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Case Study

MetaX Integrated Circuits (Shanghai) Co. Ltd.

Enhancing Operational Efficiency, Reliability and Disaster Recovery with Integrated DDI

Project Objectives

- Move from Excel to structural management of IP Addresses
- Implement security control methods
- Simplify enablement of firewall rules
- Overcome limitations of Microsoft DNS
- Give IT Team better visibility over business activities

Key Benefits

- 80% Time savings for network administrators
- Enhanced business continuity due to error-free configurations
- Strengthened network security
- Improved disaster recovery
- Ensured application availability with app health checking
- Enhanced team collaboration

MetaX is committed to providing full-stack GPU chips and solutions for heterogeneous computing.

The company was founded in Shanghai in September 2020 and has established wholly-owned subsidiaries and R&D centers in Beijing, Nanjing, Chengdu, Hangzhou, Shenzhen and Wuhan.

"EfficientIP DDI has brought 80% time savings, virtually eliminated configuration errors, and enabled faster troubleshooting"

Crystal Tang, Head of IT Department, MetaX

Situation and Challenges Being Faced

MetaX were looking for a more structural way to manage IP space, DHCP and DNS on one platform in order to prevent error-prone network service configuration and improve team working efficiency.

For DNS, MetaX was using Microsoft DNS, managed by Active Directory. However, MS DNS contained certain limitations making it incapable of adequately supporting the rapidly-growing business requirements.

MetaX IT was aiming to improve IT performance as well as security. It was clear the whole IT infrastructure needed to be redesigned taking into consideration business requirements. Having a high-availability, integrated DDI (DNS-DHCP-IPAM) solution was mandatory to make this happen.

"Our most successful IT project, bringing great productivity and team working efficiency improvement."

Crystal Tang, Head of IT Department, MetaX

Solution Implemented

After evaluating solutions including those from local vendors, the decision was made to take EfficientIP's SOLIDserver™ DDI, which offered the rich features required by MetaX. Key features included the dynamic integrated DNS/DHCP/IP Address management solution, and SmartArchitecture templates for simplified, fast implementation. The resulting stable DDI platform enabled the MS AD structure to be easily changed, as well as the email environment.

EfficientIP's DNS GSLB (Global Server Load Balancing) product was also leveraged, to enhance application availability via load balancing of application traffic and health checking functionalities.

The original project plan was two-three months including design, implementation and migration phases. However, a crash of the MS DNS server in place caused the implementation to be accelerated, actually being completed within one month. The strong and professional support, intensive communication coordination, and fast response provided by the EfficientIP team resulted in the MetaX IT team no longer struggling with incidents and security issues related to IPs and DNS. Crystal Tang, head of IT Department, described it as "our most successful IT project, bringing great productivity and team working efficiency improvement".

Main Results

The migration to SOLIDserver™ DDI brought immediate benefits to MetaX network operations, security and reliability. According to Crystal Tang, "EfficientIP DDI has brought 80% time savings, virtually eliminated configuration errors, and enabled faster troubleshooting". Deployment of DNS rules for critical infrastructure has become much simpler. And DHCP is now dynamic (it was previously static) so IP addresses can be received in just a few milliseconds.

Having global visibility over all IP Addresses, logs and backup status from a single platform has certainly given back control to the IT team. It also allows DNS and networking teams to work together on one central management portal.

The EfficientIP solution has brought stable, real-time Database replication and a smart failover DDI platform between MetaX's two data centers. "From IP management to failover DHCP and DNS integrated with AD, SOLIDserver™ has significantly improved our operational efficiency and disaster recovery", states Crystal Tang.

Business continuity is another area where important benefits have been seen, thanks to the multiple redundancy techniques used. In addition, with EfficientIP's DNS GSLB solution, application access and reliability has been improved.

Conclusions / Future Plans

With the company growing quickly, scalability is of utmost importance for MetaX. So as new data centers appear in the future, dynamic scale out of EfficientIP solutions will most likely occur. In addition, the company plans to focus considerable effort on network automation as well as zero trust security.

As part of their strategy to "put automation everywhere", MetaX are interested in using EfficientIP API to implement automation flows with their collaborative platform, as well as investigating DNS Guardian possibility to strengthen their network security in the near future.

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As one of the world's fastest growing DDI vendors, EfficientIP helps organizations drive business efficiency through agile, secure and reliable network infrastructures. Our unified management framework for DNS-DHCP-IPAM (DDI) and network configurations ensures end-to-end visibility, consistency control and advanced automation. Additionally, our unique 360° DNS security solution protects data confidentiality and application access from anywhere at any time. Companies rely on us to help control the risks and reduce the complexity of challenges they face with modern key IT initiatives such as cloud applications, virtualization, and mobility. Institutions across a variety of industries and government sectors worldwide rely on our offerings to assure business continuity, reduce operating costs and increase the management efficiency of their network and security teams.

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