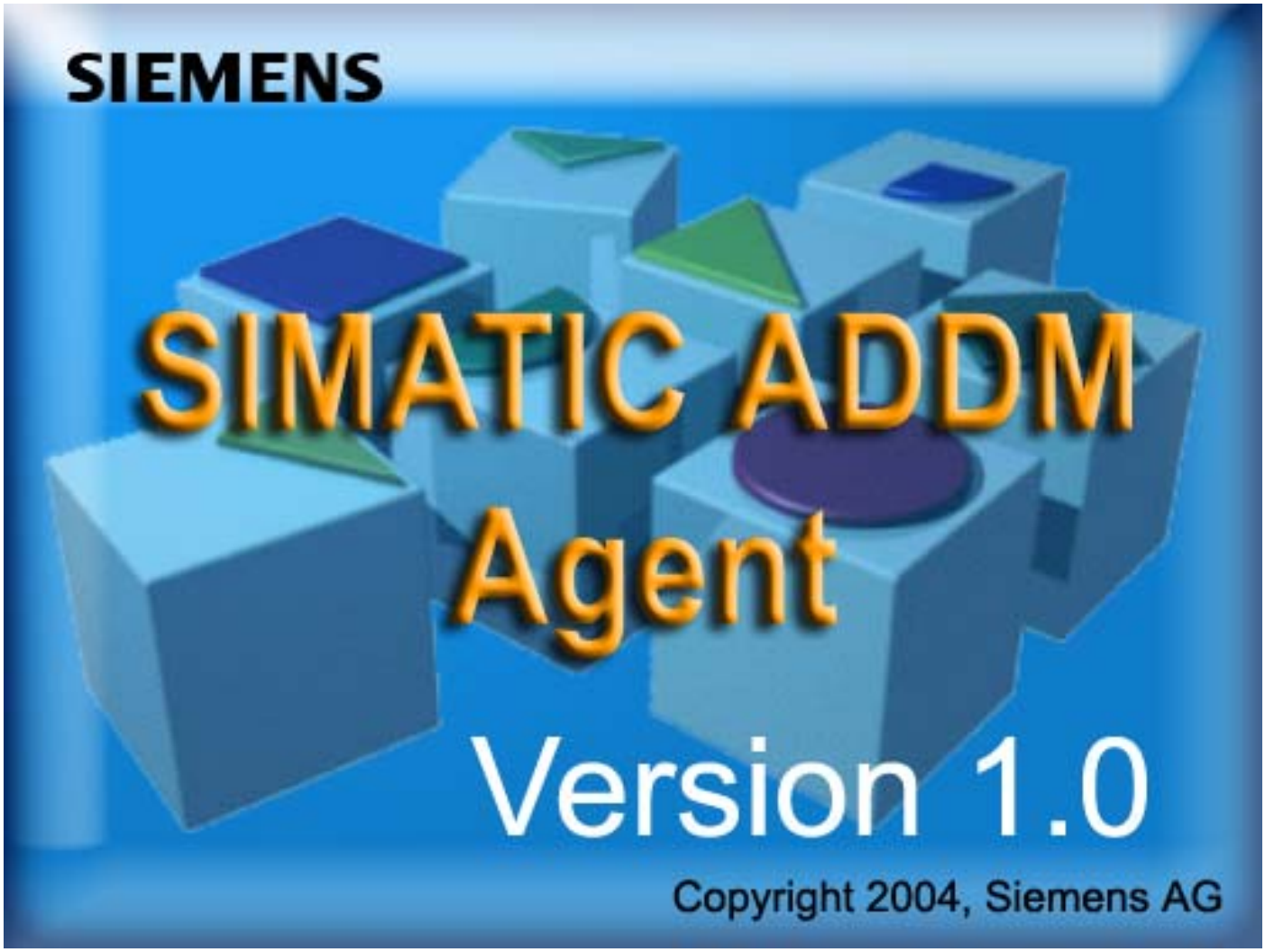
SIEMENS

SIMATIC A&D DataManagement Agent V1.0

Operator Manual **08/2004 Edition**



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Operator Manual

Published in August 2004

Safety Guidelines

This manual contains notices which you should observe to ensure your own personal safety, as well to protect the product and connected equipment. These notices are highlighted in the manual by a warning triangle and are marked as follows to the level of danger.

Danger

indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

Warning

indicates an potentially hazardous situation which, if not avoided, could result in death or serious injury.

Caution

used with the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

Caution

used without safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

Notice

NOTICE used without the safety alert symbol indicates a potential situation which, if not avoided, may result in an undesirable result or state.

Note

In the sense of this publication, this indicates important information about the product or a particular part of the publication which should be given special attention.

Qualified Personnel

The device/system may only be set up and operated in conjunction with this manual. Only qualified personnel should be allowed to install and work on this equipment. Qualified persons are defined as persons who are authorized to commission, to ground, and to tag circuits, equipment, and systems in accordance with established safety practices and standards.

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Siemens Aktiengesellschaft

Order No.

Contents

About this Operator Manual

This Operator Manual for the A&D DataManagement Agent (ADDM) application is a part of the ADDM Agent installation CD. It is not available separately.

Note

ADDM Agent is an expansion program to SIMATIC A&D DataManagement. Detailed information about the software will be found in the description A&D DataManagement. In this description is described the addition for running the software ADDM-Agent.

1 A&D DataManagement and Agent

1.1 Overview

A&D DataManagement (ADDM) is the data storage system for your control components.

ADDM manages the data and programs of the components used in a simple manner via **one uniform operator interface**.

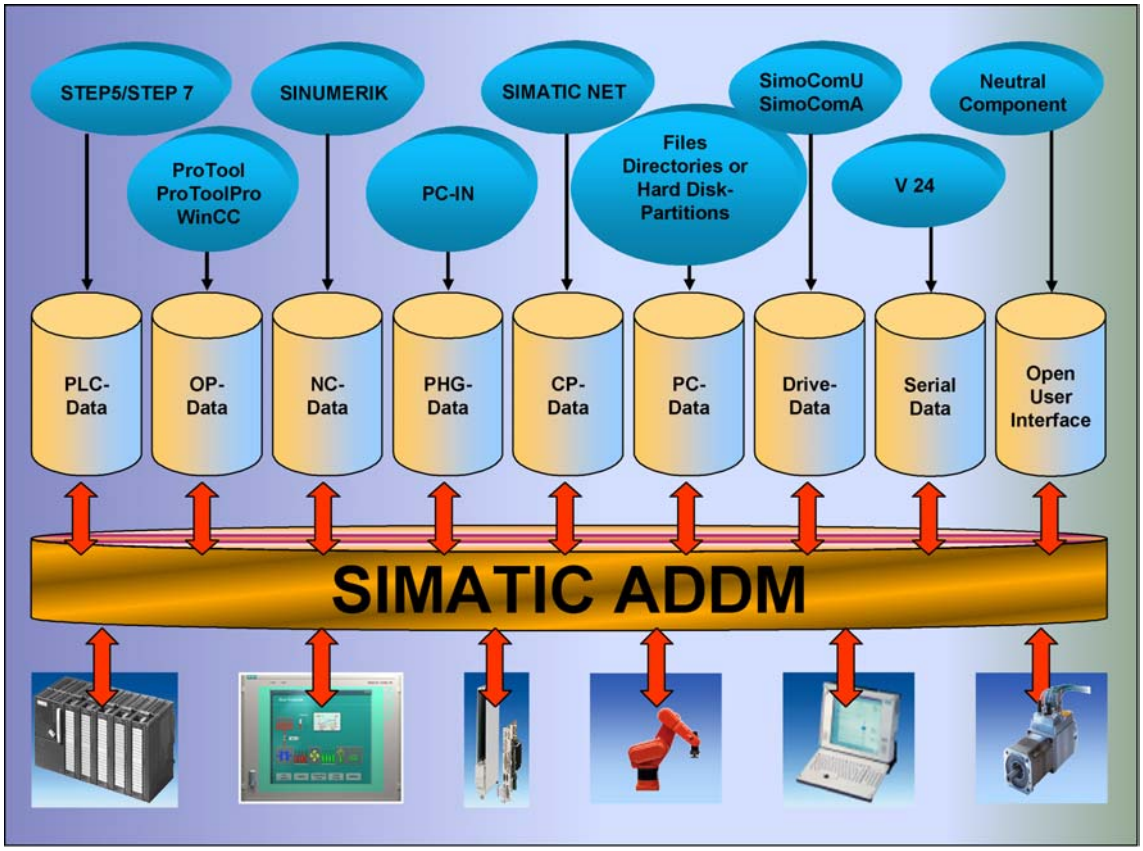


Figure 1–1 Uniform operator interface for all control components

A&D DataManagement gives you independence from configuration tools, data types and formats. It creates an exact image of your production facility.

Even complex production lines can be easily imaged in clearly understandable directory trees. The display is based on the Windows Explorer from Microsoft. The navigation is not oriented on abstract data structures, but on real conditions.

Identical components can be supplied with identical data. The standardization of the configuration makes service and maintenance easier.

Features

- Production-oriented structure: uncomplicated overview, easy to handle
- Reduced plant downtimes for replacing defective hardware components (fast disaster recovery)
- Increased security and availability of all data stocks
- Works with already existing standard configuration tools
- Supports as standard a multitude of components
- No special knowledge needed, for example of programming.

A&D DataManagement increases plant availability

Replacement components are promptly supplied with the relevant data. There is no time-consuming parameterizing and configuring.

In this context, it is irrelevant whether you need to copy over individual files or complete hard disk partitions in the form of a compressed image file (imaging).

High safety level with A&D DataManagement–company wide

A&D DataManagement allows you to store data centrally on servers and mass storage systems. You can therefore integrate your entire data stock into highly available client-server architectures and fault tolerant online storage. This enables the plant control to provide the highest possible safety standards for your data.

A&D DataManagement provides extensive options for drive-independent DataManagement:

- Data can be stored online on a server.
- Removable disks may be used.
- Loading data and settings after component replacement.
- Backup of complete hard disks or hard disk partitions (imaging).
- Restoration of hard disks or partitions from an image file.
- Reloading to an unpartitioned and unformatted hard disk.
- Logging of all modifications in a logbook.

1.2 How does A&D DataManagement work?

A&D DataManagement manages the data and programs existing in the production facilities in a uniform plant structure. To do this, it represents the structure of your production facility as a directory tree in the interface, which is based on the WINDOWS Explorer. You manage the data and programs existing for each control component via this plant structure–and backup or load as required.

For this ADDM uses the existing standard software tools for the components. You can thus manage the data both with the standard software tool and with the A&D DataManagement software.

In order to enable fast disaster recovery, defective components are replaced by new ones. Then the previous parameterization is loaded into the component concerned with ADDM.

1.2.1. Hardware connection for fast recovery

The hardware connection for restoring the parameterizing is made in various ways, depending upon the defective control component.

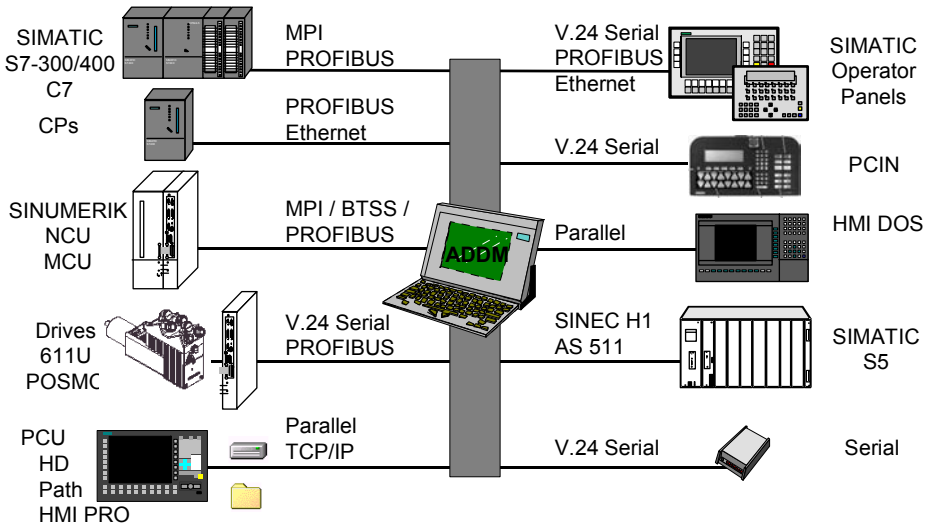


Figure 1–2 Hardware connections for fast recovery

MCU, NCU, S7-CPU, drives

MCU, NCU and S7-CPU are loaded directly over the **MPI connection**.

Moreover, NCUs, drives and S7-CPUs can also be addressed via PROFIBUS links.

Operator Panels

All operator panels:

- OPs

- TDs
- TPs
- MPs

are connected over the serial interface (RS-232-C).

A defective operator panel is replaced by a new one.

If necessary, connect the operator panels to be loaded via the **serial interface** to the ADDM computer.

PCIN

The operator panels for SINUMERIK HPU, OP030, MMC100 und MMC100.2 are loaded via serial interface. Other operator systems of SINUMERIK are PC-based operator panels with implemented hard disks.

S5-CPU

The S5-CPU can be reached via SINEC H1 or the serial interface AS511. An appropriate CP is needed in the rack of the SIMATIC S5 and in the PG/PC for communication via H1.

HMI DOS

The HMI DOS operator interface is linked to the ADDM computer via the **Interlink** (parallel or serial interface).

Hard disks

Complete hard disks are loaded under ADDM via the **parallel interface (not under Windows NT 4.0 or Windows 2000)** or via the **TCP/IP network**.

Neutral component

The neutral component allows integrating miscellaneous software tools on an easy way into ADDM. This software tools need an interface for the communication with ADDM.

Miscellaneous

Even older control systems and non-Siemens systems can be connected to ADDM. In such cases, the crucial factor is whether the systems use standard transfer mechanisms. Older SINUMERIK systems such as the 3/8, 810, 820, 850 and 880 systems use a serial interface without a protocol for data output. Machine data, for example, are output via this interface. ADDM can receive and store data with the serial component. After the data exchange, this data can be transferred to the systems again.

Systems such as SINUMERIK 840C have a PC, which can be backed up and loaded with the DOS drivers Interlink and Interserv. These drivers were components of the Microsoft MSDOS operating system and are therefore subject to the relevant licensing laws. For this reason, these drivers are not supplied with ADDM.
If these drivers are present on the backup computer, ADDM can recognize this serial or parallel coupling and backup and reload data via the path component.

1.2.2. Backup concept

ADDM supports different hardware configurations for backing up configuration and system data:

- ADDM (client) runs on a mobile network computer, which stores the backup data on a central server. Via this computer it is possible to transfer the data between hardware components and server.
- ADDM (client or agent) runs on stationary network computer (e.g. operator panels) and is connected to the automation component. The computer has also access to the server in the same way as the mobile computer.

The following applies to both solutions:

The ADDM project and the STEP7 project must lie on a **common drive** for both solutions!

ADDM-Agent in stationary network computers takes the communication with the automation components. That means an agent can be installed on an operator panel. All data transfer functions via network are possible without a complete client installation is necessary on the operator panel.

ADDM on a network computer

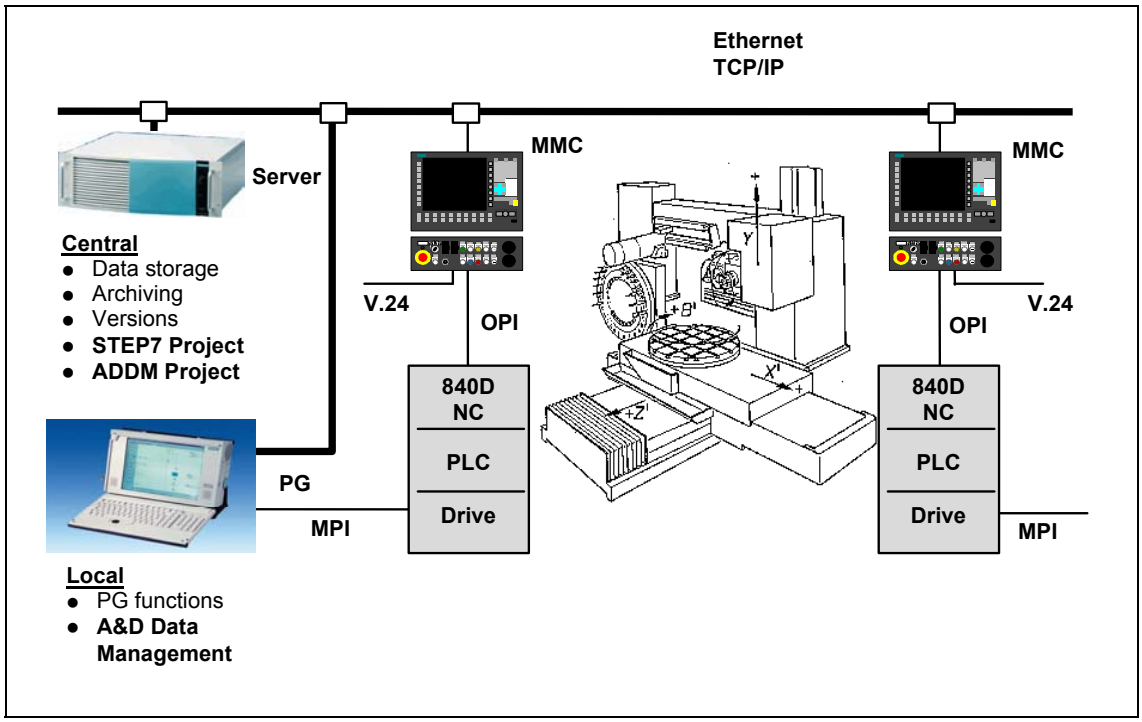


Figure 1–3 ADDM as a network station (V.24 = RS-232-C)

1.3 How does ADDM-Agent work?

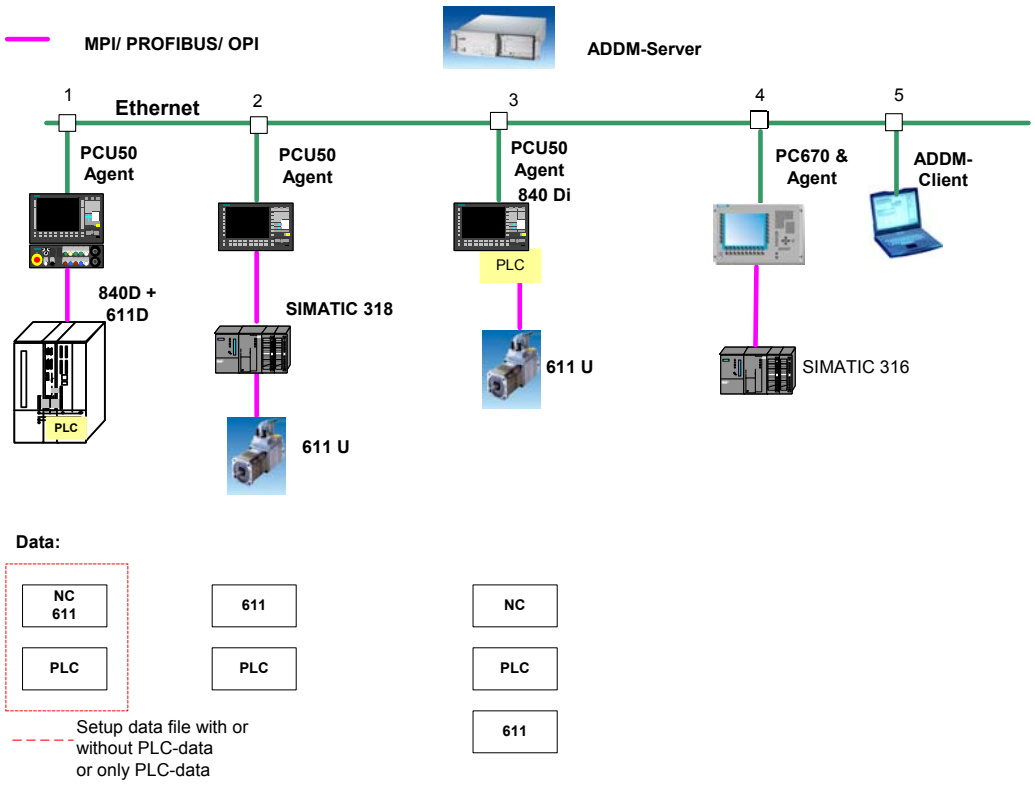


Bild 1–4 ADDM Agent

General

On stationary computer like operator panels at machines the memory space often is limited. Therefore a complete installation of the ADDM client software couldn't be possible. In this case the software ADDM agent may installed on an operator panel. An ADDM client has now the possibility to communicate with several ADDM agents. So an access to components via stationary computers is possible. No connecting of a mobile computer to the component is necessary.

The ADDM client instructs the ADDM agent to do the functions of the client. During a running task a constant communication between agent and client is been held. The agent is the helping hand of the client.

ADDM agent has no operating interface. He is a router for communication through the operator panel to the component. ADDM client does all settings and definitions.

Supported components by ADDM agent

ADDM agent supports following components for load, backing up and compare.

- NCU: SIN840D, 840Di, 810D: PLC-Data via S7-CPU
- Drives: 611U, 611UE, POSMO CD, -CA, -SI, -A, 611D via NCU

- S7: S7-300, S7-400, WIN AC, WIN AC RTX

Communication between ADDM client and ADDM agent

The communication between ADDM client and an ADDM agent is executed by the Microsoft DCOM mechanism. For a data transmission between the client and an agent a network connection is necessary. For a proper function both computer must be a member of the same domain.

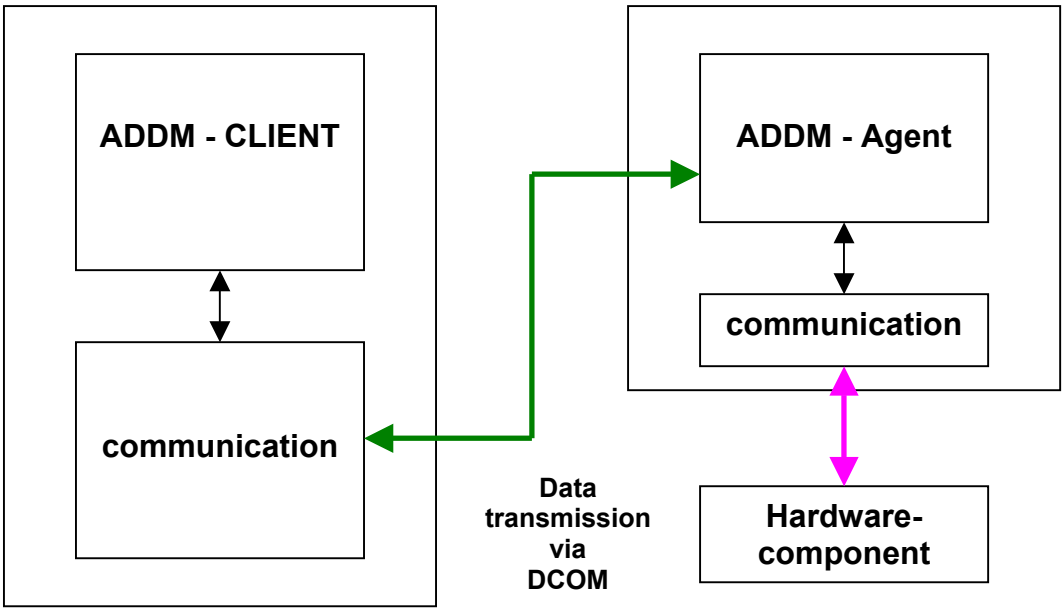


Fig. 1–5 ADDM agent communication

Should been executed a backup or a comparison, the client sends the instructions to the ADDM agent via the DCOM interface. The agent starts the task and transfers the data to the client. After the data transmission is succeeded, the client waits for the next task. Occurs an error during the data transmission; the error message is given to the client. The client displays the error message or transfers it to the job server, which have initiated the task.

For contacting the ADDM agent from the client, the client needs the TCP/IP address from the computer where the agent is installed. This information is stored in the properties of the component of an ADDM project (see description SIMATIC A&D DataManagement).

1.4 Installing A&D DataManagement Agent

Hardware requirements

ADDM Agent V1.0 is a 32-bit application requiring an MS Windows 98, MS Windows ME, MS Windows 2000, MS Windows Xp or MS WindowsNT 4.0 operating system. ADDM cannot run under MS Windows 3.1 or MS Windows for Workgroups 3.11.

The hardware requirements are recommended by the operating systems used, which are also stated for the use of the particular operating system.

- Under **MS Windows 98** must be installed DCOM 98 (if it's not already done).
- Under **MS Windows NT 4.0**, at least Service Pack 6 (NT version 4.00.1381) must also be installed. You will find the relevant information at Microsoft in the Internet. You must be logged on as a main user to work with ADDM under MS Windows NT / 2000 / Xp. You need administrator rights
  - to install ADDM
  - to set up modules with the **Set** PG**/PC interface** function.

Memory requirement

ADDM Agent V1.0 requires approx. 10MB free storage space on your hard disk.

In addition, MS Windows 98, MS Windows ME, MS Windows 2000, MS Windows Xp and MS Windows NT require storage space for the swap-file on the hard disk (typically drive C:). You should keep about 128MB free.

If possible, do not store the project data on the same drive as the Windows-swap file.

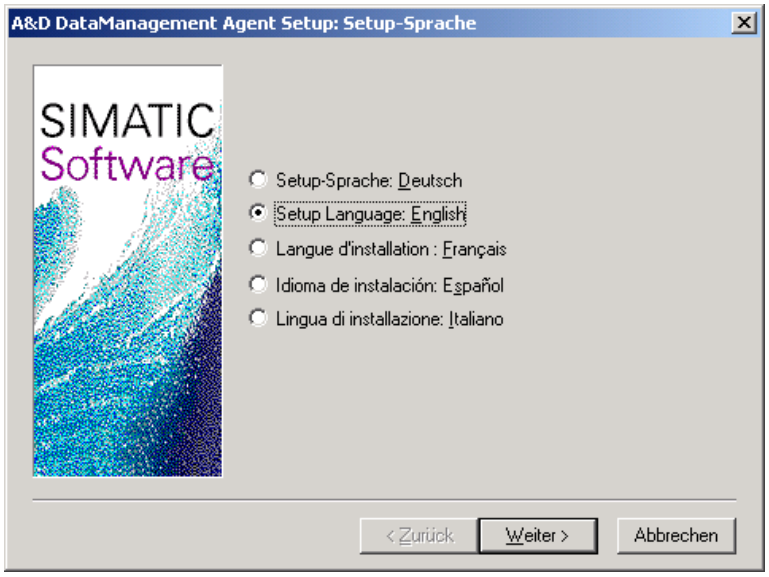
Software requirements

Further software packages are required for individual components:

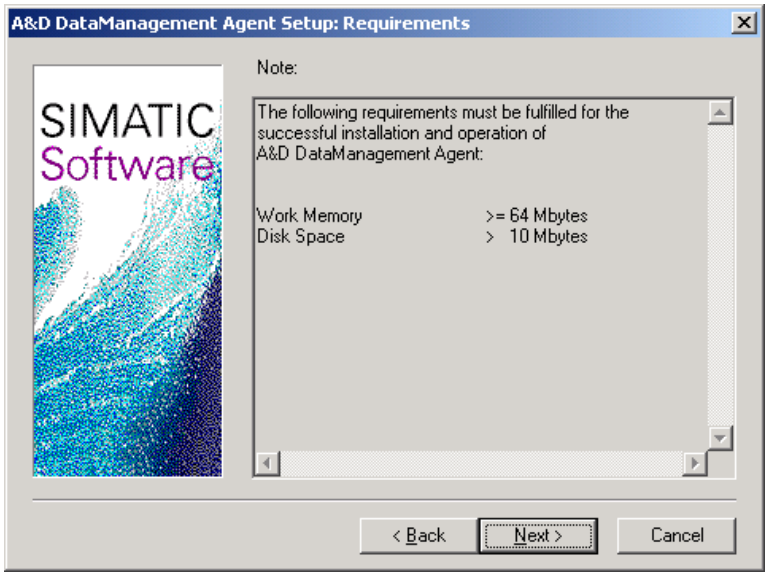
- SIMOCOM U
- SIMOCOM A

Start setup

1. Start the installation by calling **setup.exe** on the CD supplied. Follow the instructions on the screen.

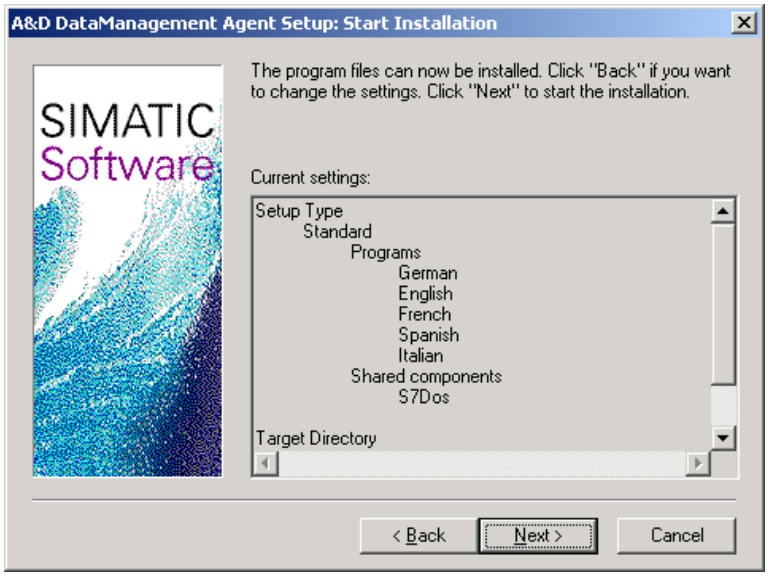


2. Select the desired language version for A&D DataManagement during the setup.
3. Take note of the instructions on the **Welcome** screen and in the **Readme** file.

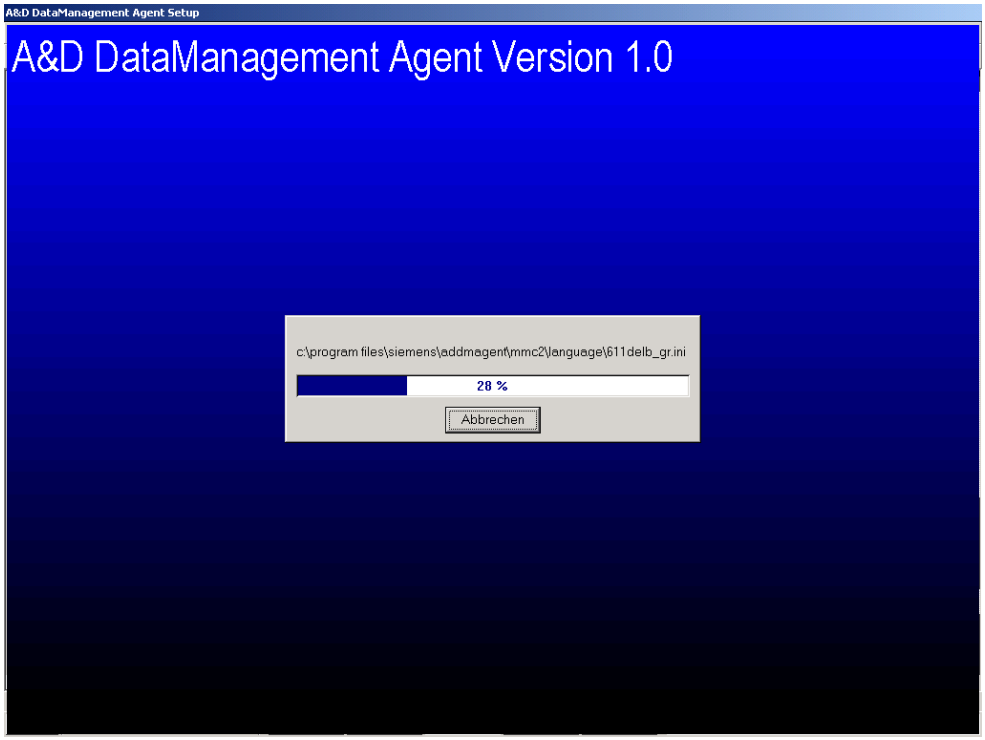


4. Take note of the hardware **requirements** for installing ADDM.
5. Read the license agreements for ADDM

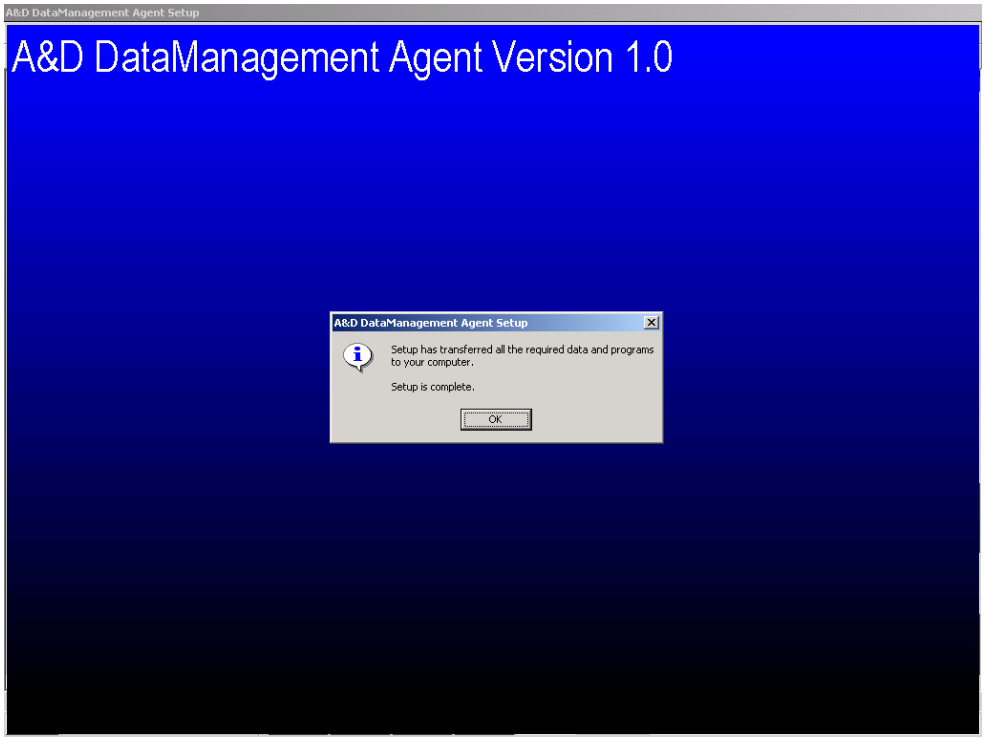
6. The Setup shows the selected settings so that they can be check



7. ADDM now will be installed on your computer with the selected options.



8. ADDM is fully installed on your computer after this step. ADDM installation informs you if it's necessary to reboot the computer.



After installation the ADDM agent must be authorized for an unlimited operation. Please install with the software AuthorsW the Authorization of ADDM agent.

1.5 Modification of the standard security for the services

Windows NT/2000

You have to change the settings for the default security to allow all users the usage of Archive Server A&D DataManagement-Applications:

Open the "**dcomcnfg.exe**" application by entering **dcomcnfg** in the **Start-->Run...** menu.

Select the **Default Security** tab.

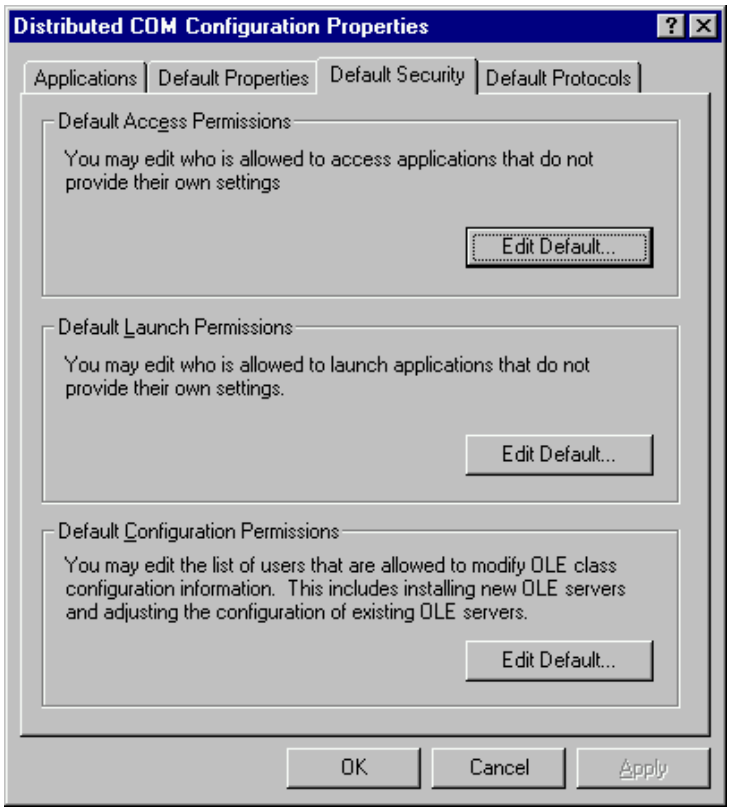


Fig. 1: Configuration of the default security WIN NT

Notice

Several messages about unassigned Windows classes may appear when **dcomcnfg.exe** is started under Windows 2000. This depends on the registration of other program installations in the registry. If this happens, always select "**No**" so that no changes are made. A change may make it necessary to reinstall the computer.

Windows Xp

Select **Run...**, give in in the open area **dcomcnfg** and confirm with **OK**.

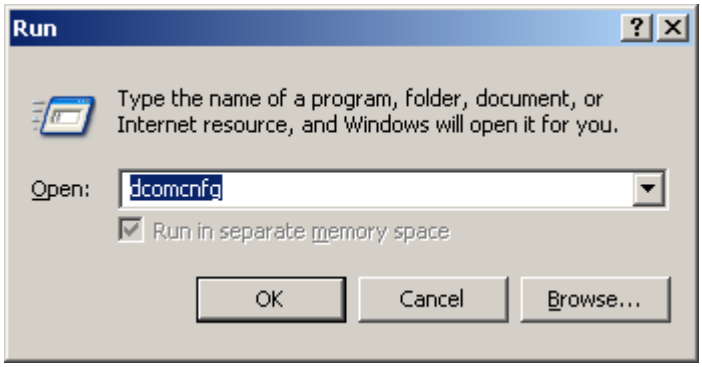


Fig. 2: Start dcomcnfg on WIN Xp

The window Component Services will be opened. Navigate under computers to **MyComputer**. Select in the popup menu **Properties**, which is opened with the right mouse button.

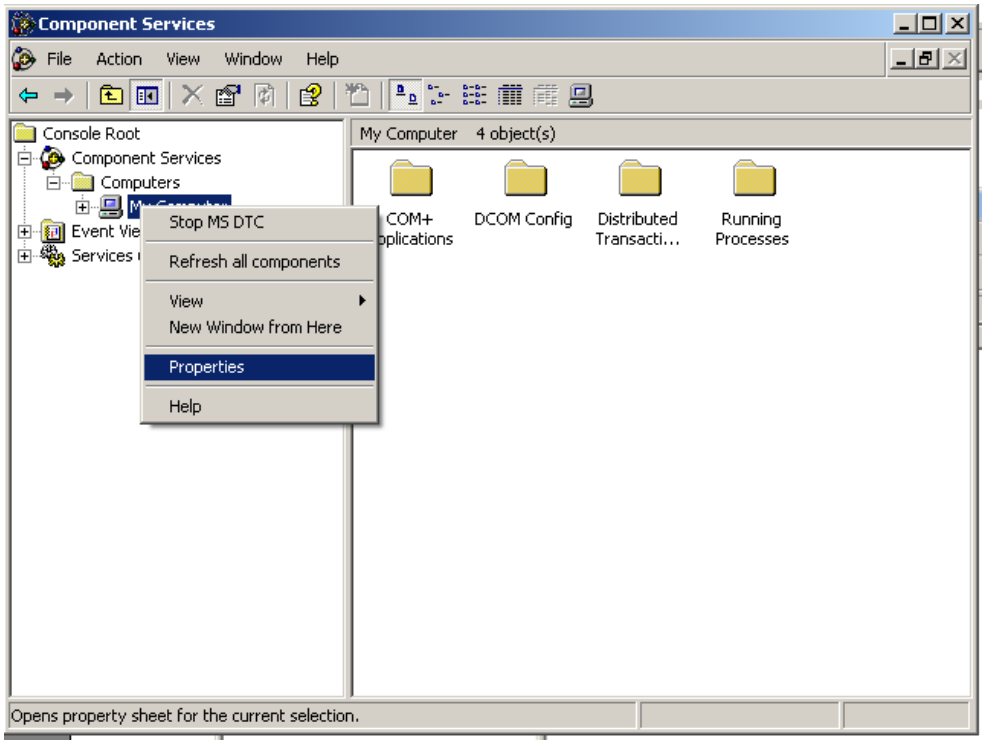


Fig. 3: Properties in Component Services on WIN Xp

In **My Computer Properties** under **Default COM Security** the **Access Permissions** may be changed.

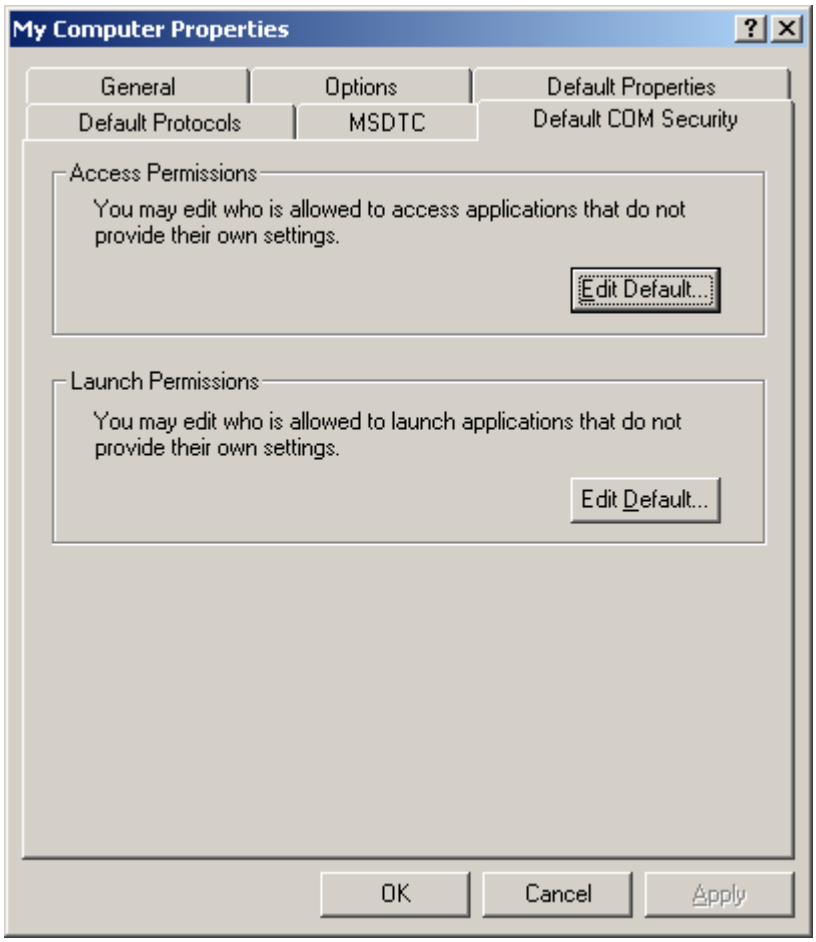


Fig. 4: My Computer Properties on WIN Xp

1.6 Domain settings

Windows NT

Click on the **Edit default...** button on the **Default Access Permissions**. The **Registry Value Permissions** dialog "DefaultAccessPermission“ is displayed.

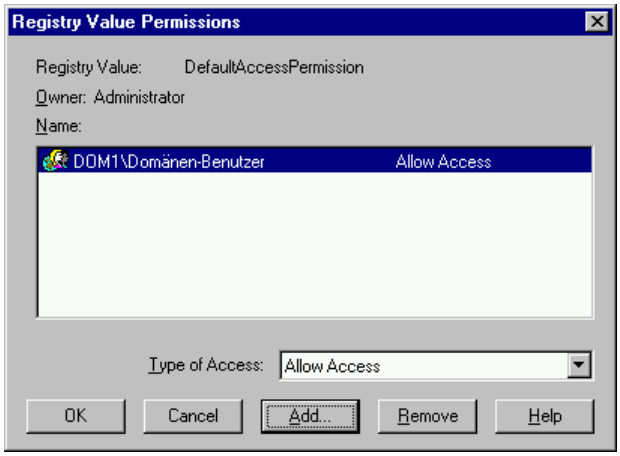


Fig. 5: Configuration of Default Access Permissions on WIN NT

Assign the type of access **Allow Access** to the **Domain Users** entry.

If **Domain Users** does not exist, please add this entry via the **Add...** button.

Exit the **Registry Value Permissions** dialog with **OK**.

Now click in the **Default Launch Permissions** section (see Fig. 1) on the **Edit default...** button. A new dialog **Registry Value Permissions** "DefaultLaunch-Permission“ is displayed.

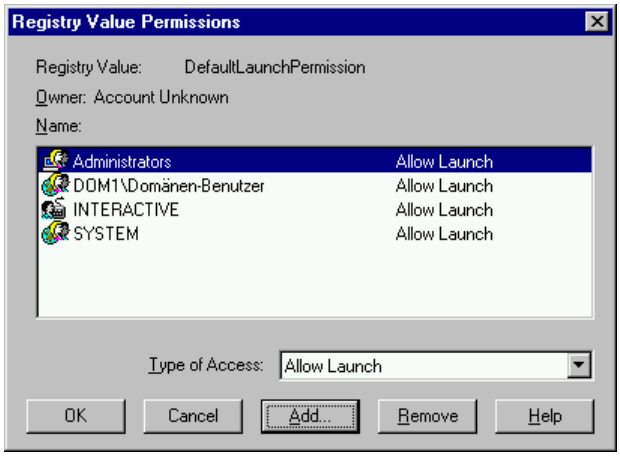


Fig. 6: Configuration of Default Launch Permissions on WIN NT

Assign the type of access **Allow Access** to the **Domain Users** entry.

If the **Domain Users** entry does not exist, please add this entry via the **Add...** button.

Exit the **Registry Value Permissions** dialog with **OK**.

Windows Xp

Please press the button **Edit Default...** under **Default COM security** in the area **Access Permissions** (see Fig. 14) The **Access Permissions** are opened.

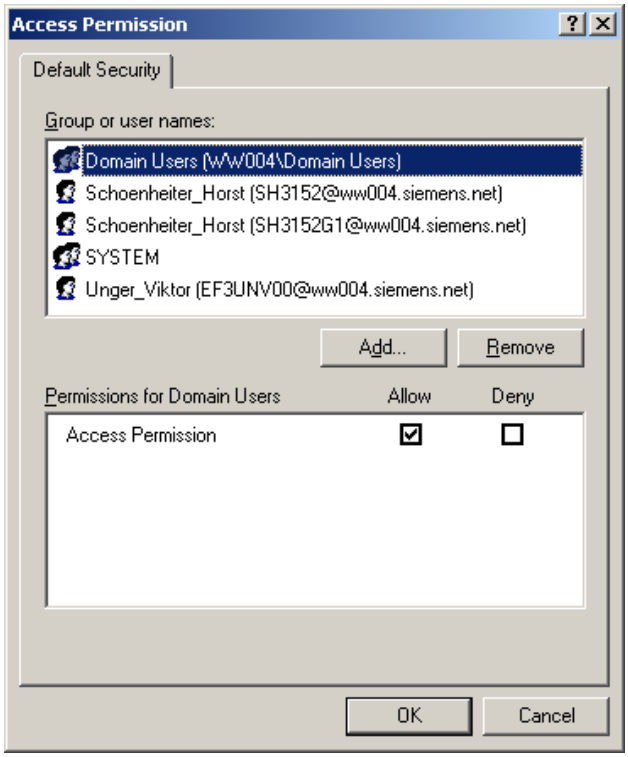


Fig. 7: Access Permissions on WIN Xp

Assign to the **Domain Users** the Access Permission **Allow**.

IF **Domain Users** does not exist, please add this entry via the **Add...** button.

Exit the dialog with the **OK** button.

Please press the button Edit Default... under Default COM security in the area Launch Permissions (see Fig. 14) The Launch Permission is opened.

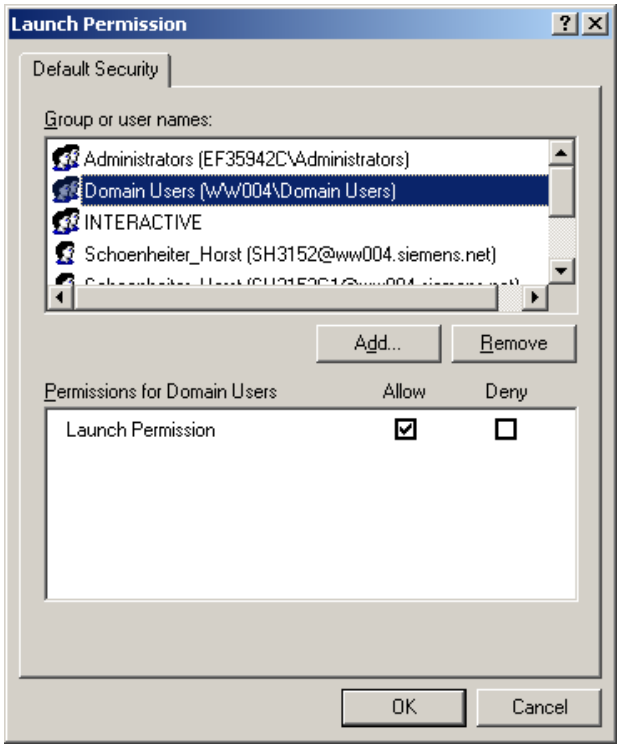


Fig. 8: Launch Permission on WIN Xp

Assign to the **Domain Users** the Launch Permission **Allow**.

IF **Domain Users** does not exist, please add this entry via the **Add...** button.

Exit the dialog with the **OK** button.

Note

The permissions have to be selected in this way, that all ADDM Client Users are members of the group, which have access rights. Only users with access rights may use the functionality of ADDM Agent.

2 Operating A&D DataManagement

The operation of A&D DataManagement software is divided into four main steps:

- Imaging the plant structure
- Assigning hardware components
- Defining properties of the hardware components
- Backing up and loading configuration data.

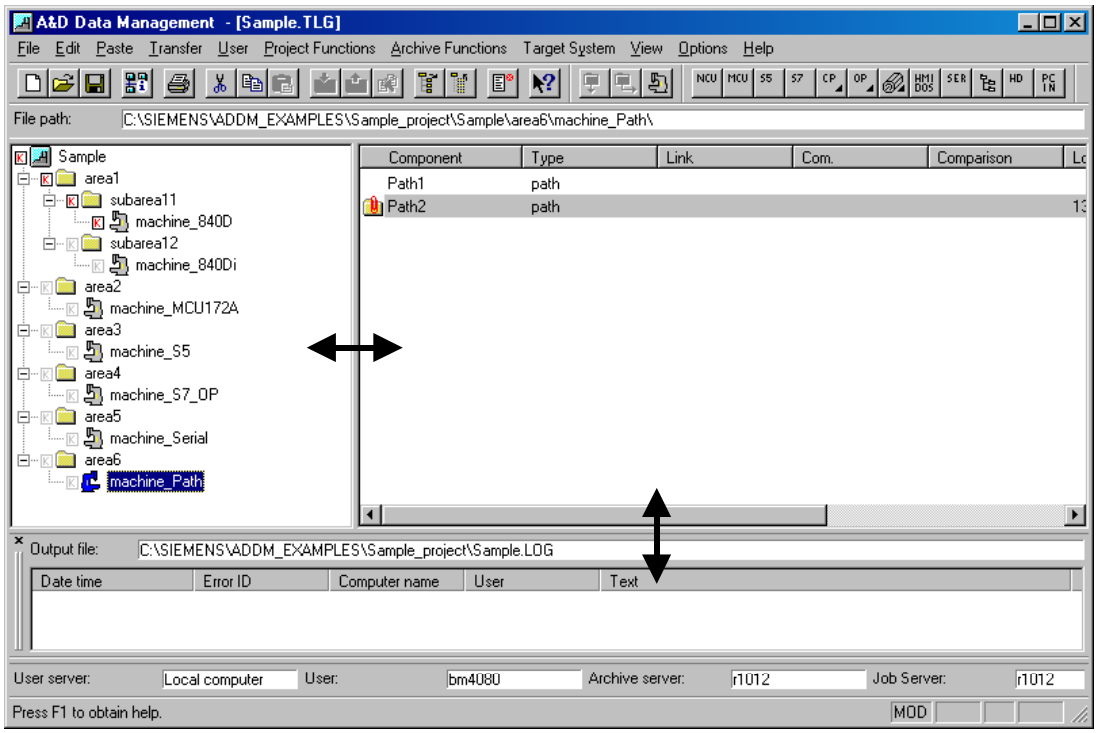
Note

The operating of ADDM-Agent is done with the software ADDM Client or ADDM Single User version.

2.1 Basic information about the human-machine interface

ADDM Agent is working as a router between ADDM Client and a hardware component. That's the reason why the Agent has no operator interface. ADDM Client does the complete operating.

The ADDM interface is subdivided into three main windows. The window areas can be moved respectively to other with the mouse (see arrow). All actions in ADDM are performed by operations in this interface. The action may take place via the menu bar or via the buttons. As a result of the selection in the windows, some functions may be greyed out. This means that these functions are disabled. The actions possible with a particular selection are shown in black script in the menus or their buttons are shown in colour. If the mouse pointer is held still over a button, a text appears alongside the mouse pointer explaining the button's function.



- The left-hand window contains the directory structure of a production line. The data is assigned via this structure. Areas, subareas and machines can be set up. The machines constitute the lowest level. The machines contain components, which contain the actual data.

- The components are stored in the right-hand window. These components contain the backed up data. The data transfer information is also stored under the components. This is necessary if a component can be accessed via different transmission paths. As well as the names of the components, this window also contains the data of the back up, the last comparison or the last loading procedure.
  If data are linked to the component by pointers (links), the link is displayed in the right-hand window.

   This symbol indicates that an additional safety back up has been made in the component in addition to the normal data backup. This is particularly advantageous if it is not desired that automatically scheduled backups overwrite the originally backed up data.
- In the lower window, ADDM provides the information of the logbook file (log file) of the current session. All the actions performed in ADDM are entered in the log file. Transfers, comparisons and changes in the structure are thus recorded with date, time and user. If errors occur during a data transfer, then these are also stored in the log files. This makes a subsequent diagnosis easy.

Note

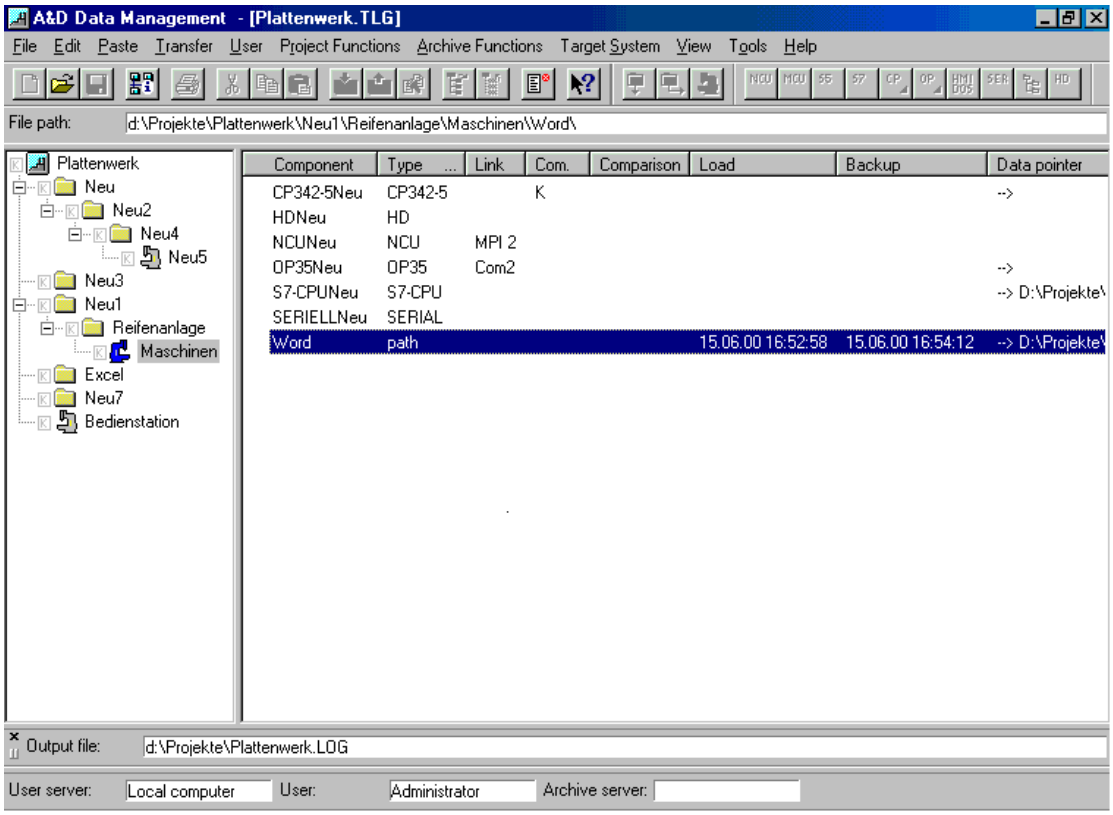
A&D DataManagement uses the associated communication mechanisms to communicate with the various components. Information and error messages are reported by the drivers to ADDM and displayed on the human-machine interface. While doing so, corresponding error codes are provided for detailed diagnosis by SIEMENS.

More detailed information about operation will be found in the documentation A&D DataManagement .

2.2 Specifying the plant structure

You model the plant structure of your production facility in the form of a directory tree in the main window of the A&D DataManagement application.

The operation of the main window is based on the WINDOWS Explorer interface.

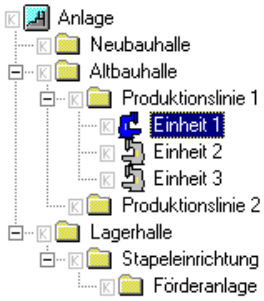


Creating a new project

1. Select the **File → New...** menu to create a new project. ADDM creates an empty project with the name "**Unnamed**".
2. Rename the **unnamed** project as, for example, **Plant** by double clicking or using the **Object properties** context menu.

Imaging the plant structure

In order to image the plant structure in A&D DataManagement, create a corresponding directory for each level of your production facility.



Construct it using the following hierarchy:
Plant – Area – Subarea – Unit.

For example, the highest level, **Plant**, represents the entire works.

The **Areas** level contains the New hall, Old hall and the Warehouse.

In this example, the **Subarea** level consists of production line 1, production line 2 and the stacking facility.

The lowest level of the tree represents the individual **Units** (or machines). Elements on the lowest level are also referred to as *physical assets* in this connection.

The designation of each tree entry can be freely selected in the **Object properties** context menu.

2.3 Assigning control components

After imaging the plant structure, the control components have be assigned to the units. The various control components are located within the unit.

You assign a new control component to a unit as follows:

1. Select the relevant unit
2. Click on the component button in the button bar on the right.
3. A&D DataManagement supports following **control components:**
   - **NCU**: SIN840D/840Di/810D, PLC data via S7-CPU
   - **Drives**: 611U, 611UE, POSMO CD, CA, SI, A
   - (programmable controller)
   - **S7-**CPU module (S7): S7-300, S7-400, WIN AC
4. For example, click on the  button to assign a S7-CPU.
   With double click on the inserted S7-CPU **Properties of 'the component'** dialog opens.
5. Assign a name to the new component, e.g. **S7-CPU**.
6. Click on **OK.**

The new component, e.g. **S7-CPU**, is assigned to the relevant unit.

Details of each component

The list on the right displays additional details about each component:

- The **Component** field contains the freely allocated name of the component
- The **Type** field contains the component type
- The **Link** field shows the hardware link of the component to the ADDM computer.
- The **Comparison time** field shows the timestamp of the last comparison.
- The **Loading time** field shows the timestamp of the last load.
- The **Backup time** field shows the timestamp of the last backup.
- The **Data pointer** field shows the paths of the **pointered** projects.
  The user sees immediately if, for example, a S7 component is not pointered.

You sort the lists according to the currently selected field with the **View → Sort** menu.

You can save the current sort with the **View → Save** menu.

Editing a project

You can **cut** and **paste** components, units and whole areas.

Components, which are no longer needed, can be **deleted**. To delete, A&D DataManagement moves the components into the WINDOWS Recycle bin. The linked data stocks are not deleted.

Note

If you have made changes to the plant structure, you must first save them before you can load or backup the corresponding control components.

2.4 Specifying the properties of the control components

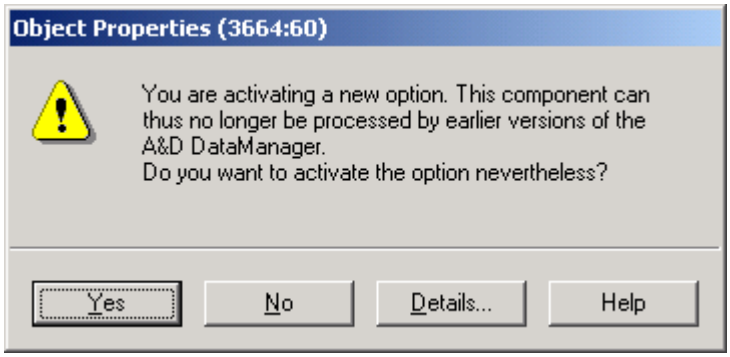
You reach the **Properties of 'the component'** dialog by double clicking on the relevant component, or via the **Object properties** context menu (right mouse button).

The general statements about each component comprise:

- The internal **name** of the particular component.
  This can be changed.
- An additional **Remark** with a maximum of 255 characters.

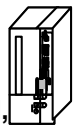
The specific properties of each control component are described in the following.

In the properties of the control components options may be activated. Following message box occurs on activating such an option:

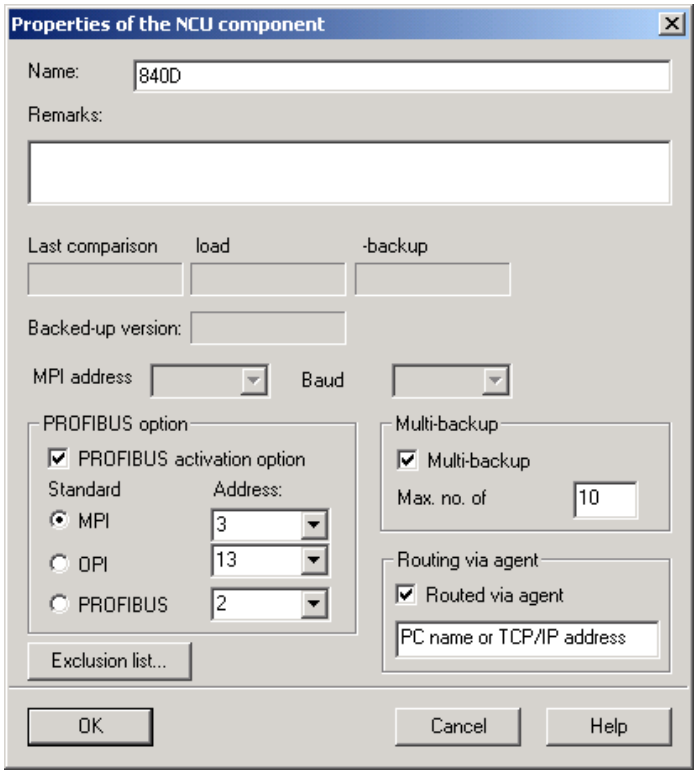


If such an option is activated, the component is visible in a minor version of ADDM. But working with the component is not possible with any minor version.

2.4.1 NCU component



The NCU SINUMERIK 810D/840D/840Di machine tool control can be **loaded, backed up and compared**. Additional to these functions safety backups can be made into this component.



In addition to the general statements, the **Properties of the NCU component** dialog contains:

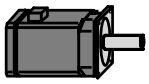
- **Name**
  Freely allocated name of the component.
- **Remarks:**
  Freely editable field for user texts.
- **Last comparison:**
  Date and time of the last occasion when the online data was compared with the offline data (for source data and memory dump).
- **load:**
  Date and time of the last occasion when the offline data was transferred to the controller (for source data and memory dump).
- **backup:**
  Date and time of the last occasion when the NCU data was backed up.
- MPI (or OPI) **address** of the NCU
  A&D DataManagement subsequently creates a link to the NCU SINUMERIK with the MPI (OPI) address.
  A communication error occurs if the stated address is not present (error 286).

- **Baud rate** for the transfer.

A&D DataManagement stores the information in the MMC.INI file when loading or backing up.

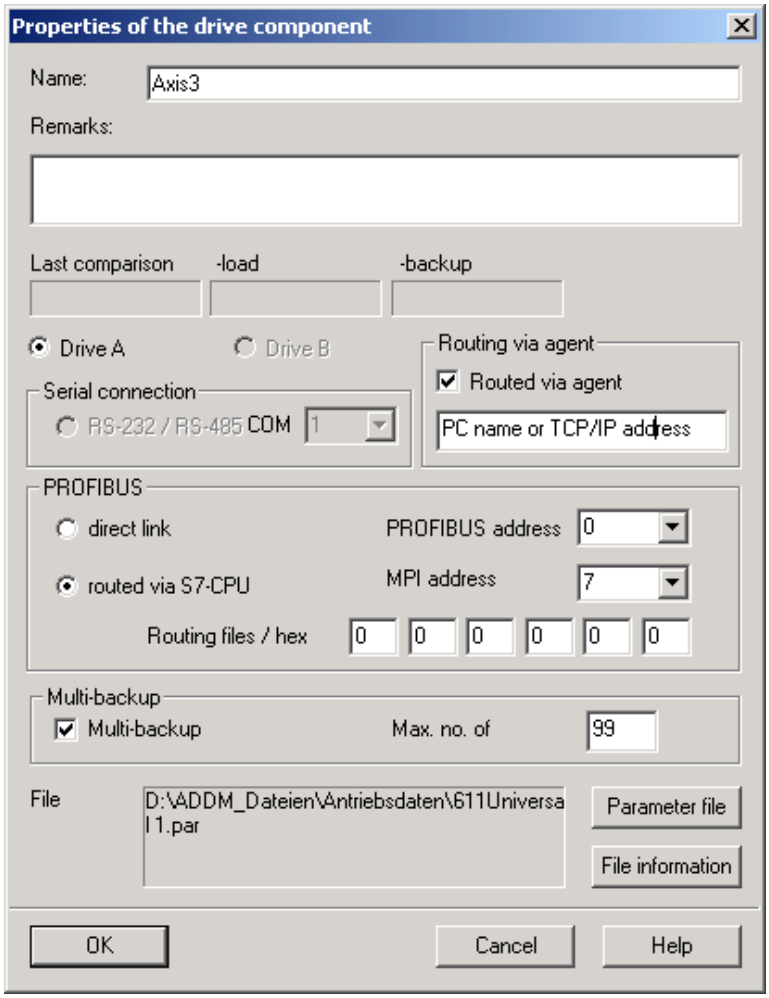
- The NC can also be backed up and loaded with the **PROFIBUS activation option** via the **CP342-5** or the integrated PROFIBUS interface. Loading is supported from CP version 1.31 and higher.
- With the option **Routing via Agent** the NCU is also connectable via a network computer installed with ADDM-Agent. For that, the name or the TCP/IP-address of the computer with ADDM-Agent has to be declared. To the Agent computer connected is the real component. In case of a NCU it could be the operator panel of the SINUMERIK.
- When **Multibackup** is activated, the number of back ups to be stored by ADDM can be specified in the **Max. no. of backups** input box. ADDM takes this specification into consideration when backing up, and saves a new, separate back up. If the **max. no. of backups** is reached, the data starts to be saved in the oldest backup. This old data is then overwritten. Up to 99 backups can be stored in ADDM in this way.

2.4.2 Drive component



The following drives can be managed, backed up, loaded and compared with the drive component under A&D DataManagement.

- SIMODRIVE 611Universal, 611Universal e
- POSMO CA
- POSMO CD
- POSMO SI
- POSMO A 75W, 300W.



The Properties dialog of the drive component contains the following fields:

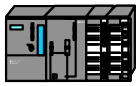
- **Last comparison:**
  Date and time of the last occasion when the online data was compared with the offline data.

- **Load:**
  Date and time of the last occasion when the offline data was transferred into the drive.
- **Backup:**
  Date and time of the last occasion when the drive data was backed up.
- **Drive A – drive B:**
  The Simodrive 611 Universal drive can be supplied with either one or two axes on a module. On modules with two axes, these axes are distinguished by being named drive A and drive B. This can be set in ADDM.
- **Routing via Agent**
  With this setting the drive is connectable via a network computer with ADDM-Agent. For this the name or the TCP/IP address of the computer has to be declared.
- RS-232 / RS-485**:**
  The 611U and 611UE drives are loaded, compared and backed up via the RS-232 / RS-485. The **COM1/2** interface of the backup computer has to be set. The transfer may also be made over the PROFIBUS with an optional expansion module.
- **PROFIBUS:**
  When the PROFIBUS is used as a transmission route, the coupling to the drive may be made in various ways.
  If the backup computer is connected directly to the PROFIBUS segment of the drives (**direct connection)**, the PROFIBUS address set for the drive must be stated in order to gain access.
  If the backup computer is connected via a SIMATIC S7 or a higher-level PROFIBUS segment (**routed via S7 CPU**), the subnet ID of the network segment and the MPI address of the S7 CPU must be stated. In the STEP7 project, the subnet ID information can be queried via the SIMATIC Manager.
- **Multibackup:**
  This option enables the user to store up to 99 memory dumps of the component. The number is specified in **Max. no. of backups**. (Please also see Subsection 2.4.1 Multibackup option and Subsection 2.5.2)
- **Parameter file**
  In ADDM, the button for selecting the parameter file sets a pointer to the drive start up data. Actuating the button opens a browser for navigating to the drive data. The data is generated and stored with the SimoComU/A software package
- **File info:**
  Information about the parameter file can be called with this button. This serves for linking the correct drive file.

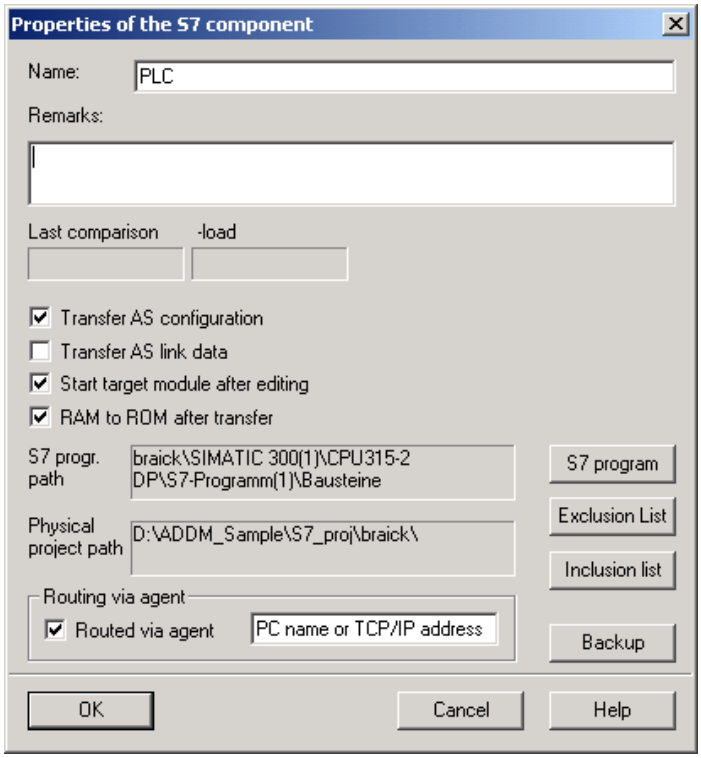
Note

That an access to the drive component via ADDM Agent is possible, the software SimoComU or SimoComA have to be installed. This software is part of the ADDM Agent CD.

2.4.3 S7 component



All S7-300, S7-400 CPUs and the PC-based Win AC controls belong to the S7-CPUs.



Because of the source data concept, the S7-CPU is only **loaded and compared**. The S7-CPU is **stopped** before the transfer and then restarted afterwards. However, there is an option of creating a backup of a S7 CPU.

The **Properties of the S7 component** dialog enables the following settings to be made:

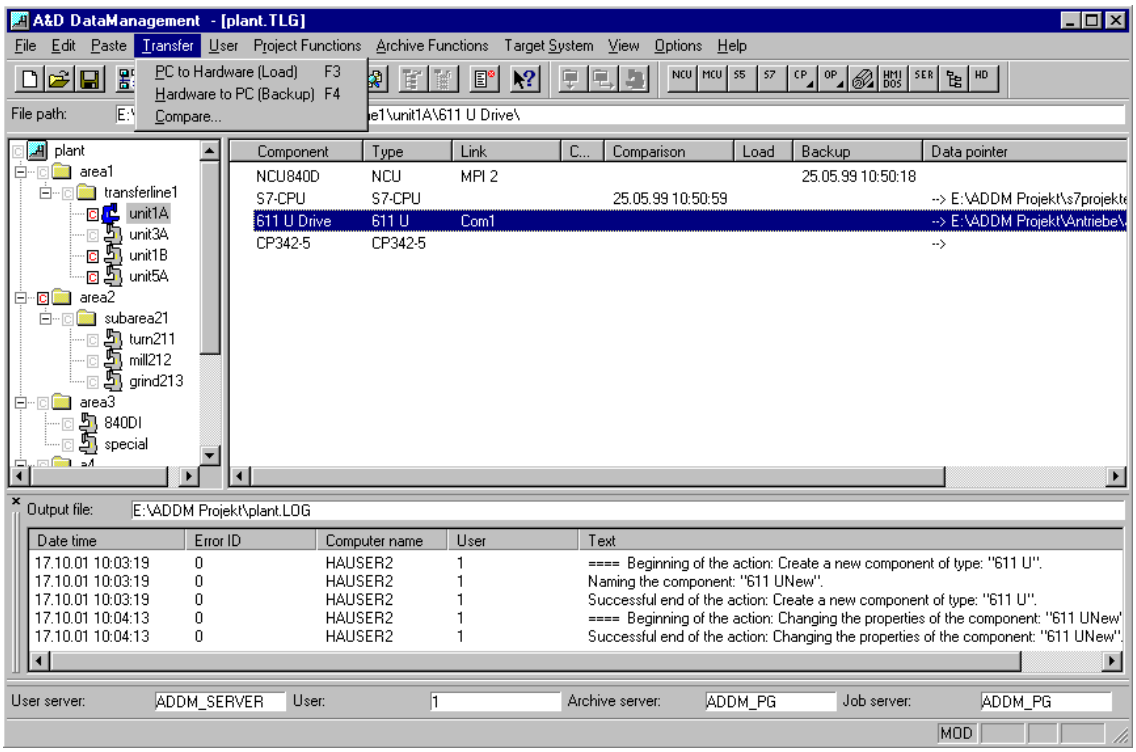
- **Transfer AS configuration** option:
  You transfer the hardware component, created with 'HW config', to the automation system (from the SDBs of the STEP7 project) with this option.
- **Transfer AS link data** option:
  If FDL links have been configured; these are also transferred when the S7 CPU is being loaded. This option can only be activated in V2 STEP7 projects. In V3 STEP7 projects, this information is transferred together with the AS configuration (SDB).
  The link data are also loaded with the transfer to the CP342-5 component.
- **Start target module after editing** option:
  You should always activate this option, so that A&D DataManagement automatically starts the CPU after the transfer.

- **RAM to ROM after transfer** option:
  A&D DataManagement automatically stores the data here in the case of modules with integrated FLASH.
- With the setting **Routing via Agent** the CPU will be contacted via an installed ADDM Agent on an operator panel. For this function the name or the TCP/IP address of the Agent computer has to be declared.

2.5 Transferring data

2.5.1 Selecting the transfer in ADDM

Configuration data are transferred as follows:



1. Select the appropriate **target component** in the right-hand window, for example the entry **611U Drive – 611U**. A data transfer cannot be made without having selected a component in the right-hand window.
2. Select a transfer direction in the **Transfer** menu.
   A&D DataManagement automatically displays the transfer direction possible in each case. An impossible transfer is greyed out and cannot be selected.

After that the ADDM Client contacts the Agent computer, which is defined in the properties of the component. Data transmission will be executed.

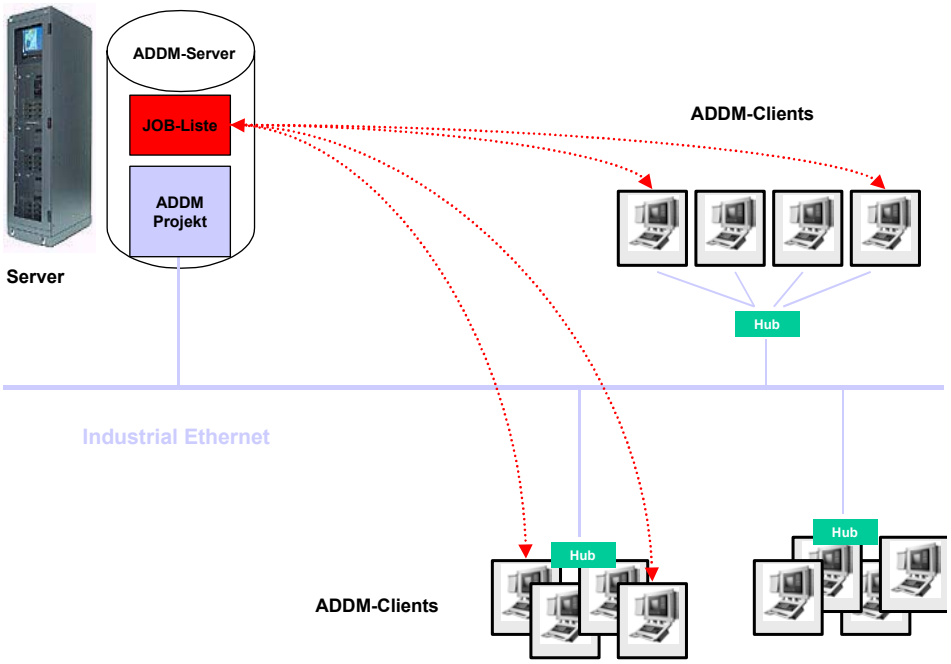
Note

The address or the computer name is taken from the properties of the component.

If a point to point connection necessary between ADDM Client/Single User and component (MPI, BTSS, PROFIBUS), the setting **Routed via Agent** has to be removed.

2.5.2 Automatic Transfers

In addition to the manually initiated data transmission, ADDM has the possibility with the client-server-application to start data transmissions automatically. Defined jobs in the job server are executed from clients/agents. A network is necessary for that. The job server sends the commands to the clients for executing a task. The execution is done from the client independent. The client gives back a response about the task to the job server.



On executing a job it's not relevant if the component is connected direct to the client computer or connected to an agent computer. The settings for the access to a component are stored in an ADDM project. The setting is done by a client. The settings are every time the same. The only difference is the setting „Routing via Agent"

This method has the big benefit, that for access to the component via network or directly via PC no setting has to be changed.

Note

Further information about the functions will be found in the documentation A&D DataManagement and A&D DataManagement Server.

2.5.3 Function control of the ADDM Agent

Displaying of the Agent

After a successful installation of ADDM agent the agent will be started automatically on starting up the computer. The agent has no own operating interface. The monitoring of a running agent can be done by checking the Windows taskbar.

Agent is waiting

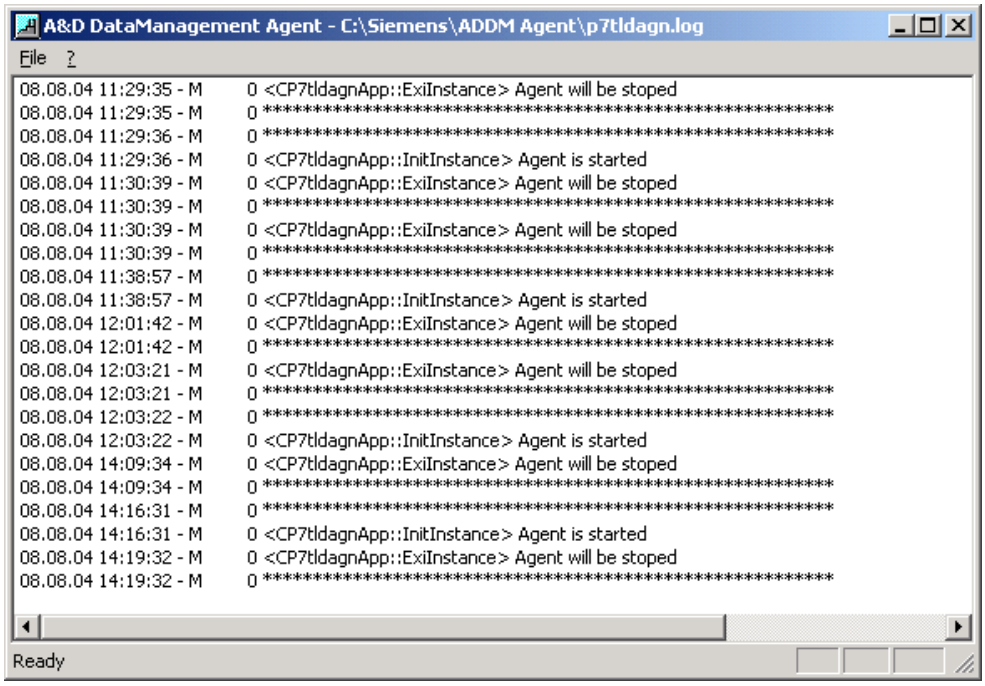
In the taskbar is displayed the successful starting up of the agent. If you point to the symbol with your mouse pointer, the tool tip „Agent is waiting“ will be visible. That means the agent is waiting for task from an ADDM client.

If ADDM agent is installed on an operator panel, it could be, that no access to the taskbar is possible. There are applications, which does permanent overlapping the taskbar. In this case you may call the task manager of Windows for checking the agent.

Pressing CRTL-ALT-DEL on the keyboard can open the task manager. At the page processes should be found the entries of the applications agentsvr.exe, CasAgnt.exe and p7tldagn.exe.

Log file of the Agent

By double clicking with your mouse button to the agent symbol the agents log file will be opened. In this file all actions of the agent are recorded.



The date and time of the action is recorded. The sign M stands for message, E for Error. After these entries follows the description of the event. Between the brackets the application, which has initiated the event, is recorded.

Note

Further information about the functions and settings will be found too in the online help of the ADDM client.

A Glossary

Term	Meaning
ADDM	Frequently used abbreviation of **A**&**D** **D**ata**M**anagement
AS	**A**utomation **s**ystem, term for SIMATIC controls (S7) (was used in the past for **A**n**s**chaltung (interface module), e.g. AS511)
AS511	**A**n**s**chaltung (interface) 511, name for the programming interface of the SIMATIC controls (S5).
CD	**C**ompact **Disk**, storage medium for data.
Component	Devices, units application programs which are part of an automated system. In this standard, the term only refers to PLC systems offered on the manufacturer's list.
CP	Communication module (e.g. CP342-5), interface module for PLC/CP for connecting to a network.
CPU	Central Processing Unit, central processor of a system, this term is often used for the central unit of a SIMATIC S7
CPU address	The CPU address of the MPI interface has the number 2 when the CPU is delivered. The S7-CPUs are supplied with data and brought into operation via the MPI interface.
DP	Dezentrale Peripherie (distributed I/O, term for a bus protocol with PROFIBUS.
Exclusion list	Makes possible a qualified comparison between S7 project and online data.
FAT	**F**ile **A**llocation **T**able, term for the contents directory of a data storage medium. Each operating system has used a different FAT.
FDL	**F**ield **D**ata **L**ink designates level 2 (according to ISO reference model) with PROFIBUS and uses defined protocols.
GHOST	Accessory program from SYMANTEC for backing up complete hard disk contents (images).
Hardware component	Devices and units within an automated system. Includes all the control components from SIEMENS for the automation area.
HD	**H**ard **D**isk of a PC or computer
HMI DOS	Human Machine Interface DOS, unit operator panel, operating and monitoring products/systems at Siemens
HT6	Handheld Terminal 6, handheld unit for SINUMERIK

Term	Meaning
Highly-available server	The concepts for central backup on network servers differentiate between • error resistant • error tolerant • failure tolerant disk storage systems. The failure tolerant systems are the safest.
HMI DOS	**H**uman **M**achine **I**nterface DOS, operator panel of units, operating and monitoring products/systems from Siemens.
IBN611D	Start-up tool for the SIMODRIVE 611D and SINUMERIK 840D/8110D drive systems
Image	Mirrored hard disk
MCU	**M**otion **C**ontrol **U**nit, single-axis control MCU 172A
MCU PIT	**P**rogrammier- und **I**nbetriebnahme**t**ool (programming and start-up tool for the MCU 172A single axis control.
MMC	Control unit running under Windows, enables manufacturers' own operating systems to be configured.
MP	**M**ulti**P**anel, operator panel with basic operating system WINDOWS CE.
MPI	The **M**ulti**P**oint **I**nterface is the SIMATIC S7 programming device interface. It enables programmable modules, text displays (TDs) and operator panels (OPs) to be reached from a central location. The nodes on the MPI can communicate with one another.
NCM	**N**etwork **C**onfiguration **M**anager, tool in STEP7 for configuring networks
NCU object	**N**umerical **C**ontrol **U**nit, machine tool control
Offline project	Offline designates the state in which the programming device is not connected (physically, logically) to the automation system.
Online data	Online designates the state in which the programming device is (physically, logically) connected to the automation system.
OP	**O**perator **P**anel
PG	Programmiergerät (programming device)
HPU	Handheld programming unit for SINUMERIK
PLC	**P**rogrammable **L**ogic **C**ontrol → **SPS**
PROFIBUS	**P**ROcess **F**ield **B**US, specially developed field bus for connecting controls and peripheral devices with one another. The bus is based on the RS-485 interface and is a logical token bus with a token passing procedure.
ProSave	Backup software for OPs, MPs and TPs

Term	Meaning
ProTool	Configuring software for creating images for OPs and TPs
RS-232	Interface specification of a RS-232 interface
RS-485	Interface specification of a serial interface in which the data transfer is based on a 7mA current loop. (e.g. PROFIBUS)
SDB	**S**ystem **D**ata **B**lock
SimoComU/A	Start up software for the drive component. The software is controlled by ADDM for accessing the drives.
SINEC	Term for SIEMENS Ethernet-based network
Software component	Application programs and system data for configuring the control components used.
SPS	**S**peicher**p**rogrammierbare **S**teuerung → PLC
TCP/IP	**T**ransport **C**ommunication **P**rotocol / **I**nternet **P**rotocol Data exchange procedure and protocol for Ethernet networks
TD	**T**ext **D**isplay, display system, similar to an OP but without a complete keyboard
TP	**T**ouch **P**anel, display system, similar to an OP but with a touch display

For suggestions for improvements, please click on the Siemens A&D website http://www.addm.de/

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