



Orchestrating a brighter world



Scalable Modular Platform for your Big Data Needs

DX2000 Modular Server for Hadoop

Pre-designed and pre-validated solution, ideal for distributed processing of large-scale data common platform for all batch and real-time processing needs.

As the information-based society is evolving, the progress in the field of IoT (Internet of Things) is bringing tremendous change in both the quality and quantity of information, and producing an enormous amount of data on daily basis. Creating new business value and transforming the existing processes from this ever-increasing data are the applications of the technology known as “Big Data”.

The IT systems, responsible for processing such data, are now expected to efficiently accumulate and analyze following types of data.

- Wide range of data (photos, videos, voice, chapter, logs, sensor data, SNS)
- Mass data (knowledge obtained from more information)
- Various types of data freshness (accumulated data and latest data)

NEC provides to its customer best in class solutions comprising essential applications and engines to handle such kinds of data.

The DX2000 Modular Server for Hadoop is the newest offering of NEC, and is a common execution platform for the following:

All batch & real-time processing needs

A common platform for all batch & real-time processing of large scale data. It employs Hortonworks Data Platform®, which is comprised of Apache™ Hadoop® for distributed processing of large scale data and Apache™ Spark® that enables efficient in-memory processing and real-time processing.

Batch Processing Real-time Processing
Hadoop Spark

DX2000

HDD HDD HDD [SSD icon]

Analytics of data in HDD Analytics of data in memory

Ideal for unstructured data processing

It allows accumulation of large scale data without changing its original structure. This greatly increases the possibilities of utilizing the data, because the data structure can be specified as per the intended use of application, when reading the data.

Structured Data (CPM, ERP, Billing, etc.) Unstructured Data (Photos, Videos, Voice, etc.)

Accumulate in common platform

Quick deployment & Stable operations

A pre-designed and pre-validated integrated system, which combines necessary hardware and software. It shortens the deployment period and stabilizes the quality of platform. It is furnished with Express5800 Servers for large scale data accumulation, and DX Servers with wide memory bandwidth for in-memory distributed processing.

Application development and operations	Application development and operations
Scalability Designing	Platform Deployment
Platform Testing	
Tuning	
Sizing	
HW/SW selection	Platform Deployment
Data Utilization Design	Data Utilization Design
Individual SI	Data Platform for Hadoop

Shorten the deployment period
Quality of PF stability

Deployment and Expansion

DX2000 for Hadoop can be deployed according to the intended purpose and scaled-out according to the increase in data volume.

Deployment

DX2000 for Hadoop is a common platform for all data accumulation, batch processing and real-time processing needs.

Also, there is Starter model for those who want to begin with data accumulation and batch processing, and Booster model for those who already have data accumulation platform and want to utilize it for real-time processing.

Model		Data Platform for Hadoop	Starter	Booster
Functionalities	Data Accumulation	√	√	
	Batch Processing	√	√	
	Real-time Processing	√		√

Expansion

Superior far-sighted design, with due consideration to expansion after deployment, allows easy scale-out by just adding nodes depending on the growing data and workload needs.



Specification

Model		Data Platform for Hadoop	Starter	Booster
HW	Server	DX2000 Servers Express5800 Servers	Express5800 Servers	DX2000 Servers
	Memory	1.3-13TB approx.	0.7TB approx.	1.3TB approx.
	Stoage (Effective Storage)	48-1280TB approx. ^{1,3}	48TB approx. ¹	1.2TB approx. ²
SW	OS	Red Hat Enterprise Linux 6.7		
	Hadoop	Hortonworks Data Platform 2.3		

*1: Including space for temporarily stored data

*2: Temporary data storage for analytics

*3: Depends on the system combination

Corporate Headquarters (Japan)
NEC Corporation
nec.com

North America (USA & Canada)
NEC Corporation of America
necam.com

NEC Enterprise Solutions
NEC Europe Ltd
nec-enterprise.com

APAC
NEC Asia Pacific Pte Ltd
sg.nec.com

Latin America
NEC Latin America
lasc.necam.com

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