stations or trunks, yet it's compact and light so it can be wall mounted or installed in a 19" rack.

With the Millennium, you have all of the business features you expect and the sophisticated call-handling capabilities you want in a communications system. In fact, the Millennium is also designed to provide value-added business applications such as:

Call Center Applications
The versatile Millennium platform supports a variety of call center applications, from basic call routing to sophisticated conditional routing, that allow you to intelligently route calls to the appropriate person with the knowledge to handle the call.

Wireless Solutions
The eOn Orbit™ Wireless System is fully integrated with the Millennium to provide the critical business features you enjoy with your desk telephone – multiple lines, calling party information, messaging waiting indication and message counts, conferencing, hold, transfer, call park, alphanumeric paging, and more. The Millennium's integrated wireless system increases productivity within your business while also ensuring timely, responsive communications with your customers.

Multi-site Communications
The Millennium's distributed networking solutions allow businesses to connect sites and share capabilities via a virtual enterprise network, thereby reducing costs by combining voice and data traffic over the same network resources.

Multimedia Messaging
The eVPS Unified Messaging, when combined with the Millennium, allows employees and customers to use the communications tool that they prefer or that is convenient – any combination of voice, fax, or email.

Desktop Solutions
The Millennium offers a selection of telephones to meet the needs of any employee.

1

Call Coverage and Routing

Using the Millennium's advanced call routing technologies, employees, customers and suppliers can communicate in a variety of mediums, including voice, video and data calls, across any number of locations.

Sophisticated Call Routing

Call routing plans for the Millennium can be simple or complex, depending upon your requirements. The Millennium supports up to 64 plans, and each plan allows for 60 different sequences of instructions for customized call handling during specified days of the week and times of the day. Each plan can be assigned a priority level so that a call can be queued relative to other incoming calls.

Powerful Translation Tables

The Millennium's translation tables for call routing offer extensive programming options, expedite call processing, and provide information about each call. Programming features that expand the possibilities for advanced call routing include:

- Capacity for assigning up to 10,000 mnemonics so that a user's telephone display shows the calling party name on incoming calls
- Ability to deliver a call to multiple locations simultaneously
- Call routing based on either the right-most or left-most digits of the inbound number to expedite call processing
- Ability to send processed digits to the system, to another call routing plan, to voice mail, to an extension number, to a feature access code, or to a network extension number.

Call Identification

The Millennium system's ability to deliver information on both the calling party and called party allows for complex call routing plans and for advanced voice processing features. Call identification not only augments the information presented to an ACD agent or to an attendant in a multi-tenant application, but also, using the called party number routing capability, provides a cost-effective solution by reducing the number of telephone lines needed to cover incoming calls.

Flexible Call Coverage

Flexible call coverage features on the Millennium ensure that all calls are routed and handled by proper, designated extensions so that a qualified, knowledgeable employee handles each call, even if it has to be directed off-premises, for example, to a cellular phone. The Millennium redirects calls to alternate extensions, based on your pre-determined criteria, when the original called party is not available. It also distinguishes between internal and external calls providing different coverage paths for each.

Versatile Call Pickup

The Millennium's extensive call pickup capabilities allow an employee to answer a Park-to-Station call, an All Call Announce call, a paging access call, an ACD group call, or a call directed to one telephone from another telephone or dial-in trunk. In other words, employees have immediate access to any ringing telephone in the building. And when the call is picked up, the Millennium provides available calling party number and name to the telephone's display or if the call is redirected from another source, the employee will know who the call was originally intended for and respond accordingly.

Efficient Station Hunting

Additional call distribution and measurement functionality is available with the Millennium's Station Hunting feature. Station Hunting allows you to distribute incoming calls efficiently and equitably among available hunt group members. A hunt group is typically a designated group of individuals in a company or department that handles the same type of incoming phone calls.

Powerful Conferencing

The Millennium has flexible and powerful conferencing capabilities that support up to 32 parties in a conference and help improve collaboration and decision making.

- **Meet-Me-Conference –** benefits users who wish to set up a time for a conference call and allow everyone to join it by calling into the system and dialing an extension.
- **Query Conference –** allows a user within a conference to select a specific party in the conference by simply pressing a programmed button to query the conference members and scroll through displayed calling party information.
- **Isolate Conference –** allows a user within a conference to isolate a member of the conference and establish a two-way conversation with that person.
- **Conference Teardown –** enables the system to continue a conference even if other members of the conference are external.

Repertory Dialing

The Millennium system's robust personal repertory dialing feature provides functionality to customize telephone buttons at the desktop providing users with automatic dialing of up to 255 personal repertory numbers or 1,024 system repertory numbers, each of which can include a string of up to 48 digits. These numbers can be used to make outgoing calls and to access internal features and extensions. Application possibilities are practically limitless because users can combine the personal repertory number dial feature with other system feature capabilities.

Networking and Remote Fiber Equipment

Millennium Networking Solutions

By optimizing the inherent flexibility of the system's features, the Millennium offers cost-effective, results-oriented solutions for a variety of unique networking applications. From campus environments to distributed call centers, the Millennium provides networking capabilities and unmatched data connectivity in industries where a communication hub is required to provide a central point of entry into a system or network.

Using T1, E1, Tie lines, or PRI as a conduit to tie locations together, the Millennium's networking capabilities help your business to consolidate resources as well as ensure call answering and routing consistency throughout all locations.

Common Dialing Plans

The system supports up to 50 remote nodes and an unlimited number of extension groups, which enables the use of common dialing plans across the network. Consistency in dialing plans results in the ability to publish a universal (network-wide) extension directory, and provides direct station-to-station dialing capability among the different locations. In addition, identical local and long distance dialing procedures, such as dialing "9", are set up for all stations within the network. This powerful benefit allows everyone to have access to extensions and features in other systems just as if they were extensions in the local system.

Faster Call Setup

Networking of systems results in faster call setup between locations. Intra-network direct dialing allows station-to-station dialing between sites without having to dial an access code. All extension lengths can have equal designations (typically three or four digits). Calls processed via ISDN PRI or T1 on both ends have faster set up times compared to traditional analog calls, representing a significant benefit.

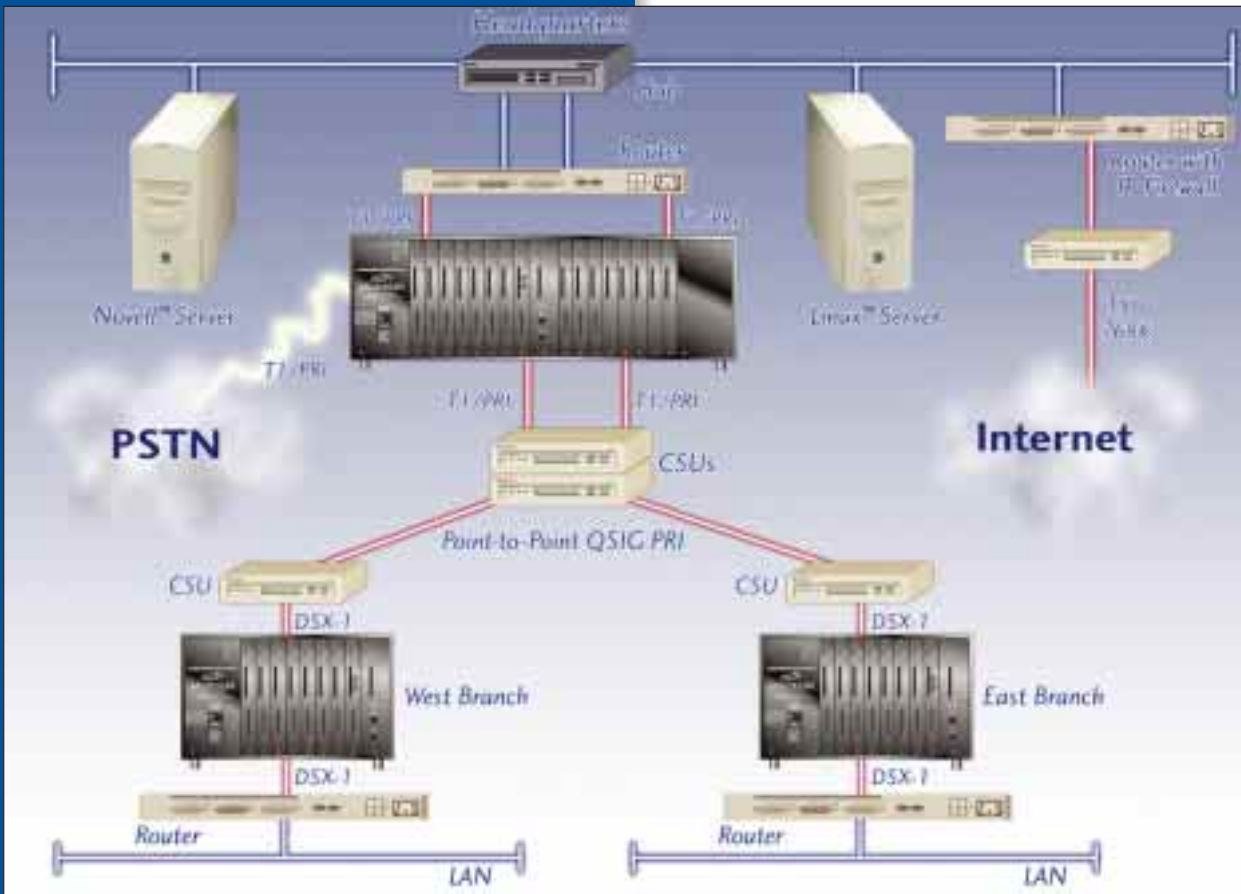## Calling Party Information

With networking, any calling party information that passes through the main system is transferred with the call and displayed at the destination desktop. This includes any information provided by the Local Exchange Carrier (LEC) such as name and number identification. The display of the calling extension name or number is simultaneous with the telephone ring and will follow the calls. Before you answer a call, you immediately know the type of call (internal or external), who is calling, and if the call is from another company location. This is especially helpful for personnel in call coverage positions - no more blind transfers and recalls.

Centralized Voice Mail

The Millennium and eOn Voice Processing System (eVPS) combination offers a single, centralized voice mail system that not only saves money, but also expedites information sharing, allowing for multi-site distribution lists and simplifying the addition of new extensions. Centralized voice mail controls the message counts and message waiting lights for all stations on the network, lighting and extinguishing them as appropriate. In addition, the system is able to automatically re-direct unanswered calls to the personal greeting of the originally called station anywhere on the network. From individual stations or mailboxes, users can send and forward messages to anyone on the network, as well as create custom mailing or distribution lists for any combination of users at any of the networked sites.

The Millennium's networking, centralized voice mail, and remote fiber shelf capabilities help your business consolidate resources.

With Circuit Switched Data, PRI calls between remote sites can be designated as voice or data on a per call basis, eliminating costly dedicated leased lines.

ISDN Networking

Millennium supports advanced networking through most ISDN Primary Rate protocol interfaces. With this capability, the Millennium system becomes a cost-effective, high-performance communications pipeline for voice and data carried by all types of trunk access services. This advanced network interface offers:

- *Faster call setup and tear down*
- *Full 64Kbps bandwidth*
- *Software-control*
- *Automatic Number Identification (ANI)*
- *Dialed Number Identification Service (DNIS)*
- *Call-by-call service selection*

The Millennium implements the ISO version of PSS1 (Private Signaling System 1 or Q.SIG), which is a worldwide standard for connecting multiple vendor PBXs in private networks using ISDN. Q.SIG is also the recommended choice for networking multiple eOn communications platforms together, including Millennium, eQueue, and eNterprise, offering enhanced feature transparency between these systems.
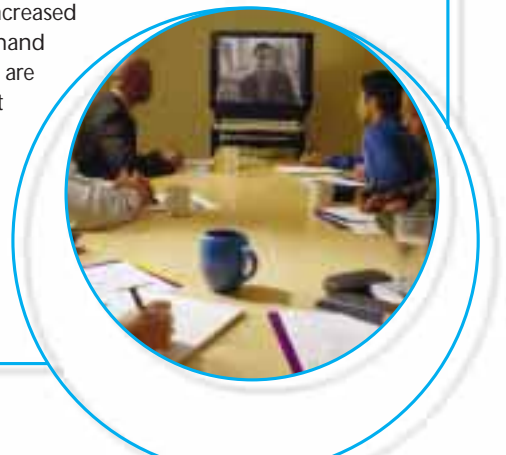
Remote Fiber Equipment Capability

The Millennium supports direct fiber connection of remote shelves, using multi-mode fiber. Rather than having two complete systems tied together, as in networking, remote shelves run directly off the main shelf and act as single switch. This allows the Millennium system to be located closer to the telephone users its serves thereby increasing the service area of a single system and offering a cost-effective solution for many multi-site situations.

Remote Office Data Communications

The Millennium's digital platform makes it extremely economical to deploy worldwide corporate communications by seamlessly integrating voice and data networks. The Millennium supports both PRI and Basic Rate Interface (BRI) Circuit Switched Data, enabling data to be transmitted through the system to videoconferencing systems, terminal adapters, routers, and modems to access the LAN and the Internet. With Circuit Switched Data, PRI channels between multi-site locations can be used for both voice and data. Bandwidth can be increased or decreased on-demand and remote locations are economically brought onto the corporate network via ISDN instead of using costly dedicated lines.

Wireless Capabilities

Millennium Wireless Communications

To increase employee accessibility and productivity, eOn Communications offers the latest in-building wireless technology. For short-range mobility around the office or greater mobility across a campus or multi-story facility, the full-featured Orbit™ Handset provides digital clarity and ease of use for active employees, enabling them to remain accessible whether on the sales floor, in the warehouse, or at their desks.

Designed to integrate fully with eOn's Millennium, the Orbit Wireless System increases internal efficiency and customer satisfaction by reducing voice mail "phone tag", the number of hang-ups, and time spent on hold. Capable of ringing simultaneously with, or independently of, the desk set, the Orbit Handset supports the same digital features offered by the Millennium including calling party information, message waiting indication, and alphanumeric paging support.

Each Millennium Wireless Interface Card is capable of supporting two 8-channel base stations allowing for 16 simultaneous conversation paths.

Wireless Coverage and Capacity

The Millennium and Orbit combination keeps you in contact wherever you are by strategically placing multiple Orbit Base Stations in practically any type of facility, including multi-story offices and multiple-building campus settings. For high traffic areas, Orbit Base Stations may be added to support greater call volumes without creating unwanted signaling interference. Using multiple Wireless Interface Cards (WICs), the Millennium supports up to 126 base stations and up to 1,500 wireless users.

Digital Wireless Features

The Wireless Interface Card and the Orbit systems together mobilize the power and features set of the Millennium. Just like the eOn digital telephones, the Orbit Handset is an extension, providing users with full access to the system's critical business features, yet allowing them to have secure conversations while roaming freely throughout the premises.
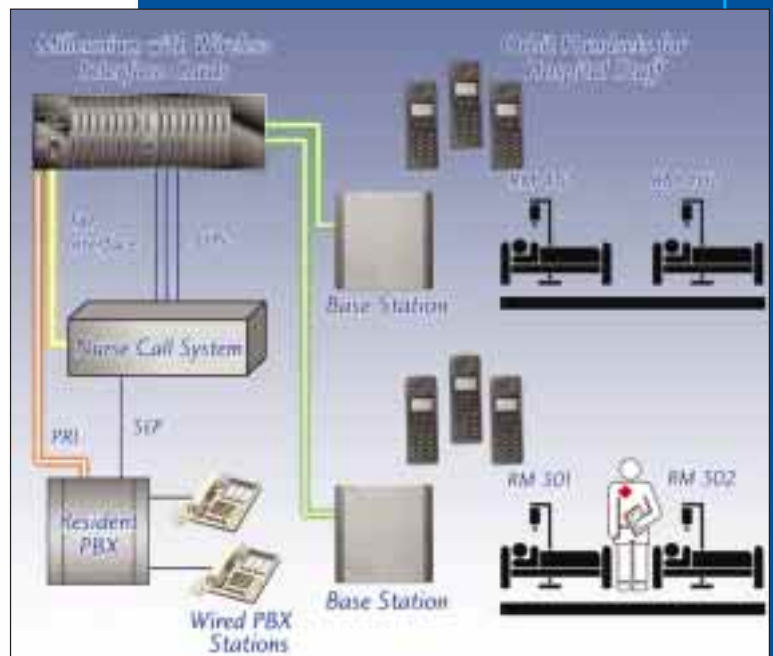
With the Millennium and the Orbit Wireless System, you will never search for a telephone because it's always with you. No more company-wide pages. No more missed calls. No more "phone tag".

Millennium Nurse Call Integration

The combination of the Millennium Digital Communications Platform, the Orbit Wireless System, and TAP-compliant nurse call equipment produces a cost effective, highly reliable wireless healthcare communication system that enables caregivers to move freely within a facility while maintaining instant communication access to patients, staff members, and the outside world.

The modular and scalable architecture of the Millennium and Orbit systems means that no clinic is too small and no hospital too large to benefit from the system's outstanding wireless coverage. The Millennium platform can function either as a wireless controller in large installations having an existing PBX, or as a combination PBX-wireless controller in smaller facilities.

Additionally, the Orbit Base Stations and Orbit Handsets operate in the 1.9GHz range, a frequency band that makes the system safe for use around industrial scientific medical (ISM) devices and, therefore, ideal for clinical and hospital environments.

This diagram shows a large clinical environment featuring an existing PBX and a Millennium system connected to a nurse call system.

Automatic Call Distribution

Automatic Call Distribution (ACD) is an effective tool both for handling a high volume of calls and managing call center operations. It is also a tool that small to medium sized call centers need, but they often do not want the hassle that can accompany full-featured ACD equipment. The Millennium offers the perfect solution by providing powerful call routing capabilities that easily distribute calls to equalize the workload across all active agents and provide callers with a prompt response.

Call routing can be based on the type of caller, agent availability, and qualification. Advanced features include routing via calling and called party information and conditional routing, utilizing "If – Then" statements to further enhance call handling. Callers in queue can hear music and recorded messages that encourage them to hold until an agent is available, allowing you to present a courteous and professional image to customers.

Unlike many competing systems, Automatic Call Distribution is provided as an integrated part of the Millennium system at no extra cost.

Agent Call
Agent Change
Agent Log On/Off
Agent Monitor
Agent Query
Agent Statistics for Transferred Calls
Agent Status Indication
Automatic Log Off
ACD Status Indicator
Do-Not-Disturb
Flexible Distribution (based on peg count, busy time, or idle time)
Flexible Queue Threshold
Group Call
Group Service Button
Group Status Indication
LED Display Board Support
Management Information
Off-Premises ACD Agents
Report Printing via Telephone
Remote Agent Change
Remote Agent Log On/Off
Remote Agent Query
Call Routing Plans
Transfer to Agent
Transfer to Group
Transfer to Routing Plan
Supervisor Support
Wrap-Up Time
Extended Wrap-up

The Real Time ACD Software allows call center supervisors to customize the screen layout and view multiple screens simultaneously.

Millennium Real Time ACD

The powerful ACD capabilities on the Millennium, coupled with the optional Millennium Real Time ACD software package, enable the Millennium platform to deliver an unbeatable combination for proficient call handling.

- *Real Time Advantage –* To keep your communications center running efficiently, the Millennium Real Time ACD offers an intuitive and easy-to-navigate Windows-based graphical user interface that gives you up-to-the-second information. Here are some of the immediate benefits:
    - No waiting for processing or calculation time
    - Support for both graphical and text information presentation
    - Color coding for immediate visual identification

- *Customized Screen Viewing –* The Millennium Real Time ACD was designed to accommodate your unique method of operation by allowing you to simultaneously view different screens, pre-program personal preferences, and set suitable performance thresholds for each group.

- *Call Trend Analysis –* Evaluation of call trends is vital in maximizing agent productivity. If you can't measure it, you can't manage it. The Millennium Real Time ACD Package offers quick, accurate reports available in both graph and text versions, including customized parameters and specific time frames. Additionally, the historical reporting feature allows customization of standard reports and charts.

Off-Premises Agents

The Millennium supports off-premises agents and also tracks performance of local and remote agents, providing reports that offer quantitative results for telecommuting applications. In addition, supervisors can remotely log agents on or off and, using Real Time ACD, can observe, monitor, and obtain the real-time status of remote agents. Further, this feature can be used with networked Millenniums enabling agents in a remote system to log into a group in the hub system.

The Real Time ACD historical reporting features can be customized to accommodate your unique method of operation.

7

eOn Voice Processing System Integration

Building on years of research and development, the eOn Voice Processing System (eVPS) provides a single platform for integrating voice, fax, and email messaging capabilities, providing a scalable yet cost-effective messaging platform.

eVPS Capabilities Include:

- *Full Featured Voice Messaging*
- *Auto Attendant*
- *Fax Messaging and Fax Broadcast*
- *Fax-On-Demand*
- *Enhanced Integration with Millennium*
- *TCP/IP Network Connectivity*
- *VoiceClusters™ Digital Networking*
- *Centralized Voice Mail*
- *Unified Messaging*

The eVPS systems are scalable dependent upon user requirements and are available in four models: Series 500, Series 1000, Series 3000, Series 5000 (rack mountable).
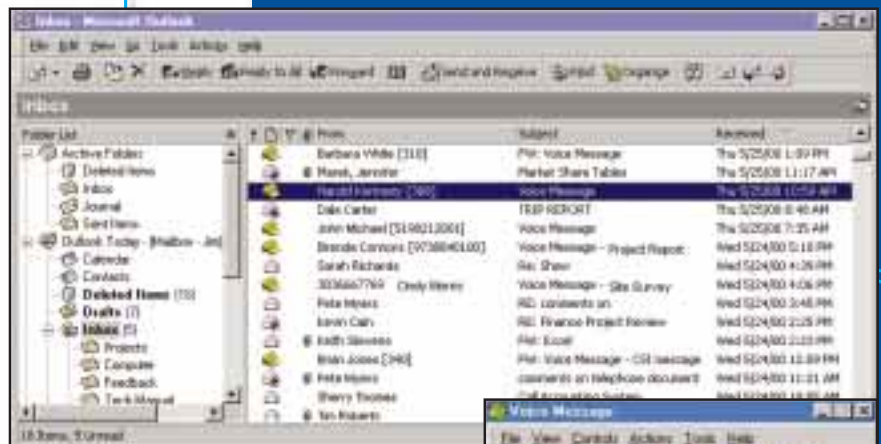

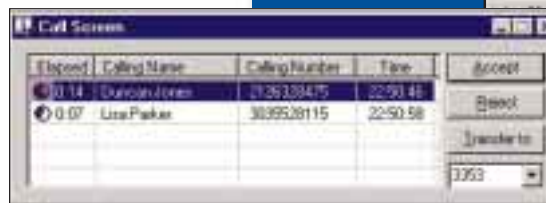*The Millennium 8-slot cabinets rack mounted with an eVPS Series 5000.*

The eVPS is optimized to work in conjunction with eOn's powerful Millennium platform featuring an extremely tight integration and providing benefits not available with other solutions including:

- Message waiting counts reflected on the telephone's display
- Calling party name and number for internal and external callers (if available)
- One-button call return and message response for internal and external callers
- Intelligent up-front paging allows the calling number to be displayed on a pager
- Caller hears the appropriate greeting – "away from desk", "on the phone", and "not available" – based on the state of the telephone (idle, busy, do-not-disturb)
- Multiple message forwarding allows messages to be forwarded to multiple recipients and distribution lists
- Access message feature, indicating that a mailbox was accessed but no message was left
- Visual call screening with Unified Messaging allows the user to control incoming calls with options to accept the call, reject the call (route the call to voice mail), or transfer the call to another party

In addition to these sophisticated voice processing features, the eVPS also provides a robust Unified Messaging option. The Unified Messaging module provides users the ability to access and manage all of their voice, fax, and email messages together from a single, highly intuitive interface: the Graphical User Interface (GUI) of the Microsoft® Outlook® "Inbox".

Unified Messaging – Millennium and eVPS enhanced integration provides calling party name and number with each voice and fax message.

Also, Visual Call Screening gives you control over incoming calls.

International Communications

When you purchase telecommunications equipment today, you want the assurance that it will meet the universal accessibility, worldwide compatibility, and international interconnectivity needs of tomorrow. eOn Communications Millennium provides you that assurance, and in fact, has systems installed in over 35 countries worldwide. Inherent to the system is the ability to adapt easily to standards other than those of North America including the following:

- *E1*
  - *75-Ohm interface*
  - *120-Ohm interface*
- *ETSI PRI or Euro-ISDN*
- *Overlap sending over PRI*
- *French PRI VN4*
- *National variants of R1 and Q.421 R2 digital trunk signaling*
- *600-Ohm and 900-Ohm analog trunks*
- *Foreign tones and cadences*
- *A-law/mu-law conversion*
- *Protocol conversion between existing equipment and Central Office upgrades*
- *Telephone LCD display support for 13 foreign languages*
- *System support for T1s and E1s in the same system and automatic detection of valid clock source*

Management and Administration

Simple system management and administration as well as the ability to manage and account for costs by each station user continues to challenge today's telecom administrators. The Millennium provides the tools to meet both challenges including extensive management and cost control features.

Management and Cost Control Features:

- Reduced Power Consumption
- Reduced Costly Floor Space
- Traffic Measurement and Reporting
- Variable System Timers
- 2-Wire or 4-Wire Cabling Options
- Station Message Detail Recording (SMDR)
- Time of Day Restrictions
- Feature Access Control
- Authorization Codes
- Forced and Verifiable Account Codes
- Call Duration Timer
- Station Monitoring
- Least Cost Routing (LCR)
- Station and Trunk Class of Services and Profiles
- Toll Restriction
- Station and Trunk Problem Tagging
- E-911 Compliance
- Multi-level System Password Protection
- Automatic Station Relocation
- Remote Maintenance
- Battery Backup

Millennium Assistant

The Millennium Assistant provides administrators with an easy-to-use interface and task-based wizards to walk them through common telephone administration. This minimizes the learning curve, helping less experienced administrators gain familiarity and confidence with the Millennium system in the shortest amount of time.

The Millennium Assistant greatly enhances end user productivity by providing an alternative to command-based programming in Millennium systems by instead placing the power of programming in the system administrator's hands. The application's powerful capabilities include:

- **Point and Click Programming –** Administrative tasks such as "moves/adds/changes" are handled directly and easily by Assistant. For instance, button features can be added or deleted on existing telephones and assigning extensions is easy – simply add a phone at the desired location and let Assistant provide a list of available extensions.
- **Scheduling Flexibility –** The Millennium Assistant's integrated Scheduler utility provides scheduling options that allow pending Millennium changes to be applied and monitored when it is convenient for the end user – immediately, daily, or at a scheduled date and time.

- **Quick Views of a Millennium Configuration –** No more searching through strings of mnemonics to determine what constitutes a specific class of service or profile. With Millennium Assistant, important Millennium database parameters, such as Class of Service, Profiles, and Dial Access Codes, are viewable in a highly readable, tabular format.
- **Printable User Guides –** Individualized user guides are pre-formatted for easy printing with feature button descriptions printed directly on the user guide, making it easy for users to understand the function of specific buttons on their telephone. User guides can also be saved to disk in a variety of popular file formats.
- **Company Directories –** The Millennium Assistant also supports the ability to generate a company directory that includes all extensions or only those you choose to list. The directory can be exported as a file and then printed in another application or attached to an email message.

Assistant's graphical interface makes telephone programming quick and easy.

User Guide provides feature button descriptions and instructions on how to access voice mail and dial access codes.

System Architecture

The Millennium is a modular, multi-shelf system combining innovative hardware design with the flexibility of easily configurable software supporting both basic and complex telephony operations. It is an extremely flexible system that works as a PBX, key system, hybrid, tandem switch, channel bank, protocol converter, or conduit for data applications. The Millennium is digital end-to-end and Integrated Services Digital Network (ISDN) compatible on both the station side and the network side. Digital capability, universal ports, highly adaptable programmability, and architectural flexibility are inherent in the system's design. Regardless of utilized capacity, the system is nonblocking with consistent speech quality, and its stored-program database contains a full complement of software feature applications.
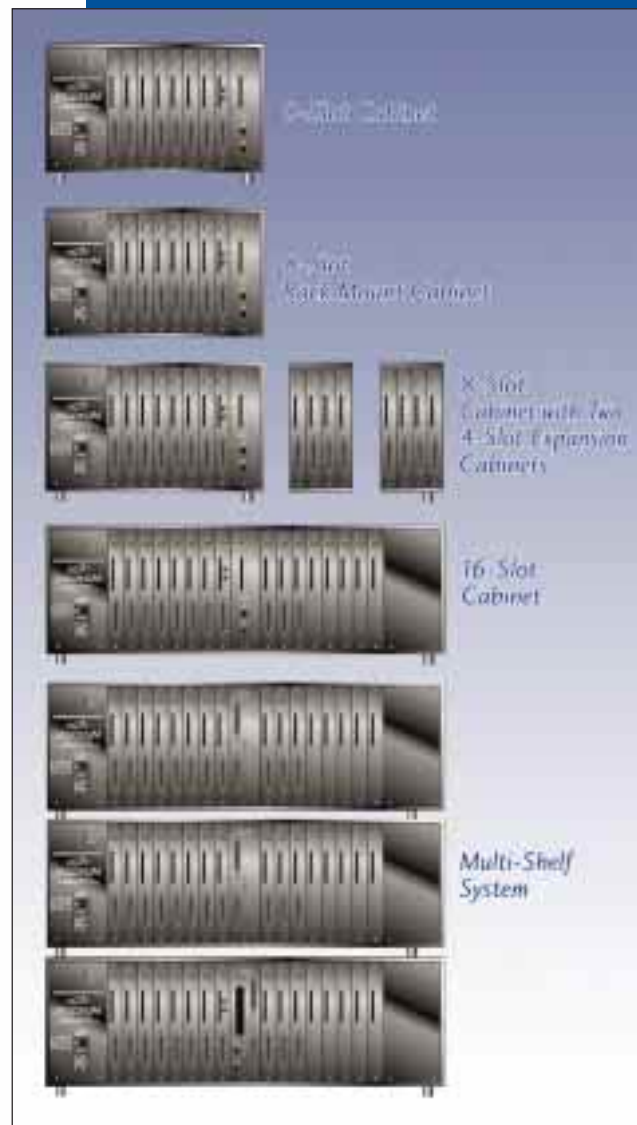
System design is based on distributed processing and DSP technology. Microprocessors are located on each interface card and in each digital telephone in the system to communicate via a signaling bus interface for operation control. This intelligent distributed processing architecture increases efficiency by relieving some of the main processor's workload. Digital voice and data transmission occurs via a 32-channel Pulse Code Modulation (PCM) link.

Multiple Growth Plans

The Millennium system offers tremendous expansion capabilities so that your system continues to meet overall communication needs. The 8-slot cabinet provides eight 16-port card slots for a total of 128 available ports. The 8-slot cabinet may be expanded by adding two 4-slot expansion cabinets for a total of 256 ports, creating a full shelf. The equivalent of a fully expanded 8-slot cabinet, the 16-slot cabinet provides 256 available ports. The 16-slot system may be expanded further by stacking up to three additional cabinets for a total of four 16-slot cabinets with a capacity of 1,024 ports.

Built for Growth and Flexibility

- Minimal number of physical components
- Innovative building-block design
- Expansion capability to protect your original investment
- Intelligent design that provides easy software and hardware upgrades

Millennium is a modular, multi-shelf system that offers tremendous expansion capabilities.

The Millennium is built upon two types of cards – control and interface. The control cards consist of the System Controller, Common Services Card in single cabinet configurations, and the Concentrator Cards or Fiber Interface Cards in multi-shelf or remote shelf configurations.

Millennium Interface Cards

Universal porting allows trunks and station cards to be assigned in any vacant card slot up to a maximum of 16 cards per shelf.
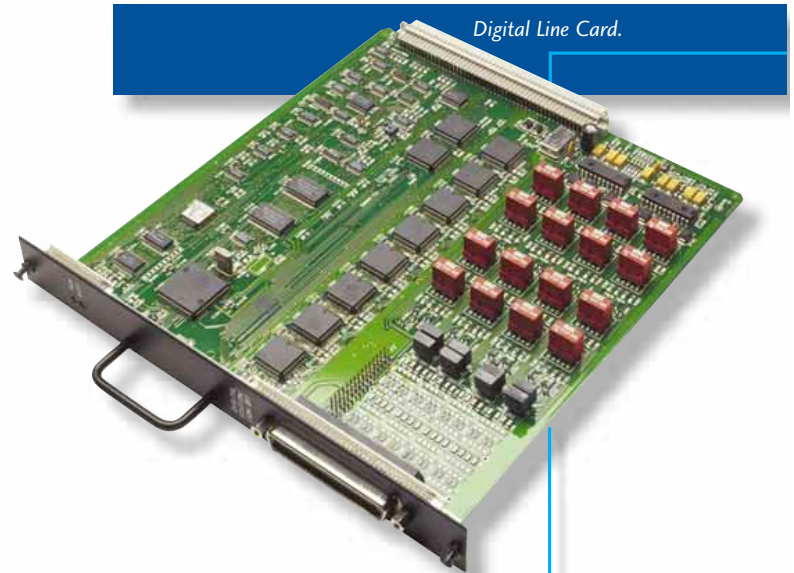
- **Digital Line Card**

  The Digital Line Card (DLC) provides eight S-loops, each with two 64 Kbps B-channels, and one 16 Kbps D-channel. Each B-channel can be used by a single digital telephone or an ISDN data device, such as a router, terminal adapter (TA), LAN bridge, or video-conferencing system. Two talk paths (B-channels) can give a single digital telephone the added capability of Off-Hook Call Announce and circuit switched data via a Data Adapter.

- **2-Wire Digital Station Card**

  The 2-Wire Digital Station Card (2WDSC) provides 16 2-wire U interfaces, with the ability to support one terminal or telephone per interface. The card is designed to connect to Millennium 2-wire digital telephones. It can also be used to connect to a Millennium 4-wire telephone with a single NT1 per U interface and to standard ISDN terminal equipment (an NT1 may be required depending on the interface). The card also supports Off-Hook Call Announce and circuit switched data via a Data Adapter.

- **U Interface Line Card**

  The ISDN U Interface Line Card (ULC) features either four or eight U interfaces for connecting a Millennium digital telephone or an ISDN data device. The ULC can extend a digital telephone up to three miles from a Millennium system. Each U interface can connect to an NT1, which will convert the 2-wire U interface into two 4-wire S interfaces identical to the S interface on the Digital Line Card. The ULC supports up to 16 digital telephones. The ULC also provides an ideal means of connecting ISDN U interface data devices, such as terminal adapters, routers, and videoconferencing systems.

Digital Line Card.

- *Analog Line Card*

  The Analog Line Card (ALC) supports up to 16 circuits. A baby board mounted on each circuit determines whether the circuit supports a loop-start trunk, ground-start trunk, Tie line, DID line, single-line telephone, off-premises station, modem, voice mail port, recorder, night bell or customer-supplied external security alarm equipment. In addition, each trunk circuit has the option of receiving Incoming Calling Line Identification (ICLID) via the ICLID baby board.

- *Wireless Interface Card*

  The Wireless Interface Card provides an integrated digital interface between the Millennium and the Orbit 1.9 GHz Base Stations and Orbit Handsets. The card provides an interface to two eight-channel base stations, allowing a maximum of sixteen active channels per card. The integration supports roaming within the system and handoff between base stations within the system. The Wireless Interface Card extends the business features of eOn's digital desktop telephones to the Orbit wireless handsets.

- *T1/ISDN PRI Card*

  The T1/ISDN PRI Card provides 1.544 Mbps interface with a 24-channel T1 trunk span or an ISDN-compatible PRI signaling trunk span. It provides digitized voice and data transmission between the Millennium and remote office interfaces. DSPs on the T1/ISDN PRI Card handle tone detection, a-law/mu-law conversion, MF and R2 signaling support.

- *E1/ISDN PRI Card*

  The E1/ISDN PRI Card provides the European standard 2.048 Mbps digital interface capability with a 32-channel E1 trunk span. It provides digital transmission between the Millennium and distant office interfaces. The far-end termination may be a digital channel bank or another Millennium E1/ISDN PRI Card. DSPs on the E1/ISDN PRI Card handle tone detection, a-law/mu-law conversion, MF and R2 signaling support.

- *3100 Line Card*

  The 3100 Line Card makes the transition from the ITT System 3100 to the Millennium easy and cost efficient. The 3100 Line Card allows System 3100 telephones and DSS/BLF units to be installed behind the Millennium, minimizing retraining effort and safeguarding your investments.

- *Fiber Interface and Remote Fiber Interface Cards*

  A Millennium system configured with fiber optic cable interconnection to remote shelves provides an economical alternative to a T1. It is transparent, nonblocking, and permits shelves in the system to be located up to 2 km (1.24 miles) from the main shelf. The Remote Fiber Interface Assembly is a two-card set that includes a Fiber Interface Card and a Remote Fiber Interface Card. A duplex (two-fiber) multi-mode fiber cable is used to connect each of the remote shelves with the system shelf. A Millennium utilizing fiber has a main shelf and a maximum of three remote shelves.

Wireless Interface Card.

Desktop Solutions

As your company's communications gateway to the world, the telephone is a critical component of business operations and should offer the utmost in functionality, versatility, and reliability.

Digital Full-Feature Telephones Enhance Call Productivity

Four models of digital telephones, as well as a 48-Button Expansion Module (BEM), operate with the Millennium to provide you with everything you need to streamline your communications.

6-Button Telephone
- 6 programmable buttons
- LED indicators for feature activation and message notification
- Message waiting LED
- Rocker bar to access menu options
- Group listen speaker
- Optional 2-line by 24-character LCD display

12-Button Telephone
- 12 programmable buttons
- LED indicators for feature activation and message notification
- Rocker bar to access menu options
- Enhanced 2-way speakerphone
- Optional 2-line by 24-character LCD display

18-Button Telephone
- 18 programmable buttons
- LCD indicators for feature activation and message notification
- Enhanced 2-way speakerphone
- Support for up to four BEMs
- Optional 2-line by 24-character display

30-Button Telephone
- 30 programmable buttons
- LCD indicators for feature activation and message notification
- Enhanced 2-way speakerphone
- Support for up to four BEMs
- Optional 2-line by 24-character display or 4-line by 40-character display
- Optional Data Adapter module
- Optional Recorder Board for connecting recording devices
- Integrated headset jack

48-Button Expansion Module
- Up to four BEMs can be connected to each telephone
- Each button is fully programmable as either a line appearance, feature, or Direct Extension Selector (DES)
- Optional display

Feature Rich Communications Tool

The eOn digital telephone family offers an impressive list of features that satisfy even the most demanding communications environment. Each of these features helps users improve their communications to meet their specific needs. These distinctive features vary depending on the model but generally include:

- Hot Dial Pad
- Optional Liquid Crystal Display (LCD)
- Voice Mail and Station-to-Station Messaging
- Alphanumeric Page Messaging
- Call Announce
- Off-Hook Voice Announce
- Enhanced Speakerphone
- Multiple-line Appearance Capability
- Conference Calling
- Wall Mountable
- Selectable Background Music Source
- Simultaneous Voice/Data Capabilities
- Group Listen
- Fully Programmable Buttons
- Field Upgradeable Display
- User Programmable Buttons

Flexible Menu Options

eOn's digital telephone menu options take flexibility to the desktop by allowing users to query and customize their own phones. Options include:

- Handset and Headset Volume
- Adjustable Speaker Volume
- Adjustable Music Volume
- Ring Level (9 levels)
- Ring Type (8 levels)
- Side Tone (3 levels)
- LCD Display Contrast
- Installation Information

Combined Voice and Data Transmission

Many businesses today need the convenience and power of voice and data in one place. To handle this requirement, eOn developed an add-on Data Adapter module for the 30-button telephone, which supports data communications between asynchronous data devices. The Data Adapter can be programmed to operate on the second B-channel or to operate on the D-channel. When programmed to operate on the B-channel, the Data Adapter can be used for circuit-switched data transmission to other Data Adapters in the same Millennium system. When programmed to operate on the D-channel, the Data Adapter can be used for:

- Remote programming and diagnostics access
- Outputting ACD reports
- Telephone dialing applications
- Display board interface
- Data link for the eOn Voice Processing System, Millennium Real Time ACD, Millennium Navigator and Millennium Assistant

Millennium Navigator

Backed by eOn's reputation for design innovation and reliability, the Navigator is a powerful attendant package that supplies all of the information necessary for an attendant to process each call, including appropriate answer phrases, company directories, and real-time employee status with a mouse click or keystroke on the custom keyboard.

With the same ease, calls can be extended to parties (on or off-site), messages can be taken for unavailable parties, or digital pagers can be dialed with preprogrammed callback numbers displayed. The Millennium Navigator's Windows®-based platform allows the console operator to perform multiple tasks on the computer by switching between the console and other applications.

A networking solution is available for multiple console applications that provides centralized attendant services and a single company-wide directory. By sharing the system database, all call information, answer phrases, and messages are common to all attendant positions.

Navigator Main Answering Screen.

The Millennium Solution

The Millennium Digital Communications Platform encompasses voice, data, wireless, and CTI into a telephony server that can be precisely tailored to your business environment. As your business grows, the Millennium will evolve with your changing needs while providing consistent, seamless, and cost-effective communication solutions.

Whether you are outgrowing your current telephone system, planning a move to another location, or coming up short on new communications solutions that could enhance your business opportunities, we have the answer: Millennium Digital Communications Platform, a digital communications system perfectly scaled to meet your company's present and future needs.

You also have the assurance that your Millennium is totally supported by eOn and our select group of authorized dealers. When you choose eOn, you gain a long-term business partner, not just an equipment supplier. We will work with you to customize our switching systems to meet your needs and provide timely servicing of your equipment. Together, we'll help you realize your business communication goals.

When You Choose the Millennium System, You Gain a Multiple Applications System That:

- *Serves office or network applications equally well*

- *Grows to meet your business needs*

- *Offers integrated Automatic Call Distribution, conferencing, wireless, CTI, voice/data capabilities, and more*

- *Meets the highest reliability standards*

- *Is backed by your partners at eOn*

eOn™
communications corporation