



## **GenieATM Has Significantly Enhanced the Manageability of ASUS' World-wide Networks**

As a leading provider of 3C total solutions, ASUS offers a complete product portfolio to compete in the new millennium. To succeed in the ultra-competitive industry, great products need to be complimented by speed-to-market, competitive cost and innovative service. Therefore, in an attempt to provide maximum value to all customers through offering the best quality without compromising cost and time-to-market, ASUS continues to refine its internal process and infrastructure basing on world-class technologies.

### **MIS's Challenges to Manage the Global-Scale Networks of ASUS**

With the fast-growing trend of e-commerce and the power of business intelligence via the Internet, enterprises now are more than ever depending on the 24x7 network connectivity which enables various business-critical applications (e.g. ERP, CRM, SCM, etc.) and provides al-time communications of geographically distributed users worldwide. While the network connectivity can ove operational efficiency and increase business productivity, it also brings about difficulties in IT management and risks of security events. To keep the pace up with ASUS' fast growing of business territories worldwide, how to plan and build the network infrastructure according to the tical business needs and well-manage the global-scale rprise networks has been the very crucial challenge faced by the ASUS MIS personnel. In addition to the challenge of network manageability, the need of continuous access to the Internet also exposes the enterprise etworks to the threats of hacking and worm attacks. Although there have been some 'securitysolutions' such as firewalls, antivirus and VPN products deployed in the environment, the ever-changing, new breeds of attacks which can circumambulate those perimeter security olutions still pose tremendous threats to the enterprise networks. In response to the needs of both traffic manageability and security protection, ASUS decided to deploy GenieATM (Genie Advanced Traffic Management) in the network construction project for their new headquarter building. GenieATM as a comprehensive traffic analysis and troubleshooting solution is expected to provide the total solution for: continuously traffic monitoring of each geographical network spot and critical business application servers, real-time detection and pre-alarming of network anomalies, precise traffic information provision for effective troubleshooting, and in-depth traffic analysis and reporting.



### **GenieATM Solution**

After closely discussing with ASUS MIS staff to understand their network topology and the management challenges faced, GenieNRM put forward the GenieATM deployment proposal meeting ASUS' needs and initiated the corresponding on-line tests as follows:

#### **Real-time Traffic Snapshot**

The unique traffic analysis technology of GenieATM, Real-time Traffic Snapshot, was used to conduct an overall network health examination. During the first 0 minutes using the Traffic Snapshot function, all the malicious traffic such as Sasser worms, ICMP attack (Ping of Death) and unwanted traffic such as P2P e-Donkey file transferring were successfully identified. Not only anomalies were reported but also each a nomaly's detailed information, such as the network addresses of the anomaly initiators/victims' and the interface inforamtion of the impacted network resources, was rendered. With the aids of the in-depth traffic information, ASUS IT personnel identified, isolated and resolved the anomalies effectively in minutes.

#### **Flow Monitor**

- Monitor by departments of the business (such as HR, Sales, RD, and Manufacturing departments);
- Monitor by worldwide branches/facilities (such as branches in America, German, Austria, Netherlands, China, etc.);
- Monitor on important application servers (such as Web Servers, Mail Servers, File Servers, Database Servers, ERP Servers, etc.)

In addition to the continuous monitoring, traffic thresholds of each monitored network segment were set. Once a threshold was violated, eal-time alarm was sent via SNMP trap or e-mail to notify MIS correspondents for timely reactions.

#### **Function 3' Flow Analysis**

Flow Analysis was performed on the perimeter of ASUS headquarter network. The function renders up to Top-128 heavy network resource consumers, the remote-end they are connecting to, and the applications they are using. The Top-N function provides also historical analyses enabling cross examination backwards with traffic monitor reports. The MIS staff hence no more regard historical event back tracing as painful task.

## Do More with Less- GenieATM Empowers the Network Manageability in ASUS

### Beneficial Results

#### Make 24x7hrs, Global-scale Traffic Visibility Possible



prior to the deployment of GenieATM, due to the tremendous complexity and giant scale of ASUS' enterprise network, the MIS had difficulties to gain the in-depth traffic visibility. Now with the capability of long-term monitoring, drilled-down Top-N analysis and focused analysis on critical network spots, ASUS MIS staff now can have the holistic view in hands of its global-scale network, anywhere, anytime.



#### Minimize Possible Losses Caused by Network Down:

via the traffic-based mechanism GenieATM can alert network anomaly activities at the early stage through Web UI, SNMP trap and e-mail notification. The comprehensive anomaly information helps identify, locate and hence perform precise actions to resolve malicious anomalies. The used-to-be 30-mins-more troubleshooting process can now be shortened to 5 minutes in 3 simple steps, and the time reduction means significant cost saving by minimizing possible productivity loss and company image damage caused by network down.

#### Painless Deployment & Easy Management:



the appliance solution, transparent architecture contributes to an effortless, non-interrupting deployment experience of GenieATM. Facing the scalability of ASUS networks, GenieATM's layered-administration design lets the MIS manager easily delegate different management tasks to different members of the crew with different scopes of responsibilities. The remote manageability with friendly Web-based GUI and the support of multiple languages perfectly meet a global-scale enterprise's need of traffic management.



#### Simplify the Task of Various Traffic Analysis Report Generation:

with the abundant traffic analysis reports provided by GenieATM, now MIS staff can fulfill the report generation routines in few clicks. The flexibility in analysis reporting also allows the MIS staff to respond to high-level management demands instantly.

GenieATM



### Customer Profile

- ┆ Industry sector: Manufacturing
- ┆ Company name: ASUSTek Computer Inc.
- ┆ Headquarter: Taipei, Taiwan
- ┆ Founded: 1990
- ┆ Employees: 40,000

- ┆ Revenue: US \$8.29 billion (2004)
- ┆ Products: motherboards, notebooks, barebone PCs, servers, graphic cards, communication devices, optical storage devices, LCD monitors, PC components and PDAs.