Fujitsu and NetApp
A strong alliance for intelligent IT

shaping tomorrow with you
“Fujitsu’s global strategic alliance with NetApp creates a well-matched and comprehensive storage portfolio which benefits our customers first and foremost. In order to help our customers increase the efficiency and flexibility of their IT, we’ve simplified how they can buy integrated solutions within our comprehensive Dynamic Infrastructures portfolio. Fujitsu customers see the value we provide with NetApp, not the least due to Fujitsu’s global service expertise across the combined product range.”

Bernhard Brandwitte, Vice President Storage Business, Fujitsu Technology Solutions
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Twice the competence from a single source

NetApp contributes the expertise and intelligent solutions expected from a genuine storage specialist to its partnership with Fujitsu, a market leader that strengthens the partnership with all of the advantages it has as one of the largest IT global players. Fujitsu offers highly developed data center and desktop solutions, plus a wide range of services that includes consulting, implementation, managed services, hosting and cloud services.

Fujitsu Technology Solutions is the leading European IT infrastructure provider. With its offerings for large businesses, small and medium-sized enterprises and private customers, the company does business in all of the key markets in Europe, Africa, the Middle East and India. Within the scope of its Dynamic Infrastructures strategy, the company offers a complete portfolio of IT products, solutions and services – from PCs and notebooks to data center solutions, managed infrastructures and Infrastructure-as-a-Service.

NetApp has an outstanding reputation as a manufacturer of innovative, extremely cost-effective storage and data management solutions, and is one of the fastest growing storage providers worldwide. The company offers storage technologies to meet every requirement. Gartner positions NetApp in the Magic Quadrant as one of the most influential unified storage vendors.
In their partnership, NetApp and Fujitsu are setting new standards for the optimization of complete IT infrastructures. To ensure that IT satisfies all of the business requirements of their customers in terms of flexibility and adaptability, both companies offer a complete and perfectly harmonized portfolio comprised of dynamic server environments and enterprise-wide storage infrastructures. All from a single source – including service, support and maintenance. The combination of expertise and mutual experience that is the foundation of this alliance results in solutions and services that address the specific needs of every customer.

Regardless of size, every customer can profit from the complete product offering and the unique know-how that distinguish the NetApp and Fujitsu partnership. And customers always know that they are acquiring first-class technology from market leaders who have solutions that perfectly match specific demands and requirements.

The alliance offers every customer the optimal strategy. Enterprises can select a particular technology without risk and remain flexible, knowing that their choice is future-proof. This is true even if their business requirements change dramatically – because they always have the option of migrating to a new architecture. They mitigate the risks involved in development and rollout because NetApp and Fujitsu have proven experience gained from thousands of successful projects. And customers know that even in complex projects they can expect fast and high-quality implementation.

Customers need information, consulting, setup assistance or know-how for support and maintenance. Thanks to a shared network of technology partners that includes the leading software vendors, sales and service partners, as well as system integrators, the alliance can ensure that customers receive the best support possible in every situation. And regardless of where the customer is located: NetApp and Fujitsu are both global players, offering customers the same high quality of service around the world.
A shared strategy:
Providing the optimal solution for every IT infrastructure model

NetApp and Fujitsu believe that an overarching storage infrastructure must be more than just a collection of components linked to each other. This mutual approach is the basis for the development of more flexible, more scalable and more cost-effective storage infrastructures in dynamic data centers.
The storage infrastructure is the foundation for effective and flexible business. And that is exactly where serious problems arise in many enterprises today. In most cases various infrastructures coexist within one business enterprise. Critical databases and applications are run in environments designed especially for their particular requirements. Other applications and services run in additional functional storage silos. And usually several types of storage systems from various vendors are also being utilized. Not to mention the fact that data is often being stored and backed up multiple times. Thus the need for more storage capacity increases, while the existing capacities are not efficiently utilized. What’s more, new developments such as server and client virtualization, as well as cloud computing, further complicate the situation in many cases.

How NetApp and Fujitsu can help business enterprises:
NetApp storage systems enable enterprises to utilize their storage capacities with more efficiency.

Furthermore, Fujitsu and NetApp have combined their expertise for many years, and this has enabled them to integrate servers, storage systems and network technologies in complete infrastructure solutions that offer flexible use of IT resources and extraordinary scalability.

These solutions are also key components of Dynamic Infrastructures, the Fujitsu portfolio for all IT delivery models: In addition to IT products and IT infrastructure solutions, the portfolio also includes managed services and cloud offerings. Fujitsu’s own server and storage technologies, as well as its comprehensive services, are supplemented with products from leading storage technology partners so that customers can set up and operate dynamic infrastructures for data management and data protection.

For customers the strategic partnership means that they will get the optimal storage solution for their particular requirements, and that they can implement their IT strategy holistically and consistently.

Many enterprises already benefit from this strong alliance, especially when it comes to optimizing business-critical application environments, realizing virtualization projects and implementing cloud strategies.
The business world is becoming more and more dynamic, decision cycles are much shorter, and the complexity of vital business data is growing. All of that demands agility. Dynamic Infrastructures from Fujitsu support enterprises in responding to these challenges.
Proven and innovative: Dynamic Infrastructures
Fujitsu supports the competitiveness of its customers at two levels with Dynamic Infrastructures:

- With infrastructure products, infrastructure solutions, cloud services and managed services, Fujitsu offers flexible sourcing options so that customers always get just the right solution for their strategies and requirements.
- Dynamic infrastructure solutions from Fujitsu also offer everything needed for modern and future-centric IT environments: pooling of IT resources and their allocation to services in real time, integrated application and resource management, as well as automated administration. In order to ensure a high level of quality in implementation, Fujitsu solutions are preconfigured and validated before being delivered to the customer.

The concept has proven its value over the past ten years in a very competitive market, and it has been successfully implemented in several thousand enterprises.

Agile data infrastructure: Data is the fuel for business development
Mobile applications represent one of the growing IT trends, along with the use of decision support/analytics in enterprise scenarios. And these are just two factors that account for the constant growth of data volumes. Burgeoning data can either hinder or boost business – it all depends on the IT infrastructure. That’s why NetApp products are important elements in Fujitsu’s Dynamic Infrastructures.

NetApp develops solutions for an agile data infrastructure in accordance with its ‘intelligent, immortal, and infinite’ design principles. NetApp systems are the ideal choice for bolstering the Fujitsu Dynamic Infrastructures offering.

The understanding and joint approach of both partners guarantees that a highly productive shared IT infrastructure delivers the flexibility and efficiency needed by business enterprises today. Optimized and automated storage is also an additional plus. It simplifies processes and cuts costs. Uninterrupted operations, complete protection and security for all data, along with secure operations for tenants in shared storage environments, are other significant aspects. Future viability is also provided through maximum freedom of choice in terms of scalability, capacity and automation.

Agile Data Infrastructure

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Intelligent Data Management

Reducing the complexity of storage management
Enterprises in all branches of business must manage a flood of data that is on the rise – this applies to the quantity, volume and lifetime of the objects. The intelligent management of this data poses overwhelming challenges for IT organizations. Specific solutions are required to meet these challenges – solutions that reduce complexity, making data available anytime and anywhere throughout an enterprise to quickly generate business benefits.

NetApp systems offer the following options for intelligent data management: service automation and analytics, storage efficiency and virtual storage tiering.

Service automation and analytics
The integration of a provisioning, protection and operations manager provides a consistent view of storage management and reduces complexity through rule-based automated workflows, thus saving time that can be used for innovations.

Virtual storage tiering
Virtual storage tiering with flash memory is an effective instrument for improving IOPS (Input/Output Operations per Second). The costs per gigabyte of raw capacity of flash memory are higher than those of SSDs. However, the effective costs per gigabyte are lower than those of SSDs because the flash memory, unlike hard disks, can be utilized to a full 100%.

Storage efficiency
For NetApp maximum storage efficiency is a basic principle in the design of its products. NetApp systems achieve this efficiency thanks to a combination of innovative hardware and software features. In environments based on server virtualization, 50% less storage capacity is required, and that enables enterprises to keep even unexpected data growth under control.
100% data with 50% storage volume
Various storage systems from different vendors, a storage silo for every application, multiple storage and backup of the same data – all of this leads to inefficient utilization of existing storage space in conventional storage systems, which continually produce redundant data and are not even able to discover unused resources. In addition, data volumes are growing at an astounding pace every day.

NetApp storage solutions offer several ways of using existing storage capacities much more efficiently. Savings of up to 80% are possible, and on average savings of 50% have actually been achieved.

This can be done by employing various NetApp technologies, for example data deduplication, snapshots, flash cache and thin provisioning.

Reducing the storage volume by half can result in many benefits for a business enterprise:
- Improved performance
- Dramatic acceleration of backup and restore processes
- Reduced workloads for IT administrators
- Fewer investments in new hardware
- Significantly lower energy consumption for system operations and cooling
- Lower overall operating costs for storage systems

The NetApp Storage Efficiency Effect
In server virtualization environments, NetApp can reduce the required storage space by up to 35% in existing third-party storage systems and by up to 50% in NetApp storage systems.

Calculate your savings potential at www.itcalc.com/fujitsu.
Data deduplication – less is more

Over time huge amounts of redundant data and countless multiple files are created in an enterprise network. One example of this is an e-mail attachment that is sent to several colleagues, who then pass the message on to other colleagues along with their comments.

In no time at all there are 30 identical copies in the network, and they all take up storage space.

If this file is backed up daily, 150 copies of the file will be stored in the company’s storage infrastructure within just a week.

Thus thousands of identical files with presentations, Excel lists, e-mail attachments, photo and film data are occupying even more space on hard disks. In order to store all this redundant data, additional storage capacity has to be purchased all the time, driving IT costs upward.

Get rid of unnecessary ballast

Deduplication technology automatically compares data at the block level, indexes the data, sets pointers to identical data blocks and deletes the redundant data. Depending on the application and IT structure, savings in storage space can soar to more than 80%.

All inclusive

Data deduplication is integrated in the Data ONTAP operating system from NetApp and is thus a free component in all NetApp storage solutions. It saves storage space and saves time when saving, backing up or archiving company data. The deduplication process runs automatically within the storage system and is completely transparent for the applications.

Savings potential from deduplication

The savings achieved depend on the specific data type.
Fast and secure – NetApp snapshot technology

With NetApp’s snapshot technology, 255 snapshots can be generated per stored volume without impacting system performance. Snapshots are virtual read-only copies of a specific volume, i.e., the data in the snapshot can reside on the same disk used for the productive data, so that very little storage space is required. Since this data is read-only, it cannot be intentionally or accidentally deleted, and it is immune to viruses. Even if the entire file system were corrupted (e.g., by a client or server that had approved systematic access to all data), restoration would take place within seconds thanks to the SnapRestore technology. In worst case scenarios this reduces the recovery time from hours to just seconds. This functionality is used for database recovery within minutes, including a reboot of the database’s services, to ensure that an accessible database is always available. This in turn increases the availability and productivity of the data center.

Flash cache – more performance with fewer hard disks

If an enterprise wants to increase the throughput of a conventional storage system, in order to process more transactions per hour, it usually purchases and installs additional hard disks. However, NetApp storage systems with integrated flash cache technology are different. Business enterprises using NetApp flash cache do not need additional hard disks or administration to increase throughput performance. That means more performance can be achieved with fewer hard disks, and that translates into fewer hardware investments and lower costs.

Thin provisioning – getting the most from resources

Thin provisioning is the answer to one of the most common reasons for inefficient storage – allocated storage space that is not used. This technology ensures that just the right amount of space is allocated to store the data that is actually available. Thanks to thin provisioning, storage space does not need to be allocated in advance – individual volumes or Logical Unit Numbers (LUNs) are dynamically allocated as the data is being written. This has many advantages:

- Fast and easy adaptation to changing storage requirements.
- Lower investment costs through just-in-time storage with integrated thin provisioning.
- Acquisition of storage space as needed – anytime and anywhere – without interruption.
- Dynamic and automatic adjustment of volume size, according to defined guidelines.
- Utilization is doubled and performance is improved.
Immortal Data Availability

All-round protection for business processes and data
Since IT is increasingly mission-critical, avoiding downtime is an absolute must to keep businesses running smoothly. Today even planned downtime is often unacceptable to many enterprises overly concerned with business revenue. NetApp storage systems address this issue: Planning for downtime is unnecessary because the systems have uninterrupted scalability and can quickly adapt to changes occurring in enterprise environments. What’s more, the systems are equipped with highly developed functions that support data security and data protection.

Non-disruptive operations
The key functions for always-on availability are included in the NetApp Data ONTAP 8 operating system and NetApp DataMotion™. They support the uninterrupted migration of data even while applications are running. Maintenance work, software upgrades and system enhancements can also be carried out without having to disrupt operations.
Embedded data security
NetApp storage systems offer three data protection options for compliance with legal regulations and enterprise guidelines:

- Role-based access control
- System-based antivirus protection
- Fine-grained encryption

The integrated data protection concept also covers the communication channels and the data residing in the memory. This complete solution makes sure that every business enterprise is ready and able to handle every challenging requirement.

Integrated data protection
Thanks to automated data protection management, NetApp helps enterprises safeguard their information and improve business efficiency. As soon as rules and protective measures are defined at the infrastructure level, they automatically adapt to changes in the environment.

Fujitsu SecDocs:
Trustworthy long-term archiving with Fujitsu and NetApp
In many enterprises and public authorities, large numbers of documents need to be readable and archived, quite often for several decades. Electronic documents can be processed and handled much better than paper documents. However, for legal reasons that can impact business processes, it is important that electronic documents are revision-proof and certified over long periods of time. In addition, the integrity and authenticity of archived documents must be verifiable at all times. Fujitsu SecDocs offers this kind of evidentiary retention for archiving electronic documents based on certified security components. SecDocs’ archive middleware archives documents in a standardized format so that the objects remain readable over the long-term – they can also be migrated, if necessary. If documents include electronic signatures, the SecDocs archive middleware also safeguards their evidentiary value and legal probative authenticity. SecDocs performs the required verification of the signatures automatically and reliably, just as it does with the renewal signature using future-proof algorithms. NetApp storage systems support long-term evidentiary archiving through various functions and features:

- NetApp SnapLock provides write protection during the entire archiving period.
- Support of standardized protocols such as CIFS and NFS ensures easy migration of data.
- The data privacy and protection concept in NetApp storage systems enables the encryption of archived documents.
- NetApp SnapMirror supports efficient data replication.
- The architecture of NetApp storage systems supports high availability at all levels.

Fujitsu SecDocs and NetApp storage systems represent an affordable and integrated solution for long-term evidentiary retention and archiving based on open standards. Proprietary and expensive systems for safeguarding evidentiary value are thus superfluous – migration and renewable signature processes are much easier, and there is less administration work overall. Archived paper documentation can be reduced or eliminated entirely.
Infinite Data Scaling

When the requirements in an IT environment change, adding more storage systems only makes management more complex. A shared IT infrastructure is a better option: It enables enterprises to scale their environments in many ways, thus leading to high levels of flexibility and operational efficiency. NetApp FAS systems offer seamless scalability, a unified architecture and secure multi-tenancy operations that contribute to efficient and flexible storage environments.

Seamless scaling

An agile infrastructure must support scaling in three dimensions, in terms of performance (scale up), capacity (scale out) and operations (scale with automation). Data ONTAP 8, the standardized operating system for all NetApp storage systems, has this capability. It expands the storage from one controller pair to numerous controller pairs so that capacity, regardless of the network protocol (SAN or NAS), can be scaled easily from a few terabytes to several petabytes – with full transparency for applications running online. Increases in performance can be achieved via software-based means with FlexCache, or with SSDs and flash cache. In addition, a large number of software tools are available for extensive automation of system operations.
Unified architecture
For enterprise storage environments both big and small: NetApp offers a unified storage architecture with a standardized unified operating system (Data ONTAP) for efficient management. What’s more, all NetApp products are universally suited for all storage applications and can be run in every system environment with every protocol (FC, NFS, FCoE, CIFS, iSCSI, HTTP). As requirements change, the storage systems can be expanded at any time, and they can be adapted to optimally satisfy new demands. These features deliver a number of benefits:

- Less administration thanks to standardized tools and processes
- Better utilization of existing storage resources
- Flexible scaling of capacity and performance
- No migration tasks
- Long-term investment protection
- Optimization of current investments – enterprises can enhance and functionally expand their existing storage with the NetApp V-Series.

Secure multi-tenancy
Nowadays, problems in many IT infrastructures often arise from resources that are based on silo systems. This results in low utilization, inefficiency and an inability to react to dynamic business requirements with speed and flexibility. The secure isolation of resources in NetApp systems, however, counteracts the inefficient use of resources so that enterprises can reliably manage several tenants in one system.

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NetApp Data ONTAP 8 offers a unified scale-out storage solution for an adaptable, always-on storage infrastructure to accommodate today’s virtualized infrastructures.

Storage can be run dynamically in Data ONTAP 8 cluster mode, which also supports dynamic adaptation to ever-changing business requirements. This is achieved with two or more controllers configured as a shared resource pool, which seamlessly expands or contracts without interruption, and which can be subdivided into logical storage containers for applications. Enterprise businesses can deploy not only NAS storage and file-based protocols, but also the SAN protocols—Fibre Channel, iSCSI, and FCoE—in a shared scale-out data storage system.
NetApp V-Series
The V-Series enhances existing storage functions, increases flexibility and protects investments in third-party storage systems.

The V-Series enables you to make your current storage more efficient and more flexible. The V-Series controllers utilize other vendors’ existing storage capacities as if they were actually NetApp storage systems.

Furthermore, V-Series controllers enable you to dramatically improve the capacity utilization of hard disks and to regain unused capacities in heterogeneous storage environments. This is possible thanks to various NetApp technologies, such as the deduplication of primary storage and thin provisioning. NetApp technologies enable you to considerably increase storage efficiency, improve data protection and simplify data management – while also protecting all of your storage investments.

THE V-SERIES PROTECTS YOUR INVESTMENTS

- **Optimize your infrastructure**: Profit from the NetApp storage efficiency effect and use the V-Series with deduplication and consolidation functions to cut costs.

- **Further develop your business-centric infrastructures**: Offer your users higher service levels with enhanced V-Series storage functions for data security and disaster recovery.

- **Migrate smoothly and efficiently**: Use the V-Series to protect your storage investments and pave the way for replacing obsolete systems in the near future.

CERTIFIED

The systems in the ETERNUS DX product family from Fujitsu are certified for use with the NetApp V-Series.
With software from NetApp you can establish an efficient shared infrastructure that serves as the basis for future-proof IT. You can:

- backup several terabytes of application data within seconds and restore it within minutes
- reduce investment costs by 50% or more by using a large number of efficiency functions
- enable one administrator to manage up to two or three times more storage capacity
- achieve time savings of up to 90% through provisioning
- cut test and development time in half

### NetApp Manageability Software Family for Integrated Data Management

#### Application Suite
- SnapManager® for Exchange
- SnapManager for SharePoint® Server
- SnapManager for SAP®

#### Database Suite
- SnapManager for SQL Server®
- SnapManager for Oracle®

#### Server Suite
- SnapManager for Virtual Infrastructure
- SnapManager for Hyper-V®
- SnapDrive® for Windows®, UNIX®, Linux®

#### Open Interfaces

### Customer Requirements Functions

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10 reasons why enterprises rely on Fujitsu and NetApp

**EASY, CENTRALIZED MANAGEMENT**

AKG Group, Germany
FlexFrame for SAP makes the AKG Group faster and more flexible. All systems – virtual, physical, SAP systems and those from other vendors – can be managed from one central console.

“There is no longer any need for us to monitor virtual and physical servers separately. Now we can keep an eye on everything from one central console.”

Peter Gans, IT department, AKG Verwaltungsgesellschaft mbH

**DISASTER RECOVERY**

Medical Center Turnhout, Belgium
When two hospitals were merged in Belgium, Fujitsu and NetApp implemented a shared IT infrastructure that was consistently virtualized and disaster-resilient thanks to NetApp MetroCluster.

“This solution really future proofs our organization, giving us the confidence that we can perform to the highest levels without worrying about downtime. Fujitsu was absolutely critical to the successful design and deployment of the MetroCluster and will continue to play a key role in future developments.”

Filip Goyens, IT Manager, AZ Turnhout

**EXPERTISE**

Hargassner GmbH, Austria
Hargassner is able to expand quickly with an easily adaptable, virtualized and mirrored IT infrastructure in which NetApp storage ensures high availability for business processes.

“We have had no previous experience with NetApp, but fortunately we can always turn to Fujitsu support services since they have experts for NetApp products. I think this is very convenient, as we have a one-stop service solution for Fujitsu and NetApp systems.”

Karl Sattlecker, Head of IT Organization and Process Management, Hargassner GmbH

**HIGH AVAILABILITY**

Karlstad University, Sweden
Karlstad University combined SAN and NAS storage that consists of two NetApp FAS3210 connected in an active cluster configuration to handle 1,500 home directories and to run 130 virtual servers.

“It is crucial that we can provide a very robust and available IT infrastructure that runs well, 24/7. Now, our storage has a much higher availability than before, which we notice not least by all the positive feedback from our students and staff.”

Niklas Nikitin, Systems Architect at Karlstad University
**FUTURE-PROOF**

Hindustan Times Media, India

Hindustan Times was faced with operational bottlenecks that were obstructing its growth. FlexFrame for SAP supports expansion and growth plans of HT Media by allowing new locations and new users to be added seamlessly while maintaining consistent service quality.

"With FlexFrame for SAP enabling a flexible infrastructure at HT media, we are future-proofed from making further investments in the infrastructure for at least three more years."

Vineet Kumar Chawla, Head of IT, Hindustan Times

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**FLEXIBILITY**

University of Bonn, Germany

Due to the increase in computationally intense research projects, the University of Bonn found that it needed more flexibility for its server resources. Fujitsu implemented a private cloud environment based on high-performance Fujitsu PRIMERGY servers, NetApp storage systems and virtualized PCs.

"The private cloud environment from Fujitsu and NetApp gives us a high degree of flexibility. Whereas in the past new hardware constantly had to be acquired for a special project, now we can use the same hardware for a variety of research projects."

Peter Middelhauve, Chief Information Officer of the Department of Economics, University of Bonn

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**SCALABILITY**

VTT Technical Research Center of Finland

In the past VTT often had too little storage capacity, and slow backups required a lot of time. Two NetApp FAS storage systems eliminated the storage bottlenecks in the research center. Thanks to highly efficient NetApp snapshot technology, the time needed for backups was drastically reduced as well.

"The snapshot backup solution from Fujitsu fits our needs. NetApp technology has made it much faster and easier to back up data."

Markku Heikura, Senior Vice President, VTT

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**PERFORMANCE**

Publiacqua S.p.A., Italy

This Italian water supplier wanted to streamline daily reports, management reports and strategic planning in order to become faster and more flexible while collecting more detailed information. Using the SAP HANA appliance from Fujitsu, Publiacqua can now compile data distributed across several systems for analysis in real time.

"SAP HANA will allow us to bring in operating and management reporting, while cutting development times and associated infrastructure costs, thereby improving business reporting performance."

Luciano Caroti, Head of IT Systems, Publiacqua S.p.A.

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**EVERYTHING FROM A SINGLE SOURCE**

internezzo ag, Switzerland

internezzo ag was looking for an easy-to-manage IT environment for hosting several hundred websites for its customers. The ultimate choice was Fujitsu vShape, which delivers extreme reliability and flexibility.

"The vShape infrastructure is basically maintenance-free and is running without any problems. We benefit from better overall performance and greater stability. Another advantage is that we were able to get all the components from a single source."

Marcel Burkhalter, Head of Technology, internezzo ag

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**PRICE PERFORMANCE RATIO**

Jysk, Denmark

Jysk is a fast-growing retailer that sees outsourcing as the potentially best way to get IT resources for its business processes. Fujitsu’s partner ATOS takes care of this by using FlexFrame for SAP – and Jysk is able to keep its IT performance, capacity, flexibility and costs in perfect balance.

“We wanted a cost-effective, reliable solution that would deliver complex SAP services in a simple way, and that is exactly what ATOS and Fujitsu have delivered. FlexFrame for SAP will be key to the continuing evolution of our company.”

Benny Pedersen, IT Director, Jysk
The strengths of NetApp storage solutions make them an ideal selection for use in Dynamic Infrastructures. For application environments, landscape virtualization and cloud strategies, Fujitsu offers complete IT infrastructure solutions based on PRIMERGY industry standard servers, NetApp storage systems and network components.
Database and application environments

The pace of the business world is constantly increasing, which is why it is important that IT and business strategies work hand in hand. Innovative IT systems enable enterprises to market new products and services quickly, reliably and cost-effectively. In key enterprise application environments, CIOs are constantly faced with the challenge of striking a balance between optimal support for business processes and keeping the costs of IT under control:

- How can the performance and storage capacity of infrastructures be adapted to ever-changing business requirements while still keeping IT investments as low as possible?
- How can high-availability and disaster recovery be achieved without the danger of exploding costs?
- What options are available for maintaining operational efficiency at constant or improved levels of service quality?

How NetApp and Fujitsu can help business enterprises:
NetApp storage solutions reduce the complexity and downtime of business-critical environments. The combination of innovative functionalities such as rapid system cloning and snapshots, as well as the automation of otherwise time-consuming processes, increases productivity and mitigates risks. Technologies such as deduplication and virtualization can lead to better utilization of existing storage resources. Flexible scalability and standardized storage architectures guarantee high efficiency even as demands rise – and the bottom line says that NetApp storage products deliver the highest performance at the lowest cost possible. Here are some examples:

E-mail applications
Today millions of Microsoft Exchange e-mail accounts are run worldwide on NetApp storage systems and backed up with integrated NetApp functions. With the SnapManager software components for Microsoft Exchange, NetApp offers a complete data management solution for consolidating, hosting and automating backup and restore processes for Microsoft Exchange Server. SnapManager manages instant backups during running operations and supports the restoration of entire Exchange databases, individual mailboxes or even specific mailbox contents. SnapManager stands for the highest levels of availability, scalability and reliability of Exchange environments and ensures low TCO (Total Cost of Ownership).

The NetApp SnapLock functionality is the ideal solution for the audit-proof archiving of e-mails with Microsoft Exchange. SnapLock can be used with e-mail archiving solutions from other vendors, for example, Symantec and OpenText/IXOS, and is thus a perfect compliance platform for Microsoft solutions.
NetApp for Microsoft SQL Server
NetApp SnapManager for Microsoft SQL Server reduces database backup times from hours to just seconds and makes every backup an extremely space-saving full backup. The backups are based on NetApp snapshot copies. Large numbers of databases of any size can be backed up and restored within minutes. With SnapManager for SQL Server, enterprises can recover from an SQL Server failure in a matter of minutes. SnapManager is one of the fastest solutions available for backup and recovery, delivering a reliable combination of availability and scalability for SQL Server environments.

What’s more, SnapManager for Microsoft SQL Server only needs a few seconds to make space-saving test and development copies of productive databases. This is possible using FlexClone database cloning technology. The complexity of database development and testing is reduced considerably, making these processes much faster. SnapManager for Microsoft SQL Server also makes the administration of mySQL Server installations easier.

NetApp for Oracle
NetApp, in its role as an Oracle Certified Advantage Partner and strategic Oracle partner, offers complete storage solutions developed, tested and optimized especially for Oracle database environments. The unique NetApp architecture, enhanced with Oracle-specific functionalities and full clustering support at all levels, results in significant performance increases along with maximum availability – across several sites, if desired – at substantially lower operating costs. More than 5,000 enterprises worldwide run their Oracle applications in combination with high-performance NetApp storage solutions – in fact, even Oracle itself does this.

SnapManager for Oracle automates, simplifies and considerably accelerates the complex manual and time-consuming processes that are associated with the backup, restoration, recovery and cloning of Oracle databases. Snapshot copies of Oracle databases are not only extremely space-saving – they can be created in just seconds and used in parallel to productive daily operations without problems. SnapRestore reduces restoration times to only a few minutes – depending on the size of the database. FlexClone supports fast cloning of entire databases for development and test purposes. Clones take up very little storage space and can be created quickly by database administrators.

Advantages of this kind make NetApp storage solutions ideal for use in the dynamic data center. With this in mind, Fujitsu offers complete IT infrastructure solutions that include PRIMERGY industry standard servers, NetApp storage systems and the network. Typical customers are enterprises that manage their business processes with the world’s leading business software from SAP. The portfolio includes comprehensive services as well as solutions for optimizing SAP operations and the enterprise-wide use of information:

- **FlexFrame for SAP**, the dynamic infrastructure solution for the comprehensive optimization of SAP processes. Hundreds of enterprises have already used this solution to consolidate their SAP landscapes. They run their applications very efficiently, and are able to keep pace with changing business demands by flexibly allocating IT resources as they are needed.
- **FlexFrame Compact for SAP**, the low-cost solution from Fujitsu for scenarios having up to 10,000 SAPS.
- **Business Warehouse Accelerator Infrastructure**, the pretested and integrated end-to-end solution for fast and easy access to SAP business data.
- **SAP HANA Appliance from Fujitsu**, the solution with in-memory technology that supports business decision-making with real-time evaluation of huge data volumes.

More information about joint solutions from NetApp and Fujitsu for SAP users is available on page 34.
Virtualization represents a layer covering all existing hardware (desksops, servers and storage systems) that bundles all resources in one large IT pool. Performance, storage capacities and bandwidths are assigned to various computers or applications in this pool. No matter where the IT resources are located, virtualization dramatically improves the provisioning of functions or systems and the administration of IT environments.

However, if an enterprise is considering the implementation of a virtualized environment, it should not merely concentrate on the IT resources that are to be consolidated, but also focus its attention on business strategy, processes and administration. Virtualization is not an isolated solution. It requires optimal compatibility with current requirements as well as the scalability and flexibility needed for adapting to change. This may also entail the rethinking of existing strategies to make sure that the business enterprise fully benefits from the advantages of a virtualized environment. Storage virtualization is a very decisive factor here because it supplements desktop and server virtualization to achieve easier administration and lower costs.
Enterprises are enthusiastic about server virtualization because the benefits can be seen immediately. That is why server virtualization is growing in importance, regardless of the state of the prevailing economic environment. In fact, many enterprises have a defined virtualization guideline that emphasizes how investments and operating costs should be reduced and how business processes should be improved. Although most business enterprises recognize the value of a virtualized server infrastructure, they often overlook the fact that storage plays a key role in these environments.

Server virtualization makes special demands in terms of storage: Virtual servers are nothing other than files residing in storage systems, and these server images are stored just like data. Therefore, the storage system is of vital importance when it comes to the reliable operation of virtual servers. Decision-makers should take the following points into consideration:

- **Performance counts**
  There must be enough leeway for handling the steady growth of server virtualization.

- **High availability**
  Is becoming more important, but there are also new aspects to consider: The availability of the storage system directly impacts the availability of the server environment. Since virtual server images are nothing other than data, the snapshot and replication functions of storage systems can be used to establish new high availability and disaster recovery concepts which are less complex and more efficient.

- **Integrated server and storage management**
  Server virtualization invariably means that the borderline between server and storage management becomes blurred. Thus, it is vital to precisely integrate storage management within a standardized server virtualization management framework.

**VIRTUALIZATION**

Functions like thin provisioning, storage virtualization, deduplication and data migration can have a positive impact on investments and operating costs – and lead to savings that go beyond the advantages of server virtualization.
Storage virtualization

Shared SLAs

SLAs
SLA 01  SLA 02  SLA 03  SLA 04  ...  SLA 20

Apps
App 01  App 02  App 03  App 04  ...  App 20

Storage

I/O Utilization

Capacity Utilization

If a storage volume is only partially utilized, other applications or users do not have access to the unoccupied storage space. However, if a volume is completely utilized, additional physical storage space needs to be purchased, installed and allocated – this is a complex, expensive and time-consuming process. NetApp virtualization tools bundle all of the physical storage in the network to form a storage pool from which administrators can assign virtual volumes quickly and flexibly. This makes administration less complex and ensures that storage resources are optimally utilized, which lowers the costs of operation and saves energy.

Virtualization for storage systems from other vendors

Enterprises that rely on storage solutions from other vendors can also benefit from efficient NetApp virtualization solutions. With NetApp V-Series products and the Data ONTAP operating system, a large number of third-party storage controllers can be consolidated in one data management architecture.

Desktop virtualization

The expectations are high when it comes to desktop virtualization. Enterprises hope that the technology will keep the costs of their client systems under control and support the management of huge desktop infrastructures with relatively few administrators – and they expect better security and efficiency at the same time. This is where NetApp and Fujitsu can help.

For example, by designing a virtual desktop infrastructure for 50,000 users. VMware, NetApp and Fujitsu have combined their technologies and designed a dynamic architecture that can be adapted flexibly to meet the specific needs of various customers. It is based on a virtualized infrastructure with hardware and software for operating a desktop pool accommodating 5,000 users. The project has resulted in extremely reliable methods for provisioning a scalable and flexibly expandable environment for 5,000 to 50,000 users. The perfectly harmonized components from Fujitsu and NetApp ensure maximum performance, easy management and high availability at the lowest cost possible.
Fujitsu vShape
The all-round virtualization and cloud solution

Workload-optimized solutions for various application scenarios
Fujitsu vShape offers convergent reference architectures that can be shared to handle the workloads of different applications. That makes vShape the ideal solution for a wide range of application scenarios such as:

- Consolidation and optimization of application environments
- More efficient support of changing infrastructure requirements and applications with highly fluctuating workloads
- Simplification and consolidation of IT infrastructures that extend to various branch offices
- Support for IT organizations with limited IT staff that need a solution that is easy to provide, operate, and manage
- Implementation of a platform that also supports private cloud services.

Validated reference architectures
Fujitsu vShape reference architectures integrate the expertise and technologies of leading server, storage, and network manufacturers: x86 servers from Fujitsu, storage systems from NetApp, and switches from Brocade. All components are harmonized for defined software packages and validated as a single solution.

- Versatile: vShape can be used for almost any IT application.
- Modular: vShape offers customers the flexibility for choosing the best components.
- Simple: vShape can be ordered as a solution, greatly reducing procurement costs and effort.
- Customized: vShape is already workload-optimized when delivered.
- Standardized: vShape uses industry-standard technologies, enabling customers to take advantage of innovations, without vendor lock-in.
- Flexible: vShape grows seamlessly along with performance requirements.
- Open: Thanks to open interfaces, vShape can be easily integrated into existing management environments.
- Unified: Fujitsu supports all the elements of vShape, by acting as a central point of contact.

How customers benefit
- Immediate access to cloud, virtualization, and innovative IT projects
- Fast implementation tailored to meet their needs
- Minimal project risks, high quality
- Lower procurement costs
- Simple, cost-effective expandability
- Lower total cost of ownership

Fujitsu vShape offers fully integrated architectures that are validated as solutions using defined software. Fujitsu vShape is currently available as a reference architecture for VMware. In the near future, solutions for SharePoint, Virtual Desktop Infrastructure, and Hyper-V will be added to the offering.
How NetApp technologies support virtualization

Several functions make unified storage solutions from NetApp ideal for deployment in virtualized server environments:

- Flexible storage aggregation across heterogeneous storage environments
- Scalable performance that keeps pace with the high I/O requirements of high-load virtual servers
- Automated data security for virtual machines – with hardly any impact on performance
- Several snapshot copies and hot backups of virtual servers, without having to add more disk space, and with no negative impact on server performance
- Low-cost virtualized storage solution with high-performance thin provisioning, deduplication and less complex data security
- High-performance standardized data management solutions for NAS, Fibre Channel SAN, FCoE SAN and iSCSI SAN
- Application integration with enterprise applications like Microsoft Exchange, Oracle and SAP
- Integration of storage management functions in the management tools of virtualization providers

Backup for virtualized infrastructures

Virtualization leads to significant improvements in the utilization of server hardware. Classical agent-based backup architectures quickly reach their limits in virtualized infrastructures because virtualization ensures that servers are running at peak capacity, which means that the servers are not able to handle additional backup loads within the time allotted. NetApp has the answer to the backup problem in virtualized infrastructures: snapshot-based backup directly in the storage system. These space-saving backups are extremely fast and can be replicated for high-availability scenarios with hardly any effect on server performance – thus making backups of virtual infrastructures possible during running operations! Seamless integration with the virtualization layer and data consistency with the applications above it is ensured by the NetApp SnapManager product family, which makes granular recovery possible at every level (servers, VM, individual files within the VM).

<table>
<thead>
<tr>
<th>Server Virtualization</th>
<th>Desktop Virtualization</th>
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NetApp storage functions for high flexibility and efficiency in virtualized environments.
When evaluating the concept of virtualization, enterprises will soon discover that cloud computing technology may also be important for their business success. Since all IT resources (servers, desktops, storage, applications, etc.) are virtualized, users have access to an unlimited range of resources and can request the specific performance and functionality they need at any particular moment. Both overhead (excess equipment and applications) and bottlenecks can be avoided through intelligent IT resource provisioning. The utilization of all devices in the cloud increases while the costs per user decrease.

HOW NETAPP AND FUJITSU SUPPORT ENTERPRISES ON THEIR WAY TOWARD CLOUD COMPUTING

- **Complete cloud-ready solutions**: Fujitsu vShape and FlexFrame for SAP are ready-to-go solutions for realizing cloud concepts that can also be used with components from Fujitsu DI Building Blocks. Enterprises profit from centralized and standardized management of all resources, plus lighter workloads for IT personnel thanks to fast, automated provisioning of IT resources and a self-service portal for users. Efficient options also ensure the high-availability of physical and virtual servers, in addition to safeguarding site security.

- **Secure multiple client capability**: With NetApp MultiStore several virtual partitions can be set up in one physical system, each one clearly separated from the other. This software has been deployed more than 16,000 times worldwide.

- **Constant data mobility**: It must always be possible to add, move or delete data volumes at any time, without having to power down the system, which would interrupt operations.

- **More storage efficiency**: Virtualization, deduplication and thin provisioning from NetApp reduce storage requirements by up to 80% when compared with conventional solutions.

- **Integrated data security**: NetApp offers fully integrated and complete data security and disaster recovery based on intelligent technologies such as NetApp Snapshot, SnapVault, SnapManager Suite, SnapMirror, MetroCluster and Protection Manager. These technologies shift responsibility for data security from the server to the storage system. This makes it possible to establish a consequent data security concept in a cloud infrastructure, whereby the backup and disaster recovery data can also be used for test and development purposes, without having a negative impact on the productive data.

- **Convenient automation**: To cope with large numbers of volumes, clients, users and applications, storage management needs to be automated to make administration of storage resources easier and to achieve a high degree of system reliability and data consistency. The real-time monitoring of available storage capacity, system performance and guideline compliance is also important – especially in heterogeneous storage environments.
Fujitsu helps enterprises migrate to the cloud and integrates innovative cloud services in existing IT landscapes. To ensure that customers can develop their own individual strategy from the many acquisition, management and delivery models available for cloud computing, Fujitsu’s Dynamic Infrastructures offering also includes professional consulting for every type of model.

The Fujitsu Trusted Cloud is comprised of flexible, scalable and ready-to-use solutions. These Infrastructure as a Service offerings enhance existing infrastructures with additional server and storage capacities that are charged according to the “pay-as-you-use” model. Customers can use these services to implement their own personalized virtual data center environments – with network layers, firewall functionality and load-balancing services.

For enterprises that want to realize their own cloud infrastructure, or plan to gradually migrate their current systems toward the cloud, Fujitsu’s cloud experts can develop the solution mix that perfectly matches the IT strategy and vision of each customer. Reference architectures and best-practice solutions make for fast and successful cloud migration. Pre-integrated scalable Dynamic Infrastructure modules from Fujitsu are key components for intelligent migration to the cloud. They considerably reduce the time needed to orchestrate a private cloud IT infrastructure. The modules are based on an integrated and holistic management concept that includes the automation and coordination of resources across real and virtual servers, while also automating and coordinating storage solutions and network components. Customers profit from more IT efficiency and considerable cost and productivity benefits.
The right service for every need

Regardless of whether customers need support during the entire storage and data management life cycle, or occasionally require assistance in one specific area – flexible service solutions satisfy enterprise requirements and guarantee success. By drawing upon NetApp’s comprehensive experience for their demanding and data-intensive IT environments, customers can be sure to fully profit from the advantages of NetApp storage solutions. Tools such as NetApp OnCommand Insight are most effective.

**OnCommand Insight** supports customers when it comes to proactive management of heterogeneous environments. This can lead to optimized resources and optimized workloads. And by evaluating IT costs and performance, it can sharpen the customer’s cost awareness. OnCommand Insight includes functions for evaluation, proactive identification of problems, simulations or even a root cause analysis covering the entire storage infrastructure. Functions for resource optimization and improved efficiency include:

- Key performance indicators to support management decisions related to virtualized infrastructures and cloud environments
- Service level management for the entire infrastructure – both physical and virtual
- Capacity planning with forecasts based on business units or layers
- Cost reporting per business unit, consumers or layers for accurate performance billing

**Storage Assessment Service**
Improve performance, reduce costs, mitigate risks and profit from new approaches and options: The joint Storage Assessment Service from NetApp and Fujitsu offers you comprehensive expertise for determining your business, storage and infrastructure requirements so that you can make the right improvements. The evaluation of data center environments with regard to organization, technology, capacity and operations can lead to immediate savings. With a thorough analysis and documentation of the efficiency and capacity loads of your existing infrastructure, the IT experts at NetApp and Fujitsu can make specific recommendations showing you how to get the most out of your infrastructure.
Furthermore, in its role as one of the world’s largest and most respected IT service providers, Fujitsu can offer its own products as well as NetApp solutions or even complete infrastructures – all from a single source, anywhere in the world. The portfolio includes everything from the installation of new products to fast and convenient multivendor support for software and hardware. From the very start enterprises benefit from smooth-running IT, and they can reduce the routine workloads of their own IT specialists so that they can concentrate on matters related to core business. Fujitsu also offers various types of operational support for IT systems based on agreed service levels. In terms of availability, you can choose from a number of options with defined reaction and recovery times that match your requirements.

**Integration Services**
Integration services from Fujitsu help customers evaluate various technology strategies that can be applied to their business processes. The service is focused on IT and process consulting, as well as the configuration and integration of new elements in existing infrastructures (e.g., high-end servers, storage solutions, internal and external networks). Offerings such as migration services ensure fast and high-quality project management and execution.

**Migration Services**
Data migration is a sensitive subject that must be addressed in all environments from time to time. Regardless of whether customers want to install new systems or to eliminate capacity or performance bottlenecks: The migration process must be fast and reliable. And that means minimizing risks and downtime. Migration services from NetApp and Fujitsu are based on know-how gained from thousands of successful projects and are backed up by proven methodologies and highly developed migration tools. The joint expertise ensures the high-quality of migration projects, prevents unnecessary downtime, and reduces the workload for the customer’s personnel.

**Maintenance and Support Services**
Customers can dramatically reduce the complexity and cost of service management with SolutionContracts for IT infrastructure solutions from Fujitsu. SolutionContracts are also designed for Fujitsu solutions that are comprised of hardware, software and network products from various vendors. Fujitsu acts as the central contact that handles matters related to all components in the Fujitsu infrastructure solutions and their interoperability. Various service level options are also available to fulfill specific customer requirements.

**Managed Infrastructures**
Thanks to in-depth expertise in managing data center environments, Fujitsu can fully satisfy individual customer business demands. Customers profit from the advantages of standardized services that can be put together from an offering comprised of predefined service modules. You can rely on support from Fujitsu experts when it comes to managing your IT infrastructure, or you can delegate full or partial service management responsibility to Fujitsu. In every case you maintain full control over your infrastructure. At the same time, you benefit from the economies of scale that Fujitsu offers when it comes to improved efficiency of operations and processes.
SAP is the leading business software provider. Solutions from SAP for process management and business analysis are used in enterprises of all sizes and in various industries so that businesses can react to the ever-changing demands of today’s fast-paced world. This is possible with innovative technologies that reduce complexity while improving efficiency in business enterprises. For nearly 40 years SAP and Fujitsu have been working together as strategic partners. An important aspect of this partnership is the Service Oriented Architecture (SOA) concept developed by SAP. All applications from SAP are based on this concept and, when deployed in conjunction with the appropriate IT system, they ensure flexible business processes. Fujitsu launched FlexFrame for SAP as the first complete solution for this concept.

Both partners have also been collaborating on the development of groundbreaking in-memory technology. The ability to analyze huge volumes of data in real time is changing the decision-making process in today’s enterprises, and this technology is a driver of innovation that will impact the development of business IT solutions in the future. As a founding member of the Future SOC Lab at the Hasso Plattner Institute, Fujitsu was involved in the development of in-memory technology for SAP HANA (High-Performance Analytical Appliance) from the start. And shortly after its introduction, the first installation of this innovative SAP database solution with the SAP HANA Appliance from Fujitsu began live operations – the first of its kind worldwide.

The alliance between NetApp and Fujitsu guarantees that SAP customers have quick and reliable access to innovations that will drive their business. The “best-in-class” technologies of both partners are perfectly harmonized and integrated in solutions that deliver more efficiency and flexibility in enterprise environments.
FLExFRAME FOR SAP
Enterprises of every size and in every branch of industry run SAP applications with FlexFrame for SAP because the solution enables them to react optimally to changing requirements in a fast-paced world. For ten years now this IT infrastructure solution has proven its value in hundreds of business enterprises and in every kind of provisioning model: in a company’s own data center, as a managed service, as a hosting service from a service provider and as a cloud service.

FlexFrame for SAP is much more than just a technology – it is a complete solution for optimizing SAP operations and making them viable for the future. The preconfigured and pretested infrastructure solution is designed around a unique, holistic operating concept that makes planning, operation and change management in SAP environments simpler, faster, better and lower in cost. For example, FlexFrame for SAP is ideal for consolidating SAP applications. This, combined with automated administration tasks, makes managing SAP environments much easier. The automatic high availability of SAP and database services improves service quality at the same time. And, since IT resources can be allocated flexibly, requirements can be satisfied very quickly, and SAP services are always provided at performance levels that precisely match the company’s current needs. Advantages like these pay off in terms of lower Total Cost of Ownership (TCO) – depending on the environment, savings of more than 50% are possible.

Based on PRIMERGY industry-standard servers, central NetApp storage and a high-performance network, this IT infrastructure solution offers end-to-end virtualization of servers, storage, the network and application services. The entire solution, from the hardware level to the software level, is consistently managed with one single administration tool. Comprehensive automation of administration and maintenance tasks also increases productivity and the service quality of SAP operations.

EDAG, an engineering partner of the international automobile industry, is an early adopter of the FlexFrame for SAP solution. By virtualizing and automating services and functions, EDAG ensures maximum flexibility in ongoing production as well as the highest data availability.

“FlexFrame is a truly innovative and future-oriented solution which can be administered simply, and which allows us at any time to react quickly to changes in demand.”

Raoul Flügel, team leader for Development & Basis Technology for EDAG Engineering + Design AG
At a glance:
- Standardized management of ERP and HANA infrastructures
- Comprehensive automation of administration and maintenance tasks
- Consistent administration of physical and virtual resources
- Integrated automatic high availability – even for HANA
- Support for every IT provisioning model
- Support for hardware from other vendors (certification program)

Business Warehouse Accelerator Infrastructure

The Business Warehouse Accelerator (BWA) Infrastructure searches huge BW databases with great speed and flexibility. It is a pretested and integrated complete solution that includes a NetApp storage system, and it gives customers the benefits of real-time analysis at the touch of a button – efficiently providing key business information.

FlexFrame Orchestrator

When it comes to new products, faster business processes or better decision-making based on fast real-time analyses, many enterprises want to boost their business with in-memory technology. To do this, however, they need IT infrastructure management that can keep up with the incredible computational speeds of this technology. FlexFrame Orchestrator from Fujitsu is the management platform that delivers ample resources to enterprise applications, including SAP HANA, in a smart, fast and secure manner – in real time, with the precision demanded by enterprise business management.

FlexFrame Orchestrator enables enterprises to implement innovations from SAP much faster, making the operation of their SAP environments simpler, more efficient and less expensive. They can also securely manage the in-memory database, which is a mission-critical factor. In FlexFrame Orchestrator this is accomplished through central and transparent management for the SAP HANA database and for the SAP ERP solution as well. Customer benefits include high operational security for the entire SAP environment, consistently optimized processes and considerable cost savings.
SAP HANA Appliance – the solution for business management in real time

The innovative real-time database platform SAP HANA employs a massive parallel architecture to end bottlenecks that occur when extremely large volumes of data are processed. This technology helps business enterprises to drastically speed up and rationalize analyses, planning and simulation. SAP HANA opens up completely new possibilities for improving processes and business management in real time.

Fujitsu is a SAP HANA partner offering complete service packages as well as a wide range of optimized infrastructure solutions, from affordable entry-level offerings to multi-node environments. Since the Fujitsu Power Appliance for SAP HANA is preinstalled and pretested before delivery, and implemented with proven integration as well, this groundbreaking in-memory technology can be installed within just a few days. Of course, the configurations have been thoroughly tested and are certified by SAP, saving customers’ time. This is also true when the requirements for high availability and reliability are extremely high: The “building block” concept based on PRIMERGY industry-standard servers and central NetApp storage can satisfy such high demands at all times and optimize the SAP HANA infrastructure solution from Fujitsu in terms of high availability, disaster resilience or backup and restore.

The Fujitsu SAP HANA Global Demo Center also provides a professional environment for exploring SAP HANA and discussing specific enterprise application scenarios. The system landscape for SAP HANA applications is supported by a competent team of developers and consultants for solution, database, BI and process matters who are ready to assist our customers.
Information is one of the most important resources for business enterprises. Those who have the right information at the right time will be far ahead of the competition. NetApp and Fujitsu offer solutions that deliver this information fast, despite burgeoning volumes of data. A dynamic shared storage infrastructure that intelligently uses existing capacities, with easy administration and the highest levels of storage efficiency is a key asset.

Take advantage of the expertise and global performance available from NetApp and Fujitsu to get the most out of your data.
“The economy and the adoption of new technologies are making Global System Integrators – such as Fujitsu – increasingly influential in our customers’ sourcing processes. NetApp was always keen on learning more about Fujitsu’s IT vision and strategic requirements, especially in weaving NetApp storage more tightly into Fujitsu’s IT solutions offerings. As a result, the Fujitsu/NetApp Global Alliance delivers next-generation products, services and solutions to help customers maximize their IT infrastructure investments. Our partnership with Fujitsu enables customers to speed up their development cycle, improve performance and maximize their ROI with the most cost-effective end-to-end solutions.”

Hendrik Leitner, Director Fujitsu Global Alliance, NetApp