White paper
FUJITSU Integrated System PRIMEFLEX® – Your Fast Track to Data Center Infrastructures

Building data center infrastructures is increasingly complex, error-prone, time-consuming, risky and expensive. FUJITSU Integrated System PRIMEFLEX reduces complexity and risk, shortens time to value and reduces cost.

Content

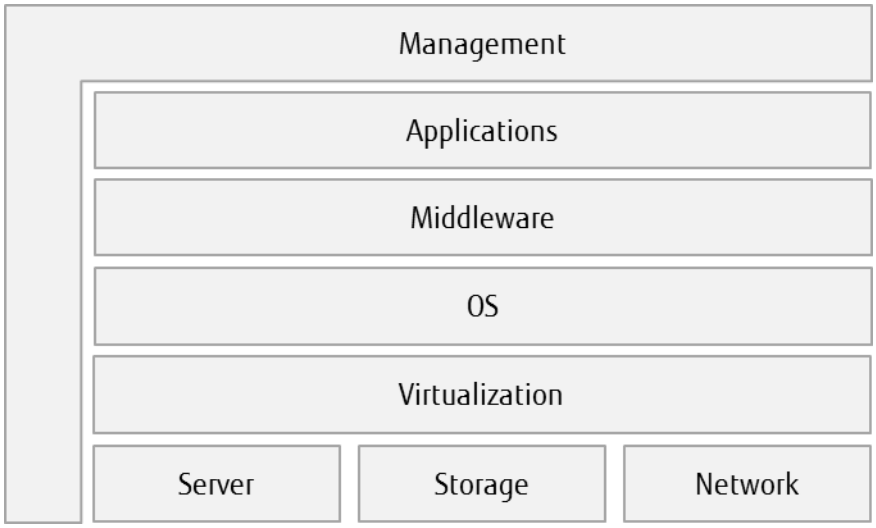
Business requirements facing IT

The job of an IT manager is not easy, because he is always in areas of conflict and pressurized on three sides. Management expects maximum flexibility from corporate IT in order to respond quickly and effectively to ever changing business demands. This requires adjustments to existing IT services and above all fast delivery of new services. At the same time, financial managers are looking for more efficiency. This includes less complexity and lower costs, in addition to more cost transparency and predictability, minimized risks and full compliance with IT directives and legislation. And finally, end users expect highest service levels as a prerequisite for highest levels of productivity and satisfaction.

It is true that the demands for flexibility, efficiency and high service quality can be contradictory, but it's the task of the IT manager to balance them in line with the business.

Building a data center infrastructure is complex

One of the tasks IT managers are faced with again and again is building IT infrastructures for their data center, which often proves to be extremely complex. The main reason for this is the complexity of the infrastructure itself, which is composed of diverse components, such as servers, storage, networks, virtualization layers for all these components, databases and other middleware, as well as applications. In addition, a management layer is needed to keep these components under control.



When building the infrastructure in a DIY (Do-It-Yourself) approach, you first of all need to select the right components from a myriad of options, procure and configure them, before you integrate the individual components onsite. As the compatibility of the components is not guaranteed at all, extensive testing is a must. The fact that these components may originate from multiple vendors does not make things easier. All these activities are time-consuming and expensive, while presenting businesses with multiple risks.

A deep knowledge of all components involved is required, and an understanding of their various interdependencies on each other. Often the coordination among the various administrators who are in charge of the individual components seems to be endless. And because every installation is different, maintenance will be complex, too.

In other words, a DIY approach can cause serious headaches, which in turn is certainly in conflict with the business requirements previously discussed.

These considerations raise the question of whether building data center infrastructures on your own and re-inventing the wheel for every project is really the best way to go. Nowadays, nobody would come up with the idea of building a PC himself. Manufacturers have demonstrated that they can build them better, faster, more reliably and at less cost. The same is true for servers. Therefore, questions such as "why stop with servers" and "why not move up to complete infrastructures" are justified.

Integrated Systems

This is exactly what an Integrated System is about. An Integrated System is a pre-defined, pre-integrated and pre-tested combination of data center components, such as servers, storage, network connectivity and software. While management software is mandatory, depending on the use case, software for virtualization, automation and orchestration, as well as databases and applications may be optionally included.

Based on real-life project experience, an Integrated System is designed in a way that its components will work optimally together.

Depending on which components are included in an Integrated System, we distinguish between systems built for general purposes and purpose-built systems. General purpose systems are applicable for various usage scenarios, while purpose-built systems are optimized for a specific use case.

It is worth mentioning that terminology, definitions and segmentation of Integrated Systems vary among analysts, among vendors, and in the market in general. And what is more, they even change once in a while. With regard to terminology, there are a lot of synonyms used in the market. Examples include converged systems, fabric-based systems, unified infrastructures, engineered systems, and various others.

Numerous benefits

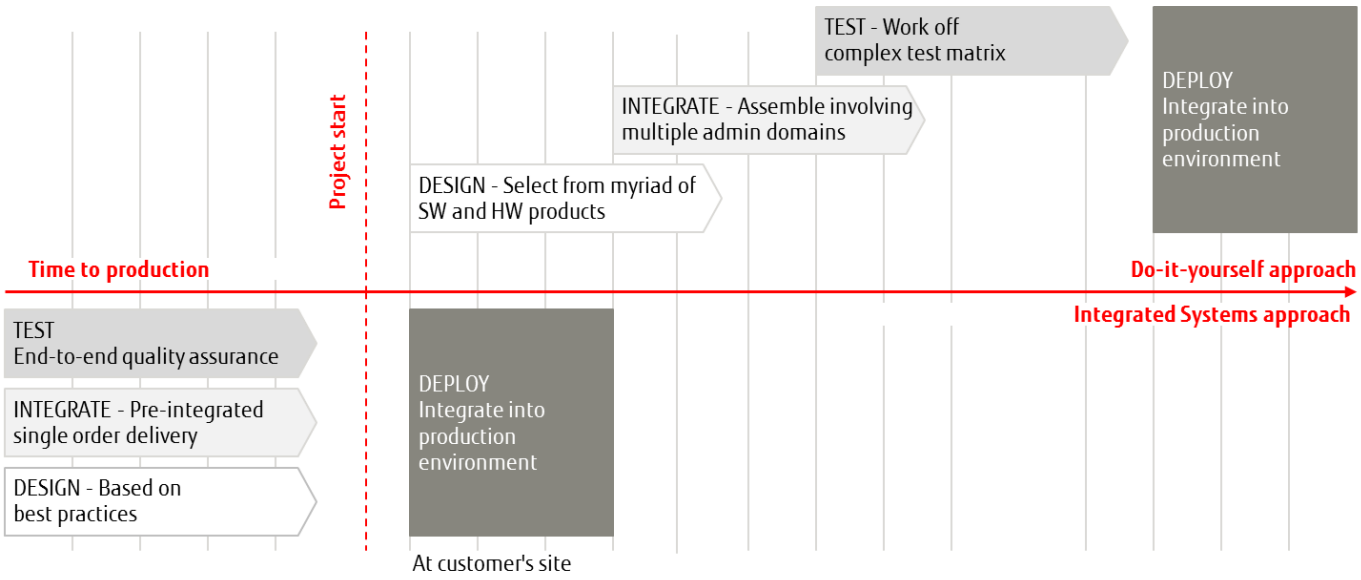
The benefits resulting from Integrated Systems are manifold. All of a sudden, complexity is reduced. Introducing a new infrastructure in your data center becomes much simpler. You will experience less trouble through trial-and-error testing, because the compatibility of all components is absolutely guaranteed. At the same time, risk is minimized and the skill sets required in your IT department will be less demanding.

Apart from this, you need less time for planning, and deployment is tremendously accelerated which shortens time to production and time to value.

Due to the optimized design of Integrated Systems, resource utilization is optimized, too. This can have a positive impact on data center space, cabling, energy consumption and cooling efforts. Moreover, an Integrated System represents a perfect foundation for efficient operations and reduced maintenance efforts. All these aspects help reduce cost, both CAPEX and OPEX.

Finally, we should not ignore the fact that all these benefits enable IT organizations to focus on the really important aspects of the business. Moving away from a build and maintain focus means improved responsiveness to new business requirements, or even driving business to a new level.

The subsequent figure demonstrates quite impressively the enormous savings in time that can be achieved by choosing the Integrated Systems approach instead of the DIY approach.



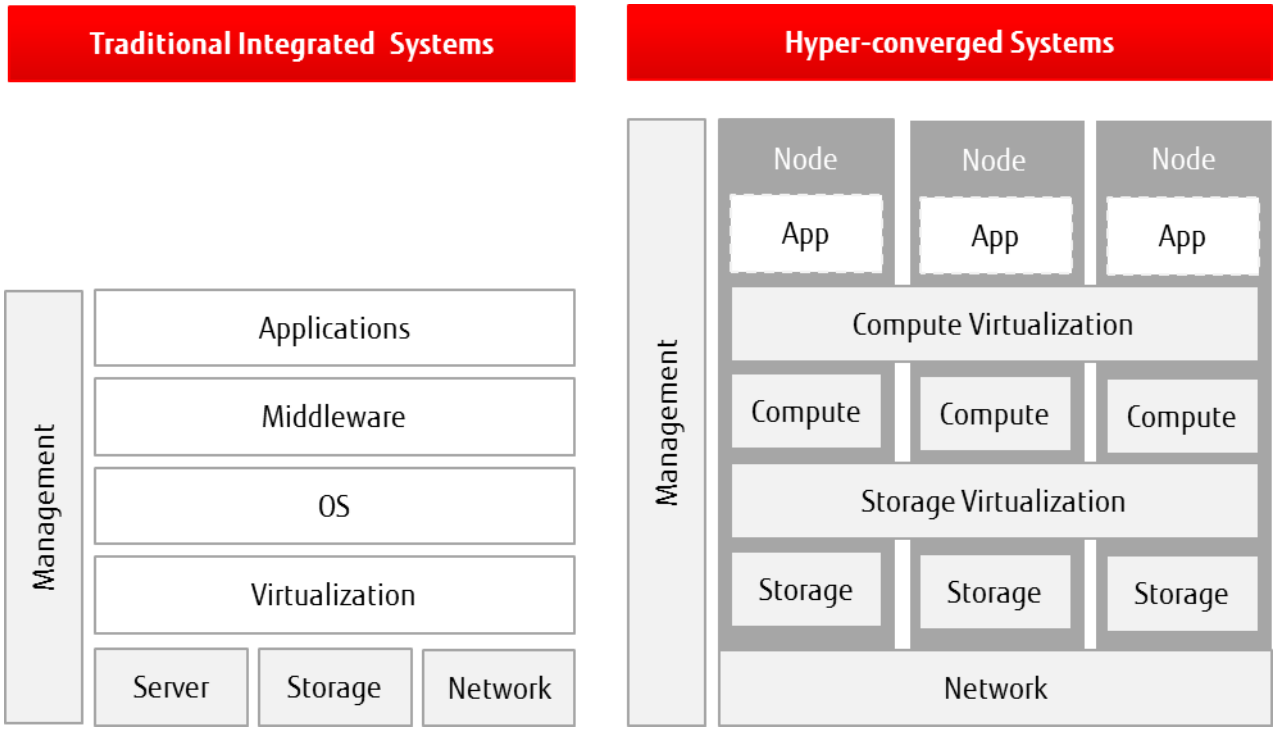
With a DIY approach, all typical activities have to be done after the project has started. You have to design the infrastructure, integrate the individual components and test the integrated combination of selected components before the actual onsite deployment and integration into the production environment.

With an Integrated System, necessary things, such as infrastructure design, integration of components and testing, have been done before project start. The required activities after project start are confined to the deployment onsite and the integration into the production environment.

Due to all the advantages mentioned, organizations today are adopting Integrated Systems faster than just individual infrastructure building blocks. And this trend will be ever increasing in the future.

Hyper-converged systems

The era of integrated systems started with the classical converged systems approach, with servers, storage, network connectivity and software being pre-integrated to accelerate deployment, minimize compatibility issues and simplify management. Hyper-converged systems go a step further, as they tightly integrate all resources in a commodity server node, making a dedicated physical Storage Area Network (SAN) with its management superfluous. Instead, data storage spreads across the local disks of the server nodes. The built-in data services, such as data replication, snapshots, deduplication and tiering turn hyper-converged systems into a software-defined storage platform. The unified management for both compute and storage resources brings simplification to a new level. While classical converged systems scale on a component level, hyper-converged systems enable scalability on a system level. Compute performance and storage capacity can be scaled by just adding or removing servers.



Hyper-converged systems provide diverse benefits in addition to those resulting from Integrated Systems in general. Having compute and storage resources integrated in a single box makes deployment even easier and faster. The single pane of glass management for both, compute and storage resources, reduces administration efforts and skills demands. As there is no external storage included, data center footprint will often be reduced just as energy consumption and cooling requirements. Due to their high scalability, most hyper-converged systems can be easily aligned to growing business demands, while business continuity is always ensured. Finally, all benefits aforementioned have often a positive impact on capital and operational expenditure.

Classical converged or hyper-converged – The use case matters

If your workloads scale horizontally, hyper-converged will be a perfect fit, especially if compute and storage resources need to scale in tandem. This applies to workloads which require a fixed amount of CPU performance, main memory, disk space and IOPS. Typical examples are Hosted Virtual Desktops and Hosted Shared Desktops. If your workloads scale vertically, or they require a granular expansion on the component level, hyper-converged might be less appropriate. An example is monolithic applications, which cope with increasing data volumes using a scale-up approach.

For hyper-converged infrastructures, virtualization is a prerequisite. Therefore they cannot be used for workloads which run on bare-metal only, maybe because a virtual environment would be ineffective and slow them down. And as most implementations of hyper-converged are based on a single hypervisor, they won't fit if a mixed operation of multiple hypervisors is needed to run different workloads.

Hyper-converged has become an attractive option for remote offices and branch offices. As no external storage infrastructure needs to be maintained, frequent costly onsite visits can be avoided. There are customer cases where travel time could be reduced by 99%, just by replacing a physical SAN by a hyper-converged infrastructure.

If your workloads benefit from the data services coming with hyper-converged, you may use these services without any additional investment. If you don't need them, you will pay indirectly for things you don't use. Another aspect worth considering is the expected growth. The more frequently you have to expand your infrastructure, the more you will benefit from the ease of scalability that features hyper-converged.

The unified management of compute and storage resources reduces operational complexity, administration efforts and cost. But bear in mind that going this new way will change existing staff roles and require other organizational changes. You may expect resistance from your IT staff, especially in the storage area. Will you counter this resistance? This aspect is also closely related to your storage strategy. If you intend to utilize existing storage, hyper-converged will hardly fit to your strategy. If in contrast you intend to replace your existing storage sooner or later, going for hyper-converged may be a good start.

The storage capacity of a hyper-converged infrastructure is limited by the number of server nodes. If you have to cope with amounts of data which are larger than the maximum storage capacity of your server cluster, hyper-converged will be no option. Though hyper-converged promises linear scalability, predictable network performance with larger deployments is sometime questioned, mainly caused by a lack of experience.

Beside the technical appropriateness of workloads, it is also software licensing aspects which should be taken into account. For instance, a database application may be a perfect fit for hyper-converged, but if you have to pay license fees per CPU socket or even per CPU core, hyper-converged will quite likely be a no-go for commercial reasons.

At the end, it will be all about cost. As mentioned before, operational expenditure always tends to be much lower with hyper-converged infrastructures compared to classical converged ones. But when it comes to capital expenditure, it is hard to make a general statement. Typically, from a hardware cost perspective, hyper-converged is certainly more attractive than classic, from a software cost perspective it is just vice versa. But hyper-converged requires a minimum number of server nodes; it requires special, certified hardware components, and license fees need to be paid for the virtualization software either. You will find lots of examples with cost advantages on either side. Make a simple cost comparison for your concrete project and you will find out which is the more cost-effective option for you.

All told: When it comes to the question "classical converged or hyper-converged", the use case matters. There are good reasons to look at both architectural approaches. It is recommendable to take the decision specifically per each use case, and go for hyper-converged systems, if their benefits outweigh the drawbacks.

Delivery options

There are two delivery options: Ready-to-run systems and reference architectures.

Ready-to-run systems, also known as turnkey systems, are built and tested in exactly the same manner as traditional infrastructure products, thus achieving the same quality level you expect from a product. Ready-to-run systems are not just pre-designed, pre-integrated and pre-tested; they are also pre-installed before being shipped to the customer. Therefore, the onsite activity is, as mentioned earlier, confined to the deployment and integration into the existing environment. Procurement is very easy; often there is a single order code for the entire Integrated System. In other cases, the configuration of existing alternatives is at least greatly simplified.

With ready-to-run systems, there is no design effort at all, you are freed from any potential risk, and have chosen the fastest way to operation.

Reference architectures are pre-tested, validated design blueprints based on a proof-of-concept. Customers and partners get the flexibility and choice to easily adapt and custom-tailor the validated configuration to their specific requirements. Nevertheless, compared to a DIY approach, the infrastructure design is easy and fast, because most of the work has been done by the vendor upfront. This minimizes risk and shortens project time. With reference architectures, component integration and installation happen typically onsite, but should be supported by detailed descriptions created by the Integrated Systems vendor.

Concerns about vendor lock-in

Organizations are increasingly discussing the question as to whether Integrated Systems represent a vendor lock-in, because they have no choice when it comes to selecting infrastructure components, and are afraid of ending up in a proprietary solution stack.

However, with a DIY approach you select all the components yourself, which in comparison is a lock-in as regards to components. Basically in this case, you choose your own lock-in, but have full responsibility for the entire infrastructure, while - with an Integrated System - full responsibility is with the vendor. So, actually with an Integrated System, IT managers should have fewer worries.

FUJITSU Integrated System PRIMEFLEX

What is Fujitsu's role in the area of Integrated Systems? Under the PRIMEFLEX brand, Fujitsu offers Integrated Systems built for general purpose and purpose-built systems. In addition to the classical converged systems, the PRIMEFLEX line-up includes hyper-converged systems, enabling customers an easy path to a software-defined data center. Fujitsu supports both delivery options: ready-to-run systems and reference architectures. Fujitsu's Integrated Systems are built from best-in-class components, either own technologies, as for instance our FUJITSU Server PRIMERGY or FUJITSU Storage ETERNUS, or 3rd party technologies from leading technology partners who are recognized as leaders in the market.

Fujitsu's Integrated Systems are unsurpassed when it comes to best practices and extensive project experience, and have proved themselves in Fujitsu's cloud operation. Attractive supplements and flexible service options, fulfilled by Fujitsu or its local partners, make Integrated Systems from Fujitsu even more appealing.

How PRIMEFLEX reference architectures excel

From Fujitsu's perspective, it is an absolute must for reference architectures to be supported by detailed installation and configuration descriptions. For this reason, Fujitsu provides comprehensive guidelines as a standard.

On demand, Fujitsu supports its customers and partners in custom-tailoring PRIMEFLEX reference architectures according to specific demands in order to let them fully exploit the potential possibilities. As an option, reference architectures or adjusted reference architectures can even be pre-installed in one of Fujitsu's staging centers, thus making the reference architecture even ready-to-run, and accelerating time to production even more. For these reasons, PRIMEFLEX reference architectures are certainly more than just the norm.

Professional Services for PRIMEFLEX

Although most of the typical activities have been done by Fujitsu before project start, some activities still need to be done onsite. But even with these remaining activities, Fujitsu does not leave you out in the rain. Fujitsu provides deployment services for its Integrated Systems, either on demand or as an integral part of the PRIMEFLEX offering.

The often more challenging task is the integration into the existing production environment, which is covered by Fujitsu's Integration Services that customers may order optionally. Even if additional services are needed, for instance database migration or anything else, it makes sense to have a word with Fujitsu.

By the way, we should not ignore Fujitsu's Consulting Services, which often represent a groundbreaking element for organizations at the beginning of any IT journey. Examples include assessments, customer briefings, IT investment decision support, configuration and sizing support, and many others.

Depending on the region and the respective local capabilities, services are either delivered by local consultants from Fujitsu or its partners, or by Fujitsu's international delivery team.

What will happen after deployment?

For sure, fast deployment and short time to production are obvious advantages of Integrated Systems. However, we should not ignore the fact that Integrated Systems can still cause substantial effort during operation. Again and again, updates will be necessary for individual components, be it patches, security fixes, or component replacements. As the compatibility of all components is not always ensured, high integration and testing efforts have to be taken into account, the frequency of which can prove to be painful due to the different release cycles of the components. The consequence: A lot needs to be done repeatedly by you. And basically you will be faced with the same challenges you have to suffer from when building data center infrastructures on your own.

Apart from component updates, maintenance and operation in general might not always be pleasant for everybody. So, we will address the question of how to avoid headaches during the operational phase.

Attractive add-ons for operation and maintenance

There is first of all **Fujitsu Lifecycle Management**, known as the tablet for headaches caused by updates. All relevant updates, patches, security fixes and component replacements are delivered as pre-tested and quality-assured update packages to the customer. Fujitsu Lifecycle Management ensures consistency of all components across the entire lifecycle of the Integrated System, which in turn helps reduce maintenance efforts and minimize downtime.

Fujitsu Solution Support relieves you from headaches caused by unpredicted problems during operation. As the name implies, Fujitsu provides support for the entire Integrated System with aligned service levels for all its components, be it hardware or software, be it from Fujitsu or its technology partners. This even applies to reference architectures which have been adapted to customer-specific requirements. It goes without saying that there is a single point of contact for all support matters related to your Integrated System.

For ready-to-run systems and reference architectures with certain adjustment restrictions documented in a pre-defined support matrix, there are even more options to accelerate the support process with the objective of reducing complexity, resolving problems faster, minimizing downtime and increasing business availability.

Beside reactive services based on optimized processes, optional proactive services are offered, comprising a regular system health check. Thus, critical system conditions can be detected early and preventive maintenance measures initiated.

There are various service level options for reactive and proactive services, which differ in service scope, response time and recovery time. Likewise the frequency of proactive services can be defined by the customer.

If you want to go a step further and disburden your administrators from standard operational tasks and problems that could occur during operations, **Fujitsu Data Center Services** will be the best choice. Fujitsu takes over the operation of your data center infrastructure on your premises (Managed Data Center), or in any of its own data centers (Managed Hosting). Managed hosting additionally counteracts a lack of data center space and all related issues such as heating and air conditioning. Both options represent all-round care-free packages providing peace of mind for IT managers, as well as cost transparency and the opportunity to focus on your core business.

Many years of experience

Beside all the attractive supplements to Integrated Systems, experience is one of the strongest arguments in favor of Fujitsu. Integrated Systems is nothing new for Fujitsu, quite the contrary: Fujitsu has a long track record. The first Integrated System was shipped back in 2002, long before the term of Integrated System or any of the synonyms mentioned before was used in the market.

Since then, the processes for end-to-end solutions have been continuously optimized. This is underpinned by a dedicated product management for each Integrated System. In addition to the quality assurance (QA) for the individual hardware and software components, quality assurance also happens on the Integrated System level, which is a guarantor for the benefits you receive. The same applies to the manufacturing processes of the ready-to-run solutions. And finally, let's not forget the established support processes on the Integrated System level, which enable hassle-free operation. Due to Fujitsu's global capabilities, support services can even be delivered consistently across geographic borders and globally.

Integration of new solutions into existing data center environments has been one of Fujitsu's core activities over decades. And the fact that Fujitsu operates more than 150 data centers in over 20 countries across the globe might be sufficient proof of its data center service capabilities.

These might all be good reasons why many customer organizations use Integrated Systems from Fujitsu for various usage scenarios.

Financial Services

One question remains: What if your wallet is not jam-packed? In this case you are all of a sudden faced with new challenges. In order to be flexible and competitive, you will have to use your limited resources intelligently and focus your expenditures on your core business. You might want to avoid costs due to technical obsolescence, protect existing credit lines, or protect CAPEX and minimize OPEX, just to mention a few of the challenges.

But there is no reason to despair, because attractive financing options from Fujitsu can help you meet the challenges.

PRIMEFLEX for many important use cases

After having discussed Integrated Systems in general, Fujitsu's view on Integrated Systems and all the attractive supplements offered by Fujitsu, let us now have a closer look at Fujitsu's Integrated Systems portfolio. In all its Integrated Systems activities Fujitsu focuses on what its customers demand. In doing so, various topic areas are addressed correspondingly.

These areas of high relevance for our customers are e.g. server and desktop virtualization, Private Cloud Infrastructures, Big Data and Analytics, HPC (High Performance Computing), as well as SAP and Oracle environments. There are an impressing number of portfolio elements with various configurations in place; the portfolio will certainly be adapted to customer demands in the future.

The subsequent figure shows the PRIMEFLEX line-up of systems and their mapping to the topic areas mentioned above. Some portfolio elements for general purpose can even be assigned to multiple topic areas.

Virtualization	Big Data and Analytics	SAP
PRIMEFLEX vShape PRIMEFLEX for VMware vSAN PRIMEFLEX for VMware Cloud Foundation PRIMEFLEX for Storage Spaces Direct PRIMEFLEX Cluster-in-a-box	PRIMEFLEX for Hadoop PRIMEFLEX for SAP HANA® PRIMEFLEX for Oracle Database	PRIMEFLEX for SAP Landscapes PRIMEFLEX for SAP HANA®
Private Cloud	**HPC**	**Oracle**
PRIMEFLEX for OpenStack PRIMEFLEX for VMware Cloud Foundation	PRIMEFLEX for HPC	PRIMEFLEX for Oracle Database

The availability of the individual offerings may differ by region.

Customer examples

PRIMEFLEX Cluster-in-a-box

barrie

Established in 1903 and located in Hawick (UK), Barrie Knitwear produces and sells luxury clothing and employs approximately 190 people.

Over the years, Barrie Knitwear had built up a diverse collection of six stand-alone physical servers, each supporting a variety of operational areas, including HR, finance and office tools. However, if one server went down, this had a significant impact on the business. Therefore, the company wanted to move to a highly available IT environment, possibly virtualized. At the same time the new solution should also be simple to install and to manage.

Following the recommendation of Fujitsu's Channel Partner JayByJay, Barrie looked at Fujitsu Integrated System PRIMEFLEX Cluster-in-a-box, an all-in-one high availability appliance which is available as a virtualized solution, too. It includes servers, storage, Windows Server 2012 and Microsoft Hyper-V that addressed Barrie Knitwear's requirements exactly.

"We could simply plug and play. It took us maybe thirty minutes to get it up and running because all we needed to do was screw it into the rack, plug it in and switch it on."
"I like to keep things simple and PRIMEFLEX Cluster-in-a-box enables me to do that."
"I've been so impressed with the elegance and effectiveness of this solution that I'll certainly bear Fujitsu in mind for future projects and further expansion."
"It is a resilient, reliable and flexible platform that will support our business and growth. It will actually cut operational costs in the long run.
Mark Kirkwood, IT Manager, Barrie Knitwear

PRIMEFLEX for HPC

BLOCK

BLOCK Transformatoren-Elektronik GmbH is a leading manufacturer of transformers, power supplies and electrical filters with production sites in Northern Germany and subsidiaries in Belgium, Denmark, Great Britain and the US.

The mechanical engineering company was looking for an easy to install high performance computing solution to enable detailed simulations in-house which had been outsourced before. This was essential for bringing more innovative standard products as well as tailored solutions to the market and ensuring a reliable supply.

The company selected PRIMEFLEX for HPC from Fujitsu, a pre-configured and ready-to-run cluster of Fujitsu x86 servers, fully pre-installed including the Fujitsu Software HPC Cluster Suite (HCS), the HPC Gateway as well as the COMSOL Multiphysics® software. This full pre-installation including HPC application software is also known as Ready-to-Go-Plus (RTG+). The Integrated Systems approach was particularly suitable as the company wanted to create a simulation department from the ground up. The three-person team required both simulation software that could process the complex tasks as well as a reliable HPC solution that was tailored for the software and ready to run immediately.

"For us, PRIMEFLEX for HPC from Fujitsu with Ready-to-Go-Plus implementation is the easiest possible way to enter the high performance computing world and explore the simulation opportunities associated with it. Our expenditure for the installation was practically zero and the performance is fantastic."
Dr. Dennis Kampen, Area Manager, Development Fundamentals, BLOCK Transformatoren-Elektronik GmbH

PRIMEFLEX for SAP HANA

Dubai's Modern Bakery is one of the most innovative bakeries in the Middle East, with Ultra-modern fully automatic and semi-automatic production lines. It produces huge varieties of products, serving thousands of stores across the Middle East.

Modern General Trading (MGT) is a division of Modern Bakery, which distributes fast moving consumer goods across the UAE and represents various brands from across the globe.

With the immense growth of the business activities a need for data governance strategy became essential.

Modern Bakery and MGT decided for SAP Business Suite powered by SAP HANA implemented on a FUJITSU Integrated System PRIMEFLEX for SAP HANA. At the push of a button the management can have real-time insight into sales, financial and other business processes. This will help optimize the cash flow, check inventory and outstanding invoices in the real-time in order to take the correct action. One system is used for development and quality assurance, and one is used for the productive SAP HANA in-memory database. The integrated systems approach enables fast deployment without typical burdens caused by integration and testing as known from previous infrastructure.

Modern Bakery's decision proves that PRIMEFLEX for SAP HANA is not only an attractive option for large enterprises, but also for mid-market enterprises which are ambitiously driving business innovation and growth.

"We picked Fujitsu based on its comprehensive portfolio of infrastructure solutions and long experience working with SAP solutions. Fujitsu PRIMEFLEX for SAP HANA helped us to go live much faster than we thought. We appreciate the simplified start of operations and feel we have all the support we need to focus on our business rather than on the integration work."
Dr. Fawaz Al Bahri, CEO & Managing Partner, Modern Bakery

PRIMEFLEX for SAP Landscapes

Al-Sayer Holding is one of the major trading companies in Kuwait. They are known for delivering superior high-quality customer services, specifically for automotive and commercial vehicles, and the sale of spare parts. In addition to general trading and car imports, they engage in car rental, engineering, insurance brokerage and trading, and they own factories for soft drinks and animal feed.

In order to consolidate their business applications landscape, Al Sayer Holding decided on a radical change: – the introduction of SAP software from end to end, including the SAP HANA database. To fully exploit the vast capabilities of the new software, Al-Sayer Holding also required a powerful infrastructure and a smart operations concept, which allows a simplified and flexible management of the entire SAP software landscape.

Fujitsu's Integrated System PRIMEFLEX approach finally convinced Al-Sayer. They chose PRIMEFLEX for SAP HANA to ensure a powerful and reliable platform for the SAP HANA database. Furthermore Fujitsu's FlexFrame Orchestrator software was selected, because it provides the greatest flexibility in managing SAP applications and SAP HANA in a uniform manner and thus allows the IT department to quickly respond to changing business needs.

The FlexFrame Orchestrator software and all required infrastructure components were delivered as a Fujitsu Integrated System PRIMEFLEX for SAP Landscapes. This optimized and ready-to-run approach significantly reduces the time for deployment and thus ensures a fast track to business value. Built-in disaster recovery mechanisms and a support contract covering the entire infrastructure solution ensure business continuity, which is a major prerequisite for further business growth.

"With FUJITSU Integrated System PRIMEFLEX for SAP HANA and PRIMEFLEX for SAP Landscapes, we experienced simplified and accelerated deployment and operations. This also laid the foundation for a quick path to productive use of the new SAP applications and the SAP HANA database. As constant availability is critical for running and growing our business, we highly appreciate the support contract which not only ensures the recovery of individual components, but of the entire infrastructure solution according to the required service levels. We are thus confident that we can provide business users with an agile and highly reliable platform."
Mr. Sayer Al-Sayer, Al-Sayer Holding, Board Member

What makes PRIMEFLEX different?

Although most has been said, let us recapitulate what makes PRIMEFLEX different.

PRIMEFLEX covers all business-critical areas that are relevant for our customers.

The PRIMEFLEX line-up comprises general purpose and purpose built systems, as well as converged and hyper-converged systems.

PRIMEFLEX includes both delivery options, ready-to-run systems for highest speed and reference architecture for high flexibility, and even a combination of both, due to our staging center capabilities. For reference architectures, installation and configuration guidelines are available as a standard.

Fujitsu Integrated Systems PRIMEFLEX are built from best-in-class components, either from Fujitsu or leading technology partners, and they are based on best practices and extensive project experience. What is more, they are proven in Fujitsu's own cloud operation.

There are flexible service options in place throughout all lifecycle phases, such as consulting, deployment, integration into the production environment, lifecycle management and solution support, as well as Data Center Services and Financial Services.

And let's not forget Fujitsu's experience in Integrated Systems in general, which is underpinned by our long track record, proven and continuously optimized processes, and a lot of references.

Summary

Integrated Systems relieve you from the pain caused by building data center infrastructures on your own, because they help reduce complexity, time and risk, while increasing operational efficiency. FUJITSU Integrated System PRIMEFLEX is focused on what customers require. Together with its add-ons, you get all you need for fast time to value, and more. So, if you are tired of the DIY model and want to choose the simple fast track to your data center infrastructure, then choose PRIMEFLEX from Fujitsu.

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