iMaster NCE Lite
V100R020C10

Server Hardware Specifications (x86)

Issue   06

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About This Document

Purpose

This document describes the hardware configuration of iMaster NCE.

Intended Audience

This document is intended for:

- Network planning engineers
- Data configuration engineers
- System maintenance engineers

Symbol Conventions

The symbols that may be found in this document are defined as follows.

Symbol	Description
⚠ DANGER	Indicates a hazard with a high level of risk which, if not avoided, will result in death or serious injury.
⚠ WARNING	Indicates a hazard with a medium level of risk that, if not avoided, could result in death or serious injury.
⚠ CAUTION	Indicates a hazard with a low level of risk which, if not avoided, could result in minor or moderate injury.
NOTICE	Indicates a potentially hazardous situation which, if not avoided, could result in equipment damage, data loss, performance deterioration, or unanticipated results. NOTICE is used to address practices not related to personal injury.
📖 NOTE	Supplements the important information in the main text. NOTE is used to address information not related to personal injury, equipment damage, and environment deterioration.

GUI Element Reference Conventions

The GUI elements that may be found in this document are defined as follows.

Format	Description
""	Buttons, menus, parameters, tabs, window, and dialog titles are in **boldface**. For example, click **OK**.
>	Multi-level menus are in **boldface** and separated by the ">" signs. For example, choose **File** > **Create** > **Folder**.

Command Conventions

The command formatting that may be found in this document are defined as follows.

Format	Description
Boldface	Command keywords are in **boldface**.
Italic	Command arguments are in *italics*.
[ ]	Items (keywords or arguments) in square brackets [ ] are optional.
{x | y |...}	Optional items are grouped in braces and separated by vertical bars. One is selected.
[x | y | ...]	Optional items are grouped in square brackets and separated by vertical bars. One or none is selected.
{ x | y | ... } *	Optional items are grouped in braces and separated by vertical bars. A minimum of one or a maximum of all can be selected.
[x | y | ...] *	Optional items are grouped in square brackets and separated by vertical bars. A maximum of all or none can be selected.

Change History

Issue	Date	Description
06	2022-09-30	This issue is the sixth official release.
05	2021-12-18	This issue is the fifth official release.
04	2021-07-30	This issue is the fourth official release.

Issue	Date	Description
03	2021-05-15	This issue is the third official release.
02	2021-04-16	This issue is the second official release.
01	2021-02-28	This issue is the first official release.

Contents

1 Server Hardware Configurations for On-Premises Deployment

In on-premises scenarios, the delivered server has been configured according to the NCE requirements based on the network type, functional unit combination, and network scale difference.

> **NOTE**
>
> If you use self-purchased software or software that does not meet Huawei requirements, or fail to timely update the software by installing related patches published at Huawei official website, the software lifecycle (EOM, EOFS, and EOS) may be shorter than the lifecycle (EOM, EOFS, and EOS) of NCE. In this case, Huawei and its subsidiaries do not assume any liability. For example, the software version mapping to NCE V100R020C10 is EulerOS 2.9. You are advised to pay attention to the latest software version information at Huawei official website and upgrade related software to the standard versions.

Configuration Principles

Plan hardware configurations under the following principles:

- Select an optimal resource usage solution based on the current network scale, capacity expansion plan, and hardware cost.
- Select hardware configurations that match the current network scale or higher.
- If the DR system is deployed, configure the hardware of the primary and secondary sites in the same way.

Hardware Configurations for the 2288X V5 Server

Table 1-1 Hardware configurations for on-premises deployment on physical machines

Hardware	Model	Requirements
128 GB server	2288X V5	• CPUs: 2 x Xeon Silver 4210 (2.2 GHz, 10 cores) • RAM: 4 x 32 GB DDR4 • Hard disks: 8 x 600 GB SAS HDD • RAID controller card: PMC3152 (2 GB cache) • NICs: 4 x 2 GE electrical ports delivered, compatible with 2 x 4 GE electrical ports
384 GB server standard configuration	2288X V5	• CPUs: 2 x Xeon Gold 5220R (24 cores, 2.2 GHz) • RAM: 12 x 32 GB DDR4 • Hard disk: 12 x 1200 GB SAS HDD • RAID controller card: PMC3152 (2 GB cache) • NICs: 4 x 2 GE electrical ports + 2 x 2 10GE optical ports delivered, compatible with 2 x 4 GE electrical ports + 2 x 2 10GE/25GE optical ports
GE switch	S5720 (compatible)	• GE ports: 28 • 10GE ports: 4 • Version: V200R011C10
	S5731 (compatible)	• GE ports: 24 • 10GE ports: 4 • Version: V200R019C00
	S5735	• GE ports: 24 • 10GE ports: 4 • Version: V200R019C10

2288X V5 Server Quantity

Table 1-2 2288X V5 server quantity in NCE-T

Service Scenario	Network Scale	Hardware	Server Quantity
Manager +Controller	< 1000 equivalent NEs	128 GB server	1
Manager +Controller +Analyzer	< 1000 equivalent NEs	384 GB server standard configuration	1

Table 1-3 2288X V5 server quantity in NCE-FAN

Service Scenario	Network Scale	Hardware	Server Quantity
Manager +Controller	< 1000 equivalent NEs	128 GB server	1

Table 1-4 2288X V5 server quantity in NCE-IP

Service Scenario	Network Scale	Hardware	Server Quantity
Manager	< 1000 equivalent NEs	128 GB server	1

Table 1-5 2288X V5 server quantity in NCE

Service Scenario	Network Scale	Hardware	Server Quantity
NCE-IP+T+FAN Manager	< 1000 equivalent NEs	128 GB server	1