“The decision to opt for the Hitachi Adaptable Modular Storage solutions is an investment in the future. They can be upgraded in a cost-effective and flexible manner, which means they can be modified as our company grows.”

Mark Dussy
Team Leader System Integration & Operations
DORMA Holding GmbH + Co. KGaA

DORMA Holding GmbH + Co. KGaA

<table>
<thead>
<tr>
<th>INDUSTRY</th>
<th>Manufacturing: Construction Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOLUTIONS</td>
<td>Enterprise Platform, Modular Platform, Business Continuity and Replication</td>
</tr>
<tr>
<td></td>
<td>Hardware — Hitachi Universal Storage Platform® VM and Hitachi Adaptable Modular Storage 2300 and 2500</td>
</tr>
<tr>
<td></td>
<td>Software — Hitachi Dynamic Provisioning, Hitachi TrueCopy® Synchronous</td>
</tr>
</tbody>
</table>
Germany-based Construction Company Builds Innovative IT Architecture on Hitachi Storage

The high-quality products provided by the German family-owned company DORMA Holding GmbH + Co. KGaA are included in the designs of construction projects all over the world. DORMA’s product placements range from public buildings and hotel complexes right through to shops and private apartments. Operating through its 71 companies located in 47 countries around the world, DORMA Group is constantly growing. So is its data, which demands increased capacity and high availability to ensure it stays secure and accessible. DORMA chose a solution based on both Hitachi enterprise and modular storage systems to meet these requirements.

DORMA is based in Ennepetal, Germany, and has produced and marketed high-quality products for over 100 years. From locking systems for the 13,000 doors in the world’s tallest building, to the Burj Khalifa in Dubai, floor-mounted door closers for the Guggenheim Museum in Bilbao or sliding wall partition systems in the Berlin main train station, DORMA’s product reach is truly international. The company’s world-class product portfolio includes automatic doors, automatic door drive units and solutions for the security/time and access sector. The company is the world market leader in the areas of door controls, mobile room dividing systems and glass fittings and the number one German provider of emergency exit and escape route systems. The company is also one of the key domestic and international suppliers in a number of other product sectors.

DORMA maintains major production plants in Europe, Singapore, Malaysia, China and North and South America. The group generated sales of EUR 856 million in the fiscal year 2009/2010 and employs around 6,500 people worldwide.

Increased Product Demand Fuels 45% Year-to-Date Data Growth

Past projects, such as the Frauenkirche in Dresden, the Emirates Palace in Abu Dhabi and the Volkswagen Autostadt in Wolfsburg, have provided DORMA with excellent references. And DORMA is continuing to develop itself as a reliable global partner for premium access solutions and services. The products are built according to high quality standards and are in an equally high demand. Business success has affected data growth at DORMA; at the last count, the data growth rate for the year was 45%.

In this regard, the SAP and VMware systems in particular play a key role within the services provided by the DORMA Group. These systems are hosted centrally at the Wuppertal data center and are deployed worldwide. “The highly productive SAP and VMware systems have always formed a large share of our storage capacity. Due to updates to these systems, memory requirements have increased once again over the past year,” says Team Leader System Integration & Operations at DORMA, Mark Dussy, as he describes the current situation. “This resulted in us realizing that this was a strategically favorable point in time at which to make our IT structure sustainable for the future.”

The previous IT environment couldn’t cope any longer with the increasing requirements placed on it. In order to configure the memory capacity for further company growth, the heads of IT at DORMA chose to gradually restructure the storage landscape at the Wuppertal premises. This strategy involved replacing the existing SAN with Hitachi Universal Storage Platform® VM (USP VM), which can expand its capacity as the company grows larger. The main focus of this strategy was to build a 2nd, separate data center for data mirroring in close proximity to the original data center.

“Our storage landscape still offers the same familiar functionalities at an enterprise level, but now our IT-structure has become much more flexible thanks to AMS and dynamic provisioning; and administrative costs have also noticeably fallen.”

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Team Leader System Integration & Operations
DORMA Holding GmbH + Co. KGaA
“In addition to the technical aspects, we were once again impressed by the expertise and the flexibility of the onsite service provided by Hitachi Data Systems. The positive experiences that we have shared with the company in a partnership of almost 10 years have been confirmed in every respect with this project,” says Dussy.

**Step 1: Move Toward the 2nd Data Center**

In the middle of 2010, the door system manufacturer initially issued an invitation to tender for 2 storage systems. The specifications for these storage systems included an interface for integration with VMware vSphere 4.1 and to support VAAI (vStorage API for Array Integration). One of the minimum requirements in the performance data specified was that the systems had to have a net capacity of 12TB or 22TB. A redundant active-active controller was also included in the required range of functions.

Several renowned storage systems suppliers submitted their tenders, but Hitachi Adaptable Modular Storage (AMS) 2300 from Hitachi Data Systems was the only solution in the competition able to meet all of the stipulated requirements. As a result, an AMS 2300 was installed in each of the data centers in Wuppertal in September 2010. The entire implementation phase proceeded without any problems and was completed within a week thanks to the onsite support provided by a Hitachi Data Systems employee.

**Step 2: Configuration Optimization**

The next step saw the environment configuration being optimized, which involved creating the Hitachi Dynamic Provisioning (HDP) volumes and setting up Hitachi TrueCopy® Synchronous software for data mirroring with HDP. This step also highlighted the fact that the 2 companies had already worked together on several joint projects. “We have worked together successfully with Hitachi Data Systems for almost 10 years now and have once again received a comprehensive problem-free package,” says Dussy. To ensure that the members of the DORMA IT team are able to configure the administration of the new system in an even more efficient manner, they also attended a 5-day training program provided by Hitachi Data Systems.

**Step 3: Expansion and Migration**

At the end of 2010, another call for tender was initiated, this time for 2 storage solutions with at least 22TB or 36TB net capacity. Once again, the products from Hitachi Data Systems were the most impressive and the 2 data centers in Wuppertal were both upgraded with an AMS 2500 installed in each at the beginning of 2011. DORMA then migrated all of its data and SAP systems from the USP VM to the AMS 2500, during which time the enterprise resource planning programs used by the DORMA Group were also updated. Carrying out the changeover without drastically affecting ongoing operations proved to be a particularly difficult challenge during this process. The migration process was completed within a few days and proceeded without any incidents.

**New Functionalities Ensure More Efficient Management**

As a result of the change in systems, DORMA is now the first company in Germany to be able to access the innovative combination of VMware Integration, VMware VAAI support and the dynamic provisioning pooling function of AMS. These high-end functionalities simplify memory allocation and increase the efficiency of the entire IT system, which means that the complex task of having to allocate the data manually is a thing of the past.

“The AMS 2000 family products from Hitachi Data Systems allow active load balancing with a real active-active controller, which gives the solutions a unique selling point,” explains Dussy. “Our storage landscape still offers the same familiar functionalities at an enterprise level, but now our IT-structure has become much more flexible thanks to AMS and dynamic provisioning; and administrative costs have also noticeably fallen. The systems run smoothly and there is significantly more time available to spend on truly relevant tasks such as strategy and planning.”

As DORMA staff have been impressed time and time again by the storage solutions offered by Hitachi Data Systems, it comes as no surprise that the solutions have been utilized at another location. In autumn 2010, subsidiary company DORMA Glass installed an AMS 2100 in their local data center in Bad Salzuflen, Germany.