

# DDE Client XITable

## DDE Client communication protocol

[Supported device types and versions](#)  
[Communication line configuration](#)  
[Communication station configuration](#)  
[I/O tag configuration](#)  
[Literature](#)  
[Changes and modifications](#)  
[Document revisions](#)

### Supported device types and versions

Communication supports the DDE Client access using the **XITable** data format (the format used by e.g. MS Excel, Wonderware Intouch I/O Servers) or **CF\_TEXT** data format.

### Communication line configuration

Communication with the DDE Server requires a separate line. There is not possible accessing several servers from one communication line.

- Communication line category: **DDE**.
- Line parameters (the **DDE - parameters** tab):
  - Server - DDE server name (e.g. MS Excel „Excel“).
  - Impersonate user - if the option is checked, the communication line will connect the NetDDE with the following name and password.
  - Name - system user name.
  - Password - system user password.

**Note:** You can impersonate just an user with the logon rights **Log on as a batch Job**.

### Communication station configuration

- Communication protocol: **DDE Client**.
- Station address is the DDE Topic name (string containing up to 50 characters).

## Station protocol parameters

Table 1

Keyword	Full name	Meaning	Unit	Default value
REQ	Request	If the value is Yes, after each writing a value, there will be sent the request for backward reading the value.	YES/NO	NO
TYPE	Server Type	Type of DDE server for communication: <ul style="list-style-type: none"><li>• WARM - supporting XTYP_ADVSTART transactions,</li><li>• COLD - periodic reading the values using the XTYP_REQUEST transaction.</li></ul>	COLD /WARM	WARM
FORMAT	Data Format	Used data clipboard format for data transmission.	XLTABLE /TEXT	XLTABLE
TIMEOUT	Transaction Timeout	Timeout of the function DdeClientTransaction, which determines the maximum amount of time (in milliseconds), that the DDE client will wait for a response from the DDE server in a synchronous transaction.	ms	1000

### I/O tag configuration

Possible types: **Ai, Ao, Ci, Co, Di, Do, TxtI, TxtO**.

Address is the DDE Cell name (string containing up to 50 characters).

**Note:** If initialization of the connection to the server, topic or cell has failed, the attempt to connect is repeated in the interval of 5 seconds. It is true when the connection is lost (server shutdown etc.).

## Connection to the server via NetDDE

If the DDE server is installed on other PC within a local computer network, you can establish a connection via the NetDDE interface. For such a connection is valid:

- DDE server name (line configuration) is defined in the form of \\computer\_name\server, where computer\_name is the network name of the PC with running DDE server (e.g. \\WRK\_PC\Excel).
- On the PC with running DDE server, there must be run the Network DDE service. You can run it as follows: Start menu -> Settings -> Control Panel -> Services, find Network DDE" and click Start. In case of the automatic start-up Startup... and switch Startup type to Automatic -> OK.
- On the PC with a process [D2000 KOM](#) as a DDE Client, the Network DDE service is run automatically at occurrence of the first request for the NetDDE server. If you are experiencing a problem with access rights, there will be displayed the **Logon** dialog box for entering access name and password which are valid on the PC with the DDE server. Usually, it is necessary to use the Win NT system utility "ddeshare" on the PC with the DDE server for configuration of access right of individual users to individual DDE servers, topics and cells.

## Example of communication testing

It is possible using the MS Excel program. Run the MS Excel as the DDE server using the switch /e e.g. from the command prompt - excel.exe /e.

Complete access to a DDE cell is as follows:

```
Excel|Sheet1!"R1C1"
```

Where:

- Excel is the server name. Configure a line of DDE category and enter the DDE server name Excel.
- Sheet1 is a topic name. Configure the protocol station DDE Client XITable and enter the DDE topic name Sheet1. Other tab names are similar in the form of Sheetx if they were not called differently.
- R1C1 is the name of a DDE cell. Configure an I/O tag and enter the DDE cell name R1C1. The name means Row 1, Column 1 and the form of the other cells names is RxCy.

The naming is valid only for English versions of MS Excel.

## Literature

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## Changes and modifications

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- May 20th 2002 - added TEXT data format + COLD/WARM link.

## Document revisions

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- Ver. 1.1 – February 8th 2000 – document update



### Related pages:

[Communication protocols](#)