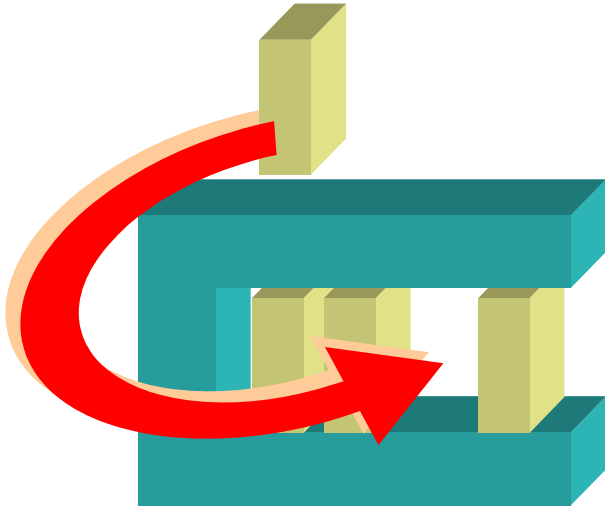


SIEMENS



MM8000 MP3.20

MM8000 MP4.xx

CDDL/CDSF Control Units

Add-on module

**Installation and Configuration
Guide**

Building Technologies

Fire safety & Security Products

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About this document

Purpose of this document

This manual is a guide to the installation, configuration, and operations for the MM8000 Management Stations that includes control units supporting the CDDL/CDSF protocol. It presents the MM8000 add-on module for this type of sub-systems.

Scope

This document applies to the MM8000 Management Station MP3.20, MP4.10 and higher.

Target readers

This documentation is intended for the following users:

- Project Managers
- Project Engineers
- Commissioning Personnel

Individuals performing the operations described in this manual are expected to have prior expertise and training in the field of security, at least a moderate level of familiarity with the Siemens Building Technologies product line, and experience with the installation, configuration, and commissioning of security management systems.

Also, a good knowledge of the CDSF standard, as applied to the specific applications, is required for performing the configuration steps.

Reference documents

The **DMS8000 Documentation Resource Information Guide** document assembles in one place important information regarding documentation resources. It contains the following:

- Comprehensive definitions of the target audiences for FS DMS documents
- Training program information including the Siemens intranet link
- A complete list of all available DMS8000 documents
- Instructions for how to obtain a document via the Siemens intranet using the STEP Documentation Repository System
- A map of relevant documents for each target audience group
- Customer Support links & resources
- A glossary containing definitions of all terms and acronyms used in DMS8000 documentation

To access the **DMS8000 Documentation Resource Information Guide** (STEP #A6V10089056), go to the link and follow the instructions below:

<https://workspace.sbt.siemens.com/content/00001123/default.aspx>



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 then select **Advanced Search**.
4. Enter the document number in the **Brochure No.** field (e.g. A6V10089056) and press **Enter**.

Operational and safety regulations



Before beginning work on the MM8000 Management Station, you must have read and understood the Operational and Safety Regulations included in the following documents:

- A6V10062425 - DMS8000 Connectivity Configuration Guide
- A6V10062413 - MM8000 Installation, Configuration and Commissioning
- A6V10062437 - NK8000 Installation, Configuration and Commissioning

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 checked the contents of this manual for agreement with the hardware and software described. Since deviations cannot be precluded entirely, we cannot guarantee full agreement. However, the data in this manual are reviewed regularly and any necessary corrections included in subsequent editions. Suggestions for improvement are welcome.

Modification index

Document index	Date	Notes
A6V10067787_a_en	06.2009	Corresponds with version MP4.20 of the MM8000 software
A6V10067787_a_en	11.2006	Corresponds with version MP3.20-01 of the MM8000 software

1 Introduction

1.1 CDDL/CDSF protocol

Some of the FS-DMS legacy subsystems and a number of 3rd party units have applied the CDDL/CDSF protocol suite to exchange application messages with LMSmodular management station.

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 CDI-135-017-E.

The CDSF (Cerberus Dati Data 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 CDI-130-017-E.

1.2 CDSS subsystems

Control unit that can communicate via CDDL/CDSF are generally called **CDSS** subsystems. CDSS is an acronym for Cerberus Dati Standard Subsystem.

Each unit type applies the CDSF standard according to a specific model, including a point and command map.

1.3 MODBUS add-on module



It must be made clear that the MM8000 add-on module documented here **is not a ready-to-use solution** and is intended as an open tool-kit that allows for integrating CDSS subsystems via NK82xx. Each subsystem requires in fact that a specific CDSF application model is defined and configured using the MM8000 tools.

In fact, depending on the modelling solutions, multiple applications of the CDSF protocol may exist for the various control units. A customisation tool is provided, along with the communication and configuration software, in order to adapt each system to the actual installed units.

1.4 Version supported

In general, CDDL exists in a unique version, whereas there are two implementations of CDSF: one is fully compliant to the standard (document CDI-130-017-E), whereas a variant (e.g. CP100 gas unit) specifies a different format for the first byte of commands (00 hex instead of the standard 80 hex).

2 Installation

2.1 Distribution package

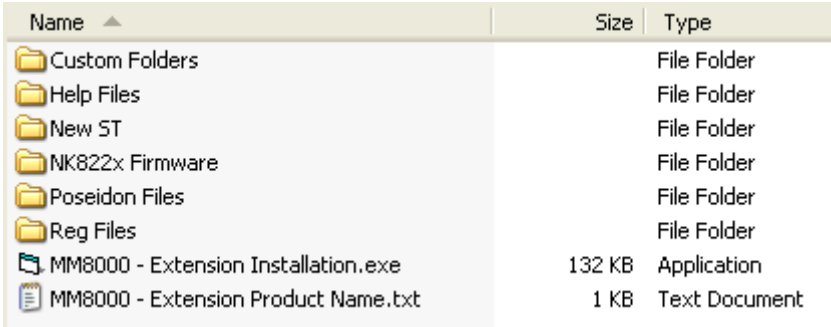
The M8000 software for the CDSS support is distributed as an add-on package, to be installed on the stations including the Composer tool (client-only and FEP stations are therefore excluded) after the standard MM8000 Setup.

The package is named: **MM8000 MPx.xx.xx - System Extension N.06 (CDSS V.1.00)** and is made up by an installation kit of a few files.

Installation kit

The installation kit includes (Fig. 1):

- **Custom folders**, containing the CDSF customisation tool for the specific application.
- The new **Help Files**, describing the CDSS configuration procedures.
- The new Composer Subsystem Tool (**New ST**) for the CDSS models.
- The firmware for the NK82xx units (**NK82xx Firmware**), i.e. an additional DLL module supporting the CDSS protocol.
- The **Poseidon Files**, including the definitions of the CDSS data structures.
- The registry file folder (**Reg Files**), containing a command for registering the add-on package.
- The installation utility: the **MM8000 – ST extension Installation.exe** program.
- The extension name text file; e.g.: **MM8000 – ST extension Product Name.txt**



Name	Size	Type
Custom Folders		File Folder
Help Files		File Folder
New ST		File Folder
NK82x Firmware		File Folder
Poseidon Files		File Folder
Reg Files		File Folder
MM8000 - Extension Installation.exe	132 KB	Application
MM8000 - Extension Product Name.txt	1 KB	Text Document

Fig. 1 Installation kit

2.1.1 Installation checklist

ITEMS NEEDED FOR THE INSTALLATION

- The MM8000 Setup CD
- The installation kit: MM8000 MPx.xx.xx - System Extension N.06 (CDSS V.1.00)
- The MM8000 hardware key (dongle)

The MM8000 license PAK code(or the REG file that contains it), including the CDSS support

INSTALLATION CHECKLIST

- 1. Install the MM8000 Software and the required license key and PAK
→ MM8000 Release Notes
- 2. Install the NK8000 units (NK82xx)
→ NK8000 Installation, Configuration and Commissioning
- 3. On the station(s) with configuration capability (Composer tool),
install the CDSS add-on p. 6
- 4. Customise the CDSF model according to the modelling solution p. 10
- 5. Update the NK8000 firmware p. 15

2.2 Software installation

2.2.1 Requirements

The support for CDSS does not add any special requirements to the standard MM8000 setup. Therefore, software and hardware requirements are the same as for the base MM8000 software, as described in the document no. A6V10062413, MM8000 Installation, Configuration and Commissioning.

As far the NK8000 network is concerned, the requirements are described in the document no. A6V10062437, NK8000 Installation, Configuration and Commissioning.

The MM8000 software must be properly installed before the add-on can be installed. For more information on the MM8000 installation, please see the mentioned A6V10062413 document.

2.2.1.1 MM8000 Version compatibility

This CDSS add-on package is designed to work with MM8000 MP3.20 and higher. Contact FSP-DMS support to verify the compatibility with other versions.

2.2.2 Software License

An additional license is required to run the CDSS module. On top of the base MM8000 MP3.2 license codes, a specific PAK is therefore needed.

Therefore, the required license includes:

- WW8000 Composer (project configuration and download): Composer License or Service key.
- NS8210 driver: NK8000 connections, indicating the number of NK82xx units. This license is required for enabling the network driver and the NK82xx units communicating with the CDSS control units.
- MM8000 core, no. of subsystems. This license should include the number of CDSS control units.
- MM8000 core, no. of devices. This license should include the number of CDSS physical objects (detectors, auxiliary and control outputs).
- CDSS add-on license.
→ Check detailed sales policy for your country

Other licenses, covering more MM8000 options, may or may not be used and they are not related to the CDSS support.

2.2.3 CDSS add-on installation

The following are the installation procedures for the CDSS add-on module.



Depending on the MM8000 version a different installation procedure is foreseen. Please select the appropriate procedure.

2.2.3.1 Installation on MM8000 MP3.20 and MP4.10

The following are the installation procedures for the CDSS add-on module.

1. Copying files

The add-on installation is quite simple. The installation kit includes the **MM8000 – ST extension Installation.exe** utility (Fig. 2 below). Just run this program and the add-on files will be copied onto the local hard disk in the appropriate folders.

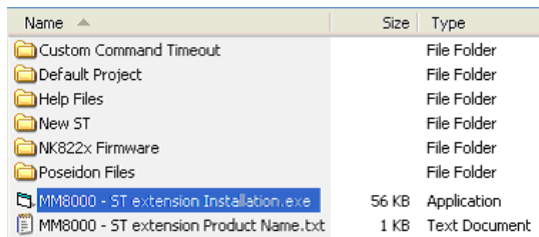


Fig. 2 Starting the add-on installation

2. Installing the Subsystem Tool I

Composer requires that the tools are installed using a specific procedure. Therefore, a small utility is also launched in order to add the CDSS Subsystem Tool (ST) in to the Composer tool set.

The utility shows as illustrated in Fig. 3. Click **Install** to proceed.

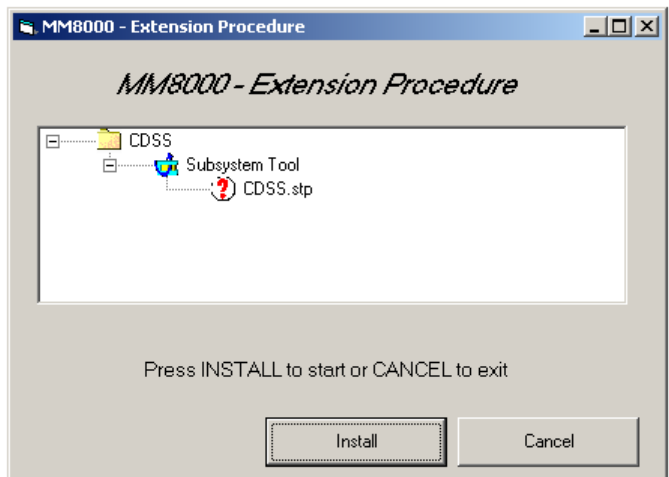


Fig. 3 Installing the CDSS Subsystem Tool

In few seconds, the tool is installed in Composer. The name of the new tool appears in the list (Fig. 4). At this point, click Exit to quit.

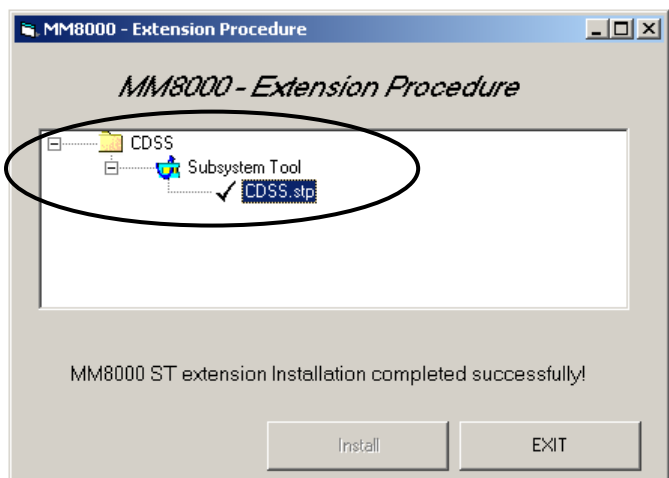


Fig. 4 Closing the installation tool

2.2.3.2 Installation on MM8000 MP4.15 and later

A specific application, the Add-on manager, is provided in MM8000 MP4.15 and later and allows installing and updating the add-on modules. The application supports the installation of add-ons developed for all MM8000 versions starting from MP3.20.

The following describes the installation procedure.

1. Start Add-on Manager.

From the Windows Start menu, select the following:

Start → DMS8000 → Tools → Add-on Manager

The Add-on Manager window appears (Fig. 5).

2. In the list of add-ons, select the name of the module that you wish to install

-- OR --

click the **Browse ...** button, locate the installation files of the add-on module and select the text file (**Extension Product Name.txt**) in the root folder (Fig. 6).

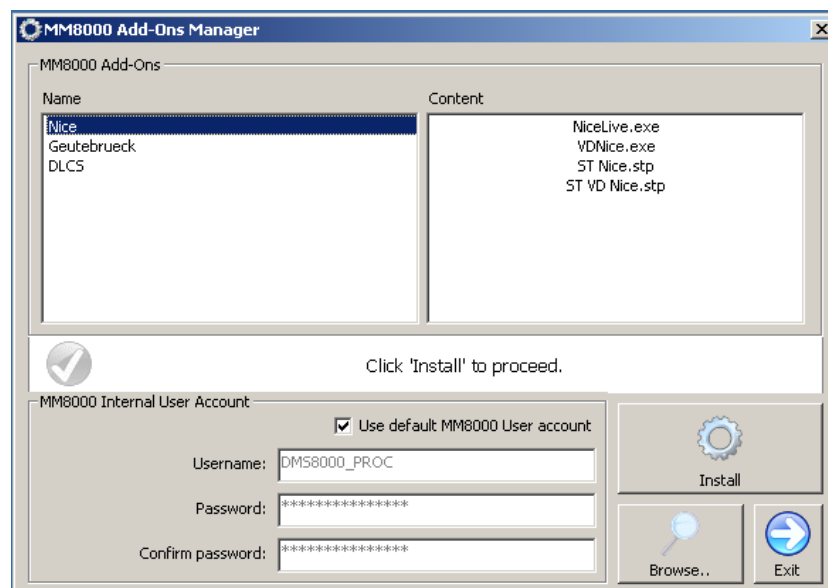


Fig. 5 Add-on Manager Window

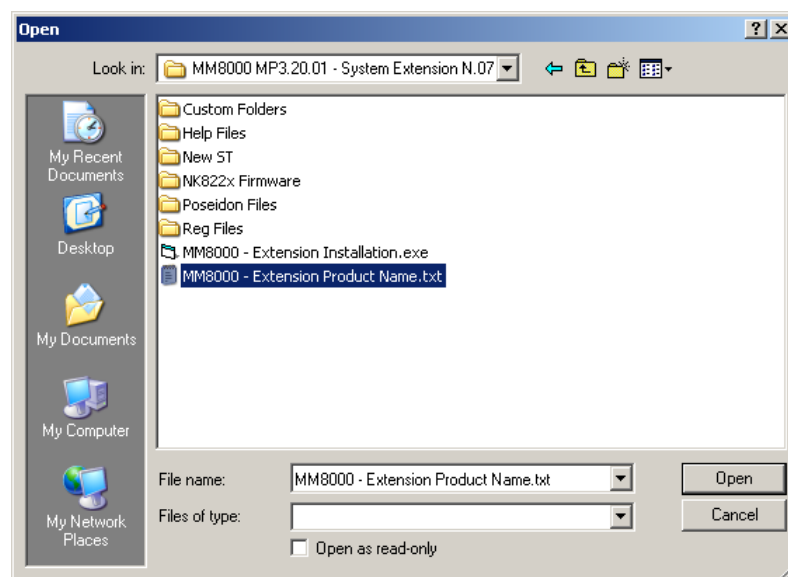


Fig. 6 Selecting the MM8000 Extension Product Name file

3. If your MM8000 installation includes a customized MM8000 internal account,

then deselect the checkbox **Use default MM8000 User account** and specify the customized username and password.

4. Click **Install** (or **Update** if a previous version is detected).

2.2.3.3 Multiple add-on's installation

In general, it is possible to install multiple add-on packages and benefit of their combined functionalities. However, specific incompatibilities might exist. Please refer to the documentation of the other add-on modules.

2.2.4 CDSS add-on uninstall

The CDSS add-on module cannot be uninstalled.

2.3 CDSF model customisations

The CDSF standard (refer to document CDI-130-017-E, edition 01.1994) defines a general message structure which can be applied to any data communication involving a set of multi-state variables.

In MM8000 applications, CDSF can be used using a 3-step approach:

- 1 A general set of *meta-model* definitions have been defined in the web-based Poseidon modelling environment (refer to FS-DMS document 2004-0217-00-Eng). The meta-models, typically organised per discipline (e.g. fire units meta-model), comprise a superset of all the applicable objects.



The Poseidon's meta-models are the base for any further steps. If the available meta-models are somehow not sufficient for a specific application, please contact the customer support in order to define new requirements.

- 2 The *meta-models* can be applied in the CDSS customisation tool, which is included in the CDDL/CDSF add-on package, whose task is to define applicable Composer models for the CDDL/CDSF compatible units, i.e. creating *CDSS subsystem models*.
The composer models can make use of the meta-model objects, freely allocate them in the CDSS subsystem model structure and finally link the objects states to the actual CDSF messages. The result of this task consists of data files for Composer and NK8000 devices.
- 3 In Composer, once the model data file is available, the *CDSS subsystem model* can be applied in the MM8000 projects: the model objects are instanced as data-points for mapping the corresponding states (or CDSF messages) of a real control unit.

Note that this document does not discuss the step 1, which requires a specific training.

Instead, step 2 is presented in the next section, whereas step 3 is a typical Composer configuration, which is illustrated in section 3 on page 18.

Depending on the specific installation, the CDSS subsystem model may be already available for your specific requirements. In this case, just proceed directly to section 3.

2.3.1 CDSS Customisation tool

The tool is a Windows program named **CDSS Meta Subsystem Tool.exe**, which is available in the folder:

<Installation folder>\DMS8000\Composer\Configuration Data\OTD_Files

Note: <Installation folder> is usually **C:\Program Files**

2.3.1.1 User Interface

Starting the program, the window shown in Fig. 7 appears.

The tool interface is organised in three parts:

- On the top, an area where name and type of the selected model are shown; also, some general configuration flags are present here.
- In the middle, the objects list is defined and the states of each object can be associated to CDSF messages.
- In the lower part of the window, the control commands can be associated to equivalent CDSF commands.

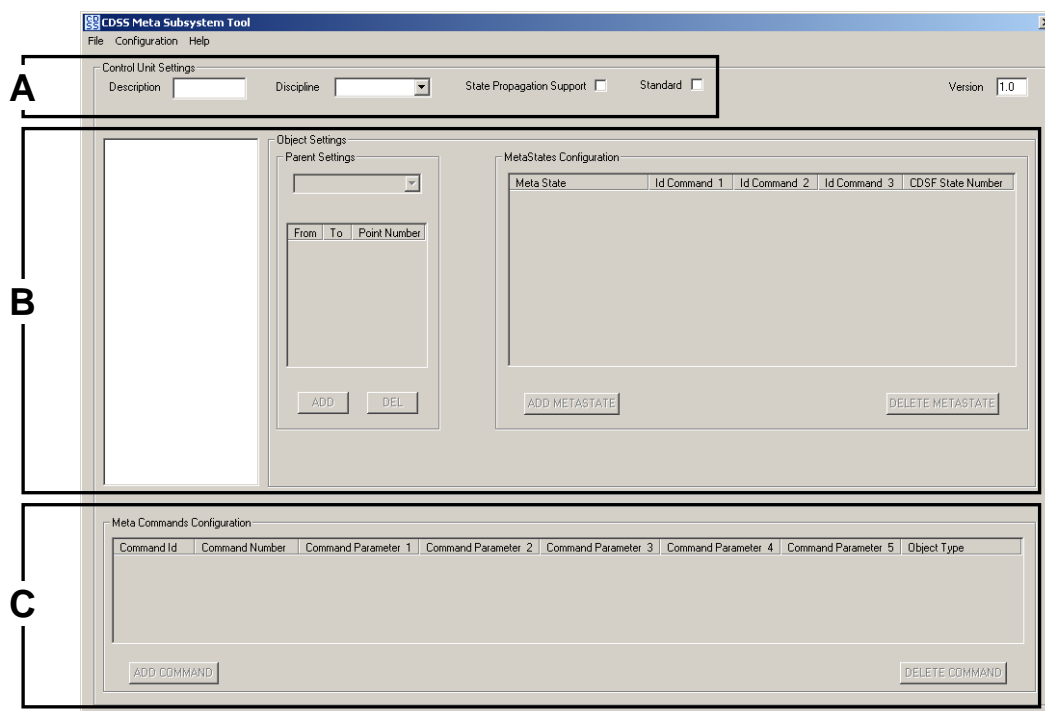


Fig. 7 CDSS tool interface

- A Model general data
- B Object list and CDSF association rules
- C Command list and CDSF association rules

2.3.1.2 Configuration fields

Description: name of the model currently opened: a free text

Discipline: application discipline, which defines the meta-model that is applied and the correspondent superset of object list. Note that, after you define a specific object to be part of the model, the discipline can no longer be modified.

State Propagation Support: if set, this checkbox enables the propagation of states along the tree structure of objects.



This state propagation is implemented in the NK82xx. When used for the MM8000 management station, which can also provide the same propagation function, this option should not be set. Instead, solutions including the MK800 OPC server or other host systems may benefit of this feature.

Standard: if set, it enables the standard CDSF command formatting, which defines the first byte of commands being = 80 Hex), else the first byte is set = 0.

→ Refer to section 1.3 on page 3.

Version: field available to store a model version number; no check is executed on the value.

Object List

This is the large white space on the left part of the window. It lists the meta-model objects available for the given discipline; any subset of the list can be actually applied in the model.

Object Settings / Configured objects

Parent settings: referring to the object type currently selected in the Object List, select here the parent node for the specified range of CDSF points.

From/To/Point Number: referring to the object type currently selected in the Object List, enter the point range and the related parent point number according to the CDSF point list.

Configured States: referring to the object type currently selected in the Object List, enter here the information about the available states: State definition (Meta State), Associated Command (ID Command 1 to 3), and CDSF State Value (a number ranging from 0 to 15). This table creates the actual conversion table between CDSF states and DMS8000 states (CNAP protocol).

Commands configuration: enter here the information about the available commands: Command Definition, Command Number, Parameters (up to 5), Associated Object Type.

Command parameter can be:

- *Fixed:* select this option and then specify the fixed value you want to set.
- *Point Address:* the involved point index is used as parameter (absolute point addressing; e.g. the value 25 is used to command CDSF point 25).
- *Single Range Offset:* the point index referred to the type offset is used as parameter (relative addressing; e.g.: the value 5 is used to command **Zone 5** corresponding to CDSF point 25, assuming the zone type starts at index 21).
- *Full Range Offset:* same as previous, but capable of handling multiple offset ranges (relative addressing; e.g.: the value 15 is used to command **Zone 15** corresponding to CDSF point 55, assuming the zone type ranges from 21 to 30 and then from 51 to 60).
- *Parent Point:* the parent of the involved point is used as parameter (absolute point addressing).

Associated Object Type can be:

- All: all points can be affected by this command
- <Specific Object Type>: the command can only affect the specified type

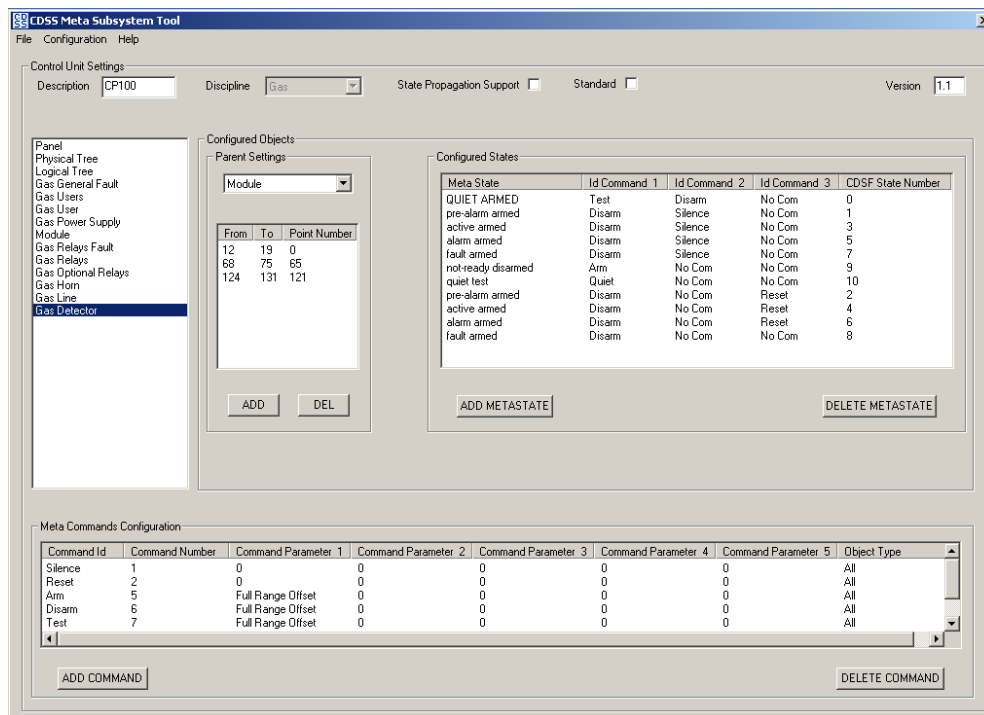


Fig. 8 Example of configured unit

2.3.1.3 Main menu

The tool menu includes the following commands:

File

Open: open one of the existing models, which are stored in .CUB files, located in the same folder as the tool program.

Note that a new model can be added by simply typing its name in the **Description** field, filling in the information, and then saving it.

Save: save the model into the .CUB file on disk,

Exit: close the tool program.

Configuration

Show tree: in the object list field, display the hierarchical structure of the list.

Hide tree: in the object list field, display the plain list.

Help

About CDSS tool: show general information about the program.

Help page: show the help page.

2.3.1.4 Configuration procedure

In order to configure a CDSS unit, you should proceed as follows:

Model Preparation

1. Get the detailed CDSF point and command list for the specific control unit, including the possible states and the command parameters.
2. Study the possible relationships between CDSF points and the objects available in one of the Poseidon meta-models (see annex A).

Model Configuration

1. Open the **CDSS Meta Subsystem Tool**.
2. Define a new model entering the name in the **Description** field.
3. Select the **Discipline**, thus setting the meta-model.
4. If the model will have a tree structure and propagation is required along the tree, check the **State Propagation Support** option.
5. Depending on the CDSF compatibility of the specific unit (see 1.4 on page 3), select or not the **Standard** option.
6. Enter the version number, e.g. **V1.0**.
7. Select the **Panel** object (whose configuration is mandatory) in the **Object List**.
8. Select the CDSF point range (**From/To**) associated to the **Panel** object. Typically, this is a single CDSF point (**From = To**) representing a general summary of the control unit status. Leave the (parent) **Point Number =0**.
9. In the **Configured States** list, add the required lines according to the possible conditions of the CDSF point.
10. For each state, define the associated commands (**ID Com**) and the **CDSF Value**. Note that **CDSF Message Type** is usually =0.
11. Enter the required commands and related parameters.
12. In the **Object List**, select the next applicable object type.
Note that the points named **Physical Tree** and **Logical Tree** cannot be associated to CDSF messages as they are only used for collecting other objects into a physical or logical oriented structure.
13. Select the CDSF point range (**From/To**) associated to the object type. It may be one or more points. Also, if a tree structure is used, enter the parent **Point Number** for this object range (e.g.: the point associated to the **Panel** object) as well as the parent object (**Parent Setting**). Note that consistency is required between the parent settings.
14. Define states and commands (see step 8 and 9 above).
15. Repeat steps 12 to 14 for all the necessary object types.
16. Save the model (menu **File**→**Save**).

When a new model is defined, new files (*.CUB and *.BIN) are available for handling the new CDSS unit in Composer and NK82xx, respectively.

Model Installation

At this point, Composer is ready to operate with the new CDSS model, whereas the NK82xx devices require a download, as described in the section 2.4.



Be aware that any subsequent change in the CDSS model is taken into account by Composer in any further configuration step.

2.3.2 Control unit icon

A specific icon can be defined for representing the CDSS control unit in the Composer (and MM8000) tree. The configuration tool provides for a default icon, which is named after the Description name of the new CDSS model.

A customised file can replace the standard ICO file. We recommend the following format:

ICO file; resolution 48x48: colour depth 32.

2.4 Communication network

The CDSS is connected to the MM8000 system by means of the NK8000 network and namely via the NK8222, NK8223, or NK8225 units.

In order to communicate with the CDSS, the NK82xx units should however be equipped with a new firmware that is included in the installation package as an additional component (DLL) to be added to the standard firmware file set.

The software installation procedure provides to copy the firmware files (a compressed ZIP archive) in the **NK82xx – Firmware** folder of the MM8000. From there, the files can be downloaded to the NK82xx units using standard Composer commands. The required procedure is described here below.

2.4.1 NK82xx firmware download

The following are the download procedures for the NK82xx firmware supporting the CDDL/CDSF communication protocol.

Note: It is assumed that the NK82xx are physically installed, powered on, and communicating over the network. Also, the NK82xx unit must be equipped with MP3.20-01 firmware or later. For more information about the NK8000 installation, please see the document no. A6V10062425, DMS8000 Network, Fire and Intrusion Connectivity Configuration Guide. More advanced technical issues are also discussed in the document no. A6V10062437, NK8000 Installation, Configuration and Commissioning.

Also, you should have available the Composer project that includes the NK8000 network and all the NK82xx units.

1. Verifying the connection with NK82xx

The NK82xx download requires that the TCP/IP connection between the host PC and the NK82xx is working properly. In the Windows Command Prompt window, you can check easily this connection using the **Ping** command:

```
ping n.n.n.n
```

with **n.n.n.n** being the IP address of the NK82xx unit, e.g. 168.123.8.76.

If the IP connection is good, the message text looks like the ones in Fig. 9, i.e.:

```
Reply from n.n.n.n: bytes=... time ... TTL=...
```

If the IP connection is not working for any reason, different messages may appear (Request timed out, Destination net unreachable, etc.) In these cases, verify the network settings and cabling and try again.

```
C:\>ping 192.168.8.76

Pinging 192.168.8.76 with 32 bytes of data:

Reply from 192.168.8.76: bytes=32 time<10ms TTL=60
Reply from 192.168.8.76: bytes=32 time<10ms TTL=60
Reply from 192.168.8.76: bytes=32 time<10ms TTL=60
Reply from 192.168.8.76: bytes=32 time<10ms TTL=60

Ping statistics for 192.168.8.76:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

Fig. 9 Checking IP connection

2. Start Composer and open the project that includes the CDSS units.
3. Expand the **Channel collection** folder in:

**Supervision System Settings → MM8000 System → Physical configuration
→ Station (or FEP) → Channel collection**

4. Select the **NS8210 driver** node and then the **Download** tab (Fig. 10).

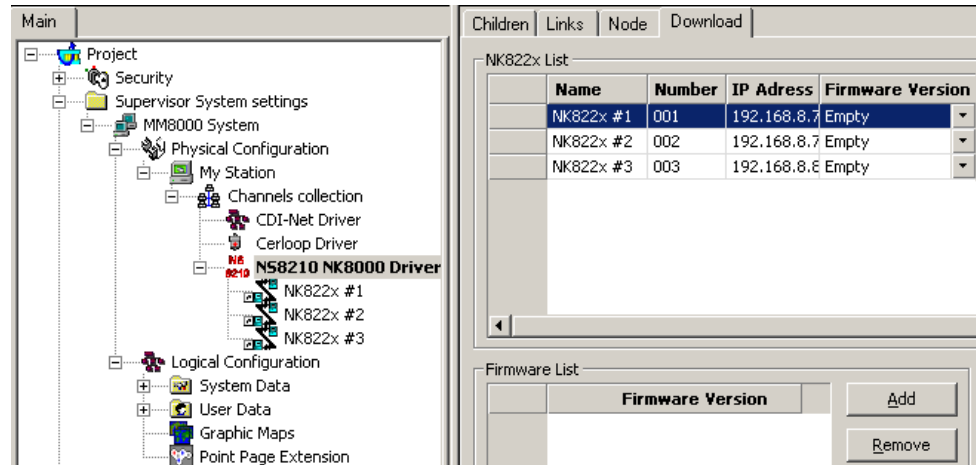


Fig. 10 Download tab

5. In the list located in the upper part of the form, select the branches (NK82xx) that requires being updated with CDSS.

Note: In order to select multiple branches, keep the CTRL key pressed while you make your selections.

See the following Fig. 11.

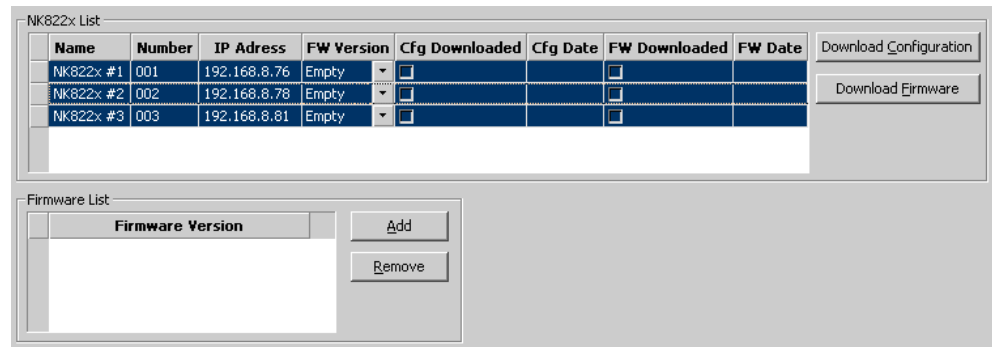


Fig. 11 Selecting the NK82xx

6. Add the new firmware version:

- Click **Add**, then browse and locate the additional firmware file in:
<MM8000 installation folder>\NK82xx – Firmware
- Then, click the file:
NK82xx_CDSS__x.xx-xx_06.zip
- And finally click **Open** (Fig. 12).
→ In a few moments, the new firmware shows in the Firmware List (Fig. 13).

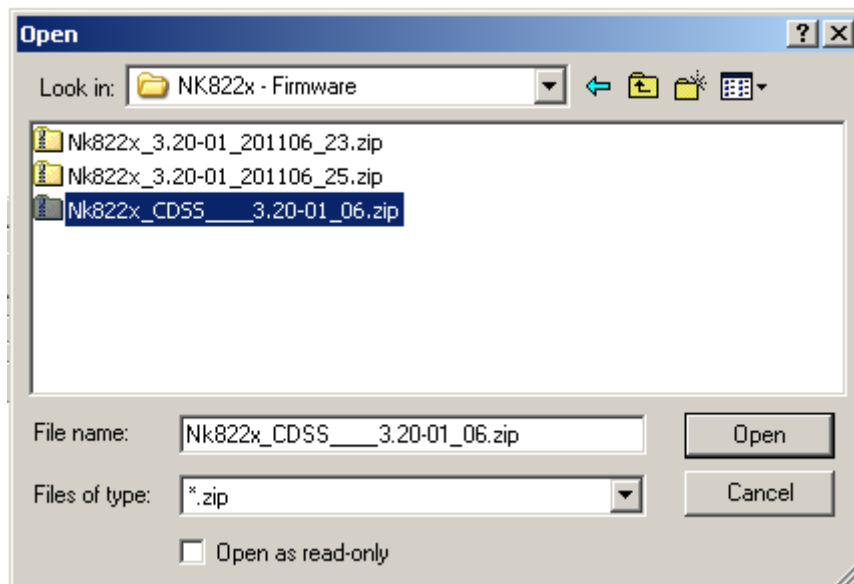


Fig. 12 Opening the new NK82xx firmware files

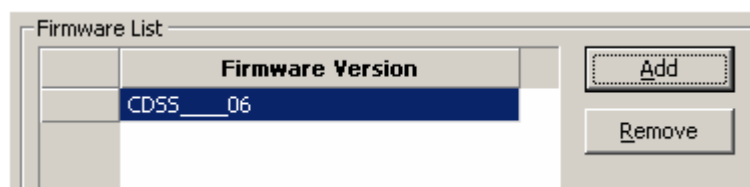


Fig. 13 New NK82xx firmware in the Firmware List



Note that the **_06** suffix in the firmware name indicates the add-on index (06 for the CDSS).

7. Select the new firmware version in the Firmware List.
8. Click the button **Download Firmware**.
 - The download procedure starts. The new firmware is downloaded to the NK82xx units via FTP (File Transfer Protocol) services over the network.
9. Ensure that you have successfully completed all downloads.
 - Verify that the **FW Downloaded** check boxes contain **X**'s.
- 10 That completes the NK82xx firmware download.
 - Note that the NK82xx configuration will also need to be downloaded after having configured the CDSS units in Composer (see pag.21).

Downloading multiple firmware

In case multiple add-on packages have been installed, then all the associated firmware files can be safely downloaded in sequence (each of them being a single additional DLL) as long as the base NK82xx version is the same (e.g. "...3.20..."). Please check the firmware version in the firmware list (Fig. 12) before selecting the file to download. Also, get informed about latest compatibility issues in the most recent NK8000 Release Notes.



3 Configuration

3.1 Configuration checklist

Verify that you have satisfied the items needed in the first checklist before proceeding to the configuration checklist that follows.

ITEMS NEEDED FOR CONFIGURATION

- The number and model (e.g.:) of CDSS systems
- The local address (0 to 65535) for each unit.
- Exact information on the CDSS internal configuration.
- The exact connection to the NK8000 unit (NK82xx).
- Plug-ins needed:
 - Plug-in #356201This is installed during the installation procedure.

CONFIGURING AN CDSS

- 1. Add the folder(s) required for identifying the location of the CDSS in the project structure tree. p. 19
- 2. Add the CDSS control unit node to the new folder p. 19
- 3. Set the Local Address p. 19
- 4. Configure the objects manually p. 20
- 5. Link the CDSS to the communication network p. 20
- 6. Repeat steps above for all the CDSS units in the project
- 7. Download the configuration p. 21


3.2 Configuration procedure

The following are the configuration procedures for the CDSS control unit:

Adding the folder for the CDSS system

1. Open the Composer project.
2. Create a folder for the control unit.

Adding the CDSS node

1. Select the new folder.
2. Select the CDSS icon  and select the model, which can be one of the customised models currently available (see Fig. 14):
→ *The new node is added to the project structure.*

By default, the node will be named **Panel #1** You can customise the text by clicking once on the name, typing a new name, and pressing **Enter**.

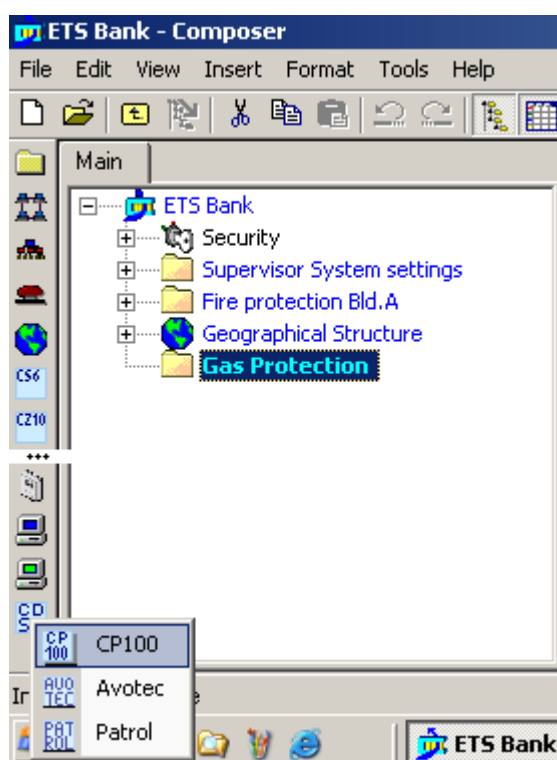


Fig. 14 Adding an CDSS subsystem

Setting the CDSS Local Address

1. Select the CDSS node.
2. Click the **Node** tab (see Fig. 15).
→ *The Node form page shows.*
3. In the **Node** tab form, you can find:
 - **Description** text: the node name you also have on the project structure tree.
 - **Technical Text**: the technical name of the node (read-only).
 - Unit **Local Address**: the CDSS address, ranging from 0 to 65535.
4. Set the unit **Local Address**.

Note: The Local Address should match what is set in the control unit.

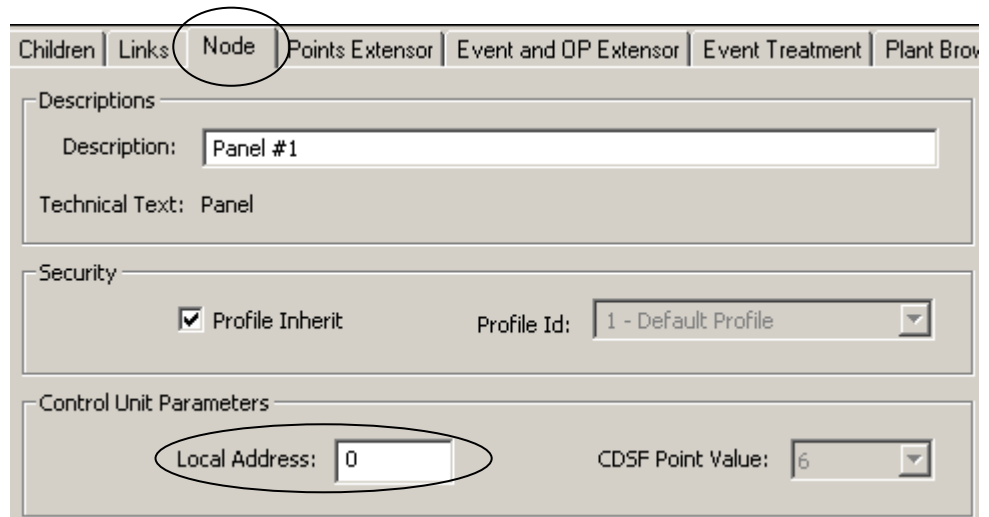




Fig. 15 Setting CDSS mode (subtype) and the unit Local Address

Manual configuration

You can configure the CDSS unit to reflect the actual field configuration. Object types and ranges depend on the model definitions.

Linking the CDSS to the Communication network

1. Open NK82xx sub-folders
Expand the NK8000 network folders until you reach the node that represents the NK882x COM port that is physically connected to the CDSS.
2. Select the CDSS node.
3. Drag and drop the CDSS node to the network COM port (see Fig. 16).

Note: Composer helps you recognise the valid link by displaying a shortcut Link icon  instead of the circle No-link icon .

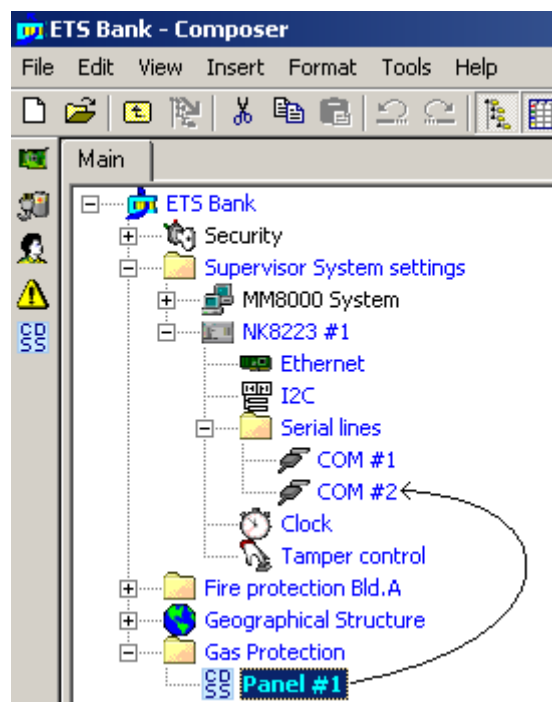


Fig. 16 Linking CDSS to the NK8000 network

→ When the link is established, a new node appears on the structure tree, and its properties can be seen on the Link tab of both the connected nodes.

Setting the communication baud rate

1. Select the new link node just below the NK82xx serial line node (see Fig. 17).
2. In the **Node** tab, set the communication baud rate, which must match the the corresponding setting in the control unit.

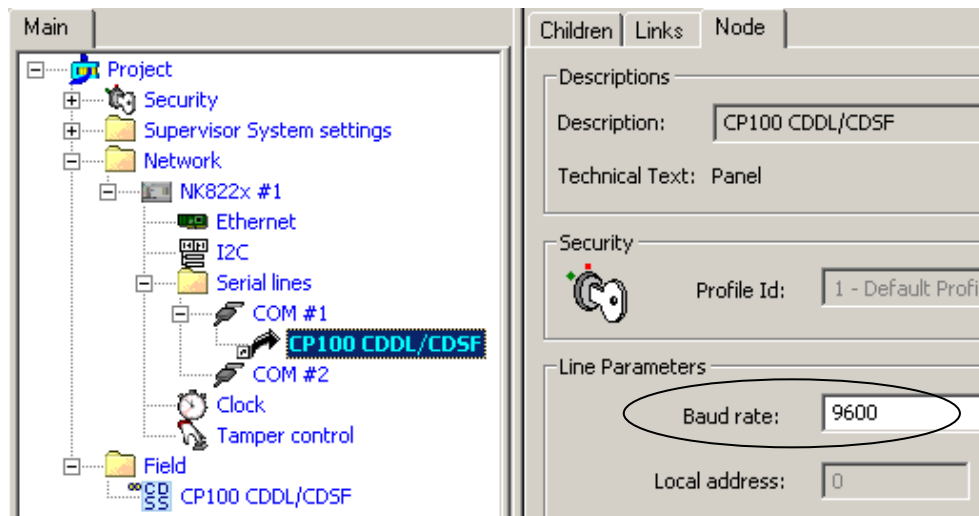


Fig. 17 Setting the baud rate

Download the MM8000 configuration

Before operating with the new MM8000 configuration, you need to download it. In Composer, the download command is available in the Tools menu. The preparation to the download is discussed in the document no. 006799, MM8000 Installation, Configuration and Commissioning.

Downloading the NK82xx configuration

After any modifications on the CDSS units, a new configuration download is required for the NK82xx devices.



Warning: the NK82xx units handle the CDSS messages interpretation for MM8000. In order to do so, the NK82xx needs to be downloaded with the updated configuration of the management stations, even after a minor modification to the subsystem structures (e.g.: after having imported an updated metafile including new objects).

Depending on the specific configuration change, failing to download the NK82xx units may affect the correct behaviour of the telegram interpretation and result in missing event signalling. In general, we recommend including an NK82xx download after any change in the configuration.

The download procedure can be started in two ways:

1. In the **Download** tab of the **NS8210 driver** node:
 - Select ... → **Supervision System Settings** → **MM8000 System** → **Physical configuration** → **Station (or FEP)** → **Channel collection** → **NK8210 driver** (see Fig. 10 above)
 - In the list that shows up, select the NK82xx units
Note: In order to select multiple branches, keep the CTRL key pressed while you make your selections.
 - Click the button **Download Configuration**
 - Ensure that you have successfully completed all downloads
 → Verify that the **Cfg Downloaded** checkboxes contain **X's**
 See Fig. 11 above
2. In the **NS822x** node (select all units one after the other):

- Right click the node
- In the menu, click **Node commands** → **Download file CNF**

3.3 Configuration backup and restore

The standard Backup and Restore functions in Composer provide for saving the CDDL/CDSF customized models (refer to section 2.3.1 on pag.10) along with all the project data.

Note that the entire folder **OTD_Files** is actually restored in

<installation folder>\Composer\Configuration Data

and this also includes the model customisation tool (CDSS Meta Subsystem Tool.exe).

Annex A – CDDL/CDSF meta-models

The following meta-models are provided for direct use or further customisations:

- CP100 gas detection unit
- AVOTEC fire alarming unit
- PATROL intrusion detection unit

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