



CDI-WAN MP2.1

Release notes

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Fire & Security Products

Siemens Building Technologies Group

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1 Introduction

This document applies to CDI-WAN MP2.1, which is now available for market distribution. The new product list includes:

- **NK8222 Ethernet port (single) R1.0**
- **NK8223 Ethernet port (multiple) R2.1**

These Ethernet ports are to be used as network units for the following DMS hosts:

- **MK8000 OPC server MP1.3;**
- **MM8000 management station MP2.3.**

CDI-WAN MP1.1, supporting LMSmodular, is still available. Please note that the ordering codes for NK8223 MP1.1 (R1.31) have changed.

2 What's new in MP2.1

This section details the differences between CDI-WAN MP1.1 (R1.31) and MP2.1.

2.1 New products and improvements

Hardware

A new NK8222 has been released for a low-cost, single LAN connection to a serial or LON-based subsystem. Note that NK8222 cannot be upgraded to NK8223.

Firmware

Firmware for NK8222 and NK8223 (generically indicated as NK822x) has been quite modified and improved.

It now supports two upstream protocols:

- CEI79 (optionally encrypted)
- The new and faster (but not encrypted) CMSDL/IP.

Downstream connectivity is a bit more limited than in previous MP1.1 and should be carefully checked on the compatibility matrix at page 11.

2.2 Compatibility with management stations

DMS hosts

NK8222 and NK8223 MP2.1 can provide IP connectivity for new DMS software released at the same time. They include:

- **MK8000 MP1.3;**
- **MM8000 MP2.3;**

Note: NK822x MP2.1 are not backward compatible with any LMSmodular software.

In the Composer project, MK8000 and MM8000 should be configured to include the new CDI-WAN driver NS8210, which is one of the standard drivers available.

Note: NS8210 actually replaces the NK8210 router that used to be installed with LMSmodular software.

Limitations



MK8000 and MM8000 cannot be connected to NK822x MP2.1 over serial line. A technical difficulty in the configuration tool currently causes this limitation, which will soon be removed.

Serial-based solutions for MK8000 MP1.3 and MM8000 MP2.3 can be realised using CDI.WAN MP1.1 (R1.31) product and tools. See →DMS8000 Connectivity Guide (007083) for more information.



CDI-WAN MP2.1 can provide support for up to 50 networked NK822x's. It is planned to remove this limitation in next market packages.

2.3 New software tools

In comparison with MP1.1 (R1.31) software, MP2.1 has partially replaced the tools.

Tool	Application	Used in MP2.1	Status
NW8201	General configuration tool	No	Composer has replaced NW8201, which is no longer distributed.
NW8202	Initialisation tool, required for IP address setting	Yes ⁽¹⁾	NW8202 is still used for initial setting of the IP address. It is distributed with MM8000 and MK8000, and requires a separate set-up to be installed.
NW8203	Update tool, required for downloading new firmware	No	NW8204 has replaced and outperformed NW8203. See → CDI-WAN MP2.1 ICC manual (007798).
NW8204	Maintenance tool	Yes ⁽²⁾	New NW8204 is distributed with MM8000 and MK8000, and requires a separate set-up to be installed. It can provide: <ul style="list-style-type: none"> - Download of new software - Upload of diagnostic logs - Advanced FTP

Notes:

(1) NW8202 for CDI-WAN MP2.1 is not compatible with CDI-WAN MP1.1 (R1.31) products
On the other hand, NW8202 for CDI-WAN MP1.1 cannot be used for MP2.1.

Be careful in using the correct tool version!

(2) NW8204 is described in CDI-WAN Installation, Configuration and Commissioning.

2.4 New documentation

The CDI-WAN documentation has changed significantly for this version, reflecting the integration into the new DMS line of products.

<u>EDMS</u>	<u>Document Name</u>	<u>Status</u>
007780	NK8222 Data Sheet	New
007777	NK8223 Data Sheet	Updated
007794	Sales presentation	New
007920	Sales guide	New
007796	Application & Planning	New
007793	Release Notes	Updated, new format
007798	Installation Configuration & Commissioning (including Maintenance & Troubleshooting)	New
007083	DMS8000 Connectivity Configuration Guide	Updated
004414	Technical manual	Not updated, replaced by 007798

3 Migrating from a previous release

3.1 Verification

Upgrading from previous MP1.0 (R1.01) and MP1.1 (R1.31) to MP2.1 is possible as long as you ensure the following:

- The architecture includes a max. of 50 NK8223 units;
- A new host DMS system (MM8000 or MK8000+OPC client) is used in place of previous LMSmodular;
- The new DMS is connected over LAN and not over serial line;
- No serial line is used on NK8823 for local host connections;
- The control units (subsystems) connected to NK8223 are supported in the software of new DMS.

3.2 Upgrading procedures

The upgrade procedure list includes:

1. Using NW8201, taking detailed notes of the existing NK8223 configuration.
2. Updating central software, from LMSmodular to MM8000 (not discussed here).
3. Re-entering NK8223 configuration with Composer.
4. Updating NK8223 configuration and firmware with NW8204.
5. Reset the NK8223 unit using NW8201 monitor command
6. Downloading new configuration from Composer.

3.2.1 Taking notes of NK8223 configuration

CDI-WAN configurations made with NW8201 are not compatible with the new version and must be reintroduced in Composer. Therefore, it is necessary to take notes of the old configuration so you can re-enter it later in the new tool.

Please use the checklist table on next page as a form for each of the NK8223s.

Note: Photocopy the page as many times as required and then fill-in the forms.

	NK8223 configuration	
<input type="checkbox"/>	Branch no.: _____	Branch number, ranging from 1 to 50
<input type="checkbox"/>	IP address: _____ . _____ . _____ . _____	IP address, subnet mask and default gateway address for the NK8223. Take note of the four 3-digit numbers (0-255). Note: The default gateway may not be required (and left = 0.0.0.0) if the unit is in the same subnet as the central.
<input type="checkbox"/>	Subnet mask: _____ . _____ . _____ . _____	
<input type="checkbox"/>	Default gateway: _____ . _____ . _____ . _____	
<input type="checkbox"/>	COM1: Control unit: _____	Take note of the control unit, subsystem, or interface unit connected to the serial port (for example, CK11, MK722, CF-9000), as well as the communication protocol (such as Cerban, Cerloop, CMX-DL).
<input type="checkbox"/>	Protocol: _____	
	Baud rate: _____	
	Subsystem local address: _____	
<input type="checkbox"/>	COM2: Control unit: _____	Take note of the control unit, subsystem, or interface unit connected to the serial port (for example, CK11, MK722, CF-9000), as well as the communication protocol (such as Cerban, Cerloop, CMX-DL).
<input type="checkbox"/>	Protocol: _____	
	Baud rate: _____	
	Subsystem local address: _____	
<input type="checkbox"/>	COM3: Control unit: _____	Take note of the control unit, subsystem, or interface unit connected to the serial port (for example, CK11, MK722, CF-9000), as well as the communication protocol (such as Cerban, Cerloop, CMX-DL).
<input type="checkbox"/>	Protocol: _____	
	Baud rate: _____	
	Subsystem local address: _____	

<input type="checkbox"/> <input type="checkbox"/>	COM4: Control unit: _____ Protocol: _____ Baud rate: _____ Subsystem local address: _____	Take note of the control unit, subsystem, or interface unit connected to the serial port (for example, CK11, MK722, CF-9000), as well as the communication protocol (such as Cerban, Cerloop, CMX-DL).
<input type="checkbox"/>	LON: Control unit 1: CS6 Guarto MP3 Protocol: CerCom/LON LON physical address: Subnet: _____ Node: _____ BACnet logical address: _____	Take note of the LON physical address and the BACnet logical address of the CS6 MP3 control unit connected to the LON interface. Note: only CS6 Guarto MP3 is supported in CDI-WAN MP2.1.
<input type="checkbox"/>	LON: Control unit 2: CS6 Guarto MP3 Protocol: CerCom/LON LON physical address: Subnet: _____ Node: _____ BACnet logical address: _____	Take note of the LON physical address and the BACnet logical address of the CS6 MP3 control unit connected to the LON interface. Note: only CS6 Guarto MP3 is supported in CDI-WAN MP2.1.
<input type="checkbox"/>	LON: Control unit 3: CS6 Guarto MP3 Protocol: CerCom/LON LON physical address: Subnet: _____ Node: _____ BACnet logical address: _____	Take note of the LON physical address and the BACnet logical address of the CS6 MP3 control unit connected to the LON interface. Note: only CS6 Guarto MP3 is supported in CDI-WAN MP2.1.
<input type="checkbox"/>	LON: Control unit 4: CS6 Guarto MP3 Protocol: CerCom/LON LON physical address: Subnet: _____ Node: _____ BACnet logical address: _____	Take note of the LON physical address and the BACnet logical address of the CS6 MP3 control unit connected to the LON interface. Note: only CS6 Guarto MP3 is supported in CDI-WAN MP2.1.
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	I²C local I/O: 1 – DF8040 8-input module _____ 2 – DF8040 8-input module _____ 3 – DF8020 8-output module _____ 4 – DF8090 power supervision _____	
<input type="checkbox"/>	Notes:	

3.2.2 Updating NK8223 firmware

The NK8223 software MP1.x should be updated with latest file set, which includes:

File name	Date	New in MP2.1
CDDL.DLL	3/11/2003	Yes
CeiCa.DLL	3/11/2003	Yes
Cerban.DLL	3/11/2003	Yes
CerComD.DLL	3/11/2003	Yes
CMSDL.DLL	3/11/2003	Yes
CMSDLNet.DLL	3/11/2003	Yes
CMX.DLL	3/11/2003	Yes
I2CIO.DLL	3/11/2003	Yes
MK7022.DLL	3/11/2003	Yes
Monitor.DLL	3/11/2003	Yes
NK822x.EXE	3/11/2003	Yes
Disk386D.BIN	23/04/2002	No, same as in MP1.1 (R1.31)

The software update operation requires:

- **Composer tool**, installed and operating; see → DMS Connectivity Guide (007083_c_en).
- **NW8201 and NW8204 tools**, installed and operating; see → CDI-WAN ICC manual (007798_a_en).
- **The new firmware files**, which are included in DMS product setups, e.g.: C:\MM8000\NK822x – Firmware\....
- **Complete information about NK8223 configuration**, both IP settings and subsystem connections.

Get sure to have this available. Then, the procedures steps include:

Configuration update:

- Start NW8204 tool and login as administrator (admin / cerdati).
- In the window that appears, set the “NK IP address” and open the connection.
- Start the menu command “Send default configuration file”. The software will request you to specify the complete IP parameter settings for the NK822x, namely IP address, Subnet mask and Default gateway (Fig 1).
- Enter carefully the correct values and start download. Be aware that a wrong setting may prevent you to connect again to the NK822x with the current address.
- The default configuration does not include the subsystem connectivity parameters; it is however sufficient for enabling the new firmware to operate over the network and then receive the complete configuration from Composer.

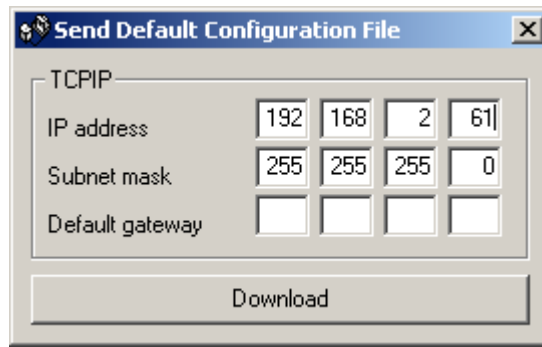


Fig 1. IP settings for default configuration

Firmware update:

- At that point, the new default configuration file (.INI) is installed on the NK8223. However, it is not used by the old firmware. In order to download the new firmware, you have to use the “Download file” command.
- Browsing on the files directories, locate and select the files listed above and select “open” to download them to the NK unit (Fig 2).

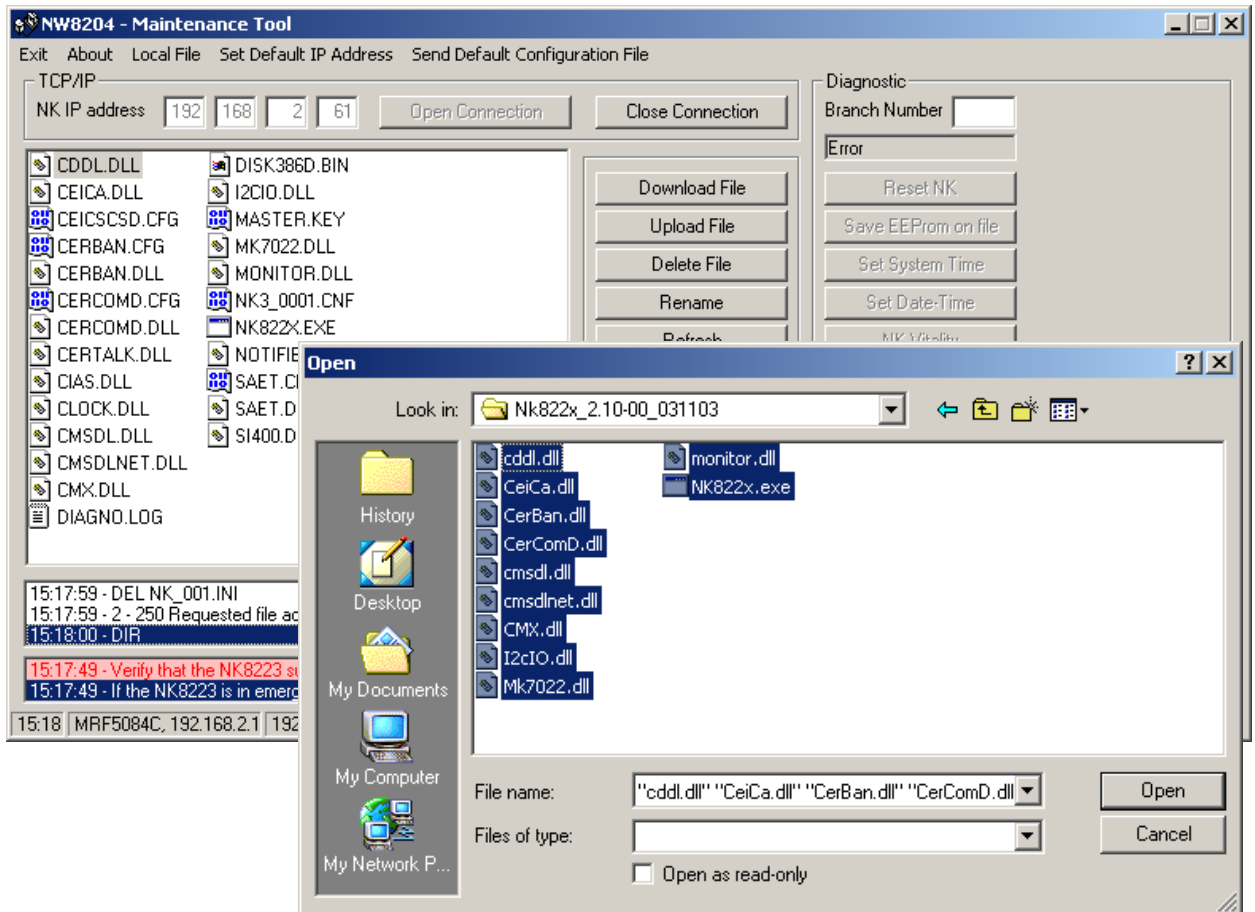


Fig 2. Selecting new firmware files

Reset:

- At that point, it is necessary to reset the NK8223 so as to let the new firmware run. Due to a change in the reset command, the NW8204 may not be able to command a reset on older firmware.

- Using the reset command of NW8201 tool, you can achieve the result. See → CDI-WAN Technical Manual MP1.x (001111_c_en).

Composer configuration:

- In Composer, configure the NK8223 to update. See → DMS8000 Connectivity Guide (007083_c_en) for detailed instructions.
- Select the NS8210 CDI-WAN driver node and then the “Firmware Update” tab.
- In the list of NK822x units, select the one you wish to download and click on the button “Download configuration” (Fig 3).
- At that point, the NK8223 will receive the new INI file and then reset. You should be ready to wait for 2 minutes for the reset to complete.

Hint: You can monitor the NK8223 status with the “ping” command. During reset, the ping requests will time out.

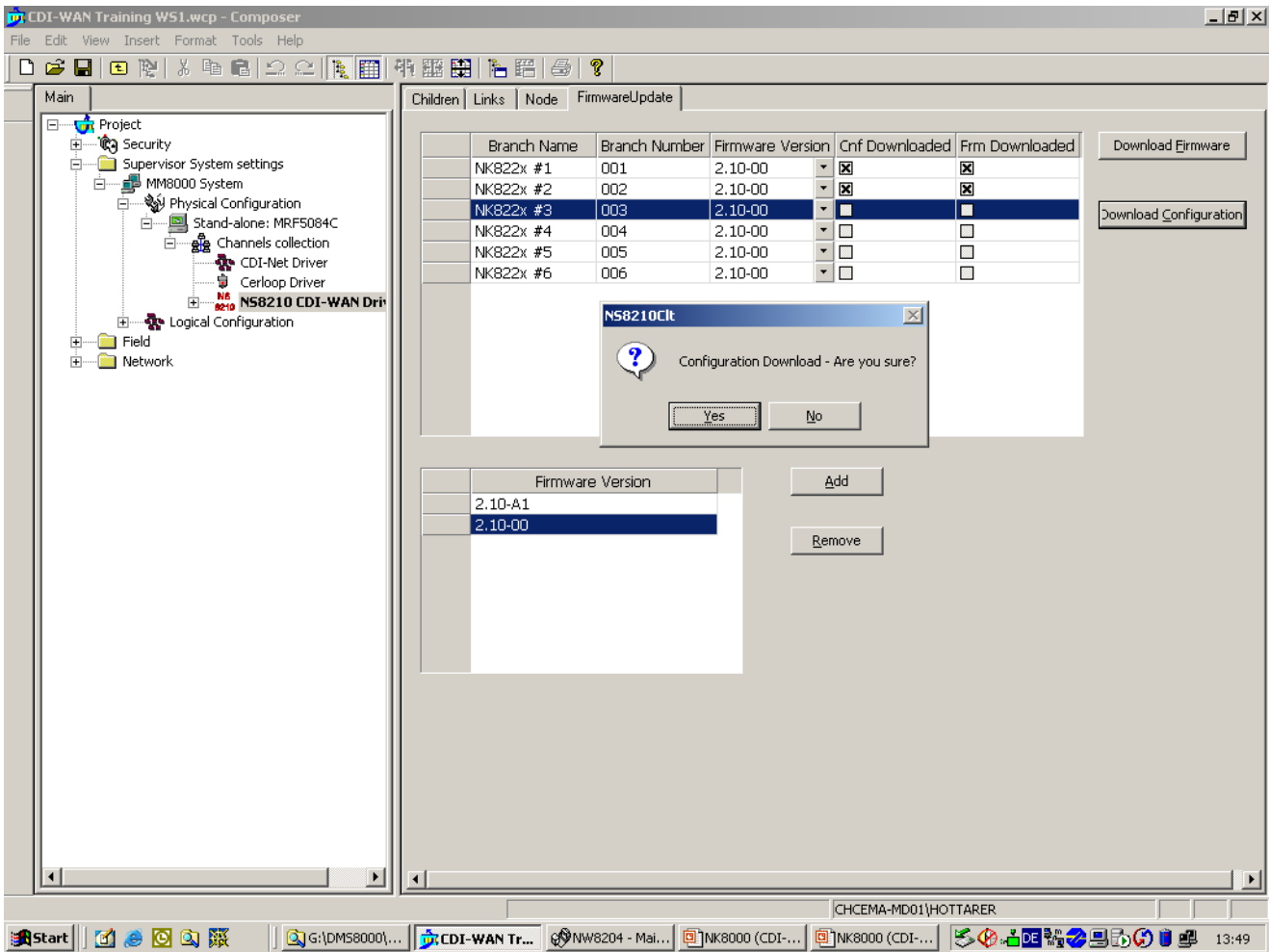


Fig 3. CDI-WAN Firmware Update tab in Composer

Repeat the procedure for all NK8223 units; note that around 8 minutes each are required for the entire file transfer.

→ **For advanced users only:** optionally, once the NK8223 is correctly updated, you may remove the old CNF and CFG files as well as the DLL not included in the list of new firmware files. You will need to operate (very carefully!) with NW8204.

4 Compatibility matrices

#	Unit – Protocol	Supported in <u>CDI-WAN MP2.1?</u>	Management stations	
			<u>MK8000 MP1.3</u>	<u>MM8000 MP2.3</u>
1.	Burle CCTV – Allegiant	<i>Planned</i>	<i>Planned</i>	<i>Planned</i>
2.	Comerson CCTV – CDDL/CDSF	<i>No, use MP1.1 and LMS</i>	No	<i>No, use LMS</i>
3.	CDDL/CDSF compliant subsystem	<i>No, use MP1.1 and LMS</i>	No	<i>No, use LMS</i>
4.	FHI-PAD - CDDL/CDSF	<i>No, use GW20 and LMS</i>	No	<i>No, use LMS</i>
5.	CC30 CerPass – CerTalk	<i>No, use MP1.1 and LMS</i>	No	<i>No, use LMS</i>
6.	CC60 – Cerban	Yes	Yes	Yes
7.	CMX/CF-9003 - CMX-DL	Yes	Yes	Yes
8.	CS4, CS440, CZ12 – Cerban	Yes	Yes	Yes
9.	CS6 Guarto MP3 – CerCom/LON	Yes	Yes	Yes
10.	CS11 – Cerban and ISO1745; EP5 and EP7	Yes	Yes	Yes
11.	CZ10 – Cerban	Yes	Yes	Yes
12.	Honeywell OpenLink 3000 – ModBus	<i>No, use GW20 and LMS</i>	No	<i>No, use LMS</i>
13.	L&S NCRS – Staefa Port (NISE)	<i>No, use GW20 and LMS</i>	No	<i>No, use LMS</i>
14.	MK-7022 Cerloop – ISO1745	Yes	Yes	Yes
15.	Simatrix – CCDL/CDSF	Yes	Yes	Yes
16.	STT11 – via Cerloop	Yes	Yes	Yes
17.	Transliner – SIZE	<i>No, use GW2x</i>	No	<i>No, use LMS</i>
18.	SI410 – Sintony protocol	<i>Planned</i>	<i>Planned</i>	<i>Planned</i>
19.	DMS7000 units (MF7033 etc.)	Yes	Yes	Yes
20.	Upstream serial (NK822x → DMS) – CMSDL	<i>No, use MP1.1</i>	Yes	Yes
21.	Upstream LAN (NK822x → DMS) – CEI79	Yes	Yes	Yes
22.	Upstream LAN (NK822x → DMS) – CMSDL/IP	Yes	Yes	Yes

#	Unit – Protocol	Supported in <u>CDI-WAN MP1.1</u> <u>(R1.31)?</u>	Management stations		
			<u>LMSmod.</u> <u>R2.50-xx</u>	<u>MK8000</u> <u>MP1.2</u>	<u>MM8000</u> <u>MP2.2</u>
1.	Burle CCTV – Allegiant	Yes	Yes	No	No
2.	Comerson CCTV – CDDL/CDSF	Yes	Yes	No	No
3.	CDDL/CDSF compliant subsystem	Yes	Yes	No	No
4.	FHI-PAD - CDDL/CDSF	<i>No, use GW20</i>	Yes	No	No
5.	CC30 CerPass – CerTalk	Yes	Yes	No	No
6.	CC60 – Cerban	Yes	Yes	Yes	Yes
7.	CMX/CF-9003 - CMX-DL	Yes	Yes	No	Yes
8.	CS4, CS440, CZ12 – Cerban	Yes	Yes	Yes	Yes
9.	CS6 Guarto MP3 – CerCom/LON	Yes	Yes	Yes	Yes
10.	CS11 – Cerban and ISO1745; EP5 and EP7	Yes	Yes	Yes	Yes
11.	CZ10 – Cerban	Yes	Yes	Yes	Yes
12.	Honeywell OpenLink 3000 – ModBus	<i>No, use GW20 and LMS</i>	Yes	No	No
13.	L&S NCRS – Staefa Port (NISE)	<i>No, use GW20 and LMS</i>	Yes	No	No
14.	MK-7022 Cerloop – ISO1745	Yes	Yes	Yes	Yes
15.	Simatrix – CCDL/CDSF	Yes	Yes	No	Yes
16.	STT11 – via Cerloop	Yes	Yes	Yes	Yes
17.	Transliner – SIZE	<i>No, use GW2x</i>	Yes	No	No
18.	SI410 – Sintony protocol	<i>Planned</i>	<i>Planned</i>	No	No
19.	DMS7000 units (MF7033 etc.)	Yes	Yes	Yes	Yes
20.	Upstream serial (NK8223 → DMS) – CMSDL	Yes	Yes	Yes	Yes
21.	Upstream LAN (NK8223 → NK8210+DMS) – CEI79	Yes	Yes	No	No
22.	Upstream LAN (NK8223 → NK8210) – CEI79 + serial (NK8210 → DMS) – CMDSL	Yes	Yes	Yes	Yes

5 Known problems & bugs

This is a list of known problems, limitations and bugs in MP2.1. For troubleshooting, see the troubleshooting documentation. See also 7 Support links and resources, on page 14 for links providing useful information.

1. CDI-WAN configurations made with NW8201 are not compatible with the new version and must be reintroduced in Composer projects for 2.1.
→ See section 3, “Migrating from a previous release”, on page 5
2. NK8222 and NK822X cannot be connected over a serial line to the DMS.
→ See section 2, “What’s new in MP2.1”, on page 2.
3. The number of NK8222 MP2.1 (R1.0) and NK8223 MP2.1 (R2.1) that can be connected to a DMS host is limited to a maximum of 50.
→ See section 2.2, “Compatibility with management stations”, on page 2.
4. NW8202 tool MP1.1 (R1.31) cannot be used for CDI-WAN MP2.1 products; instead, you need to install the new tool MP2.1 distributed with MK8000 MP1.3 and MK8000 MP2.3. The same incompatibility is present between NW8202 tool MP2.1 and the CDI-WAN MP1.1 tools.
→ See section 2.3, “New software tools”, on page 3.
5. CS6 Quarto MP2b is no more supported.

6 Documentation

This section provides an overview of what information is included in each of the documents that accompany CDI-WAN MP2.1.

6.1 CDI-WAN Product Binders

The product binders contain sales and technical documentation, respectively. The format reflects the standard for all FSP-DMS documents.

6.2 Sales documentation

Product Datasheets

These are 4-page documents to be used for introducing the NK822X Ethernet Ports to potential customers. NK8223 datasheet has been updated, while a new one has been created for NK8222.

Sales Presentation

A new PowerPoint presentation has been created. It can be used as is, or modified for client presentations. It provides an overview of the CDI-WAN network solutions.

Sales guide

This new guide lists the most important sales arguments for CDI-WAN products.

Application & Planning

This is a new guide to the available architectures. The CDI-WAN application & planning document contains a brief discussion of the product marketing strategy, and a moderate level of detail about the architectural configurations supported by MP2.1.

6.3 Technical documentation

Release Notes

This document outlines what's new and different about MP2.1 and how that affects your work. It also included any newly discovered bugs and fixes.

Installation Configuration & Commissioning

The ICC guide contains information about network limits, hardware and software requirements. It provides step-by-step procedures for some installation and configuration aspects of the CDI-WAN. During configuration this manual should be used in tandem with the DMS8000 Connectivity Configuration guide.

The troubleshooting guide is also included here and contains known problems encountered during and after installation configuration & commissioning.

DMS8000 Connectivity Configuration Guide

This is a document that is shipped with all FSP-DMS products. It includes information about installing Composer, connecting and activating the hardware (dongle) key, setting up a new project and configuring the networks and subsystems supported by DMS8000 products. This should be used in conjunction with the CDI-WAN ICC guide.

7 Support links and resources

7.1 CDI-WAN

FSP-DMS support provides information on the Intranet site <http://www.cdi.cerberus.ch/support/supp-lmsn.asp>. A software troubleshooting guide is available at: <http://www.cdi.cerberus.ch/support/supp-trou.asp> (password required) or deliverable upon request, please contact CD-IT support: support@cdi.cerberus.ch.

7.2 Microsoft

General support about Microsoft Windows can be found at:

⇒ <http://support.microsoft.com/directory/>

Most interesting support links are also available in the Intranet site page:

⇒ <http://www.cdi.cerberus.ch/support/supp-link.asp>

The following links concern more specifically the platform Windows 2000.

7.2.1 Windows 2000 professional workstation

Technical information, including deployment guides:

⇒ <http://www.microsoft.com/windows2000/default.asp>

Frequently Asked Questions (FAQs):

⇒ <http://www.microsoft.com/windows2000/support/issues/default.asp>;

⇒ <http://www.windows2000faq.com>

Hardware compatibility list:

⇒ <http://www.microsoft.com/windows2000/professional/howtobuy/upgrading/compat/default.asp>

Security issues:

⇒ <http://www.microsoft.com/technet/treeview/default.asp?url=/technet/security/current.asp?productid=5&servicepackid=0>

How to obtain Windows 2000 Service packs:

⇒ <http://support.microsoft.com/support/kb/articles/Q260/9/10.ASP>

7.3 Adobe Acrobat

To view the CDI-WAN documentation it is necessary to install the program Adobe Acrobat Reader. You can find its free version at:

<http://www.adobe.com/products/acrobat/readstep.html>

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CDI-WAN Technical Material
Section 1