Welcome to the podcast on the topic of storage. In the discussion is Matthias Werner, Storage Leader for IMT Alps. The interview was conducted by Claudio Grolimund.

Claudio Grolimund: „Matthias, could you provide us with some information about yourself and your function at IBM?"

Matthias Werner: „Gladly. With a few breaks, I have been at IBM for 20 years. Since 1990/1991, I have basically been active in the storage field, and since 1st January I have been responsible for the storage platform for Switzerland, Austria and Liechtenstein, i.e. for IMT Alps."

Claudio Grolimund: „What are the challenges for companies in dealing with data and information?"

Matthias Werner: „In my view, the greatest challenge, which we hear, see and experience personally every day, is the continuously growing flow of data. This sounds a bit hackneyed, but is nevertheless one of the greatest problems with which our customers are confronted; this is also due to the fact, that there is certain insecurity where data storage periods are concerned. This insecurity can be based on an uncertain legal position, on weaknesses in communication within the company or on the integration of the IT within the corporation. Many companies fear consequences, and because they don't exactly know which data they need to store, they store everything from a business year, which in turn impacts the growth of data."

Claudio Grolimund: „How can the IBM storage solutions support a company's activities?"

Matthias Werner: With respect to this matter, I would like to mention that last year IBM bought the company Diligent. Diligent was and is market leader in the area of data deduplication; this is a question of efficient methods for the massive reduction of data which recurs several times within a company. Through this, you get at least a partial grip on the growth in data. The second point to be mentioned here is that we are still one of the very few producers who offer a complete portfolio, i.e. all components that a customer typically needs for the complete management of his information, from disc to tape, across the entire palette."

Claudio Grolimund: „Could you explain to us, through an example, how companies can benefit from innovations in the storage offering?"

Matthias Werner: „We have included two innovations in the portfolio in the past 12 months which are directly related to unstructured data. For a start there are the available data deduplication solutions, which help customers in the unstructured environment, to reduce the versions, of for example presentations which are stored umpteen times, down to one, which is then referenced with respect to its storage location. In my view, data deduplication is a good starting point for many customers when dealing with unstructured data. The second interesting innovation, which for the customer is associated with many benefits, is our so-called *XIV storage sub-system*, which was announced last year. This concerns a revolutionary innovation in the area

of data storage on physical hard disk systems. As a result, it is better suited to control the growth of unstructured data. With this new system, customers can address the data growth, simply, efficiently and to a great extent automatically. Consequently, this is a *„self-healing & self-defining" s*ystem, as they say, which relieves the customer of a large part of his work, and at the same time enables him to keep at least a partial grip on the growth in data."

Claudio Grolimund: „Which innovations in the area of storage are to be expected in the next few years?"

Matthias Werner: "In the innovation field there are at the moment two relatively promising trends, which should also be closely followed by customers. On the one hand there is the fiber channel over Ethernet in the area of data center networks. The underlying aim here is to standardize the network in the data center or in the company's core, and thereby to use a central network infrastructure for all components, be they servers, storage or other units, and thereby to use the FCoE standard, with which different data and protocol types can be processed on a single physical network at the same time, which is made possible by network convergence. The second area concerns the so-called solid state discs, which we all know from the consumer electronic sector, in such items as iPods, telephones, cameras or other gadgets.

This solid state technology or USB Flash is increasingly asserting itself in the field of data processing in companies, and for the first time enables a highly efficient and fast data processing in storage systems. With regard to the so-called storage hierarchy, it basically involves an additional hierarchy level. In general, companies today use discs as fast storage and tapes as slower but also cheaper storage. With solid state discs, a third hierarchy level of super fast storage is emerging, or tier 0 as it is sometimes known. Here an additional hierarchy will probably establish itself, which will allow the customer to consider new approaches for performance and efficiency in storage systems."

Claudio Grolimund: „Many thanks for your remarks."