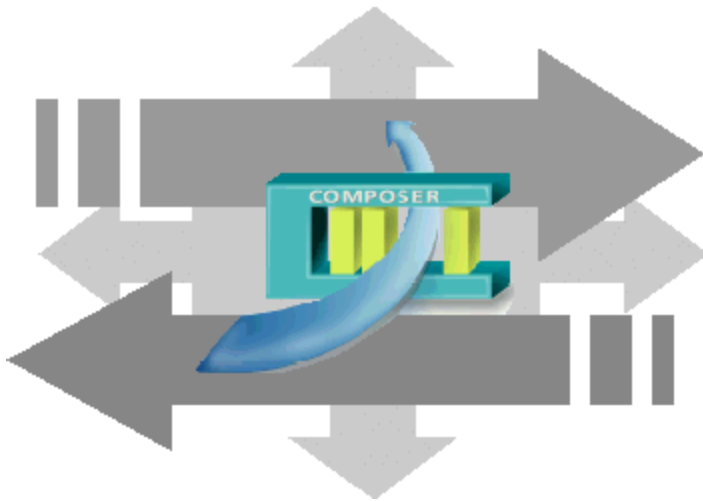


SIEMENS



DMS8000

Migration from LMSmodular

Engineering Guide for:

MM8000 MP4.xx

Building Technologies

Fire Safety & Security Products

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About this document

Purpose of this document

This manual is for use during the migration of a LMSmodular Danger Management System to a DMS8000 Danger Management System. The focus of this document is the substitution of LMSmodular stations with MM8000 stations.

Scope

It is a guide to, and reference for the steps that have to be performed during the migration of LMSmodular systems to DMS8000. This manual is part of the general DMS8000 documentation set which includes the Composer™ technical manual, the Connectivity Configuration Guides, and the Installation, Configuration and Commissioning manual for each specific system.

Target audience

This manual is written for people responsible for the commissioning and configuration of the DMS8000 systems. It assumes that the reader is already familiar with the concepts and terminology related to the field of security, as well as with LMSmodular systems, Siemens fire and security products, and the networks and subsystems supported by them.

Related training

Siemens Fire & Security Products offers a comprehensive training program. You can find information about training courses in the BT FS Intranet.

Operational and safety regulations



Before groups of persons begin work on any DMS system, they must have read and understood the related documents. In particular, section 1 in this manual, "Safety Regulations", at p.7.

Liability disclaimer for damage or injuries

Before products are delivered, they are tested to ensure they function correctly when used properly. Siemens disclaims all liability for damage or injuries caused by the incorrect application of the instructions, or the disregard of danger advisories. This disclaimer applies in particular to personal injuries or damage caused by:

- Improper and/or incorrect use.
- Disregard of safety instructions in the documentation or on the product.
- Poor maintenance or a lack of maintenance.

We have taken every possible care in preparing this manual. The contents of this manual are revised regularly and brought up to latest standards. Nevertheless, we are unable to provide any guarantee with regard to content, entirety or quality of the details contained in this manual.


We assume no liability for problems resulting from the use of this manual. The information contained in this document may be changed without prior notice. We reserve the right to publicize any such changes by issuing updated versions or new editions.

Reference documents

The most recently released documentation for customers can be found in the STEP Documentation Repository System released at SBT FS for end-users via the STEP Web Client interface at the following address:

https://intranet.sbt.siemens.com/dbcom/en/db_porta/client.asp

The following describes one way to search and find a document:

1. Click on the "STEP WEB Client" image: 
2. Choose "04 Fire -3F" from the "Product Segment" box and select "Activate filter".
3. Select "All" in the Documents section of the Quick Search page and select "Advanced Search".
4. Enter the document number in the "Brochure No." field (e.g. A6V10062415 or 007121) and press "Enter".

Note: STEP provides no results when the number of found objects is equal to or greater than 200.

Hint: For a specific version, specify the Market Package as *MPn.nn* in the "Classification No." field (e.g. *MP4.10*).

→ To learn about other ways to locate a document, see DMS8000 Quick Reference Guidelines for Search and Finding DMS Documents in STEP (A6V10064704).

| Product and Document Name | Document no. | Date | Last update |
|---------------------------|--------------------------------------|---------------|----------------|
| Sales documents | | | |
| DMS8000 | | | |
| 049 | Application Specification & Planning | A6V10063710_a | 06.2007 MP4.10 |

| MM8000 | | | |
|---------------|-----------------------|---------------|----------------|
| 023 | Product Datasheet | A6V10062415_a | 06.2007 MP4.10 |
| 053 | System Description | A6V10062417_a | 06.2007 MP4.10 |
| 039 | Sales Presentation | A6V10062423_a | 06.2007 MP4.10 |
| 074 | Sales Guide | A6V10062427_a | 06.2007 MP4.10 |
| 074 | Tender Specifications | A6V10062419_a | 06.2007 MP4.10 |
| 074 | Offer Template | A6V10062429_a | 06.2007 MP4.10 |

| MK8000 | | | |
|---------------|--------------------|---------------|----------------|
| 023 | Product Datasheet | A6V10062405_a | 06.2007 MP4.10 |
| 039 | Sales Presentation | 007121_a | 03.2003 MP1.10 |
| 074 | Sales Guide | 004970_b | 03.2003 MP1.10 |

| MT8001 | | | |
|---------------|--|--|--|
|---------------|--|--|--|

| | | | | |
|-----|-----------------------|----------|---------|--------|
| 023 | Product Datasheet | 006952_e | 09.2005 | MP3.15 |
| 053 | System Description | 008605_a | 09.2005 | MP3.15 |
| 039 | Sales Presentation | 007346_b | 03.2003 | MP1.01 |
| 074 | Sales Guide | 007286_c | 09.2005 | MP3.15 |
| 074 | Tender Specifications | 007788_c | 09.2005 | MP3.15 |
| 023 | Demo Material | 008078_b | 09.2005 | MP3.15 |

NK8000

| | | | | |
|-----|-------------------------------|---------------|---------|--------|
| 023 | Product Datasheet NK8223 | A6V10062431_a | 06.2007 | MP4.10 |
| 023 | Product Datasheet NK8222 | A6V10062433_a | 06.2007 | MP4.10 |
| 023 | Product Datasheet NK8225 | A6V10062445_a | 06.2007 | MP4.10 |
| 023 | Product Datasheet NK8225 PICS | A6V10062449_a | 06.2007 | MP4.10 |
| 023 | Product Datasheet NE8000 | A6V10062421_a | 06.2007 | MP4.10 |
| 023 | Product Datasheet NK8021 | A6V10075902_a | 06.2007 | MP4.10 |
| 039 | Sales Presentation | A6V10062435_a | 06.2007 | MP4.10 |
| 074 | Sales Guide | A6V10062439_a | 06.2007 | MP4.10 |

Technical documents**DMS8000 and Composer**

| | | | | |
|-----|--|---------------|---------|--------|
| 054 | Composer Technical Manual | A6V10062401_a | 06.2007 | MP4.10 |
| 022 | Composer Quick Reference | A6V10067783_a | 06.2007 | MP4.10 |
| 048 | Network, Fire and Intrusion Connectivity Guide | A6V10062425_a | 06.2007 | MP4.10 |
| 048 | Access Control Connectivity Guide | A6V10062451_a | 06.2007 | MP4.10 |
| 048 | Video Connectivity Guide | A6V10062457_a | 06.2007 | MP4.10 |
| 048 | OPC Connectivity Guide | A6V10065253_a | 06.2007 | MP4.10 |
| 048 | Graphical Map Configuration | A6V10062441_a | 06.2007 | MP4.10 |
| 022 | Graphical Map Configuration Quick Reference | A6V10069550_a | 06.2007 | MP4.10 |
| 016 | Migration from DMS7000 | A6V10062443_a | 06.2007 | MP4.10 |
| 016 | Migration from LMSmodular | A6V10085965 | 09.2007 | MP4.10 |

MM8000

| | | | | |
|-----|---|---------------|---------|-----------|
| 073 | Release Notes MP4.10 | A6V10062455_a | 06.2007 | MP4.10 |
| 073 | Release Notes MP3.20-03 | A6V10075048_a | 06.2007 | MP3.20-03 |
| 048 | GEUTEBRUECK ICC add-on | A6V10067796_a | 06.2007 | MP4.10 |
| 029 | Operation | A6V10062409_a | 06.2007 | MP4.10 |
| 022 | Operation Quick Reference | A6V10067779_a | 06.2007 | MP4.10 |
| 048 | Installation, Configuration and Commissioning (ICC) | A6V10062413_a | 06.2007 | MP4.10 |
| 022 | Configuration Quick Reference | A6V10075052_a | 06.2007 | MP4.10 |
| 048 | Autronica BSxx, ICC ad-on | 008750_a | 06.2006 | MP3.20 |

| | | | | |
|-----|---------------------------|----------|---------|--------|
| 048 | LIST SCU 2000, ICC add-on | 009248_a | 06.2006 | MP3.20 |
|-----|---------------------------|----------|---------|--------|

| | | | | |
|-----|----------------------------------|---------------|---------|--------|
| 048 | MAXSYS PC601, ICC add-on | 008751_a | 06.2006 | MP3.20 |
| 048 | CP100, ICC add-on | 009848_a | 06.2006 | MP3.20 |
| 048 | R Card M5 ICC add-on | A6V10064742_a | 06.2007 | MP4.10 |
| 048 | MODBUS ICC add-on | A6V10067800_a | 06.2006 | MP3.20 |
| 048 | CDDL-CDSF ICC add-on | A6V10067787_a | 06.2006 | MP3.20 |
| 048 | DLCS ICC add-on | A6V10067792_a | 06.2007 | MP4.10 |
| 019 | Localisation - Engineering guide | A6V10062459_a | 06.2007 | MP4.10 |

| | | | | |
|--|---|---------------|---------|--------|
| MK8000 | | | | |
| 048 | Release Notes for MP4.10 | A6V10062459_a | 06.2007 | MP4.10 |
| 073 | Release Notes for MP3.20 | 009423_a | 06.2006 | MP3.20 |
| 073 | Release Notes for MP3.10 | 008603_a | 12.2004 | MP3.10 |
| 048 | Installation, Configuration and Commissioning (ICC) | A6V10062407_a | 06.2007 | MP4.10 |
| MK8000 Interface Specifications | | | | |
| 019 | MK8000 OPC Server | 004971_h | 06.2006 | MP3.20 |

| | | | | |
|---------------|---|----------|---------|--------|
| MT8001 | | | | |
| 073 | Release Notes for MP3.15 | 008604_a | 09.2005 | MP3.15 |
| 048 | Operation | 006611_e | 09.2005 | MP3.15 |
| 022 | Operation Quick Reference | 008088_a | 09.2005 | MP3.15 |
| 048 | Installation, Configuration and Commissioning (ICC) | 006647_e | 09.2005 | MP3.15 |
| 019 | Localisation Engineering Guide | 008083_b | 09.2005 | MP3.15 |
| 016 | History Analysis Installation | 006962_b | 03.2003 | MP1.00 |

| | | | | |
|---------------|---|---------------|---------|-----------|
| NK8000 | | | | |
| 073 | Release Notes for MP4.10 | A6V10062457_a | 06.2007 | MP4.10 |
| 073 | Release Notes for MP3.20-01 | 009422_b | 12.2006 | MP3.20-01 |
| 073 | Release Notes for MP3.15 | 008902_a | 09.2005 | MP3.15 |
| 073 | Release Notes for MP3.10 | 008602_a | 12.2004 | MP3.10 |
| 048 | Installation, Configuration and Commissioning (ICC) | A6V10062437_a | 06.2007 | MP4.10 |

Tab.1. Reference documents

Standard symbols

| | |
|---------|---|
| Italics | Result |
| “ ” | Quotation, reproduced identically |
| ➔ | Cross reference |
| (...) | Brackets contain supplementary text, suggestions etc. |

Modification index

| Current version | Date | Comments |
|-----------------|---------|--|
| A6V10085965_a | 10.2007 | First edition of DMS8000 Migration from LMSmodular |

Definitions of terms

| | |
|---------------------|--|
| Area | A group of sections. Each control unit can monitor one or more areas. |
| CCG | DMS800 Connectivity Configuration Guide manuals. These include: <ul style="list-style-type: none"> – Access Control – Network, Fire and Intrusion – → OPC – Video |
| CDDL-CDSF | The CDDL (Cerberus Dati Data Link) is a data-link protocol specifying the data exchange across a serial RS232 point-to-point connection. → For more information about CDDL, please refer to document e1152 (contact customer support). The CDSF (Cerberus Dati Standard Format) defines the data structure of application messages transferred into CDDL frames. CDSF is designed to model the control unit conditions into a flat list of multi-state objects that can be easily mapped into the process image memory of central stations. → For more information about CDSF, please refer to document e1151 (contact customer support). |
| CDI-NET | Family of communication devices (GW-xx gateways) providing serial (RS232), point to point solutions including one or two levels of concentration gateways. CDI-NET includes: GW-00, GW-01, GW-20, GW-21. |
| CDI-WAN | Network solution based on GW-23 (and its predecessor GW-22) gateway providing LAN and WAN connectivity for serial (RS232) control units. CDI-WAN was replaced by → NK8000 in recent years. |
| Cerban | Serial, point-to-point interface protocol for Siemens fire, safety, and intrusion control units. Physically, it can be based on TTL or V24 (RS-232) signals. When equipped with → Cerban interface cards, the control units can provide access to an external → DMS computer on → CDI-NET or → NK8000 (→ CDI-WAN) network. |
| Cerloop | The Cerloop network provides a redundant connectivity solution for Siemens fire, safety, and intrusion control units. The network has a ring topology, and each unit can communicate via two different wiring paths, thus assuring a redundant link in case of failure in any point of the loop. In order to communicate with a → DMS supervision system such as MM8000, the loop should include one or more interface units, called → MK7022, which provides access to an external computer system via an RS232 serial protocol based on the → ISO1745 standard. From a Cerloop ring equipped with → MK7022, access to a → DMS computer is possible both directly, and via a larger → CDI-NET or → NK8000 (→ CDI-WAN) network. |
| CF9000 | Digital input/output system, based on modular units distributed over RS485 bus lines. The CF9000 hardware (CF9003) is being replaced by → DF8000. |
| CGS | Cerberus Graphic Station Auxiliary station used by LMSmodular to enhance the graphic capability of the management system. |
| CNV_CS6 | Adapter board used to connect early CS6 Guarto releases to LMSmodular via CDI-Net gateways or directly. This solution has been replaced by → NK8000. |
| Control Unit | The physical panel (for example, CS11 fire subsystems) that is connected to a group of detectors. The control unit receives messages from and sends commands to the detectors. For example, when a control unit is connected to the MM8000, it behaves as a liaison (or translator) between the detectors and the MM8000. It receives commands from the MM8000, and communicates them to the detectors, and it receives messages from the detectors and communicates them to the MM8000. The → DMS supervision systems support different types of control units in the disciplines of fire, safety, and security. Each type of control unit has a different set of terms to describe the hierarchical levels of the organisational structure it uses. At the lowest level are the detectors, which are organised into groups. These groups are organised into larger groups, and so on. |
| CSC | Customer Support Centre. |
| DDE | Dynamic Data Exchange. DDE is a technology for communication between multiple applications under Microsoft Windows and OS/2. DDE has been replaced by → OPC in recent years. |
| DF8000 | Family of input/output devices, supporting on/off and supervised signals, and based modular units distributed over RS485 bus lines. |

| | |
|------------------|--|
| DMS | <p>Danger Management System. The term DMS is commonly referenced in two contexts.</p> <p>The first, 'DMS8000', refers to the Siemens family of Danger Management System products, which includes the MM8000, MK8000, MT8001 management stations and terminals, as well as the connectivity and configuration solutions, NK8000 and Composer. DMS8000 refers to the complete system, including subsystems, networks and management stations / terminals.</p> <p>The second, 'DMS', refers to the management stations / terminals in the DMS8000 family. Those are the MK8000, MM8000, and MT8001. When using this manual, reference is made to the 'DMS'. This means the specific product that you are currently configuring.</p> |
| Element | Typically detectors, manual call points, signalling devices, contacts, etc. in the parlance of control units. |
| Function | A group of elements in the STT11 control unit. |
| FS | Fire Safety & Security Products, a division of Siemens Building Technologies. |
| ICC | Installation, Configuration and Commissioning manual. |
| ISO1745 | RS232 serial protocol based on the ISO1745 standard guidelines. – See also Cerloop. |
| LMS | Local Management System |
| MK7022 | In order to communicate with a DMS, the loop should include one or more interface units, called MK7022, which can provide access to an external computer system. – See also Cerloop. |
| NK8000 | <p>Formerly called CDI-WAN, NK8000 network provides local or wide area connectivity solutions over IP networks for fire, safety, and security control units. In order to communicate with a supervision system such as MM8000, NK8000 devices provide a serial upstream connection, as well as a TCP/IP upstream connection, using CMSDL/IP proprietary protocol, or CEI79 standard protocol.</p> <p>The NK8000 unit list includes NK8222 and NK8223 Ethernet ports (gateway devices) that connect to the DMS via an NS8210 driver. Note that NS8210 can be installed on the host DMS station, server or stand-alone, or on a FEP.</p> |
| NK8210 | Early version of NK8000 Network driver (see also NS8210) used by LMSmodular systems for CDI-WAN solutions. |
| NK8222 | Reduced version of NK8223 Ethernet port, supporting only one subsystem on serial or LON line. – See also NK2223 and NK8000. |
| NK8223 | NK8223 Ethernet port, supporting up to 4 RS232 lines, one CerCom/LON bus, and local I/O units. See also NK8222 and NK8000. |
| NS8010 | Cerloop driver: one of the possible communication components. NS8010 enables the link to the Cerloop port MK7022. – See also Cerloop. |
| NS8012 | → CDI-Net driver: one of the possible communication components. NS8012 enables the link to GW-20 and GW-21 gateways as well as to → NK8223/NK8222 and → NK8210 when configured in serial mode. – See also CDI-Net. |
| NS8210 | NK8000 Network driver: one of the possible communication components. NS8210 enables the link to NK822x when configured in LAN mode. – See also NK8000. |
| OPC | OLE (Object for Process Control). OPC is set of specifications defining the way multiple Windows applications can talk to each other and exchange real-time data. |
| Operator | The person responsible for treating events using the DMS. The operator is usually either a member of the security force, or the fire brigade. |
| Plant | The physical location being protected by the security detectors and controlled with the DMS. Synonyms are: facility, site, building, area, etc. |
| PSP | Product Support Platform from → CSC on the SBT intranet |
| Section | A group of zones in the CC11, CZ10, CS440, and CS4 control units. |
| Subsystem | A control unit configured in the Composer environment. |
| Zone | A group of detectors (or elements). The term 'zone' is used with the following control units: CC11, CZ10, CS440, CS4. There are two other control units that use different terms for the same concept. The STT11 uses the term 'function', while the CZ12 uses the term 'address'. |

1 Safety regulations

This chapter describes the danger levels and the relevant safety regulations applicable for the use of FS-DMS products. Please read the following subsections, as well as the previous section "About this document" thoroughly before beginning any work.

1.1 Country-specific standards

FS-DMS products are developed and produced in compliance with the relevant international and European safety standards. This document provides warnings and recommendations specific to the MM8000 Management Station.

Any additional country-specific or local safety standards and/or regulations that apply concerning project planning, and installation and operation of the MM8000 Management Station must also be taken into account, in addition to the safety regulations mentioned in the product documentation.

1.2 Assembly, installation, commissioning and testing work

Activate security-, fire- and third party systems or devices **only** in the presence of the person responsible.

- Abide by the safety regulations of the connected sub-systems when working on management stations. This especially applies when switching-off system components.
- Inform people before the testing of alarm devices - consider the possibility of panic Reactions.
- Inform the alarm and fault receiving stations connected to the system before carrying out tests.

1.3 Modifications to the system design and the products



Modifications to a system or to individual products may cause faults or malfunctioning

Please request written approval from Siemens Building Technologies, Fire Safety & Security Products. Product line DMS, and the relevant authorities, concerning intended system modifications and system extensions.

2 Introduction

Siemens fire safety and security products are designed to work together. While there are many occasions where only one product may be used in a facility, when combined our products create a robust and flexible set of architectural and connectivity solutions. The possible combinations of Danger Management Systems (DMS), network choices, and subsystems used in any given plant are extensive. However the time involved with commissioning tasks can be substantial.

With the aim of reducing time spent on configuration, Siemens FS has developed their products so that the DMS and the networks can all be configured with a single tool called WW8000 Composer.

The networks and subsystems supported by our Danger Management Systems are always configured in the same way within the Composer environment.

What this document contains

This document compares LMSmodular features with MM8000 features and provides recommendations and tips for the migration to MM8000. It describes configuration procedures needed for the migration of LMSmodular Management stations and discusses the use of the available tools.

What this document doesn't contain

Details about the configuration of each DMS product are not included in this manual, but can be found in the product-specific configuration manual.

Each DMS product carries a different set of technical and behavioural characteristics that interact with the networks and subsystems. These differences typically appear as additional tabs in the network and subsystem work areas of Composer. However, since these tabs are always associated with attributes specific to the DMS being used, they are not discussed in this manual. This information can be found in the corresponding product configuration manual.

2.1 Overview of LMSmodular and DMS8000 families and networks

Siemens fire safety & security products are organised into three levels:

- **Management level:**
Presents the events, and allows for control of the site via the management station(s). The majority of the human interface takes place at this level.
- **Automation level:**
Provides data communication links between the other two levels and defines the network topology and structure. The majority of the real-time control functions are carried out at this level.
- **Field level:**
Contains the discipline-specific field devices.

| Level | System | Products | Compatibility notes |
|--|---|---|--|
| Management | LMSmodular Local Management Systems | LMSmodular base module CGS Graphic Station additional module GT Guard Tour additional module | Note that not all combinations of devices across the levels may be possible at a given time. |
| | DMS8000 Danger Management Systems (DMS) | MM8000 Management Station MT8001 Management Terminal MK8000 OPC Server for Subsystems | |
| Automation (including connectivity) | Network | Cerban Cerloop CDI-Net NK8000 (formerly CDI-WAN) | |
| | Network components | MK7022 GW-00, GW-01, GW-21, GW-20 NK8210 NK822x | |
| | Subsystems | Fire, Intrusion, CCTV, Gas, I/O, Access Control (SiPass) | |
| Field | Physical devices | Automatic detectors Manual call points Signalling devices, contacts Control elements, etc. | |

2.2 Additional documents

Depending on your level of experience with Composer, and the architectural solutions available with our products, as well as where you are in the commissioning process, there are a number of additional documents that you may find useful. If you need a document that you don't have, you can download it through STEP on the Siemens Intranet.

Please see the following descriptions of relevant additional documents:

- The Composer Technical Manual contains mostly introductory information for new users of Composer. In addition to general introductory information, it contains details about several functions and shortcuts that can be useful for users. This manual is typically included with the documentation set that comes with each product. The STEP document number is: A6V10062401. STEP short name: WW8000.
- The Planning Application & Planning guide shows the architectural solutions currently available with the DMS8000 solutions, including network and subsystem connectivity options. This document is a kind of library of technical solutions, and is intended primarily as sales tools, but provides an overview of the relationships within the system that may be useful when planning a configuration. STEP document number: A6V10063710.
- The DMS8000 Connectivity Configuration Guides include the configuration procedures for the networks and subsystems supported by our DMS products. They discuss in detail how to configure these systems by hand. STEP document numbers: A6V10062425 (Network, Fire, and Intrusion), A6V10062451 (Access Control), A6V10062457 (Video), and A6V10065253 (OPC).
- The product-specific Installation Configuration & Commissioning manual (ICC) is the necessary complement to this manual for getting a complete view of the configuration process of a DMS product. STEP document numbers: A6V10062413 (MM8000), A6V10062407 (MK8000), A6V10062437 (NK8000).

3 Migration from LMSmodular

3.1 General

3.1.1 System architectures

The MM8000 system allows for single and multiple stations architectures as well as client/server solutions that can replace any LMSmodular architecture.

As far as the field connectivity is concerned, systems based on ISO1745/Cerloop and CDI-Net communication can still be supported by MM8000. However, due to obsolete and unsupported hardware, CDI-Net gateways - GW-00, GW-01, GW-20, GW-21 - should be replaced as soon as possible as described below.

Instead, connections based on Cerban, CDDL-CDSF, CDI-WAN (GW-22, GW-23), and CNV-CS6 are no longer directly supported on the MM8000 server station and require an additional interface, e.g. NK822x.

3.1.2 Compatibility issues

MM8000 allows for restoring part of the configuration of existing LMSmodular installations. However, some components require a new configuration activity and some others are no longer supported.

In general, please be aware of the following:

- Various legacy subsystems are still supported by MM8000 and the direct import of customised texts is possible for some of them.

Customer texts can be imported *from LMSmodular database* for the following subsystems:

- CZ10
- CZ12
- CC60
- CMX/CF9003 (note that DF8003 replaced CF9003)
- SIMATRIX
- Philips-Burle CCTV matrix

In other cases, MM8000 can import the *database export (metafile)* of the specific subsystem tool. The metafiles of the following subsystems can be imported:

- CS11 AlgoRex
- STT11
- CS4
- CS440
- CS6 Guarto
- SI410/420 Sintony
- CerPass CC30 (via SiPass)



Subsystems that are compatible with MM8000 and can be still used may anyway need specific software updates (and possibly hardware updates as well). Please refer to latest MM8000 Release Notes.

Migration from LMSmodular

- The following units are still supported by MM8000, but require preliminary activities for modelling the subsystem point and command structure:
 - CDDL-CDSF units such as Comerson CCTV, WSS, CDSS, Transliner
- The following units are no longer supported by MM8000:
 - Access control: Westinghouse units SE902, SE422, SE818, and NexSentry
 - Stäfa NCRS building automation modules via NISE-PAD
 - Third-party units via FHI-PAD
 - CBA fire control unit
- The general project structure, the configuration options concerning reactions and sequences (MM8000), and the graphic maps (MM8000, MT8001) must be re-entered manually.
- In general, special options related to the LMS-WAN solution, including the time controlling module RClock, are not supported.
- Access Control module (ACW) cannot be ported. A solution based on SiPass should be studied.
- Guard Tour module (GT) cannot be directly ported. A solution based on SiPass should be studied.
- CGS Graphic Station can be replaced by a dual-monitor MM8000 station.



When evaluating the LMSmodular compatibility issues and the related migration options, it is strongly recommended that you verify the latest product portfolio and the product phase-out strategies.

3.2 Management station features

This section contains the main LMSmodular software functions and how they can be replaced in a scenario with a new MM8000 management station.

3.2.1 Basic operations

| LMSmodular | Supported in MM8000 | Migration procedure | References |
|--|---------------------|--|-------------------------------|
| Acknowledgement of alarms or trouble messages | Yes | Supported in Fast Treatment mode | Doc.: MM8000 Operation Manual |
| Resetting of alarms | Yes | Supported in Fast Treatment mode | Doc.: MM8000 Operation Manual |
| Switching zones or elements OFF/ON/TEST | Yes | Use Plant Browser and point properties | Doc.: MM8000 Operation Manual |
| Switching organisation day/night (present/not-present) | Yes | Use Plant Browser and point properties | Doc.: MM8000 Operation Manual |
| Switching control elements ON/OFF and other control commands | Yes | Use Plant Browser and point properties | Doc.: MM8000 Operation Manual |

3.2.2 Event treatment

| LMSmodular | Supported in MM8000 | Migration procedure | References |
|---|---------------------|---|-------------------------------|
| Treatment pages with graphics and intervention text | Yes | Supported in Assisted Treatment mode <ul style="list-style-type: none"> ➤ Intervention texts must be manually added | Doc.: MM8000 Operation Manual |
| Alarm printouts | Yes | Supported in Assisted Treatment mode <ul style="list-style-type: none"> ➤ Activation must be re-configured | Doc.: MM8000 Operation Manual |
| Event treatment report | Yes | Supported in Assisted Treatment mode | Doc.: MM8000 Operation Manual |

3.2.3 Menu selection

| LMSmodular | Supported in MM8000 | Migration procedure | References |
|--|---------------------|--|---------------------------------|
| Login, Switchover, Password modification | Yes | Use commands in the MM8000 "Operator" menu | Doc.: MM8000 Operation Manual |
| Lists menu | Yes | Use MM8000 filtering options | Doc.: MM8000 Operation Manual |
| Management | Yes | Use Plant Browser and point properties | Doc.: MM8000 Operation Manual |
| Page browser | Yes | Use Plant Browser with graphical navigation ➤ Re-engineering required | Doc.: MM8000 Operation Manual |
| History | Yes | Use History Browser | Doc.: MM8000 Operation Manual |
| Engineering Tools | Yes | Use Composer | Doc.: Composer Technical Manual |
| Windows Applications | Yes | Use MM8000 "Applications" menu | Doc.: MM8000 Operation Manual |

3.2.4 Data point descriptions

| LMSmodular | Supported in MM8000 | Migration procedure | References |
|--|---------------------|---------------------|--|
| Max. number of characters for data point description: 80 | Yes (> 80 char.) | Use Composer | Doc.: MM8000 Operation, ICC Tool: Composer |
| Max. number of characters for subsystem description: 60 | Yes (> 60 char.) | Use Composer | Doc.: MM8000 Operation, ICC Tool: Composer |

3.2.5 System security

| LMSmodular | Supported in MM8000 | Migration procedure | References |
|----------------------|---------------------|---|--|
| Access levels 0 to 9 | Yes | Use MM8000 security levels ➤ Re-engineering required | Doc.: MM8000 Operation, ICC Tool: Composer |

3.2.6 Graphics

Graphic pages cannot be migrated.

3.2.7 Printer support

| LMSmodular | Supported in MM8000 | Migration procedure | References |
|------------------|---------------------|---------------------------------------|---|
| Serial printer | Yes | Use any printer supported by Windows. | Doc.: MM8000 Operation, ICC Tool: Composer |
| Parallel printer | Yes | Use any printer supported by Windows. | Doc.: MM8000 Operation, ICC Tool: Composer |

3.2.8 DDE support

| LMSmodular | Supported in MM8000 | Migration procedure | References |
|------------------|---------------------|---|---|
| DDE connectivity | No | Move to OPC and use MK8000 <ul style="list-style-type: none"> ➤ Re-engineering required | Doc.: MM8000 Operation, ICC Tool: Composer |

3.3 Subsystem support

Note: See DMS8000 Network, Fire and Intrusion Connectivity Guide, Appendix A (STEP #A6V10062425) for network connectivity options.

| Subsystem | Supported in LMSmodular | Supported in MM8000 | Supported in MK8000 | Supported in MT8001 | Customer text import | References |
|-------------------|-------------------------|---------------------|---------------------|---------------------|---|--|
| CZ10 | Yes | Yes | Yes | Yes | Import from LMSmodular database (see section 4.2.1) | Documentation: – DMS8000: CCG manuals – MM8000 / MK8000 / MT8001: ICC manual – MM8000 Release Notes |
| CZ12 | Yes | Yes | Yes | No | | |
| CC60 | Yes | Yes | Yes | Yes | | |
| CMX/CF9003 | Yes | Yes | Yes | Yes | | |
| SIMATRIX | Yes | Yes | Yes | No | | |
| Philips-Burle | Yes | Yes | Yes | No | | |
| CS11 AlgoRex | Yes | Yes | Yes | Yes | Import metafile | |
| STT11 | Yes | Yes | Yes | Yes | | |
| CS4 | Yes | Yes | Yes | No | | |
| CS440 | Yes | Yes | Yes | Yes | | |
| CS6 Quarto | Yes | Yes | Yes | Yes | | |
| SI410/420 Sintony | Yes | Yes | Yes | Yes | | |
| Cerpass CC30 | Yes (via CerPass) | Yes (via SiPass) | Yes (via SiPass) | No | Import via SiPass | |

3.4 Network

| LMSmodular | Supported in MM8000 | Migration procedure | Reference |
|-----------------------------------|---------------------|---|----------------------------|
| Cerban | No | Install end-loop on data concentrators; install MK7022 or install NK8000 | → See section 4.3.1, p.22 |
| CDDL-CDSF | No | Install NK822x | → See section 4.3.2, p.22 |
| Cerloop | Yes | - | → See section 4.3.3, p.23 |
| CDI-WAN (GW-22, GW-23) via NK8210 | No | Install NK822x | → See section 4.3.4, p.23 |
| CNV-CS6 | No | Install NK822x with LON option | → See section 4.3.5, p. 23 |

4 Migration procedures

4.1 LMSmodular database files

The two files needed for importing customer texts into a DMS8000 are:

- DB_PUL.DBF
- DB_SUB.DBF

These files are located in the compressed backup set (ZIP file) of LMSmodular configuration and in the C:\COPAV\IDBM\DATA folder of the PC where the LMSmodular software is installed.

4.2 Subsystems

4.2.1 Importing customer texts from an LMSmodular database

To import customer texts from an LMSmodular database, perform the following procedures in Composer:

Adding a folder for the subsystem

1. Open the Composer project.
2. Create a folder for the Fire/Gas/Intrusion components.

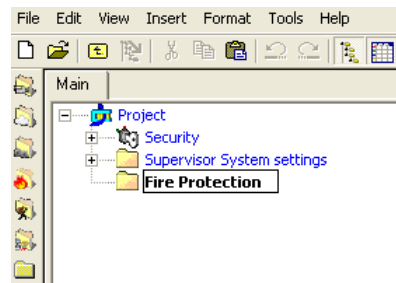


Fig. 1 Creating a new folder in the Composer tree

Adding a subsystem node

1. Select the new folder.
2. Select the appropriate subsystem icon to add a subsystem node.

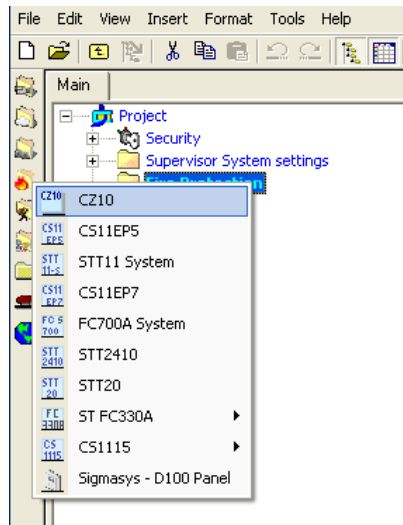


Fig. 2 Adding a new subsystem (e.g. CZ10) in the Composer tree

Setting the subsystem 'Local Address' and the 'Vitality Timer' (Cerban/Cerloop only)

1. Select the subsystem node.
2. In the Node tab form, set the 'Local Address' and the 'Vitality Timer'.

The local address must match the corresponding value set in the unit's configuration according to the Cerban/Cerloop network rules. The vitality timer setting indicates the maximum acceptable delay between two vitality messages from the control units. If timer expires, a fault event is generated. A value between 120 and 180 seconds is recommended.

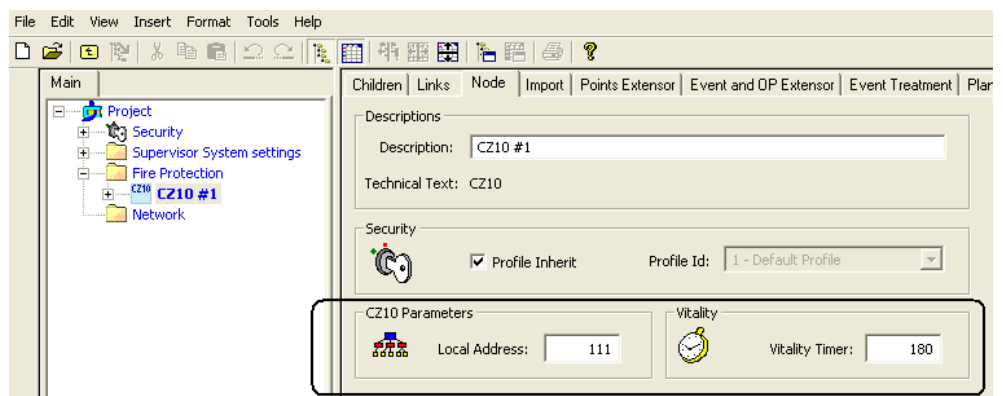


Fig. 3 Configuring Cerban/Cerloop options

Importing the LMSmodular configuration

1. Select the subsystem node.
2. Select "Tools→Import" in the Composer menu to start subsystem import.

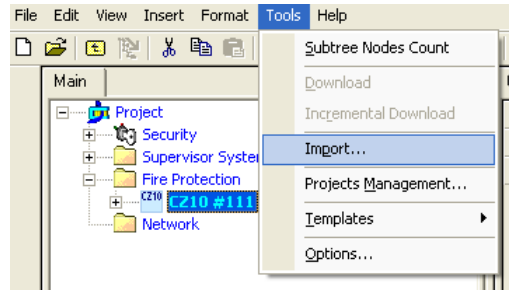


Fig. 4 Importing data from subsystem node

After a confirmation request, the software presents a browsing window to search for the files to import.

3. Using standard Windows controls, do the following:

- a. Look for LMS files (DB_SUB:DBF is searched) using the browsing window.

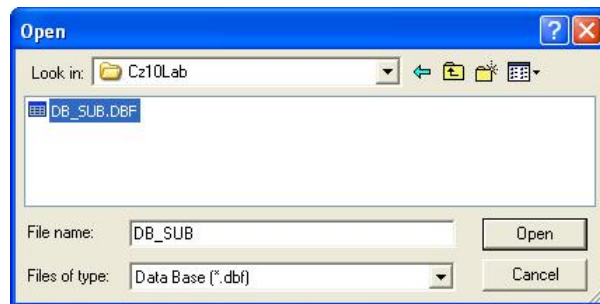


Fig. 5 Locating the file to import

- b. Locate the DB_SUB.DBF file (note that DB_PUL.DBF is also required: **both** files must be present in the same folder).
- c. Select DB_SUB.DBF and click 'Open'.
- d. When prompted, select the language code of the DBF file.

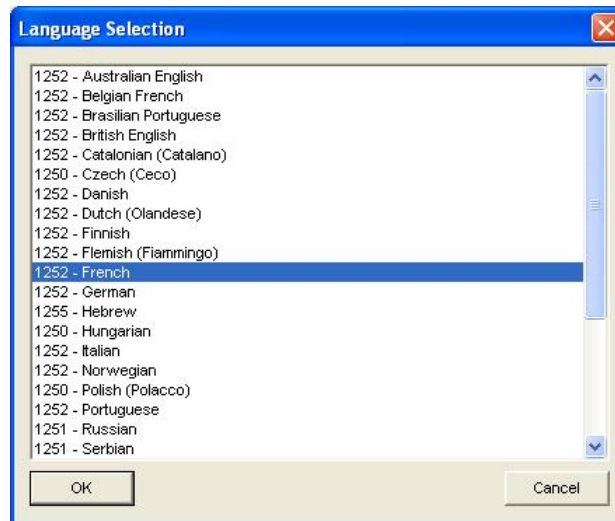


Fig. 6 Choosing language code (e.g. French)

- e. If more than one subsystem unit is present in the database file, the software presents a list. Select the one you want to import and click 'OK'.

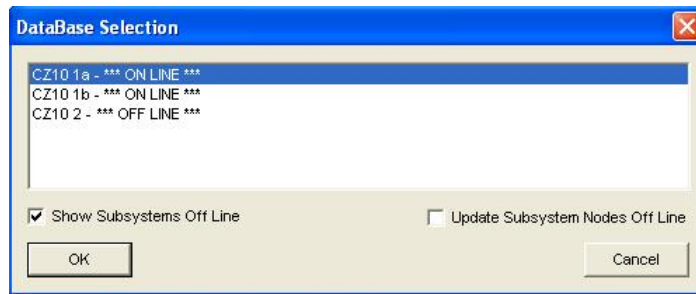


Fig. 7 Selecting the subsystem to import

In a few moments, the subsystem structure is imported, and the node is represented in the Composer tree.

Two checkboxes in the selection window allows for enabling the process of out-of-scan (off-line) data in the LMSmodular database.

The first option, *Show Subsystem Off-Line*, lets the out-of-scan subsystems appear in the selection list. Check the option *Update Subsystem Node Off-line* to include the out-of-scan points in the import.



Note that re-import is not possible.

4.3 Networks

4.3.1 Cerban

Direct connections to Cerban networks are NOT supported by MM8000.

Possible migration scenarios:

Cerban network in end-loop configuration

1. Connect all existing data concentrators in an end-loop configuration
2. Install MK7022 in Cerloop
3. Configure MK7022 using Win_K22 tool
4. Program MK7022 EPROM
5. Connect MK7022 to MM8000

Note: NS8010 ISO1745 Driver is required on MM8000

Connect subsystems via MK7012 Cerban nodes

1. Connect subsystems via MK7012 Cerban nodes to a Cerloop network
2. Install MK7022 in Cerloop
3. Configure MK7022 using Win_K22 tool
4. Program MK7022 EPROM
5. Connect MK7022 to MM8000

Note: NS8010 ISO1745 Driver is required on MM8000

Connect subsystems to NK8000 Network

1. Install NK822x Ethernet Ports
2. Connect subsystems via Cerban (or ISO1745 for CC114x) to NK822x
3. Connect NK822x to the LAN
4. Connect MM8000 to the LAN

Note: NS8210 NK8000 Network Driver is required on MM8000

4.3.2 CDDL-CDSF

Direct connection to CDDL-CDSF units is NOT supported by MM8000.

Migration scenario:

Connect subsystems to NK8000 Network

1. Install NK822x Ethernet Ports
2. If a CDSF model is not already available in Composer (see note below), a new one must be configured using the CDSS customization tool
3. Connect subsystems via CDDL-CDSF to NK822x
4. Connect NK822x to the LAN
5. Connect MM8000 to the LAN

Note: NS8210 NK8000 Network Driver is required on MM8000.

The CDDL/CDSF Control Units Add-on module is required on MM8000. The Add-on module includes a set of predefined models for the following units: CP100, AVOTEC; PATROL. The integration of other CDDL/CDSF control units requires additional engineering effort for creating specific subsystem models. For details about the CDDL/CDSF support please refer to the documents CDDL/CDSF ICC Add-on (A6V10067787) and CDDL/CDSF ICC Add-on Release notes (A6V10067804).

4.3.3 Cerloop

Existing Cerloop connections to LMSmodular can also be connected to MM8000 station using NS8010 ISO1745 Driver.

4.3.4 CDI-WAN

CDI-WAN connection (GW-22 and GW-23) is not supported by MM8000.

Migration scenario:

Connect subsystems to NK8000 Network

1. Install NK822x Ethernet Ports (replacing one to one GW-2x)
2. Connect subsystems to NK822x
3. Connect NK822x to the LAN
4. Connect MM8000 to the LAN

Note: NS8210 NK8000 Network Driver is required on MM8000.

4.3.5 CNV-CS6

Connections to CS6 Guarto via CNV-CS6 are not supported by MM8000.

Migration scenario:

Connect CS6 Guarto subsystems to NK8000 Network

1. Install NK822x Ethernet Ports (replacing CNV-CS6)
2. Update CS6 Guarto version
3. Connect subsystems to NK822x
4. Connect MM8000 via LAN or serial line

Note: NS8210 NK8000 Network Driver is required on MM8000.

5 Migration Checklist

This brief checklist presents the main steps required for migrating an existing LMSmodular systems to MM8000. The list is organised in two parts, containing the planning and the implementation phases. For each step, the *References* column shows what sections of this paper or what other documents or tools can be refer to.

| # | Step | Reference |
|-----------------------|---|---|
| Planning | | |
| 1 | Analyse the existing system as well as the corresponding LMSmodular configuration | <ul style="list-style-type: none"> – Project documentation – LMSmodular documents: <ul style="list-style-type: none"> → LMSmodular Configuration Guide (001863_c) → LMSmodular Configuration Reference (001864_c) |
| 2 | Verify compatibility of field subsystems, define the list of obsolete or incompatible units | <ul style="list-style-type: none"> – Section 3.1.2 of this document – Subsystems' documentation |
| 3 | Acquire new subsystems as required | <ul style="list-style-type: none"> – Sales Support |
| 4 | Define the new DMS software (MM8000 license) and hardware (PC, NK8000) required | <ul style="list-style-type: none"> – Section 3.2 of this document (MM8000 software) – Section 3.4 of this document (Networks) – DMS8000 documents: <ul style="list-style-type: none"> → Application Specification & Planning (A6V10063710_a) → MM8000 and NK8000 Datasheets |
| 5 | Acquire new DMS software and hardware | <ul style="list-style-type: none"> – Sales Support |
| 6 | Define the required MM8000 software configuration, compile the configuration forms | <ul style="list-style-type: none"> – Section 3.3 of this document – MM8000 document: <ul style="list-style-type: none"> → Install., Configuration & Commissioning (A6V10062413_a) |
| 7 | Get the LMSmodular configuration files (DB_SUB.DBF, DB_PUL.DBF) | <ul style="list-style-type: none"> – Section 4.1 of this document |
| 8 | Get the subsystems' metafiles | <ul style="list-style-type: none"> – Subsystem's configuration tools – Subsystem's documentation – Section 3.3 of this document |
| 9 | Get the AutoCAD drawings of the building(s) to be used in MM8000 | <ul style="list-style-type: none"> – DMS8000 document: <ul style="list-style-type: none"> → Graphical Map Configuration Guide (A6V10062441_a) |
| Implementation | | |
| 10 | Install new subsystems or update old software/firmware | <ul style="list-style-type: none"> – Subsystem's documentation |
| 11 | Using Composer, configure the new MM8000 Project | <ul style="list-style-type: none"> – Section 3.3 of this document – See DMS8000 documents: <ul style="list-style-type: none"> → Composer Technical Manual (A6V10062401_a) → Network, Fire & Intrusion Connectivity Guide (A6V10062425_a) → MM8000 Install., Configur. & Commissioning (A6V10062413_a) |
| 12 | Install new MM8000 | <ul style="list-style-type: none"> – MM8000 document: <ul style="list-style-type: none"> → Install., Configuration & Commissioning (A6V10062413_a) |

Siemens Switzerland Ltd
Building Technologies Group
International Headquarters
Fire Safety & Security Products
Gubelstrasse 22
CH-6301 Zug
Tel +41 41 724 24 24
Fax +41 41 - 724 35 22

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