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 Head IS Operations
 Swiss Federal Institute of Intellectual Property*



Eidgenössisches Institut für Geistiges Eigentum (IGE): Swiss Federal Institute of Intellectual Property

INDUSTRY Legal

SOLUTIONS **Storage Economics, Modular Storage**
Hardware — Hitachi Adaptable Modular Storage 2300, 500 and 200
Software — Hitachi Resource Manager™ utility package; Storage Navigator Modular 2 feature; Hitachi Device Manager and Hitachi TrueCopy® Synchronous software
Services — Services for data migration from a direct attached storage (DAS) architecture to the Hitachi Adaptable Modular Storage provided by Hitachi Data Systems Global Solution Services

Swiss Federal Institute of Intellectual Property Selects Secure Hitachi Storage Solution for Swiss Innovation

Headquartered in Bern, the Swiss Federal Institute of Intellectual Property is responsible for intellectual property matters in Switzerland. Founded in 1888, it became an independent public law institute on January 1, 1996. The institute is independently managed. To ensure it had the cost-effective scalability and security to administer intellectual property rights, the institute chose a solution based on Hitachi Adaptable Modular Storage.

With a separate legal personality and registration in the Commercial Register, the Swiss Federal Institute of Intellectual Property, also known as IGE, is responsible for its own accounting and is totally independent from the Federal budget.

Within the field of intellectual property, the institute is responsible for preparing legislation and advising the Bundesrat and the other federal authorities. It also represents Switzerland at the international level. For its clients, the institute primarily acts as a point of contact for industrial property rights (brands, patents and designs) in Switzerland and in some cases also for the corresponding international registrations. It examines national filing applications, issues industrial property rights and administers such rights. Probably the most prominent former employee was Albert Einstein, who worked at the IGE from 1902 to 1905 before producing his Theory of Relativity and other important works.

Protecting Intellectual Efforts

New technical inventions, exciting brands, original designs and artistic works all have one thing in common: they are the product of their creators' intellectual efforts. This is precisely why it is so important to protect such products. IGE ensures outstanding achievements can be protected and thus offers valuable support to Switzerland's creative minds.

Turning Pressures for Migration into Self Determination

The development of new ideas always involves considerable background know-how. All the applications, documents and materials received by the IGE involve huge volumes of data, which need to be stored reliably and securely in a way that ensures they can be located again at any time. At the end of the 1990s, the IGE used the Ingres database to administer the

intellectual property rights. This was run on the VMS operating system. Since both the future of the VMS operating system and also that of Ingres as a database system appeared less than certain, the IGE launched a project with the aim of migrating the database side of the intellectual property rights administration system to a new platform.

The experiences with the legacy solutions meant it was especially important for the following requirements to be met when defining a new operating environment:

- Ensure the greatest possible protection of investments.
- Ensure the IGE doesn't have to carry out any more enforced migrations.
- Ensure the foundations for an upwardly scalable infrastructure are established.

Persuasive Focus on Service

Armed with these basic conceptions, the IGE proceeded to the evaluation phase. The evaluation considered solutions from other suppliers in addition to Hitachi Data Systems. These included EMC and also the existing VMS storage supplier, Digital Equipment Corporation. Hitachi Data Systems emerged as the clear winner on points among all the contenders.

Even at the consultation stage, Hitachi Data Systems really impressed the IGE's technical managers and stood out from the other competitors with its technically flawless consultation and communication. The specified requirements for the new system were



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perfectly integrated into the proposed solution. The objective was to jointly achieve the most economic solution possible.

“The corporate culture presented by Hitachi Data Systems was also impressive and credibly demonstrated that developing a sustainable, independent solution that wasn’t merely based on quarterly figures was important to the storage specialist,” Swiss Federal Institute of Intellectual Property Head of IS Operations Rolf Leuenberger explains. “Our impressions at the time have been confirmed and corroborated over the years. Today we are now also satisfied we made the right choice.” Another major factor in the decision was of course the very attractive price-to-performance ratio offered by the Hitachi Data Systems tender.

Actively Shaping the Future of Data

The migration of the SAN environment to the Hitachi Data Systems solution initially included the Hitachi Adaptable Modular Storage 200 and 500, before IGE upgraded to the 2300.

With the Hitachi Adaptable Modular Storage products in place, IGE was able to begin data consolidation and the foundation was laid for an upwardly scalable infrastructure.

One of the greatest challenges was to define an environment that would ensure that migrations were wherever possible driven by the IGE, with external pressures playing an increasingly minor role in future migration projects.

“The actual migration of the SAN to Hitachi storage proceeded very smoothly. I can honestly say it was more of a challenge, not a problem at all,” explains a relieved Leuenberger. The SAN solution is operated regionally in Bern at two locations that are linked by a glass-fiber connection. Almost all structured data are now on Hitachi SAN devices.

Learning by Doing Proves Invaluable

Being able to use the standard implementation and avoid any type of special configurations, etc., was a major advantage. No actual problems were encountered during the migration process; just brief outages that occurred during data migration were caused by the database management system changeover.

The current solution performs well and is reliable. The low maintenance costs allow efficient operation. The scalability allows relatively cost-effective expansion of additional storage capacity.

Hitachi Data Systems engineers supported IGE’s IT specialists during the planning process. They performed the installation, configuration and migration work together. This “learning by doing” on a “living object” helped familiarize them with the new storage environment.

Planning and coordination was looked after by IGE’s own project management team. The institute’s system managers made the necessary space available and ensured sufficient power capacity and network connections were available. This form of cooperation is still working well today. The Hitachi Data Systems engineers are responsible for integrating new products and updates for existing components; they document them and pass the know-how on to the employees at the IGE. The staff involved in the project always describe the cooperation with Hitachi Data Systems as excellent. The fact that technical support is guaranteed at all times is especially appreciated.

Leuenberger notes, “Following the database migration, users reported they were pleased with the improved response times. As well as the new database servers, the Hitachi SAN was also a major factor behind the success.”

Around one year earlier, the IGE had consulted with Hitachi Data Systems regarding the possibility of using data de-duplication as an alternative to the robot lifecycle. The storage specialist then proposed a free analysis of the backup data. A presentation outlined the results of the analysis along with solution scenarios.

The completed analysis revealed a possible de-duplication factor of 8.8:1. This means eight times less storage capacity is required compared with traditional backup.

Based on these results and after having analyzed efficiency, the IGE decided on the promising Hitachi Data Systems de-duplication solution, which employs IBM® ProtecTIER®. After around six months in productive use, the Hitachi solution achieved a de-duplication factor of 13:1. “This result more than confirmed we were right in our decision!” says Leuenberger. “Moreover, ProtecTIER is also very easy to implement and extremely user friendly,” he adds.

The Partnership Continues

A project is generally characterized by a clearly defined time frame. The cooperation with Hitachi Data Systems started with this type of clearly defined project and was successfully completed within this window.

Because of the scalability and technological continuity, the cooperation with Hitachi Data Systems has now assumed an evolutionary character. This means the IGE can adapt flexibly to new requirements and adapt its storage environment to current needs in gradual stages.

There are firm plans for permanent expansion. Medium-term plans include replacing the Adaptable Modular Storage 200 and 500 with the 2300 and the new SAS technology.

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