

Datasheet

Fujitsu Interstage Big Data Complex Event Processing Server V1.0

High-Performance Complex Event Processing system with easy and flexible rule development



Fujitsu Big Data Software

An organizations ability to collect and analyze large volumes of data is fundamental to their capability to predict trends, forecast sales and make crucial business decisions.

In the era of Big Data, the amount of data is increasing exponentially and is becoming more and more diverse. The Collect, Analyze Decide and Act cycle, has become too difficult to process through conventional IT systems and has resulted in the emergence of Big Data technology.

Big Data technology can shorten the, afore mentioned, cycle by performing the analysis in real time, thus making it possible for organizations to engage new opportunities not previously conceived. It is critical that companies can utilize Big Data to better understand their customers and stay ahead of the competition.

Until now, Big Data technology has not been well leveraged. Fujitsu's new Interstage Big Data Software offers reductions in analysis times and an ability to combine Big Data with conventional business data. With Interstage, organizations can benefit from greater efficiencies in enterprise processing and create new business opportunities.

Interstage Complex Event Processing Server

The Interstage Big Data Complex Event Processing Server delivers a high-performance CEP engine by leveraging Fujitsu's proprietary stream processing technology. This enables large amounts of data to be processed in real-time and analyzed quickly.

Complex Event Processing (CEP) is a technology that addresses real time processing of Big Data. With this technology, it has become possible to develop real-time data processing systems through "rules" to define how to generate output from input data in real-time.

The key to the powerful CEP system is the high-performance engine. With the capacity to process large amounts of data the engine is faster and requires less conventional hardware. As a result costs are reduced through less server investment and real time processing can be established to meet business requirements.

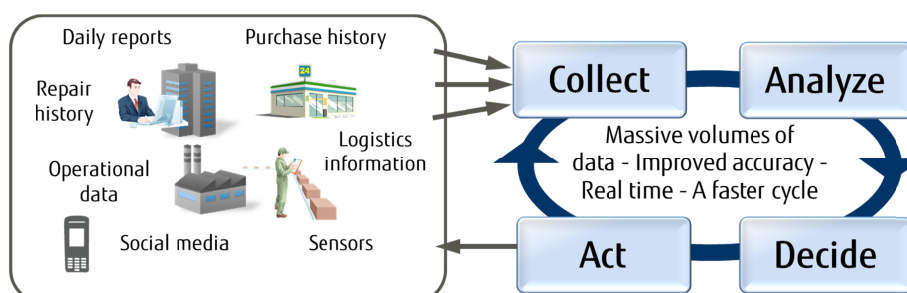
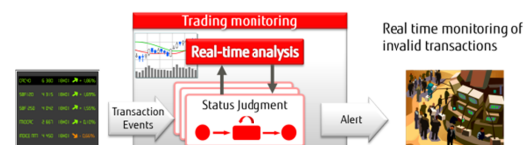
The Interstage Big Data CEP Server supports high-performance CEP engines by leveraging Fujitsu's proprietary stream processing and in-memory fast matching technology. It is this technology that allows for fast, real-time. The product also supports two types of rule

descriptions, IF-THEN and SQL. Compared to conventional SQL rules, the IF-THEN description can be developed easier and allow for increased flexibility. Rules can also be developed for complex analysis where required.

CEP is focused on processing data in memory for real-time requirements and does not keep input data on external storage systems. The Interstage Big Data CEP Server passes data back to the Interstage Big Data Parallel Data Processing Server for further batch analysis by using Hadoop. This integration enables delivery of advanced data utilization and analysis, combining real-time processing technology and parallel distributed data processing technology.

Usage Scenarios

[Stock Trading]



Features and Benefits

Main features	Benefits
High-Performance CEP engine <ul style="list-style-type: none">■ High-performance CEP engine leverages Fujitsu`s proprietary stream processing and in-memory fast matching technology.	<ul style="list-style-type: none">■ Enables fast, real-time processing of large amounts of data to be quickly analyzed.■ Reduces the number of servers required to meet performance requirements
Easy and flexible rule descriptions <ul style="list-style-type: none">■ Delivers two types of rule descriptions "IF-THEN-type rule" and "SQL-type-rule"<ul style="list-style-type: none">➢ IF-THEN-type rule for creating a simple description➢ SQL-type-rule for creating an advanced description	<ul style="list-style-type: none">■ Enables higher productivity in developing rules via simple IF-THEN- type rules.■ Enables flexibility in developing rules by combing two types of rules according to the requirements for data analysis.
Enable hybrid and advanced data processing system <ul style="list-style-type: none">■ Integration with external Big Data processing software<ul style="list-style-type: none">➢ Interface with Interstage Big Data Parallel Processing Server	<ul style="list-style-type: none">■ Enables data processed by CEP engine to be retained by the Hadoop system for further analysis through parallel distributed technology.

Topics

High-Performance CEP Engine Enabling Real-Time Data Analysis

In recent years, the amount of data produced in our daily lives continues to grow at an explosive pace. This is due to the spread of technologies such as smartphones, tablet devices, and various kinds of sensors. At the same time, there is also significant demand to use Big Data in corporate business activities—for instance, to discover trends and forecasts from various logs and data sources, and then to leverage such information in new business areas or to improve operations.

One important characteristic of Big Data is that some data is generated in high frequency and needs to be processed in real time. This requires a high-performance data processing platform that can navigate through large amounts of data faster than conventional technology.

The Fujitsu Interstage Big Data Complex Event Processing Server provides businesses with the required power to process these large amounts of data in real time and with less server hardware.

High-Performance CEP Engine

Fujitsu's high-performance CEP Engine enables processing of millions of events per second ^(*), adjusting to many different business requirements with minimum server configuration.

For instance, web page access can be tracked and quickly correlated with a customer information database. This information can then be used to identify relationships between events and customers in real-time, delivering customers tailored services on-the-fly.

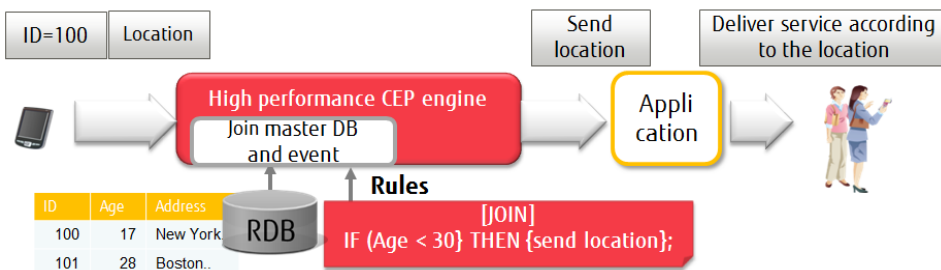
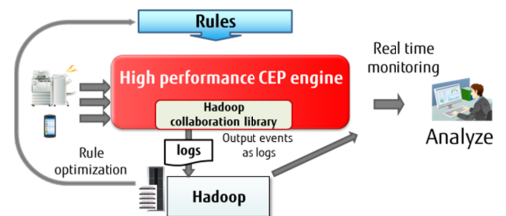
High Productivity through Easy and Flexible Rule Descriptions

The type of analysis or decision that should be made on each event depends on the nature of the data and the business. Interstage Big Data CEP Server supports rule-based data analysis, where the analysis can be performed by defining a rule without complex programming.

Enable Hybrid and Advanced Data Processing System

Advanced Big Data processing becomes possible by combining Interstage Big Data Parallel Processing Server with Hadoop technology and Complex Event Processing technology.

For instance, data in the range of several TB to PB, when processed by a CEP engine can be retained by the Hadoop system for further analysis through parallel distributed technology.



*1: Up to 2 million events/sec on a single PRIMERGY RX300 (measured by Fujitsu)

Technical Details

Server Hardware	PRIMERGY RX,BX ^(*1)
Operating Systems	Red Hat(R) Enterprise Linux(R) 5.6 (for Intel64) Red Hat(R) Enterprise Linux(R) 5.7 (for Intel64) Red Hat(R) Enterprise Linux(R) 5.8 (for Intel64) Red Hat(R) Enterprise Linux(R) 6 (for Intel64) Red Hat(R) Enterprise Linux(R) 6.1 (for Intel64) Red Hat(R) Enterprise Linux(R) 6.2 (for Intel64)
User Interface	English, Japanese

*1: One or more (up to four) dual core processor required

More Information

Fujitsu Platform Solutions

In addition to Fujitsu's Interstage Big Data Complex Event Processing Server V1, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Dynamic Infrastructures

With the Fujitsu Dynamic Infrastructures approach, Fujitsu offers a full portfolio of IT products, solutions and services, ranging from clients to datacenter solutions, Managed Infrastructure and Infrastructure as a Service. How much you benefit from Fujitsu technologies and services depends on the level of cooperation you choose. This takes IT flexibility and efficiency to the next level.

Computing products

www.fujitsu.com/global/services/computing/

- PRIMERGY: Industrial standard server
- SPARC Enterprise: UNIX server
- PRIMEQUEST: Mission-critical IA server
- ETERNUS: Storage system

Software

www.fujitsu.com/software/

- Interstage: Application infrastructure software
- Systemwalker: System management software

More information

Learn more about Fujitsu's Interstage Big Data Complex Event Processing Server V1, please contact your Fujitsu sales representative, Fujitsu business partner, or visit our website.
www.fujitsu.com/software

Fujitsu green policy innovation

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:
www.fujitsu.com/global/about/environment/



**Green
Policy
Innovation**

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Contact

FUJITSU LIMITED
Address: Shiodome City Center,
1-5-2 Higashi-Shimbashi, Minato-Ku, Tokyo
105-7123, Japan
Website: www.fujitsu.com/
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