

Technical Specification

Hardware Interface

Uplink Interface

- 1x or 2x IEEE802.3z 1000 Base-LX/SX with LC or SC connector (Master).
- 1x RJ-45 IEEE802.3ab 1000 Base-T, or 2x RJ-45 IEEE802.3u 100 Base-TX (Slave).

Cascade

- 6x RJ-45 IEEE802.3ab 1000 Base-T (Master)

DSL

- 24-port 50-pin RJ-21 champ connector

POTS

- 24-port 50-pin RJ-21 champ connector

Console Port

- 1x RJ-45

Alarm Port

- 1 output alarm contact (Master)

ADSL2/ADSL2+ Feature

DSL

- Backward compatible to ITU-T G.992.1, G.dmt, ITU-T G.992.2 G.lite, ANSI T1.413 issue 2, ITU-T G.992.3 ADSL2, ITU-T G.992.5 ADSL2+
- Upstream 3M Annex M and long reach DSL for Annex L of G.992.3
- Power management defined on G.992.3 and G.992.5
- SELT (Single Ended Line Testing) for ADSL
- DELT (Dual End Loop Testing) for ADSL2
- Fast Seamless Rate Adaptation (Fast SRA)
- G.hs
- Dying gasp
- Annex A
- Annex B

Indicator

- Power, Active, Critical/Major/Minor Alarm, DSL for link Activity, Subtend (Master)
- Power, Active, Critical/Major/Minor Alarm, DSL for link Activity(Slave)

Encapsulation Mode

- RFC 2684 MPoA LLC/VCMUX
- PPPoA to PPPoE conversion

ATM Feature

- 8 PVCs per subscriber line
- F5 end-to-end and segment to segment OAM loopback in I.610
- UNI 3.1 / 4.0 PVC
- VPI (0 - 255), VCI (0 - 65535)
- Provide incoming and outgoing rate limit per PVC

Bridge Feature

- IEEE802.1p CoS prioritization
- IEEE802.1Q VLAN support
- IGMP snooping and 256 multicast groups
- 802.1d STP
- GARP / GVRP
- MAC, packet filter and classifier
- 4,000 MAC addresses
- Support ICMP request from VigorCMS or management tool
- DHCP Option 82
- Port isolation
- VPN pass-through
- PPPoE packet forwarding
- Link aggregation
- Port mirror

VLAN

- Support 4094, concurrent 512 VLAN ID
- IEEE802.1Q tagged based VLAN
- VLAN ID mapping to PVC
- GVRP

VoIP

- 24 FXS port
- SIP / MGCP
- Codec G.711 , 729A, 723.1, G.726
- VAD (Silence Suppression) & CNG
- G.168-2000 Echo Canceller , Jitter Buffer
- Packet Loss Concealment
- RFC2833 - Out of Band DTMF
- Gain / Attenuation Setting
- Modem Support Rate Up V.92 (for G.711 only)
- Line Polarity Reversal Generation
- QoS for B.W Reservation
- Hunt Group
- Call Holding
- Call Forwarding
- Outbound Proxy
- NAT Traversal (STUN) (RFC 3489)
- Incoming Call Barring
- T.38 Fax Relay
- Hot Line
- MLT
- Multi-register

QoS

- IEEE802.1p
- 4 priority queues for multimedia application
- Configurable priority mapping for PVC and IEEE802.1p
- Strict priority
- Probabilistic priority
- Customized priority

Multicast Feature

- IGMP snooping v1, v2 defined on RFC2236
- 256 multicast groups

Management

- In-band or Out-of-band by single IP management
- SNMP v1.0 & v2c
- SNMP MIB for RFC1213, Ethernet , RFC2662, RFC3440 and proprietary MIBs
- Standard SNMP trap report to VigorCMS or NMS
- TFTP firmware upgrade utility via VigorCMS
- Telnet server for remote management
- SNMP enabled for network management function
- Console or Telnet CLI for configuration or status monitor

Environment

- Operation temperature: -10 °C to 65 °C (-14° F to 149° F)
- Storage temperature: -10 °C to 85 °C (-14° F to 185° F)
- Operating Humidity: 10% to 95% (non-condensing)
- Storage Humidity: 5% to 95% (non-condensing)

Regulatory

EN550221 class A & EN300386 V1.3.2, 

Safety

EN60950-1

MTBF

55,000 hours

Power Consumption

150W MAX

Dimension

L440 * W280 * H45 (mm)

Power

AC 90 ~ 260 VAC, DC -42V ~ -60V

DrayTek

DrayTek

VigorAccess MSAN

VigorAccess Multiservice Access Gateway



VigorAccess Series

ADSL2+ MSAN

- ◆ ADSL2/2+ High Speed Broadband Service
- ◆ Triple play for IPTV, Internet and Voice
- ◆ Small, Medium Scale NGN Network

To meet the increasing demand for high-speed internet access and triple play application service. The next generation network offers a feasible functionality of integrated services with the most cost effective architecture. IP DSLAM network is designed to provide rich video contents, DSL, POTS and VoIP service over traditional copper wire infrastructure. These types of service will be supported on NGN architecture simultaneously. DSL is used as the data service platform, video and VoIP or traditional POTS technology is basis of the voice service. The multimedia and local content-rich applications can also be easily implemented on this NGN architecture. The IVD product combines VoIP, DSL on CO side to provide Telecom class voice quality. The customer can call POTS phone and surf IPTV program simultaneously. IVD can be easily configured by VigorCMS. The VigorCMS system covers topology, configuration, deployment, security, alarm management and backup storage.

Next Generation Voice Service

VigorAccess IVD provides toll quality voice communication in terms of voice quality and reliability voice service. Customer can call from POTS with DSL data and will not aware that it is by next generation network.

Scalable

The system is designed to be stackable with uplink Ethernet interface expansion. The port number is up to 168 ports with a combination of xDSL service. By using scalable architecture, equipment provider can scale up easily with benefit from low-initial investment cost as subscribers increase.

Seamless Rate Adaptation (SRA)

The SRA is on-line configuration mechanism specified in ITU-T Rec. G.992.5. By using SRA, the downstream net data rates during showtime shall be automatically increased and decreased according to the line condition.

QoS Guaranteed

To ensure appropriate QoS, the telephone traffic is prioritized and assigned to a service flow, which is handled by ToS control and TCP/IP throttling. IVD should implement the IP packet classification function to support priority data flow to guarantee the quality of service. It might be necessary to assign voice packet a higher priority queue and assign data a lower priority queue.

Broadband Access for Building Complex, Community and Campus

For multi-tenant unit(MTU) building like hotels, community and commercial, the VigorAccess series provide cost-effective, flexible and easy deployment of Internet access, gaming, and video/audio services.

No New Wiring Required

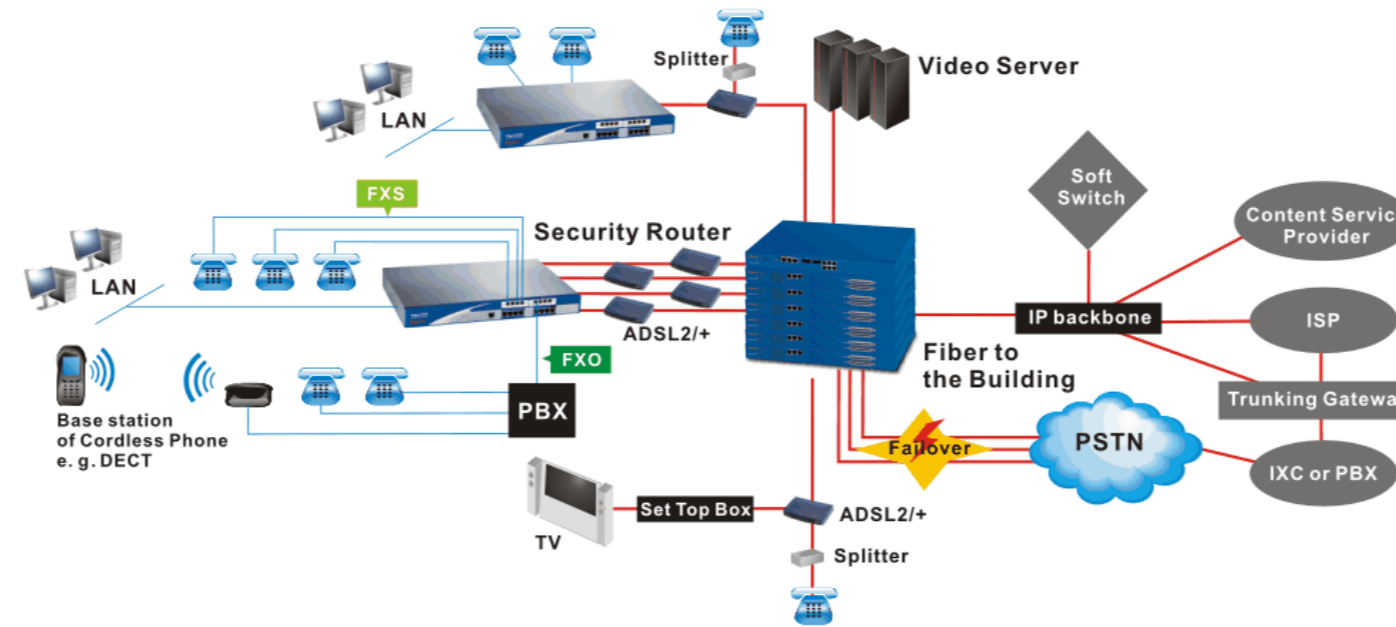
It's costly and annoying to wire inside building. Through current telephone line the VigorAccess series deploy service on current POTS wiring closet. No new wiring required.

Single IP Management

The VigorAccess IVD provides the feature of single IP management. Up to 6 IVD devices can be managed by one IP address. It can reduce maintenance overhead.

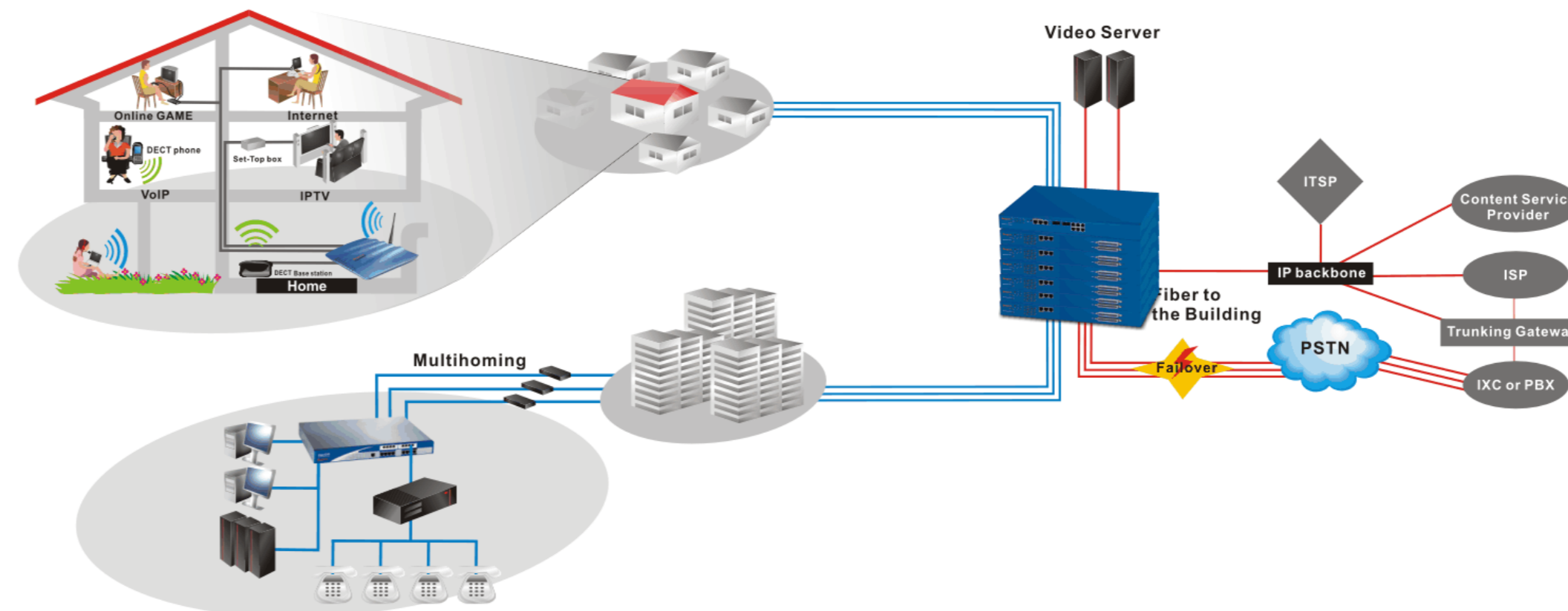
Triple-Play Deployment

The triple-play applications will be more popular and the VigorAccess series support cost-effective delivery of data, voice and video services. The up to 24Mbps downstream, multiple PVCs, QoS, IGMP snooping and multicast capabilities can help you to offer the value-added services. Users can easily access Internet and use Stream TV, VoD and VoIP applications. Teleco can provide toll quality VoIP for subscriber.



Community Application

Many people live in the various high-density residential environment. The VigorAccess series can offer building complex, campus or community a complete network with rich services. These services include video on demand, remote monitor, building security, product browsing, and local LAN. The advantages of the system architecture facilitate local content management and reduce the content access cost by minimizing traffic loading of the outgoing link. Teleco can integrate POTS to VoIP on CO side to reduce operation and maintenance fee of PSTN.



EMS Management - VigorCMS

DrayTek Element Management System - VigorCMS is a multi-tier architecture, flexible, easy to use for system management. It can manage up to 5000 devices, depends on the capacity of server. The VigorCMS provides configuration management, topology management, security management, fault management and back/ restore management.

