

# High-speed Net Connect

HNC-VI 91855 - Overview

# High-speed Net Connect 91855

- Features
- Configurations
- Software requirements
- Hardware requirements
- Addressing

## Characteristics HNC-VI 91855 (1)

### ■ Full functionally appliances:

There is the HNC-VI in two variations (**Floor-stand and Rack-integration**), that already all with two Fibre Channels (FC) and two LAN connections equipped is. Optional can widened with additional LAN connections.

### ■ Host connection:

The channel type **Fibre Channel** (FC) is offered **exclusively**. This ensures satisfactory support for the high throughput performance of the Gigabit LAN on the channel side. Throughput rates (best case) almost reach the maximum possible utilization of the capacity of a Gigabit Ethernet LAN.

The HNC-VI either is connected with a BS2000 server of the S series over a FC switch or is connected directly to the FC channel of the S server.

### ■ Mirrored boot-disk:

The basic configuration HNC-VI included also a (hardware)-**mirrored boot-disk**.

## Characteristics HNC-VI 91855 (2)

### ■ Power supply:

A 2nd power supply module is serially installed in the basic configuration.

### ■ Graphic User Interface:

The Web-surface of HNC was adapted on the SQ server. Role-specific user-profiles are supported with it.

### ■ Password safeguard:

The passwords of the user-profiles are safeguarded automatically and the safeguard can be used from the service to the restoration.

### ■ Teleservice:

The service access is now realized via own Service-LAN to the SCP 3970-40, -50, -51 or -60. Hereby, the HNC can become diagnose, as also become reset or switch off/on. (Thereby the outdated V.24 connection is no longer use.)

## Characteristics HNC-VI 91855 (3)

### ■ Link Aggregation:

Enables together with openNet Server V3.4 (BCAM) **simultaneous use of several** - also virtual - **channel connections** to BS2000/OSD server (line bundles). This enables load distribution and thus achieves an increase in throughput.

### ■ Checksum Offloading:

The **HNC calculates and checks** the **TCP checksum** for outgoing and incoming data packages. This computing intensive TCP protocol function is moved out from openNet Server  $\geq$  V3.4 (BCAM) to the HNC and notably relieves the load on the BS2000 CPU.

### ■ Throughput:

In defined test surroundings, the HNC-VI reaches up to 88. 000 transactions/sec and up to 177 MByte/sec data throughput.

**HNC - Floor-stand**

**HNC - Rack-integration**

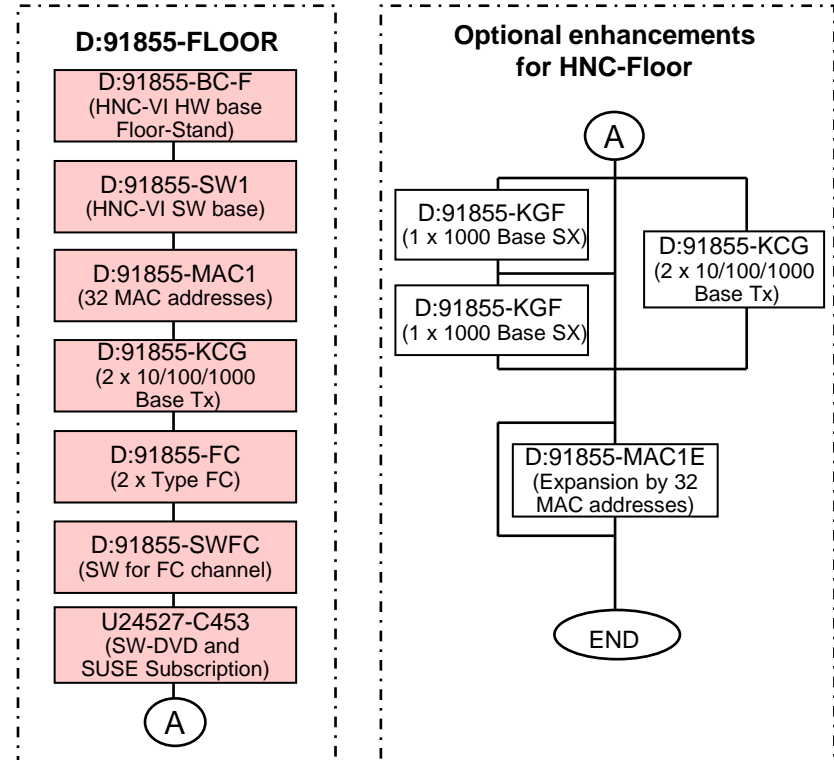
# HNC - Floor-stand

## D:91855-FLOOR with optional enhancements

The HNC can be connected simultaneously to the same or to 2 different BS2000/OSD servers via 2 x FC channels.

### Optional enhancements:

- 2 x 10/100/1000 Mbit LAN (Cu) or alternatively
- 2 x 1000 Mbit LAN (fiber)
- additionally MAC addresses

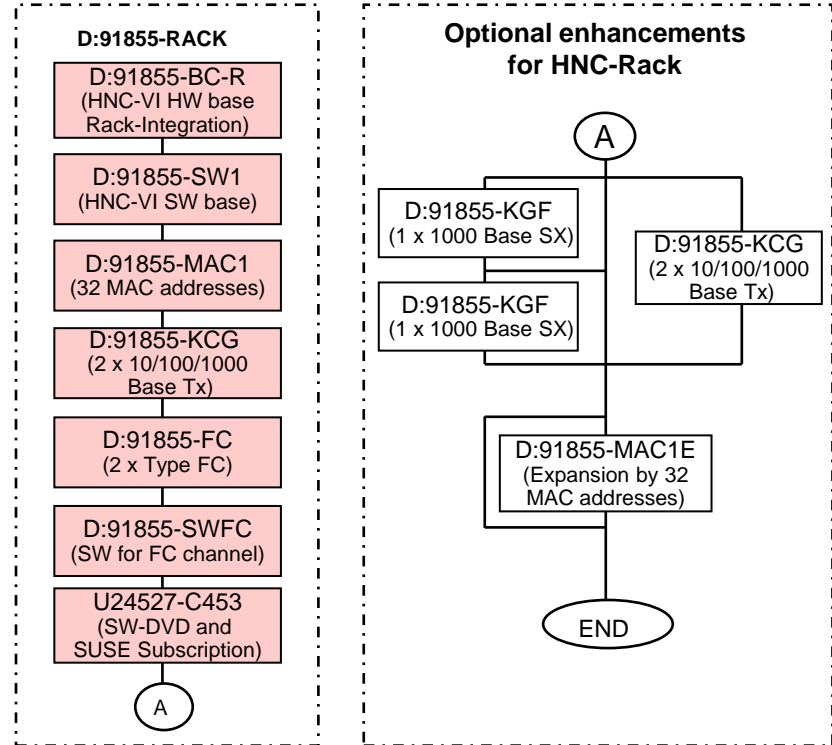


## D:91855-RACK with optional enhancements

The HNC can be connected simultaneously to the same or to 2 different BS2000/OSD servers via 2 x FC channels.

### Optional enhancements:

- 2 x 10/100/1000 Mbit LAN (Cu) or alternatively
- 2 x 1000 Mbit LAN (fiber)
- additionally MAC addresses





# Configuration Options

## (maximum configuration for LAN interfaces)

<b>Configurator HNC-VI 91855</b>		
Type FC Channel	D:91855-KCG (10/100/1000 Cu)	D:91855-KGF (1000 fiber)
2	2 - 4	0
2	2	1 - 2

# Software requirements

- Fibre Channel support:  
openNet Server V3.1 or higher is required for using the Fibre Channel interface.
- VLAN:  
VLAN support on the BCAM side is available for the first time with openNet Server V3.2 (BCAM V19).
- Note on mixed configurations in redundancy operation:  
Within a redundancy configuration, a mixed mode of operation between the “trunk”-oriented VLAN solution of HNC-IIIR and the new VLAN solution (BCAM V19) as of HNC-IV, HNC-V and HNC-VI is not possible.
- The functions “link aggregation” and “checksum offloading” stands to the disposal only together with openNet Server  $\geq$  V3.4 .

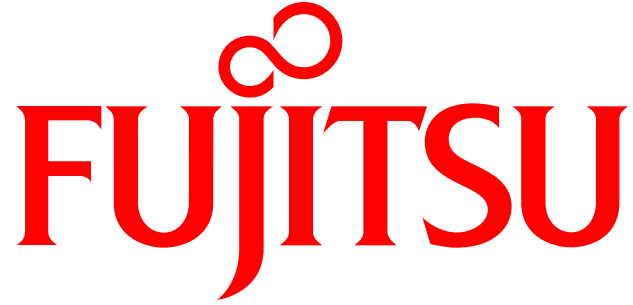
# Hardware requirements

- Fibre Channel support:  
The HNC-VI either is connected with a BS2000 server of the S series over a FC switch or is connected directly to the FC channel of the S server.
- For the administration of the HNC-VI, the console of the SCP or a PC with Web browser can use. The SCP resp. PC is connected over a administration LAN to the HNC-VI.
- For the teleservice is necessary a LAN connection (via service LAN) to the SCP of the BS2000/OSD servers. The required LAN cable is included.

SCP = Service-Console-Processor

- The following addresses are required for each link (communication path from guest (monitor) system to LAN port):
  - Type FC channel:
    - 2 x LUN (1 x read and 1 x write),
    - 1 x MAC address
  - The basic configuration includes 32 MAC addresses.
  
- If necessary, the MAC addresses can be expanded to max.128 addresses (D:91855-MAC1E).

This enables 2 times 16 guest (monitor) systems to access 4 LAN ports each (configurable maximum configuration).



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