

Datasheet

FUJITSU Integrated System PRIMEFLEX® for Hadoop

FUJITSU Integrated System PRIMEFLEX® for Hadoop is a powerful and scalable platform analyzing big data volumes at high velocity

FUJITSU Integrated System PRIMEFLEX

Your fast track to datacenter infrastructures Building datacenter infrastructures for a certain use case can be complex, error-prone and time-consuming. Moreover it requires a deep knowledge of all components involved and their dependencies to each other. Therefore, a do-it-yourself approach entails many risks for businesses. These risks can be avoided by using integrated systems. FUJITSU Integrated System PRIMEFLEX is a pre-configured and pre-tested combination of servers, storage, network connectivity and software. Depending on the use case, software for virtualization, automation and orchestration, as well as databases and applications may be included.

PRIMEFLEX encompasses factory-installed solutions which are ready-to-run and reference architectures which can be easily adjusted to customer-specific requirements. Along with its reference architectures, Fujitsu makes detailed configuration and installation descriptions available as a standard. Optional deployment and integration services ensure a smooth integration into the on-site environment. To ensure simplified operation and maintenance of PRIMEFLEX solutions, Fujitsu provides support on solution level, and further datacenter services including managed services and hosting.

Big Data Analytics

Using the ever increasing large data volumes from versatile previously untapped data

sources can create decisive value. Big Data is about quickly delivering business value from a range of new and emerging data sources, including social media data, location data generated by smart phones and other roaming devices, public information available online and data from sensors embedded in cars, buildings and other objects – and much more besides. In a Big Data world, one of the key factors is speed. Traditional analytics focus on analyzing historical data. Big Data extends this concept to include real-time analytics of in-flight transitory data. Beside classical statistics and reporting the analytical results allow predictions or prescriptions in a progressive rate.

Volume, Velocity, Variety, Value

Volume refers to the fact that Big Data involves analyzing comparatively huge amounts of information, typically starting at tens of terabytes.

Velocity refers to the sheer speed at which this data is generated, analyzed, and changes.

Variety describes the fact that Big Data can come from many different sources, in various formats and structures.

Value creation means that Big Data solutions can add new value by analyzing the sentiment contained in the data rather than just looking at the raw information.

In summary, Big Data gives organizations the opportunity to exploit a combination of existing data, transient data and externally available data sources in order to extract

additional value through improved business insight.



The Solution

FUJITSU Integrated System PRIMEFLEX for Hadoop combines the advantages of pre-configured and pre-tested hardware based on industry standard components with open source software Apache Hadoop and Big Data analytics software.

PRIMEFLEX for Hadoop is provided as a ready-to-run Integrated System as well as a Reference Architecture for on premise use cases. In addition, big data consulting, services for Hadoop and integration and maintenance services are supplementing the offering which helps to create knowledge from information.



Features and benefits

Main features

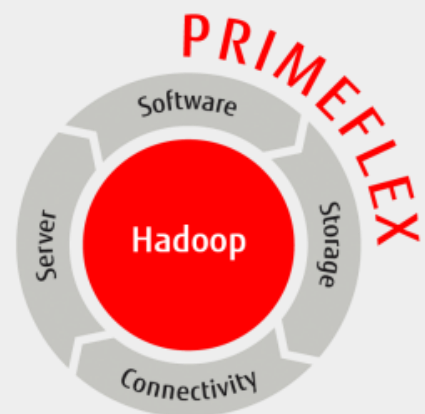
FUJITSU Integrated System PRIMEFLEX for Hadoop

- Integrated system: Pre-configured PRIMERGY cluster running open source software
- Hadoop distribution provided by Cloudera®, Hortonworks® or MapR®
- Big Data Analytics provided by partner Datameer®Inc.
- Switchless torus network for Smart Entry
- Sized for predictable performance
- Ready-to-run all-in-1 platform: Collect, analyze, visualize
- End user / business user friendly (Self-service analytics)



Benefits

- Guaranteed compatibility of components
- Based on industry standard architecture, PRIMERGY servers reduce operational cost through energy-efficient power supplies, smart power management tools and the Cool-safe® design
- Trusted FUJITSU support of leading open source distributions
- End-to-end big data analytics software to integrate structured and unstructured data; 50+ adapters to make data accessible, and 200+ functions to respond to all types of inquiries. Smart Analytics enables machine learning methods for business users.
- Cost-effective powerful 10 GB premium inter-connect
- Meet timely requirements: appropriate stage of expansion with help of sizing tools to deliver desired performance in terms of processing time and memory requirements
- Fast time to production and value through pre-integrated solutions ex-factory or automatic set-up on-site
- Reduced complexity: Business user friendly software leads seamlessly through the complete process from raw data collection through cleansing, analyzing and understanding up to insightful graphical presentation of results
- Proven building blocks from which an optimum solution can be designed for a customer-specific situation



Components of the Integrated System PRIMEFLEX for Hadoop

FUJITSU Server PRIMERGY (CX) - Smart Entry

The FUJITSU Server PRIMERGY CX scale-out systems are the ideal basis for cloud, hyper-converged and high performance computing solutions. They provide data centers as well as branch offices with computing power for virtualized environments, complex big data processing as well as consolidation and high-availability scenarios. PRIMEFLEX for Hadoop Smart Entry is a ready-to-run appliance with 64 cores / 48 TB.

FUJITSU Server PRIMERGY (RX) Rack Systems - XXL

PRIMERGY Rack Servers are the perfect platform to build up dynamic infrastructures to support current and future business requirements by delivering top performance, excellent scalability and leading efficiency in a modular, easy-to-upgrade housing. Combined with high efficient power supplies and a simplified power management this contributes to favorable lifecycle costs. PRIMEFLEX for Hadoop XXL is a reference configuration with PRIMERGY RX25xx server nodes with up to 272 cores and 1224 TB per rack, addressing the deployment of platforms for storage-intensive big data analytics.

Hadoop Distributions

Upon your requirements we will provide your solution either with the Cloudera® Hadoop distribution or with the Hadoop distributions of Hortonworks® or MapR®. The Hadoop distributions provided by PRIMEFLEX for Hadoop help you become information-driven by leveraging the open source community with the enterprise capabilities you need.

Datameer® Software

Datameer® software simplifies end-to-end-big data analytics environment into a single application on top of the Hadoop platform. Designed to make big data simple for everyone, Datameer® combines self-service data integration, analytics and visualization functionality that provides the fast time to insights.

Professional and Integration Services

FUJITSU Integration Services and Professional Services complement PRIMEFLEX for Hadoop as follows:

- PRIMEFLEX for Hadoop Deployment Service.

The following Big Data Solutions and Services are also available from Fujitsu, upon request:

- Fujitsu Big Data Assessment Workshop
- Fujitsu Big Data Strategy Consulting Service
- Fujitsu Big Data Analytics Services
- Fujitsu Services for Hadoop

Technical details

As a ready-to-run integrated system for on premise use cases, FUJITSU Integrated System PRIMEFLEX for Hadoop is offered in pre-staged configurations: Smart Entry and Rack. Memory size, disk size and CPU power may vary for special use cases.

FUJITSU Integrated System PRIMEFLEX for Hadoop	Configuration Smart Entry
Contains four CX2560 M4 servers in a CX400 shell	
1 x CX400 + 4 x CX2560 M4	2x Intel Xeon Silver 4110 8C 2.10 GHz 8 x 32GB (1x32GB) 2Rx4 DDR4-2666 R ECC 6 x HD SATA 6G 2TB 7.2K 512n HOT PL 2.5' BC 10GBE Cross Connection
Datameer® Software 7	Unlimited data import
Cloudera® (CDH 5), RHEL 7 64bit	4 Server Cluster

FUJITSU Integrated System PRIMEFLEX for Hadoop	Configuration Rack
1-n Racks including 2 10GBE ToR switches	
17 x RX2540 M4	2 x Intel Xeon Silver 4110 8C 2.10 GHz 8 x 16GB (1x16GB) 1Rx4 DDR4-2666 R ECC 12 x HD SAS 12G 4,6,8,10 or 12TB 7.2K 512e HOT PL 3.5' BC 2 x 10GBE
Service Node	1 x RX2530 M4, 64GB
Datameer® and Cloudera® Management Node	1 x RX2530 M4, 64GB
Hadoop Master Nodes	2 x RX2530 M4, 256GB (2 per rack, max. 4)
Datameer® Software 7	
Cloudera®/Hortonworks®/MapR®	
RHEL 7 64bit	

FUJITSU Integrated System PRIMEFLEX for Hadoop	Configuration AI Node
Replaces 1-n Data Nodes in rack configuration	
RX2540 M4	2 x Intel Xeon Gold 6130 16C 2.10 GHz 18 x 32GB (1x32GB) 2Rx4 DDR4-2666 R ECC 8 x SSD SAS 12G 400GB Mixed-Use 2.5' H-P EP 2 x NVIDIA Tesla P100 for PCIe 12GB 2 x 10GBE
Cloudera® Data Science Workbench	
RHEL 7 64bit	

More information

Fujitsu products, solutions & services

Products

www.fujitsu.com/global/products/
In addition to PRIMEFLEX for Hadoop, 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
- 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

<http://www.fujitsu.com/global/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

www.fujitsu.com/global/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 center and end user environments.

Fujitsu green policy innovation

www.fujitsu.com/global/about/environment/
Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment. Using our global know-how, we aim to resolve issues of environmental energy efficiency through IT. Please find further information at:



More information

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