INTRODUCTION
Fujitsu offers SAP HANA on PRIMEFLEX for VMware vSAN based on the SAP HANA hyper-converged-infrastructure [HCI] certification. PRIMEFLEX for VMware vSAN simplifies the deployment of a VMware based HCI to run SAP landscapes of any kind including SAP HANA® databases virtualized in one common platform. The ImplementationPack delivers a best practice hyper-converged-infrastructure that is fully pre-tested and pre-configured to support 1 to 4 SAP HANA instances per vSAN node from 3 up to 64 vSAN nodes in one cluster. An additional Cluster Extension Pack can be purchased to extend an already installed cluster with further nodes. It can be extended in steps of one or more nodes up to the maximum total of 64 nodes.

BENEFITS
SAP HANA on PRIMEFLEX for VMware vSAN architecture allows you to start small and then grow the physical environment to meet your actual needs. Simplified daily operation of SAP landscapes including SAP HANA and flexibility to be adapted for future demands.

SAP HANA ON PRIMEFLEX FOR VMWARE VSAN – IMPLEMENTATIONPACK

- The ImplementationPack Base 3 Nodes enables the operation of SAP HANA on PRIMEFLEX for VMware vSAN with 3 Nodes installed into your infrastructure ready to use SAP-HANA Database
- Additional 1 Node ImplementationPack that can be used to extend a Basic Pack up to the number of nodes you wish to deploy at initial purchase time
- Cluster Extension 1 Node Implementation Pack provides the services required to extend an already running installation at dates in the future when you seek to expand with one more node in compute and storage capability
Service in detail

HARDWARE INSTALLATION (Local)
- Installation of the Certified components into the customer’s Data Center.
  - RIMERGY compute nodes
  - Approved Network switches
  - ETERNUS storage subsystem
- All in-rack power and network cabling.
- Setup of remote access for remote deployment and ongoing support.

SOFTWARE IMPLEMENTATION (Remote or Local)
- Production of a Low Level Design that satisfies the Customer's existing network design.
  - Including reserved parameters ready for future node expansion.
- Configuration of all devices against the Low Level Design.
- Installation of Host ESXi software.
- Installation of all solution appliances, vCenter, ISM, AIS etc.
- Joining of the guest to an existing active directory domain.
- Product acceptance testing.
  - Acceptance testing
  - Resiliency testing
- Formal Handover documentation with all relevant SW version details and settings along with default passwords employed.
- Completion of Ready-4-Service Documentation
- Online activation of Fujitsu SolutionPacks

PRE-REQUISITES
- The required infrastructure (connections for the power supply, LAN, Fibre Channel, SCSI, etc.) including the necessary building cabling, are to be provided by the customer in such a way that they can be connected to the system
- Basic configuration parameters, such as IP addresses and host names, are known. The customer provides the standard operating system to be installed and if necessary the connecting and operating software on a suitable medium with the appropriate license keys
- The ImplementationPack must be purchased either with the PRIMEFLEX for VMware vSAN – Extension for SAP HANA, or 90 days thereafter.
- The Ready-4-Service (R4S) workflow and related documentation ensure smooth hand over from the deployment to operation and in addition configuration changes and updates during the service period. When the contract starts, service readiness of the Fujitsu Integrated System is verified by Fujitsu. Therefore, the customer is required to support Fujitsu as necessary, in particular in recording required system configuration and third party contract data at initial implementation.
- The Fujitsu Infrastructure Support assumes that there is the possibility of immediate remote access is available for Fujitsu. If the customer rejects setting up remote access or it cannot be configured for other reasons, the services described can only be provided in a restricted manner and the contractual service levels cannot always be met.

SERVICE DELIVERY
The standard service delivery time is (9x5, local business hours). Services are designed to be performed as remote service, except the needed on-site hands-on tasks. The service can be delivered outside of these times or on-site but will be subject to additional charges that can be quoted on request.

PRIMEFLEX provides both installation and implementation services in one package. Completion of on site installation tasks includes confirmation of remote access to enable implementation activities to be completed by central consultants.

TRAVEL EXPENSES
Travel cost for hardware installation is included as standard. Implementation is assumed to be delivered remotely and, therefore, no travel costs are included in Implementation Pack pricing outside of DE, AT and CH. If a requirement dictates that implementation activities must be delivered on site then the associated costs will be charged additionally.

OUT OF SCOPE
Check of prerequisites services, SAP-Application Installation services, System/Application Backup services, Management Services, Integration services, Data migration services, SAP-HANA migration services, System Health Check or building of any SAP-HANA High Availability and Desaster&Recovery services (excluding any SAP-HANA Databases that is part of the standard delivery in the basic service).

SERVICE APPLICABILITY
The "ImplementationPack Base 3 Nodes" is only applicable to a new SAP HANA on PRIMEFLEX for VMware vSAN cluster with 3 Nodes. It cannot be applied to grow an existing SAP HANA on PRIMEFLEX for VMware vSAN cluster.

Whenever a customer chooses more than 3 nodes, per each additional Node an "Additional Node ImplementationPack" covers the Implementation of it.

Whenever a customer orders additional nodes for a running installation, per each additional Node an "Cluster Extension 1 Node ImplementationPack" covers the Implementation of it.

EXAMPLE SCENARIOS
A customer purchasing a 6 node cluster as an initial starting SAP HANA on PRIMEFLEX for VMware vSAN requires:
- 1 x ImplementationPack Base 3 Nodes
- 3 x Additional 1 Node ImplementationPacks
A customer purchasing 2 nodes enlargement for existing SAP HANA on PRIMEFLEX for VMware vSAN requires:
- 2 x Cluster Extension 1 Node ImplementationPacks
NB: There is a maximum node count of 64 vSAN nodes per cluster in this service
Ordering Implementation Pack
SAP HANA on PRIMEFLEX for VMware vSAN

<table>
<thead>
<tr>
<th>Implementation Pack Base 3 Nodes</th>
<th>FSP:G-IM12900PRSER</th>
<th>SP SOL Imp PF VSAN HANA Basic</th>
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</thead>
<tbody>
<tr>
<td>Additional 1 Node Implementation</td>
<td>FSP:G-IM13000PRSER</td>
<td>SP SOL Imp PF VSAN HANA AddNode</td>
</tr>
<tr>
<td>Cluster Extension 1 Node Implementation</td>
<td>FSP:G-IM19400PRSER</td>
<td>SP SOL Ext PF VSAN HANA AddNode</td>
</tr>
</tbody>
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Legal information / General terms and conditions
In addition to this data sheet, which includes a final list of the features of the services, the general business terms and conditions of the respective local Fujitsu entity for the performance of the services in its respective local version shall apply. Please refer to: Terms and Conditions
## Fujitsu products, solutions & services

### Products

In addition to the Fujitsu Support services, Fujitsu offers a full portfolio of other computing products.

### Computing products
- Storage systems: ETERNUS®
- Server: PRIMERGY®, PRIMEQUEST®, Fujitsu SPARC® M10, BS2000®/OSD Mainframe
- Client Computing Devices: LIFEBOOK®, STYLISTIC®, ESPRIMO®, FUTRO®, CELSIUS®, PRIMEQUEST®
- Peripherals: Fujitsu Displays, Accessories
- Software
- Network

Product Support Services with different service levels agreements are recommended to safeguard each product and ensure smooth IT operation.

### Solutions

The Fujitsu solutions combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships. Fujitsu's Solutions include parts of one or more activity groups (e.g., planning, implementation, support, management, and training services) and are designed to solve a specific business need.

**Infrastructure Solutions** are customer offerings created by bringing Fujitsu’s best products, services and technologies together with those from partners to deliver benefit to our customers’ businesses.

**Industry Solutions** are tailored to meet the needs of specific verticals.

**Business and Technology Solutions** provide a variety of technologies developed to tackle specific business issues such as security and sustainability, across many verticals.

### Services

Several customizable Fujitsu Service offerings ensure that IT makes a real difference and delivers true business value. We do this by leveraging our extensive experience in managing large, complex, transformational IT programs to help clients in planning, delivering and operating IT services in a challenging and changing business environment.

**Application Services** support the development, integration, testing, deployment and on-going management of both custom developed and packaged applications. The services focus on delivering business and productivity improvements for organizations.

**Business Services** respond to the challenge of planning, delivering and operating IT in a complex and changing IT environment.

**Managed Infrastructure Services** enable customers to deliver the optimal IT environment to meet their needs; achieving high levels of IT service quality and performance for data centre and end user environments.

### Fujitsu green policy innovation

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment. Using our global knowhow, we aim to resolve issues of environmental energy efficiency through IT.