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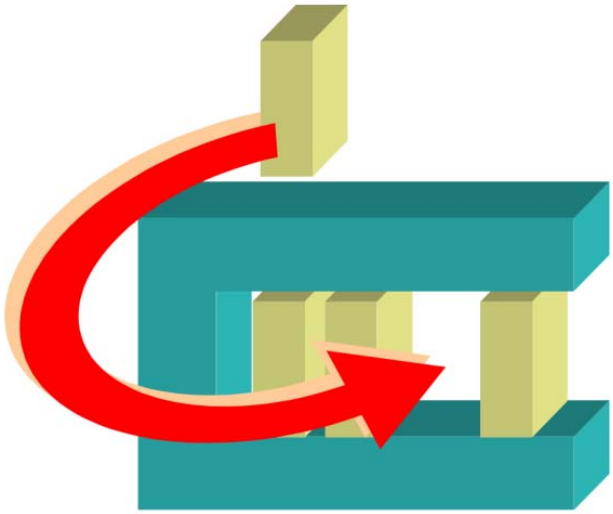

MM8000 MP4.xx

DLCS Access Control Add-on module

Installation

Configuration

Building Technologies

Fire Safety & Security Products

Table of Contents

About this document **4**

1 Safety regulations **7**

1.1 Country-specific standards 7

1.2 Commissioning and testing 7

1.3 Modifications to system design and products 7

2 Introduction **8**

3 Installation **9**

3.1 Software installation 9

3.1.1 Software License 9

3.1.2 Installing the Add-on module 9

3.1.2.1 Multiple add-on’s installation 9

3.1.3 Removing the Add-on module 10

4 Configuration **11**

4.1 Configuration checklist 11

4.2 Configuration procedure 12

About this document

Purpose

This manual is intended as a guide to the installation and configuration procedures for the integration of DLCS Access Control system in the MM8000 Management Station and MK8000 OPC server. It presents the MM8000 add-on module for this type of subsystems.

This guide is part of the general DMS8000 engineering documentation set which includes the Composer Technical Manual, the other DMS8000 Connectivity Guides (the complete list includes: Network, Fire, Intrusion, Access Control, Video, and OPC), and the Installation, Configuration, and Commissioning manual (ICC) for each specific product.

Scope

This document applies to the **MM8000 Management Station MP4.15** and higher.

Target audience

This documentation is intended for the following users:

- Project Managers
- Project Engineers
- Commissioning Personnel

It is assumed that individuals performing the operations described in this manual have prior expertise and training in the field of safety and 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.

Documentation resource information

The *DMS8000 Documentation Resource Information and Glossary Guide* assembles important information regarding documentation resources. This document contains the following:

- Comprehensive definitions of the target audiences for Siemens 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 Siemens Asset Portal
- 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 and Glossary Guide* (document no. A6V10089056), go to the link and follow the document search instructions below:

http://assetportal.bt.siemens.com/portal/index.html

1. In the Search column on the left, set:

- Segment: **04 Fire -3F**
- Document Type: **All**
- Image Type: **All**
- Advanced search criterias: Select **Brochure No.** and enter the document number to search for (*A6V10089056*). Alternatively, select **Title** and enter the product name (*DMS8000*).

2. Click **Search** to start.
3. In the resulting area on the right, click on **Contents** link to show the list of search results.

For more information such as Siemens news and announcements, visit the STEP Web portal at:

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

Operational and safety regulations

Before groups of persons begin work on the system, they must have read and understood the Safety Regulations [→ 7] section in this manual.

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 are included in subsequent editions. Suggestions for improvement are welcome.

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Documentation Conventions

The following table lists conventions to help you use this document in a quick and efficient manner.

Convention	Examples
Numbered Lists (1, 2, 3…) indicate a procedure with sequential steps.	**1.** Turn OFF power to the field panel. **2.** Disconnect the power cord. **3.** Open the cabinet.

One-step procedures are indicated by a bullet point.	● Expand the Event List.
Conditions that you must complete or must be met before beginning a procedure are designated with a ▷. Results, after completing a step or at the end of the entire procedure, are designated with a ⇨.	▷ The report you want to print is open. **1.** Click the **Print** icon . ⇨ The **Print** dialog box appears. **2.** Select the **printer** and click **Print**. ⇨ The print confirmation appears.
Bold font in a procedure indicates something you should select or type.	Type **F** for Field panels. Click **OK** to save changes and close the dialog box.
Menu paths are indicated in **bold**.	Select **File > Text, Copy > Group**, which means from the **File** menu, then select **Text**, **Copy** and finally **Group**.
Error and system messages are displayed in `Courier New` font.	The message `Definition successfully renamed` displays in the status bar.
Italics are used to emphasize a term.	The Open Processor continuously executes a user-defined set of instructions called the *control program*.
	This symbol signifies a Note. Notes provide additional information or helpful hints.
Caution	This is a Caution message and indicates that minor or moderate injury or property damage may occur if a procedure is not followed.
Warning	This is a Warning message and indicates that a serious injury or a severe equipment and property damage may occur if a procedure is not followed.
Cross references to other information in printed material are indicated with an arrow and the page number, enclosed in brackets: [→92]	For more information on creating flowcharts, see Flowcharts [→92].

Modification index

Note: For versions more than four years old, please visit the Siemens Asset Portal.

Version	Date	Notes
A6V10067792_a_en	06.2009	DMS8000 4.20.

1 Safety regulations

This section describes the danger levels and the relevant safety regulations applicable to the use of the products described in this manual. Please read the following work instructions as well as the preceding section *About this document* thoroughly before beginning any work.

1.1 Country-specific standards

Siemens products are developed and produced in compliance with the relevant international and European safety standards. Should additional country-specific, and/or local safety standards or regulations concerning project planning, installation, and/or operation of the product(s) apply, then these standards and/or regulations must also be taken into account, in addition to the safety regulations mentioned in the product documentation.

1.2 Commissioning and testing

- 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; take the possibility of panic reactions into account.
- Inform the alarm and fault receiving stations connected to the system before carrying out any tests.

1.3 Modifications to system design and products

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

Please request written approval from Siemens Building Technologies, FS-DMS, and the relevant authorities concerning intended system modifications and system extensions.

2 Introduction

DLCS Access Control

The DLCS (Door Light Control System) can monitor and control the state of doors and detect the related alarm states. Also, a control command may be optionally available for unlocking doors. The MM8000 can receive the door states/alarms and issue control commands (unlock door) by means of a networked OPC server (Siemens WinCC V6.0 SP2).

The MM8000 can communicate with DLCS by means of a networked OPC server (Siemens WinCC V6.0 SP2), which provides as many as 3 OPC items to represent the conditions of each door. The item list includes:

- Door status (open/closed)
- Door alarm (normal/alarmed)
- Door control command (unlock, optional)

The OPC items can be imported in Composer using a WinCC export file. Then, the items should be manually linked to the door objects in order to build up the Composer tree that can map the actual door state.

- More than one OPC link can be supported, each one requiring the configuration of a DLCS node in Composer.

3 Installation

The add-on package is provided in the MM8000 product DVD as add-on. It can be installed using the standard Add-on Manager.

3.1 Software installation

3.1.1 Software License

MM8000 license must include specific items for the add-on and for the OPC Driver.

Therefore, the required license includes:

- WW8000 Composer (project configuration and download): Composer License or Service key
- MM8000 core, no. of subsystems and points
  This license should include the number of OPC subsystems and points
- OPC Driver license

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

3.1.2 Installing the Add-on module

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

1. Start the **Add-on Manager**.
   - From the Windows **Start** menu, select the following:
     Start > DMS8000 > Tools > Add-on Manager
   ⇨ The **Add-on Manager** window appears.
2. In the list of **MM8000 Add-Ons/Name**, select the **name of the module** you wish to install
   -- OR – (if the name of the add-on is not in the list on the screen):
   click **Browse**, locate the installation files of the add-on module, and select the text file (**Extension Product Name.txt**) in the root folder.
3. If your installation includes a customized *MM8000 internal account*, then deselect the check box **Use default MM8000 User account** and specify the customized username and password.
   Note: For information about the MM8000 Internal Account, refer to *MM8000 internal user account* section of the MM8000 ICC, doc.no. A6V10062413_a_en.
4. Click **Install** (or **Update** if a previous version was detected).

3.1.2.1 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 check about possible problems in the documentation of all add-on modules that must be installed.

3.1.3 Removing the Add-on module

Add-on module cannot be uninstalled.

4 Configuration

4.1 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 general system architecture and the number of WinCC connections that will require configuration for each DLCS unit.
- For each DLCS, the list of doors and the associated OPC items in WinCC
- The WinCC export file including all the DLCS items
- Plug-ins needed:
  - #252301 (ND Dlcs/ST ND OPC)
  - #353901 (DLCS/STDLCS2)

Note: Plug-ins are installed during the software setup procedure. You can check that the Plug-ins are actually available using the **Composer Plug-in Installer** in the DMS8000 start menu.

Configuration overview

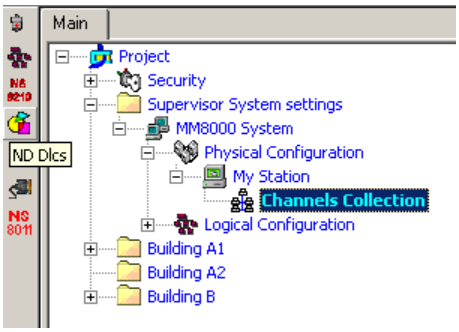
1. Add the DLCS driver.
2. Add the folder for the DLCS system.
3. Add the DLCS node.
4. Link the DLCS node to the OPC driver.
5. Set the server computer name or IP address.
6. Import the WinCC OPC items.
7. Set the PC items property.
8. Add the door nodes.
9. Link the OPC items to the door nodes.

4.2 Configuration procedure

The following are the configuration procedures for a DLCS unit.

Adding the OPC driver

1. Open the Composer project.
2. If not already done, add the **OPC driver**:
   In the MM8000 physical configuration, select the main station name and then the Channel Collection.
   Supervisor System Settings > MM8000 System > Physical configuration > <Station name> > Channels Collection
3. Click the **ND Dlcs** icon to add the OPC driver required for DLCS/WinCC.



Adding the OPC driver

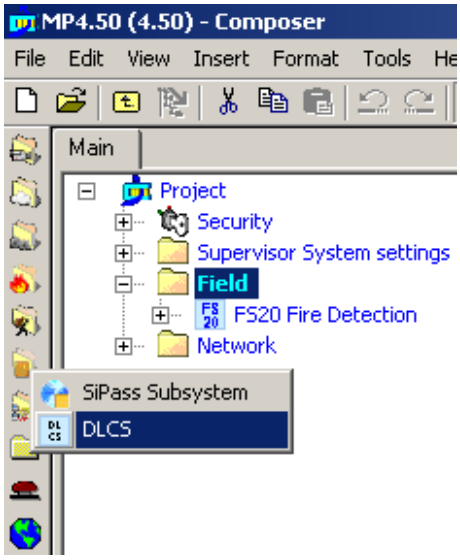
⇨ A new node is added. No further configuration is required for the OPC driver.

Adding the folder for the DLCS system

- Optionally, create a folder for the DLCS unit.

Adding the DLCS node

1. Select the new folder.
2. Click the **Access Control** menu folder icon .
3. Select the **DLCS** icon to add a new DLCS node.



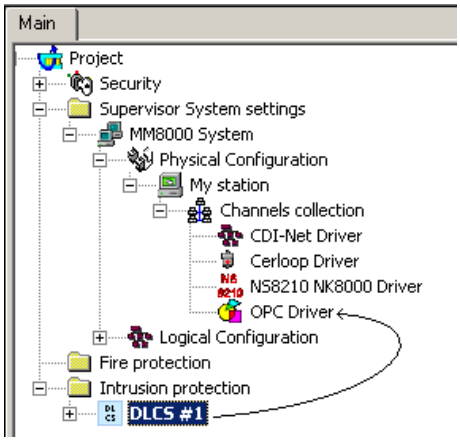
Adding the DLCS node

⇨ A new DLCS node is added to the Composer tree.

Note: You can customise the default name of the new node typing in a new name in the **Description** field of the **Node** tab.

Linking the DLCS node to the OPC driver

1. Select and expand the **Channels collection** of the main station.
2. Select **DLCS** node.
3. Drag-and-drop the DLCS node to the **OPC Driver** node.

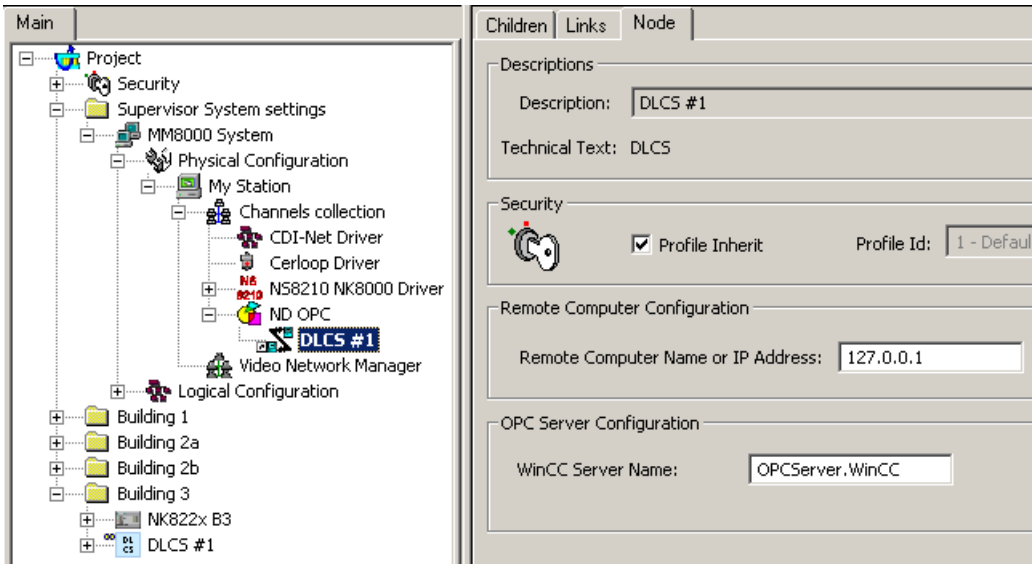


Linking DLCS node to the OPC Driver

Setting the server computer name or IP address

1. Select and expand the **Channels collection** of the main station.
2. Select and expand the **OPC Driver** node.
3. In the Node tab, set the **Remote server name or IP address**.
   By default, the field is set with the local IP address.

Note that the next field (WinCC server name) contains by default the standard WinCC settings. Do not modify the default value.

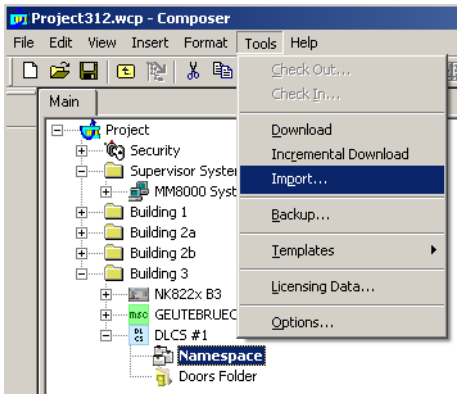


Setting server computer name or IP address

In case of network-distributed solutions, be aware that DCOM security must be configured in order to enable the correct communication over the network.
In general, the MM8000 internal user (→ see MM8000 Installation, Configuration, and Commissioning manual) must be recognised by the server (i.e. defined locally on the server computer or at domain level) and granted the DCOM permissions for the WinCC process (DCOMCNFG settings).
Also, the computer running MM8000 should be configured in order to grant access the user of the WinCC server.

Importing the WinCC OPC items

1. Select and expand the **DLCS** node.
2. Select the **Namespace** node.
3. Select **Tools > Import** in the Composer menu.



⇨ After a confirmation request, the software presents a browsing window to search for the file to import (a file with extension CSV is expected).

4. Locate the CSV file and click **Open**.

⇨ In a few moments, the OPC items are imported in the Composer tree.

Selecting the *Import* tab results in a page report being displayed. This page contains the detailed logs of the latest import procedure, including all the added or removed objects.

CSV files can be re-imported after a configuration change. Note the behaviour of the import procedure:
- New objects in CSV (not configured in Composer) are added to the configuration.
- Old objects in CSV (already configured in Composer) are updated.
- Removed objects in CSV (configured in Composer) are removed.

Setting the OPC items property

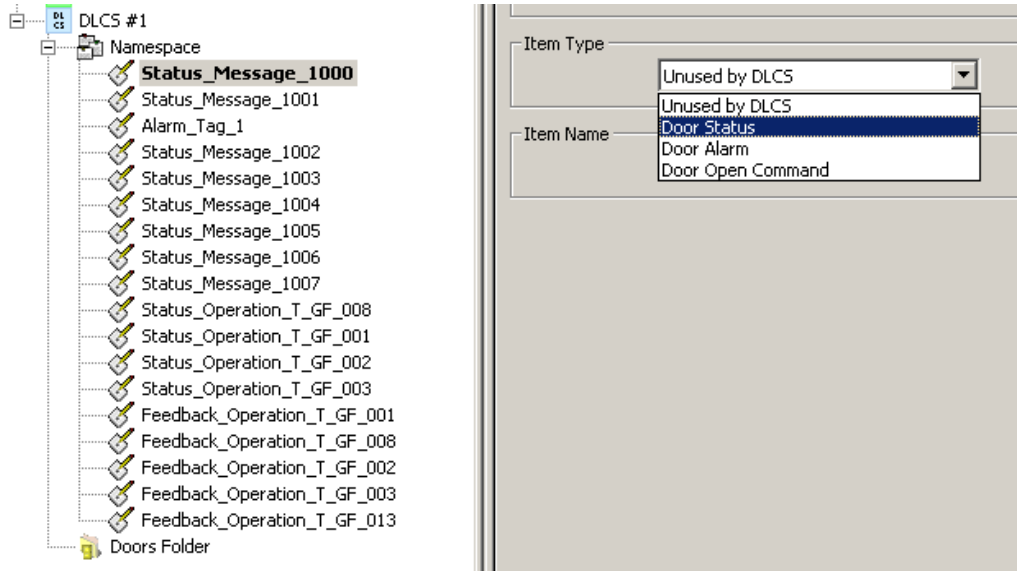
The OPC items should be configured to set the type of item in relation to the DLCS application. The type can be:

- Unused
- Door Status
- Door Alarm
- Door Open Command

In order to set the item type, proceed as follows:

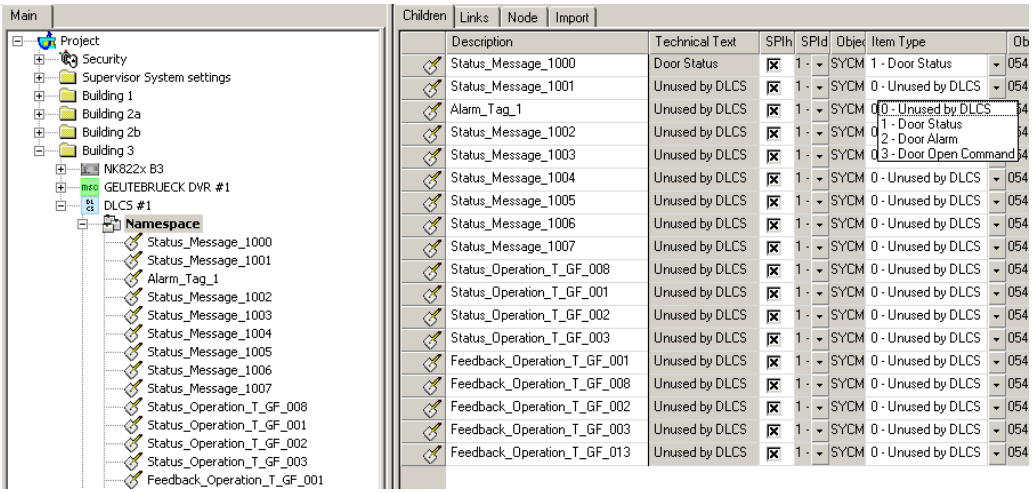
1. Select and expand the **Namespace** node.
2. Select the first **OPC item** used by DLCS, and click the **Node** tab.
3. In the Item Type drop-down list, set the **Item Type**.

4. Repeat steps 2 and 3 for the remaining items used by DLCS.



Setting the item type on the Node tab

Note: If you are familiar with the Composer tool, select the **Children** tab of the *Namespace* node. At this point, you can quickly set the item types in the spreadsheet page.

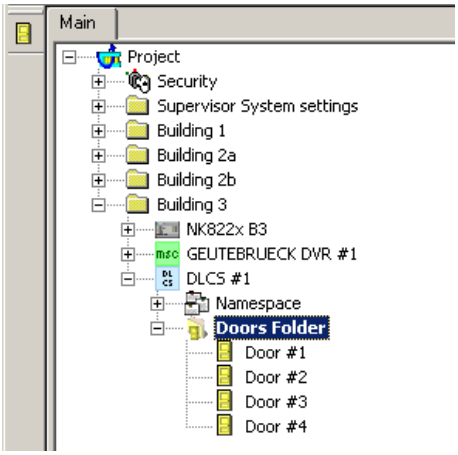


Setting the item types on the Namespace Children tab

Adding the door nodes

1. Select and expand the **DLCS** node.
2. Select the **Doors Folder**.
3. Click the **Door** icon to add a new door.

⇨ A new Door node is added to the Composer tree.

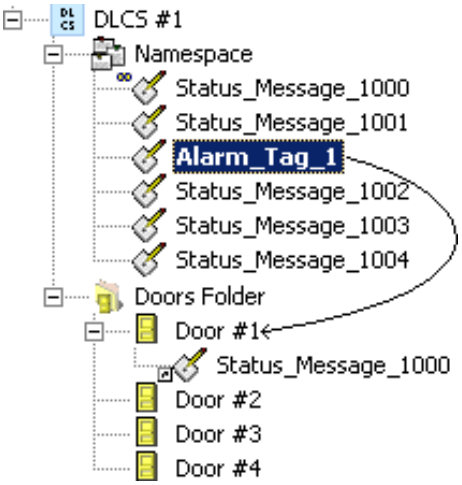


Adding a new door

Note: You can customise the default name of the new node typing in a new name in the **Description** field of the **Node** tab.

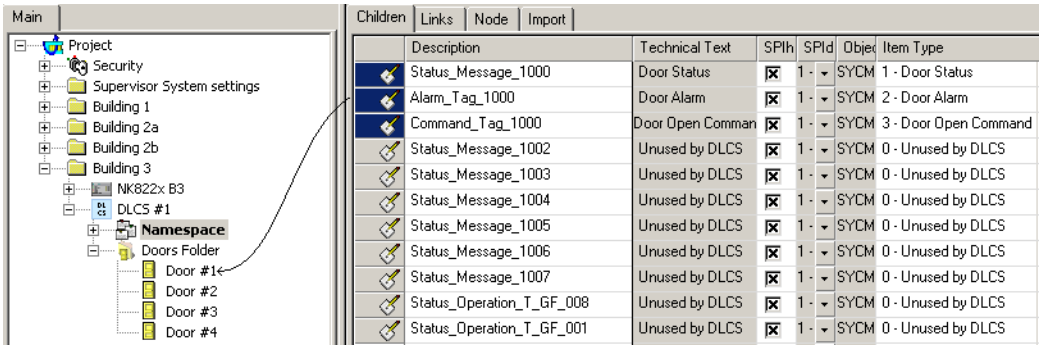
Linking the OPC items to the door nodes

1. Select and expand the **DLCS** node.
2. Select and expand the **Namespace** node.
3. Select and expand the **Doors folder**.
4. Drag and drop the OPC items to the corresponding **door**.



Linking OPC items in the Composer tree

Note: If you are familiar with the Composer tool, click the **Children** tab of the **Namespace** node. At this point, you can select the three associated items (keep the CTRL key pressed and click them all) and then drag and drop them together to the corresponding door node.



Linking OPC items from the Namespace Children tab

	WARNING Each door requires a link to at least two items (Door Status and Door Alarm), whereas the third item (Open Command) may or may not be present depending on whether the door can be remotely unlocked or not. Door nodes that are nor properly linked to two or three OPC items will not be downloaded (an error message will display during the download procedure).

Issued by
Siemens Switzerland Ltd
Infrastructure & Cities Sector
Building Technologies Division
International Headquarters
Gubelstrasse 22
CH-6301 Zug
Tel. +41 41-724 24 24
www.siemens.com/buildingtechnologies

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