

High-Speed Net Connect (HNC)

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Version 6.2A SP1  
April 2018

Release Notice

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# 1 General information

\*1 This Release Notice is a summary of the major extensions, requirements, and operating information for HNC V6.2A SP1 in Fujitsu Server BS2000 SE700/SE700B and Fujitsu Server BS2000 SE500/SE500B.

\*1 **The release level V6.2A0502 is that of April 2018.**

\*1 Changes to release level November 2017 (V6.2A0402) are marked with \*1.

The information in the Release Notices for the following delivery units should also be noted:

- \*1
  - M2000 V6.2A SP1
  - OSD/XC V11.0, OSD/XC V10.0, OSD/XC V9.5 (as a guest system under VM2000 V11.0)
  - VM2000 V11.0A, VM2000 V11.5

This and other current release notices are available on the SoftBooks DVD and online under: <http://manuals.ts.fujitsu.com/>.

If one or more of the previous upgrades are skipped when this version is used, then the information in the release notices (or README files) for these previous versions must also be taken into account.

## 1.1 Ordering

\*1 The HNC V6.2A SP1 software is supplied preinstalled on the HNC (as part of the server unit /390 or ordered individually) and cannot be ordered separately.

## 1.2 Delivery

The HNC software is a component of an SE server with SU /390. It is pre-installed on the HNC on delivery or installed by Fujitsu service engineers on HNC that have already been delivered.

\*1 The software files for HNC V6.2A SP1 are supplied on DVD.

Designation:

\*1 HNC V6.2A0502 Release: 2018-04-04

The MAC addresses required for the HNC are supplied on the license CD.

## 1.3 Documentation

The documentation for the SE servers comprises the following components:

- SE-specific manuals that describe the concepts and operation of servers in the SE line.
  - Operating Manual SE700 / SE500 / SE300 (comprising of several modules)
    - FUJITSU Server BS2000 SE700 / SE500 / SE300 Basic Operating Manual
    - FUJITSU Server BS2000 SE700 / SE500 / SE300 Server Unit x86

- FUJITSU Server BS2000 SE700 / SE500  
Server Unit /390
- FUJITSU Server BS2000 SE700 / SE500 / SE300  
Additive Components
- FUJITSU Server BS2000 SE700 / SE500 / SE300  
Operation and Administration
- FUJITSU Server BS2000 SE700 / SE500 / SE300  
Quick Start Guide
- FUJITSU Server BS2000 SE700 / SE500 / SE300  
Security Manual

The documentation is also available in the Internet under:  
<http://manuals.ts.fujitsu.com>. Manuals displayed with an order number can be ordered as printed versions.

➤ White Paper

- Cluster solutions for Fujitsu BS2000 SE300, SE500 and SE700 servers

This white paper can be found in the documentation on the SE700 product site on the Fujitsu website at:

<https://sp.ts.fujitsu.com/dmsp/Publications/public/wp-se-cluster-em-en.pdf>

The current versions of this and other Release Notices are available under  
<http://manuals.ts.fujitsu.com>.

The BS2000 documentation is available on DVD, in German and English, under the title **BS2000 SoftBooks**.

## 2 Software extensions

HNC V6.2A is the further development of the existing HNC version V6.1A and offers the following extensions and enhancements over the previous version:

- **Live migration support for BS2000 systems**  
Live migration for BS2000 VMs in VM2000 mode is supported on SU /390. To achieve this, two server units in M2000 are logically grouped to form an SU cluster.
- **Net storage support enhancements**  
The NetClient in BS2000 supports the processing of SAM node files.
- **Upgrade of the underlying HW for HNC**  
The HNC M2 used in SE500B and SE700B is based on PRIMERGY RX2530 M1-L

HNC is exclusively used on the SE HNCs of the Fujitsu Server BS2000 SE700/SE700B and Fujitsu Server BS2000 SE500/SE500B.

## 3 Technical information

### 3.1 Resource requirements

Two disks, which occupy slots 0 and 1, are required for the installation of the system. These are switched together to form a hardware mirror, on which five virtual disks are configured. The SW mirror function enables a system status to be frozen and then to be activated by Service after software errors.

VD	MU	Use
VD0	50 GB	ROOT, VAR, SWAP
VD1	50 GB	ROOT (Installation), CRASH
VD2	50 GB	ROOT standby, VAR standby, ARCHIVE
VD3	100 GB	DATA
VD4	16 GB	Configuration Raw Device (CRD)

An SE HNC is equipped in its basic configuration with a 32 GB memory (2\* 16GB DDR3 modules).

### 3.2 SW configuration

- BS2000 native
  - OSD/XC V11.0
  - OSD/XC V10.0 and OSD/XC V9.5 (correction package 2017 or later)
- VM2000 V11.5
  - OSD/XC V11.0 as a monitor system
  - OSD/XC V11.0 or OSD/XC V10.0 (correction package 2017 or later) as a guest system
- VM2000 V11.0
  - OSD/XC V11.0 or OSD/XC V10.0 (correction package 2017 or later) as a monitor system
  - OSD/XC V11.0, OSD/XC V10.0 or OSD/XC V9.5 (correction package 2017 or later) as a guest system
- SE Manager
  - M2000 V6.2A SP1
- Prerequisites for live migration
  - OSD/XC V11.0 or OSD/XC (V10.0 with correction package 2017 or later)
  - VM2000 V11.5 (LM on SU /390 only in VM operation)
  - openNet server V4.0A

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#### Linux is not released for use on HNC

The Linux appliance HNC is a scaled-down Linux system. This is why the use of Linux on HNC is not released for customer applications.

### 3.3 Product installation

A HNC is supplied preinstalled as part of the net unit with the delivery of the /390 server unit. Any required new correction levels for the HNC are supplied as part of the hardware service contract and are installed by the service technician responsible for you.

### 3.4 Product use

- **HNCs are operated via the SE Manager**, a web-based graphical user interface for managing the SE servers.

Local access is possible via a web browser running in the M2000 on the rack console integrated in the SE rack.

Remote operation and administration takes place via PC workstations that can access the SE Manager via a web browser.

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The Release Notice for M2000 V6.2A SP1 contains information about supported browsers.

- **Setting the BS2000 host name**  
The BS2000 host name must contain at least four characters. In principle, the following special characters are supported: # @  
The use of special characters should be avoided where possible.
- **Connecting the net unit to the customer LAN**  
Customers should not configure a spanning tree protocol on the LAN switch for uplink ports in public networks (MANPU, MONPU, DANPU<nn>).
- **Connecting the HNC to the SE server**  
Only FC (FibreChannel) direct connections (8 Gbit/s) are supported for the connection to the /390 server units. The connection is single-phase as default. We recommend for 10 Gbit/s Ethernet connections the use of a second FC connection to the second FC port of the HNC as this is the only way to attain full throughput. Furthermore, a maximum of 30 parallel network connections can be operated on one FC connection; in the case of 8 or more guest systems or multiple configured networks, a second FC connection from the HNC to the server is recommended.

### 3.5 Obsolete (and discontinued) functions

- None

### 3.6 Incompatibilities

SW configuration:

- V9.5 can only be used as a guest system under VM2000 V11.0
- VM2000 V10.0 is no longer supported

### 3.7 Restrictions

- None

### **3.8 Procedure in the event of errors**

In order to successfully diagnose and eliminate software problems, sufficient error documentation must be created and saved as early as possible.

If possible, error report documents should be supplied in the form of files so that they can be processed with diagnostics tools. Reproducible errors are to be described accurately so that the error can be generated.

If an error situation occurs, the generation of diagnostics data can be initiated via the SE manager on the management unit by way of the "Diagnostics" tab.  
Hardware -> Server (SE<model>) -> <Name> (HNC) -> Service -> Diagnostics

The diagnostics data file is a compressed tar archive and contains important logging, trace and configuration files of the unit.

If errors occur in the SE Manager, hard copies should be made of the screen.

Access to the management unit of the SE server is mandatory via AIS Connect for diagnostics purposes! If there is no AIS Connect, the service provider can charge for any additional outlay separately.



## 4 Hardware requirements

- \*1 HNC V6.2A SP1 is an integral part of the net unit of a Fujitsu Server BS2000 SE700/SE700B or SE500/SE500B.
- \*1 The software version HNC V6.2A0502 is used on the following hardware models:

SE Server HNC M1  
SE Server HNC M2

## 5 Firmware versions

The following minimum firmware levels should be used on HNC. They are installed during system installation in the factory.

Any new firmware levels that may be required are provided as part of the hardware service contract and installed by the service technician responsible for you.

	<b>SE SERVER HNC M1 (RX200-S8)</b>	<b>FW-Version</b>
*1	BIOS	<b>V4.6.5.4 R1.16.0</b>
	iRMC	<b>8.86F / 3.61</b>
	RAID-Controller SAS 6G 5/6 512MB (D2616)	<b>2.130.403-4660</b>
	FC-Controller LPe12002	<b>2.02A1</b>

	<b>SE SERVER HNC M2 (RX2530-M1-L)</b>	<b>FW-Version</b>
*1	BIOS	<b>V5.0.0.9 R1.34.0</b>
*1	iRMC	<b>8.86F / 3.12</b>
*1	RAID-Controller EP420i	<b>4.660.00-8175-1.0.0</b>
*1	FC-Controller LPe12002	<b>2.02A3</b>