Hewlett Packard Enterprise

intel®

Hutchison Drei Austria delivers always-on mobile services with HPE NonStop

Austrian mobile operator ensures service continuity with NonStop BladeSystem

Objective
Ensure continuous availability of critical Home Location Register and in-house developed network applications for mobile services, and support a unified corporate image to customers following merger

Approach
Deploy open, efficient, and continuously available HPE Integrity NonStop BladeSystem NB54000c-cg powered by Intel® Itanium® 9300 series

IT Matters
- Enabled real-time, front-end database for routing subscribers to appropriate back-end infrastructure to ensure service continuity following merger
- Provided open platform that eliminated vendor lock-in
- Consolidated Mobile Number Portability solution, eliminating two racks of servers by deploying on an existing HPE NonStop CPU

Business Matters
- Enabled Drei Austria to rapidly merge networks and present a single face to newly combined customer base
- Delivered six-nines uptime for always-on Integrated Home Subscriber Server (I-HSS) services to meet demanding customer expectations for service availability and quality
- Supported custom application development to enhance subscriber services and provide market differentiation

Fast-growing mobile operator Hutchison Drei Austria GmbH (Drei Austria) nearly doubled its subscriber base overnight following a merger with its nearest competitor. Thanks to the HPE Integrity NonStop platform running HPE Integrated Home Subscriber Server (I-HSS), Drei Austria maintained seamless service continuity for all subscribers, while gaining an open platform for custom application development to enhance efficiency.

Hutchison Drei Austria GmbH is that country's fastest-growing provider of 3G voice, messaging, and data services. In an intensely competitive marketplace, the company was already achieving double-digit growth when it merged with its nearest competitor, Orange Austria, essentially doubling in size to more than 3.4 million subscribers.

As the first such merger among six Hutchison Drei operators in Europe and Asia, all eyes were on Drei Austria. The challenge: present a single face to the newly merged customer base while ensuring absolute service availability.

Case study
Hutchison Drei
Austria GmbH

Industry
Telecommunications

Page 2

"Reliability, availability, ease of operations, and open development capabilities made HPE NonStop the right choice for Drei Austria."

– Oliver Schnabl, Senior Architect, Hutchison Drei Austria GmbH

Thanks to an infrastructure built on HPE NonStop and HPE Integrated Home Subscriber Server (I-HSS) technologies, Drei Austria met that challenge and more.

Assured continuous availability for critical Home Location Register

In Austria, as throughout Europe, mobile services are the dominant form of communications. In fact, many Austrians no longer have landline phones, instead relying solely on their mobile devices. Therefore, user expectations for service availability and quality are extremely high.

A key component of any telecommunications network is the HLR/HSS, which provides a central database for all pertinent data needed to connect mobile calls, including mobile subscriber identity, current location of each subscriber, and services engaged by subscribers. Simply put, if the HLR/HSS fails, subscriber communications come to a halt. And that could be devastating in terms of reduced revenue, tarnished brand, and lost customers.

After exploring possible solutions among IT vendors, Drei Austria found that HPE NonStop running the HPE I-HSS best met its needs with advanced capabilities such as synchronization and geo-redundancy.

After a short trial, which proved HPE's capabilities in the Drei Austria network, the telecom operator replaced its former HLR provider with HPE NonStop and the HPE I-HSS.

Oliver Schnabl, senior architect with Hutchison Drei Austria GmbH, explains, "We chose HPE NonStop as the platform for our HLR because we need total systems availability, we need scalability, and we need absolute reliability for the underlying file system. It's not enough that the server hardware is available, the database must be always available as well."

Today, Drei Austria relies on redundant HPE Integrity NonStop BladeSystem NB54000c-cg powered by Intel® Itanium® 9300 series carrier-grade platforms to run the HPE I-HSS, as well as a full suite of essential products from HPE Communications and Media Solutions (CMS), including:

Case study
Hutchison Drei
Austria GmbH

Industry
Telecommunications

Page 3

- HPE Integrated Home Subscriber Server (I-HSS), the primary repository for subscriber information, including personal profiles, mobile services, and other subscriber data

- HPE Intelligent Network Server (INS), which supports Hutchison Drei Austria GmbH in-house solutions, including real-time call control, location service enablement, text message welcome, and roaming cost optimization

- HPE Profile Manager to hold AAA (authentication, authorization and accounting) subscriber session data, as well as subscriber-based policy and tariff data

- HPE Enhanced Internet Usage Manager (eIUM) for improved real-time data charging and session management

Ensured smooth merger and service continuity

With its I-HSS running on an HPE NonStop platform, Drei Austria gained an open platform that eliminated vendor lock-in. For example, the company was able to replace its core network and radio network vendor because the HPE solution provided seamless support for the new supplier.

In addition, the NonStop platform proved instrumental in enabling Drei Austria's merger with Orange Austria by ensuring the company could present a unified image to subscribers. At the back end, Drei Austria runs two separate infrastructures for core operations such as network services, customer care, and billing. However, the company developed its own custom database on the NonStop platform, which acts as a

master front-end switch for all subscriber activity. All communications—voice calls, text messages, support tickets, and top-ups for prepaid services—come into that one, central database. Each communication is then automatically routed to the appropriate IT systems and network equipment based on whether it originates with a Drei Austria legacy customer or Orange Austria customer.

"HPE NonStop allows us to have one face to the customer," affirms Oliver Schnabl. "The NonStop platform gives us the flexibility to implement all these solutions and process network activity through a real-time database. This was critical so customers can continue to use their existing devices and still get high quality of service."

Efficient solution for Mobile Number Portability

HPE NonStop also provides Drei Austria with a powerful development platform. In fact, Drei Austria has developed more custom applications on top of the Intelligent Network Server than is typical for telecommunications companies. One example is Mobile Number Portability (MNP), which allows subscribers to retain their existing mobile phone number when switching carriers.

Drei Austria developed its own MNP solution on the HPE NonStop platform, however the company's network supplier had another MNP solution for Short Message Service (SMS) text messaging running on a separate infrastructure. With a small amount of coding, Drei Austria added SMS MNP capabilities to its existing HPE NonStop-based solution, eliminating two racks of servers in its data center.

Case study
Hutchison Drei
Austria GmbH

Industry
Telecommunications

Page 4

Customer at a glance

Hardware
- HPE Integrity NonStop BladeSystem NB54000c-cg powered by Intel® Itanium® 9300 series

Software
- HPE Integrated Home Subscriber Server (I-HSS)
- HPE Profile Manager
- HPE Intelligent Network Server (INS)
- HPE Enhanced Internet Usage Manager (eIUM)
- HPE-UX AAA Server

Services
- HPE I-HSS installation and migration services
- HPE Solution Management Services

"Our new SMS MNP application allowed us to deploy on an existing HPE NonStop CPU and eliminate two racks of servers," notes Oliver Schnabl. "We not only save space but also significant amounts of power and cooling. Plus the entire MNP is now on a 100% fault-tolerant solution so our customers' voice calls and text messages get to their proper destinations without fail."

Oliver Schnabl credits the HPE NonStop platform with enabling these efficiencies and providing a solid foundation for growth following his company's merger. "Reliability, availability, ease of operations, and open development capabilities made HPE NonStop the right choice for Drei Austria," he concludes.

About Hutchison Drei Austria GmbH

Hutchison Drei Austria GmbH is a wholly owned subsidiary of multinational conglomerate Hutchison Whampoa Ltd. Headquartered in Vienna, Hutchison Drei Austria GmbH is the fastest-growing telecommunications provider in Austria, and the third largest with more than 3.4 million customers and a 26% market share. The company represents an attractive alternative to established providers by offering unique services with the highest quality and best price.

Learn more at
hpe.com/info/nonstop

Sign up for updates

Hewlett Packard Enterprise

intel