TOP LEVEL PERFORMANCE

- Advanced Software Structure
- Hardware Platform with MPC RISC CPU

MULTISERVICE INTEGRATION

- Integration of Routing and Switching
- Integration of Voice and Video Functions
- Integarated Security Functions
- Integrated VPN Functions

IMPROVED ENCRYPTION/ DECRYPTION

- Built-In Encryption Engine Improves Encryption/Decryption Performance

RICH SOFTWARE FEATURES

- Uses a Standard CLI For Easier Operation
- On-Line Upgrades Available For Future Functionality Expansion

HIGH PERFORMANCE

- Uses Flow Table Technology
- Per Entry Matching And Flow Table Matching
- Mutual Performance of 100ACL/PBR and 300 ACL/PBR
- Uses Advanced MPC RISC CPU and Bus Technology With Low Delay

PERFECT QOS POLICIES

- Supports 2-Level QoS Functions
- DNOS QoS Technology Controls The Rate between 8k and 100M
- DNOS Allows The QoS on the Broad-Bandwidth MSTP Lines

Reliable Multi-Services Router

Overview

The DRO10 reliable multi-services router is a new generation of network products developed by D-Link for industry branch offices and large & medium enterprises. The DRO10 series router integrates network applications including routing, switching, voice, security, transmission, video etc, satisfying individual customer requirements of various situations. Simultaneity, it provides profuse software features, supports application technologies such as VOIP, VPN, MVRF, Multicast, backup solutions and QoS features, suitable for data, video and voice service access solutions.

Designed with a modular structure, the DRO10 is a new generation of high-performance routers and features great capacity, abundant fixed-ports, modular design, strong security and is easy to use. It has a built-in encryption engine for high-speed and secure encryption/decryption.

Designed with the Motorola PowerPC high-performance network processor with 64-bit microprocessor technology, it provides two fixed 10/100M fast Ethernet ports and runs D-Link 's proprietary DNOS as the operating system. Combined, all these features make it a cost-effective network solution for SMB customers.

Multiservice Integration

Routing and switching, voice and video functions, a full array of security functions and VPN functions are integrated into the DRO10 series of routers.

Complete Separation of Management and Data Transfer

The DNOS adopts the advanced V-CPU design. The CPU resources are divided into management and data transfer resources which can be automatically allocated between the two resources according to the busy condition, so that the management applications like CLI, SNMP, telnet and routing protocols are not affected during the packet attacks and data transfer of any densities.

Small Chassis Modular Design

The small 11-inches sized chassis is flexible and convenient by offering two fixed 10/100M fast Ethernet ports, two SIC network/voice slots for various types and functions of high density network/voice modules. This allows for more application combinations.

High Performance

The DRO10 series of routers also adopts flow table technology, which means that while enabling applications such as QoS, ACL, NAT, PBR, the router uses per entry matching for the first packet and uses then flow table matching for the following packets of the same flow. This processing mechanism enables a mutual performance of 100 ACL/PBR and 300 ACL/PBR. It also utilizes advanced MPC RISC CPU and bus technology with low delay to guarantee high data processing capacity.

Perfect QoS Policies

The DRO10 routers support 2-level QoS functions. The common MSTP lines use the 100M port. However, the actual bandwidth assigned by the operator is often less than 100M, for example, 2M, 4M, 8M, and 10M. Due to the difference between the port bandwidth and the actual bandwidth, the conventional QoS queue mechanisms will not take effect. After the GTS rate limitation is enabled, the DNOS QoS technology can control the rate between 8k and 100M. With the QoS queue mechanism and 2-level QoS technology, the DNOS really allows the QoS on the broad-bandwidth MSTP lines.

It features priority setting of the voice packets, and provides small and medium-sized enterprises with cost-effective multi-functional service platforms.

Rich Software Features

Through the Unified DNOS network platform and the creative virtual router function (VRF).

The VRF can divide a router to multiple virtual routers logically. With separate routing table and corresponding data transfer ports, each virtual router works like an independent router and the services of different virtual routers are isolated. This solves the problem that several services that need be isolated but together in the same physical router and saves the investment on equipment and telecommunication resources.

Easy to Use and Manage

The DRO10 routers use standard CLI for easier operation combined with less learning efforts and more cost-efficiency. For future functionality expansion, diversified online upgrades are available.

TECHNICAL SPECIFICATIONS

PERFORMANCE

- Maximum packet forwarding rate of 260 Kpps
- Advanced MPC RISC CPU
- Flash 32M (default)
- SDRAM 64M (default)

INTERCONNECT PROTOCOLS

- Encapsulation protocols
  - Ethernet
  - 802.1Q
  - HDLC
  - PPP
  - MP
  - X.25
  - Frame Relay
  - LAPB
  - SLIP
  - ATM
  - SDH
- Routing protocols
  - Static
  - RIPv1/v2
  - OSPF
  - ISIS
  - PBR
  - IPv6
- IP applications
  - Ping
  - Trace
  - NTP
  - Telnet
  - SSH
  - DNS client/DNS static
  - UDP helper
  - DHCP server/DHCP relay
  - SMTP

QoS

- Congestion management
  - FIFO
  - PQ
  - CQ
  - WFQ
  - CBWFQ
  - LLQ
  - RTPQ
- Congestion avoidance
  - RED
  - WRED
- Traffic supervision
  - CAR
- Traffic shaping
  - GTS
- Link efficiency
  - CTCP
  - CRTP

MULTICAST & SECURITY

- IGMPv1/v2/v3
- PIM-SM
- PIM-DM
- Firewall
  - Packet filtering
  - State inspection
  - Attack defense
  - Content filtering
  - Traffic control
- Data encryption standard
  - 3DES
  - AES
- Authentication
  - Local authentication
  - Radius authentication
  - TACACS+ authentication
- ACL
- Routing protocol authentication
  - OSPF MD5 authentication
  - RIPv2 MD5 authentication

MAINTENANCE AND AVAILABILITY

- Network management
  - SNMP v1/v2/v3
  - Standard MIB
  - RMON MIB
  - Private MIB
  - Traffic management
  - SYSLOG
- User management
  - Console login
  - AUX login
  - Telnet (VTY)
  - SSH login
- Availability
  - Modular software design
  - VRRP protocol
  - Backup
  - DLDP

VPN

- IPSec
- GRE
- PPTP/L2TP

ORDER INFORMATION	
MODEL	DESCRIPTION
DRO10-02	DRO10-02 Router Host
CAB-AC-DRO-10xx	Accessories, AC Cable for DRO10 Series Router
GCB-DRO-10xx	Accessories, Tool Kit for DRO10 Series Router
INTERFACE MODULE	
SIC-2FXS	2-Port FXS Voice SIC Module
SIC-2FXO	2-Port FXO Voice SIC Module
SIC-1CE1	1-Port Channelized SIC Module
SIC-1HS	1-Port High-speed Synchronous Serial SIC Module
SIC-1B-U	1-Port ISDN SIC Module (U Interface)
SIC-1B-S/T	1-Port ISDN SIC Module (S/T Interface)
SIC-1E1-F	1-Port Non-channelized SIC Module (E1-F)
SIC-4ESW	4-Port 10/100BASE-TX L2 Switch SIC Module
INTERFACE ACCESSORIES	
CAB-V.35DTE/POS26-34PM/3m	V.35DTE Cable/POS26-V.35
CAB-V.35DCE/POS26-34PF/3m	V.35DCE Cable/POS26-V.35
CAB-V.35DTE-V.35DCE/POS26	V.35DTE-V.35DCE Cable-1meter Specially for Network Lab (Both POS26 Terminal)
CAB-V.24DTE/POS26-DB25M/3m	232DTE Cable/POS26-DB25
CAB-V.24DCE/POS26-DB25F/3m	232DCE Cable/POS26-DB25
CAB-E1 balanced/DB9M-RJ45F/120 ohm/3m	E1 Cable-3m, DB9 Female Connect RJ45 (120ohm)
CAB-E1 unbalanced/DB9M-2*BNC/75 ohm/3m	E1 Cable-3m, DB9 Male Connect BNC*2 (75ohm)
CAB-E1 balanced/DB9M-RJ45M/120 ohm/3m	E1 Cable-3m, DB9 Male Connect RJ45 (120ohm)