

Hillstone Networks Successful Case of Multi-Core Security Appliance

— Great Wall Broadband Network

Customer: Great Wall Broadband Network Service Co., Ltd.

Industry: Telecommunication

Platform: Hillstone SG-6000-G6100

Provided Functions: Firewall, QoS, attack defense, AV

Customer Introduction:

Great Wall Broadband Network Service Co., Ltd. (GWBN) is the pioneer of Internet broadband access service in China. It was jointly invested by China Great Wall Computer Group Corporation and CITIC Group. It is headquartered in Beijing and sets up branches in more than 30 cities. GWBN Shanghai branch is the core in East China, and provides high-quality network access service for personal users and enterprises in Shanghai.

Current network situation of GWBN Shanghai Branch

Network of GWBN Shanghai branch is complex. Before the network restructuring, the exit of the network was managed by two high-end routers with NAT function configured. Each router connected more than 10 NAT servers, and each NAT server was controlled and ran independently and statically assigned to parts of internal users.

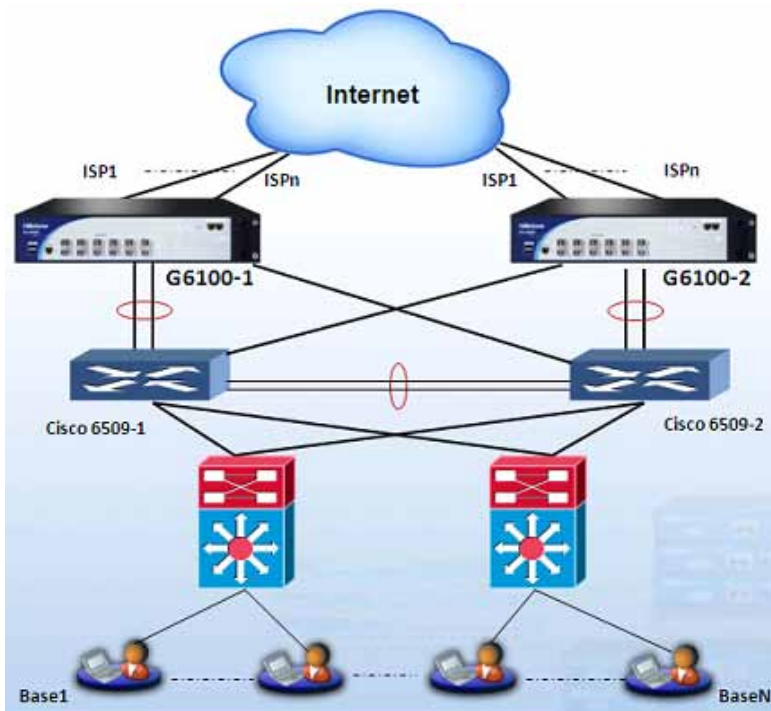
GWBN Shanghai branch has large amount of users. There are up to 500,000 registered users, and more than 100,000 users may be online concurrently at peak time. Currently, multiple NAT servers are used to translate IP addresses for user PCs. When the NAT server or its ISP link is broken, access problems will occur for the users controlled by the server. Besides, GWBN internal network is complicated, OSPF is used for internal routing and BGP is used for enterprise customers. When network problems occur, a large amount of manpower is required to diagnose errors from each key point, and administrators have to switch the users manually from the broken link to other normal links.

All above problems impact GWBN's service quality. Since there are too many NAT servers, large amount of hosting fee needs to be paid each year. GWBN Shanghai branch needs to

reconstruct its network exit, improve service quality and network reliability.

Main characteristics of Hillstone solution on GWBN's network exit

After evaluation and selection process, GWBN Shanghai branch chose Hillstone Networks' multi-link security solution to resolve its problems. Hillstone Networks' security appliance is based on multi-core Plus G2 architecture, providing a new generation network security solution with high throughput, high concurrent sessions, high rump-up rate, and high availability.



Two Hillstone appliances are deployed at the Internet exit of GWBN Shanghai branch, connecting all ISP links.

SG-6000-G6100 comes with 12 gigabit SFP interfaces, and connection deployed in GWBN's network are all gigabit. Each SG-6000-G6100 connects to 6 ISP links, providing out bounding traffic load balance over these 6 links. SG-6000-G6100 provides 200,000 new sessions per second and up to 5,000,000 concurrent sessions, guaranteeing the latest, fastest and most reliable service for GWBN.

SG-6000-G6100 supports WECMP protocol, link inspection, and link backup. The appliance automatically allocates traffic 6 ISP links, and monitors each link's status. If one link goes down, user traffic on the broken link will be switched to another link automatically, maintaining user's connectivity to the internet.

In addition, Hillstone SG series security appliance has strong attack defense capability. For the raging attacks on the, such as SYN Flood, UDP Flood, ICMP Flood, etc., the appliance provides a full functioned and effective defense. For large amount of network attacks and misuse of resources, the appliance can limit the session number and session rampup rate of specified IP using fine-grained session control technology. The appliance protects network resources, and improves resource utilizing rate, maintains a clean network environment for GWBN.

Commends from customer

Manager of GWBN Shanghai branch said that:” As an experienced solution provider, Hillstone Networks provides a much faster and more effective multi-link solution for us. The solution is easy-to-manage and controls network precisely, resolving our potential network security problems. After deploy the solution, our exit bandwidth is controlled effectively and fully utilized, and cost used for bandwidth renting of each month has be reduced dramatically.”