



**COMPUTER CONTROL SYSTEM  
FOR**



**1E35z**

**08039sz SABIZ PLANT**

# **System Administrator Manual**

**LOGOFIVE S.r.l.**

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## Scope

The manual is dedicated to a correct management of the Computer Control System by the System Administrator  
It determines the system architecture as for the hardware as for the software.

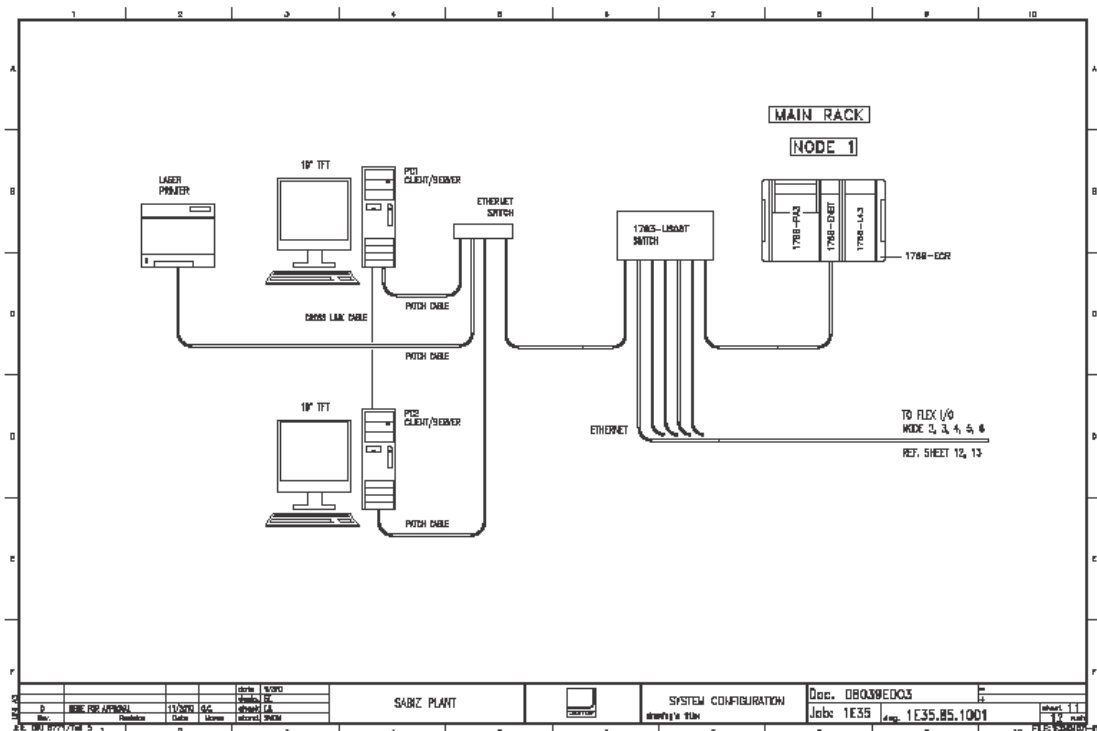
## System architecture and general concepts

The architecture is **Client/Server**: communication with the PLC, data processing, storing and printing is performed by the Server.

**The Clients take care of the user's interface.**

**The Server cannot be used as operator station for Process Control.**

Interfacing with a Host System, if any, will always be done through the Server.



## Data Organization

Data managed by CCS can be divided into the following classes, according to type and functionality:

- CONFIGURATION database for internal use only of the Logoview application (DBF and TXT format). Any read/write external access of this files at the original path, when Logoview running, can generate several errors of the system.
- HISTORICAL database managed by the Logoview application but having the purpose of historical archiving and therefore with reading possibility through other tools (DBF format)
- file of "RAW\_MATERIAL\_DEFINITION" (XLS format)
- files of "RECIPE" (XLS format)
- files of "PRODUCTION REPORT" (DBF format)

All these files are stored on the Server path C:\Data that is shared with the name DATA.

All these files are managed by the Master Server and updated on the Backup Server through scheduled time transfers.

All DBF files (compatible with dBase III, dBase IV, Clipper, FoxPro) can be opened with Microsoft Excel; is recommended to make a copy of this files and don't open it in a source directory.

Each Client accedes through the logical path ([\\MSERVER\DATA](#)) to the shared directory of the active Master Server

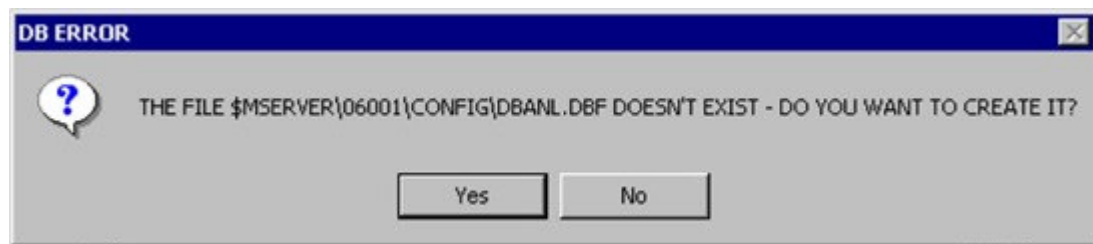
In the following pages are described files details, subdivided for the above mentioned types:

## Configuration files

### **Data\08039sz\Config\Dbanl.DBF (index file: Dbanl.CDX)**

On this file are recorded the Analog Channels Configurations.  
It is reserved for an internal use of Logoview application software.

Any problem on this file (missing, damaged, not accessible through the LAN...) causes the opening of following DB ERROR Window when Logoview NT CLIENT Application starts:



Confirming **YES** will be created an EMPTY FILE.  
All Analog Channel configuration shall be re imputed on the ANALOG CONFIGURATION page.

Choosing **NO** the systems starts without Analog Channel Configuration Data.

**IT IS SUGGESTED to choose NO, close the application and restore (copy) this file from a previous Application Backup.**

### **Data\08039sz\Config\Dbloop.DBF (index file: Dbloop.CDX)**

On this file are recorded the Loop Regulators Configurations.  
It is reserved for an internal use of Logoview application software.

Any problem on this file (missing, damaged, not accessible through the LAN, ...) causes the opening of following DB ERROR Window when Logoview NT CLIENT Application starts:



Confirming **YES** will be created an EMPTY FILE.

All LOOP Regulator configuration shall be re-imputed on the LOOP CONFIGURATION page.

Choosing **NO** the systems starts without LOOP Configuration Data.

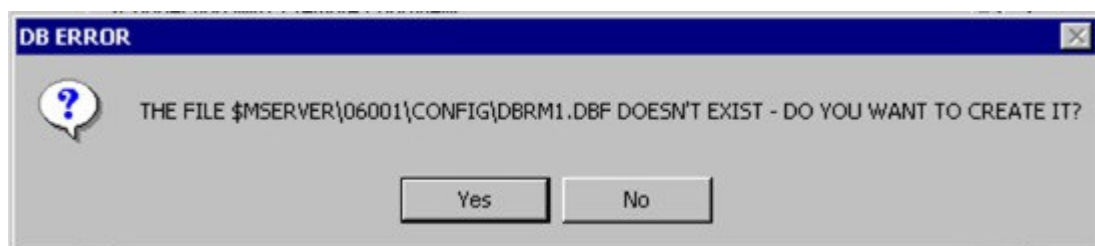
**IT IS SUGGESTED to choose NO, close the application and restore (copy) this file from a previous Application Backup.**

**Data\08039sz\Config\Dbrm1.DBF (index file Dbrm1.CDX)**

**Data\08039sz\Config\Dbrm2.DBF (index file Dbrm2.CDX)**

On this file are recorded the Data of the last recipe downloaded.  
Is reserved for an internal use of Logoview application software.

Any problem on this file (missing, damaged, not accessible through the LAN...) causes the opening of following DB ERROR Window when Logoview NT CLIENT Application starts:



Confirming **YES** will be created an EMPTY FILE.

At the next Recipe Download it will be filled with proper data.

Choosing **NO** the systems starts without Recipe Configuration Data.

**Data\08039sz\Config\Thresh.TXT**

On this file are stored the references of Thresholds used for Interlocks management.

It is reserved for an internal use of Logoview application software.

### **Historical files**

**Data\08039sz\Archive\Alarms.DBF**

**Data\08039sz\Archive\Alarms.CDX (index file)**

**Data\08039sz\Archive\Alarms.CHK (temporary synchronization file)**

On this file are stored all the events of the system, both for alarms and for commands, concerning valves, motors, regulation...

It is limited to 65.000 records and the storing is managed in a ring mode.

Logoview Client Application accedes to this file when historical alarm page is opened.

Any read/write external access of these files at the original path, when Logoview running, can generate several errors of the system.

**Data\08039sz\Archive\Htrend.DBF (index file: Htrend.CDX)**

On this file are stored, each minute, all the Analog Channels values.

Logoview Client Application accedes to this file when historical trends pages are opened.

Any read/write external access of this files at the original path, when Logoview running, can generate several errors of the system.

**Data\08039sz\Archive\Hanalog\_YYYYMMDDHHSS.DBF**

**Data\08039sz\Archive\Hanalog\_YYYYMMDDHHSS.CDX (index file)**

These files constitute the historical archive of analog values.

Are weekly files containing values stored each minute, named with date (YYYYMMDD) and hour (HHSS) following the rule "Hanalog\_YYYYMMDDHHSS.DBF".

The maximum storage is 52 files (1 year)

**Data\08039sz\Production\PROD\_REP\_DX.DBF (index file  
PROD\_REP\_DX.CDX)**

**Data\08039sz\Production\PROD\_REP\_PB.DBF (index file  
PROD\_REP\_PB.CDX)**

These files constitute the historical archive of production batch.

Any read/write external access of this files at the original path, when Logoview running, can generate several errors of the system.

## **Recipe files**

**Data\08039sz\Recipe\[id]\_[name].XLS**

These are the "Recipe Master" files used to generate / create all the Recipe files.

There is not limit to the Recipe Files number and names.

The only rules to be respected are:

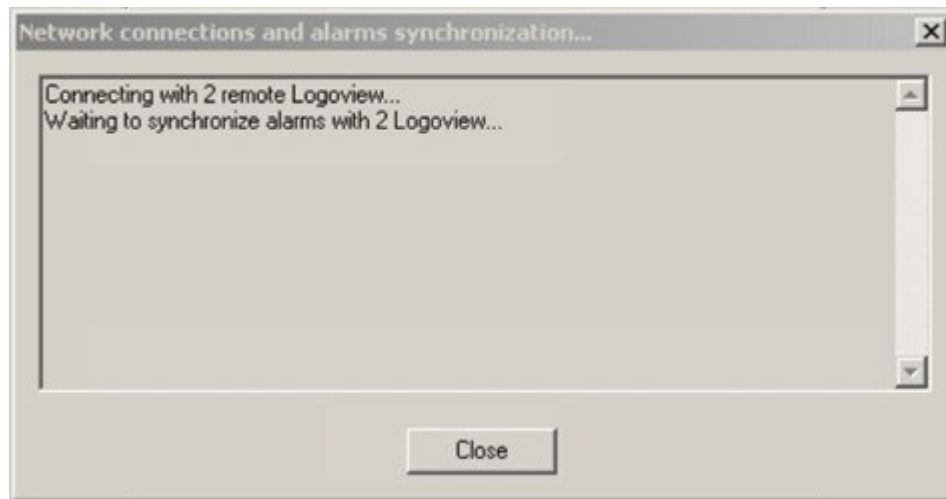
- **.XLS** format
- **RECIPE ID** Cell filled with number in range 1-100.

If different recipes files are created with the same RECIPE ID, the recipe ID totalizer will be the sum of the production done with these recipes.

## CLIENT APPLICATION

The CLIENT application must be started before the SERVER application.

Starting the Client application, at the end of the system initialization, the following window is shown:



The alarm synchronization in the network is essential for the system; therefore it is important the complete success of all connections and synchronizations with the active Servers.

At the end of connection with all Logoview (Client and Server) this windows is automatically closed.

In the system initialization all data contained in configuration Data Base are loaded in memory to improve system performances during normal running.



## SERVER APPLICATION

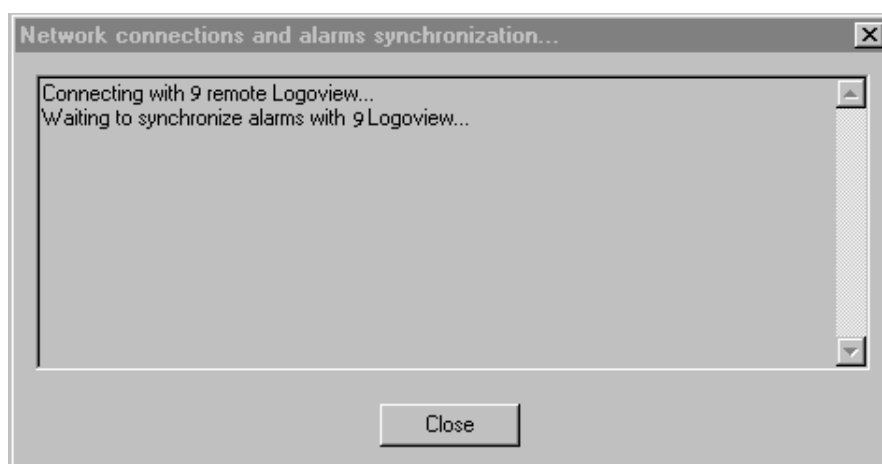
The **SERVER** application must be started after the **CLIENT** application.

A window called “**Network error**” is shown:



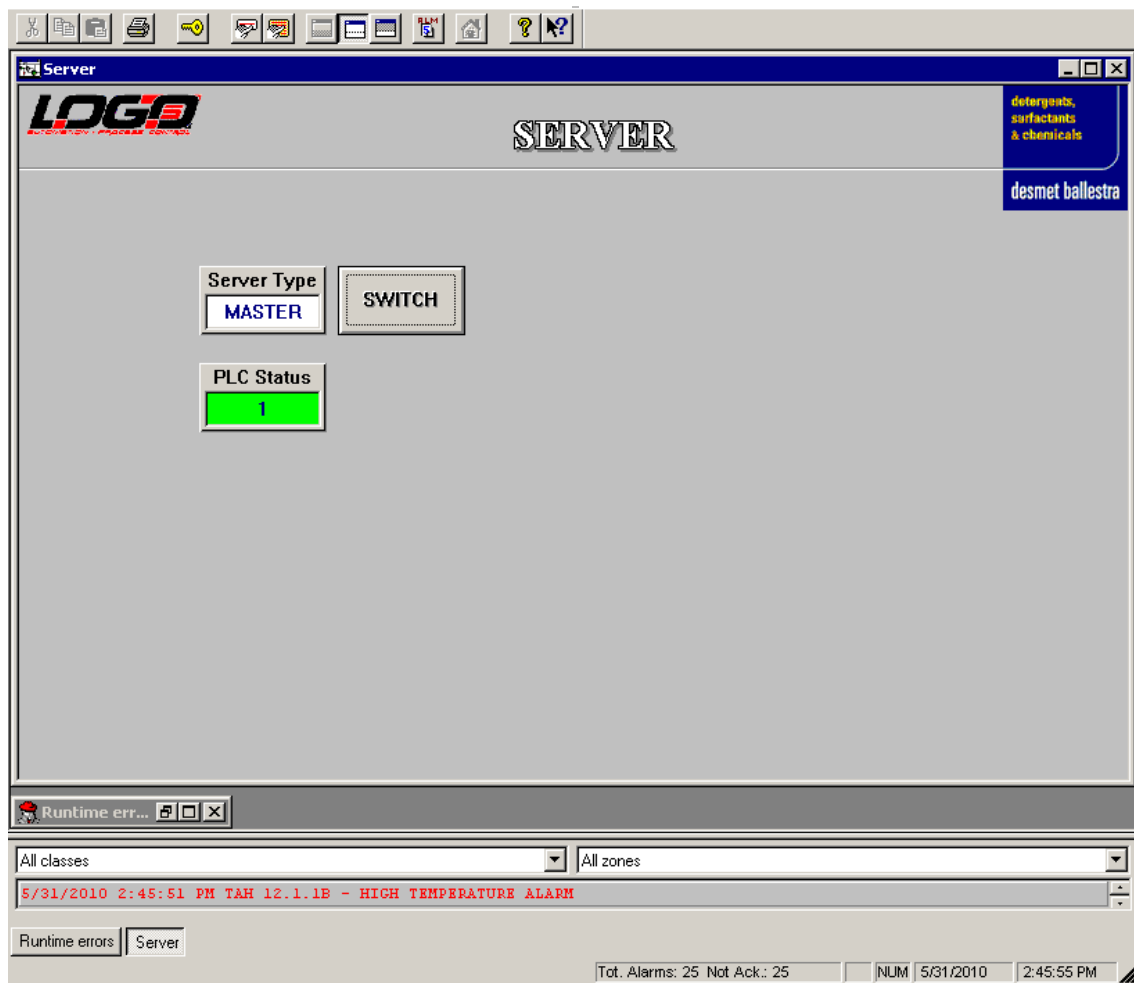
The application recognizes it has been configured as MASTER and tries to connect to the BACKUP. If the BACKUP has not been activated yet, the System Administrator must press “**OK**” (in any case, after 10 connection attempts, the program considers automatically that the Backup Server is not available).

Then the window “**Network connections and alarms synchronization...**” is shown.



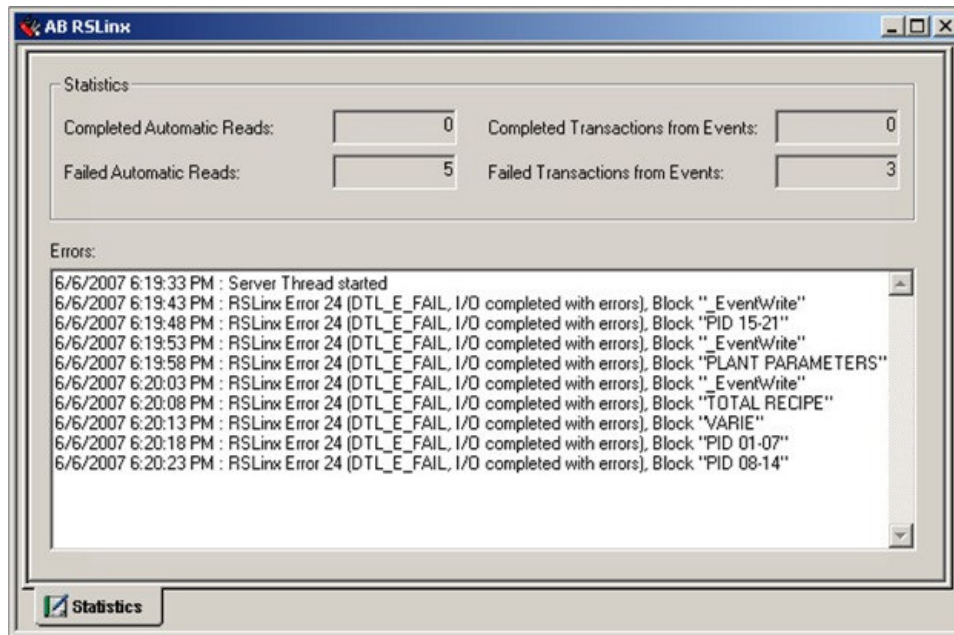
This window displays the status of synchronizations with other applications. Also if the window is closed before the end of all the checks, the process will be anyway completed.

In the Server Window there is the SWITCH key that inverts the roles MASTER and BACKUP of the Servers applications.

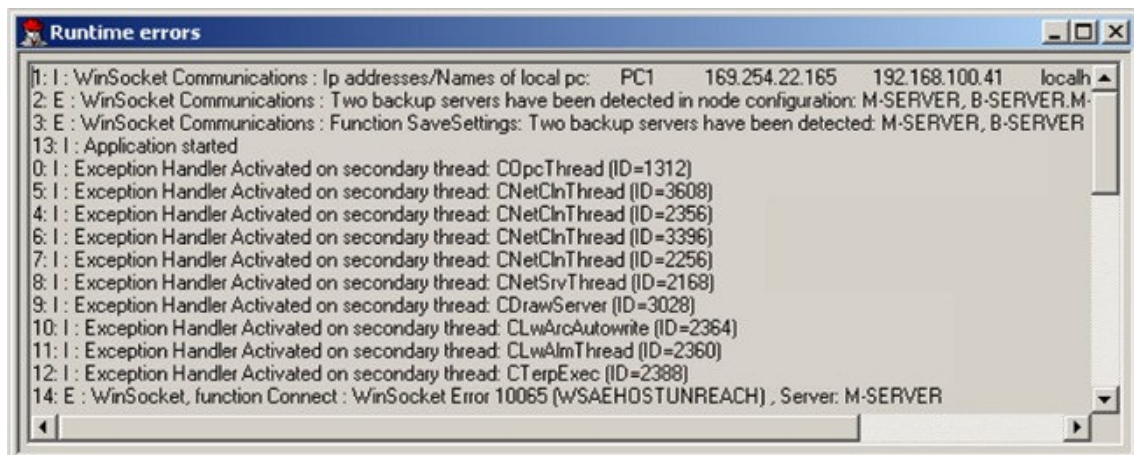


From the Window List Toolbar (bottom of the page) is possible to open:

- the PlugIn control Window with statistic an diagnostic data of PLC driver communication:



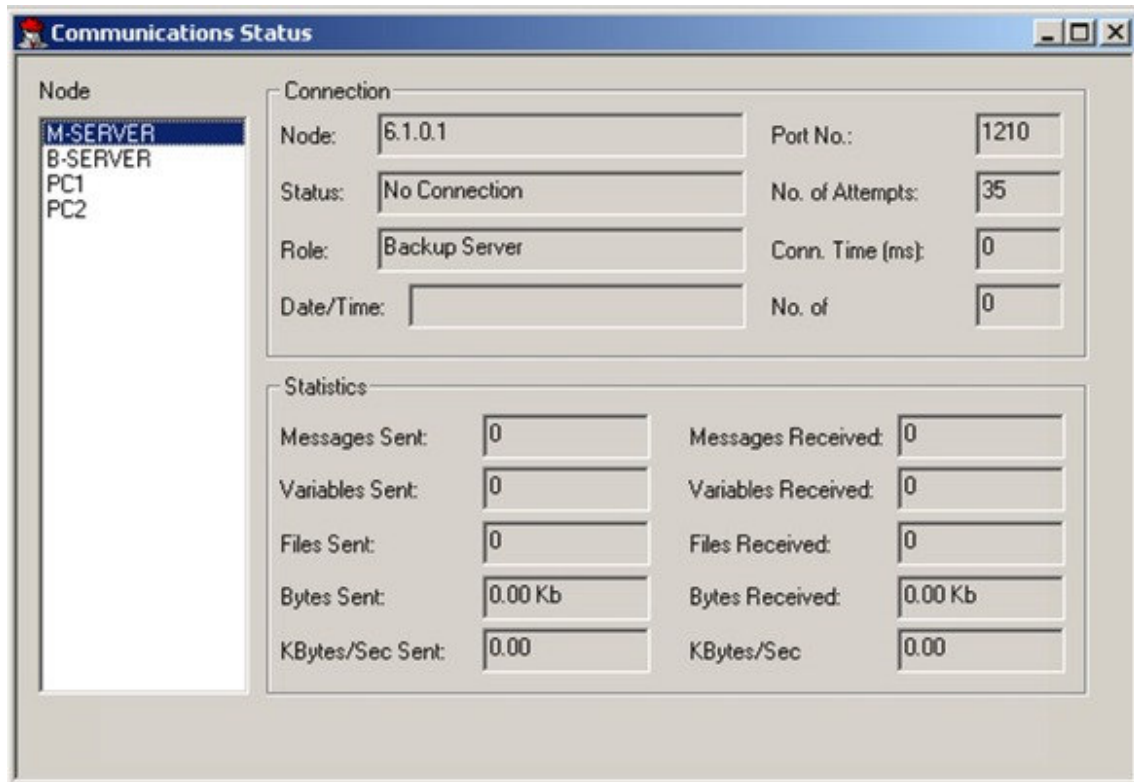
- the Errors control Window with a list (up to 100 lines) of application errors, warnings and information:



It shows the detailed logging of application errors, warnings and information in the file Errors.LOG (newer) and Errors.LGO (older) stored in the application directory.

From the main menu in the top of page (Ctrl+M to activate/deactivate it), in the Windows submenu you can open:

- the Communication Status Window:



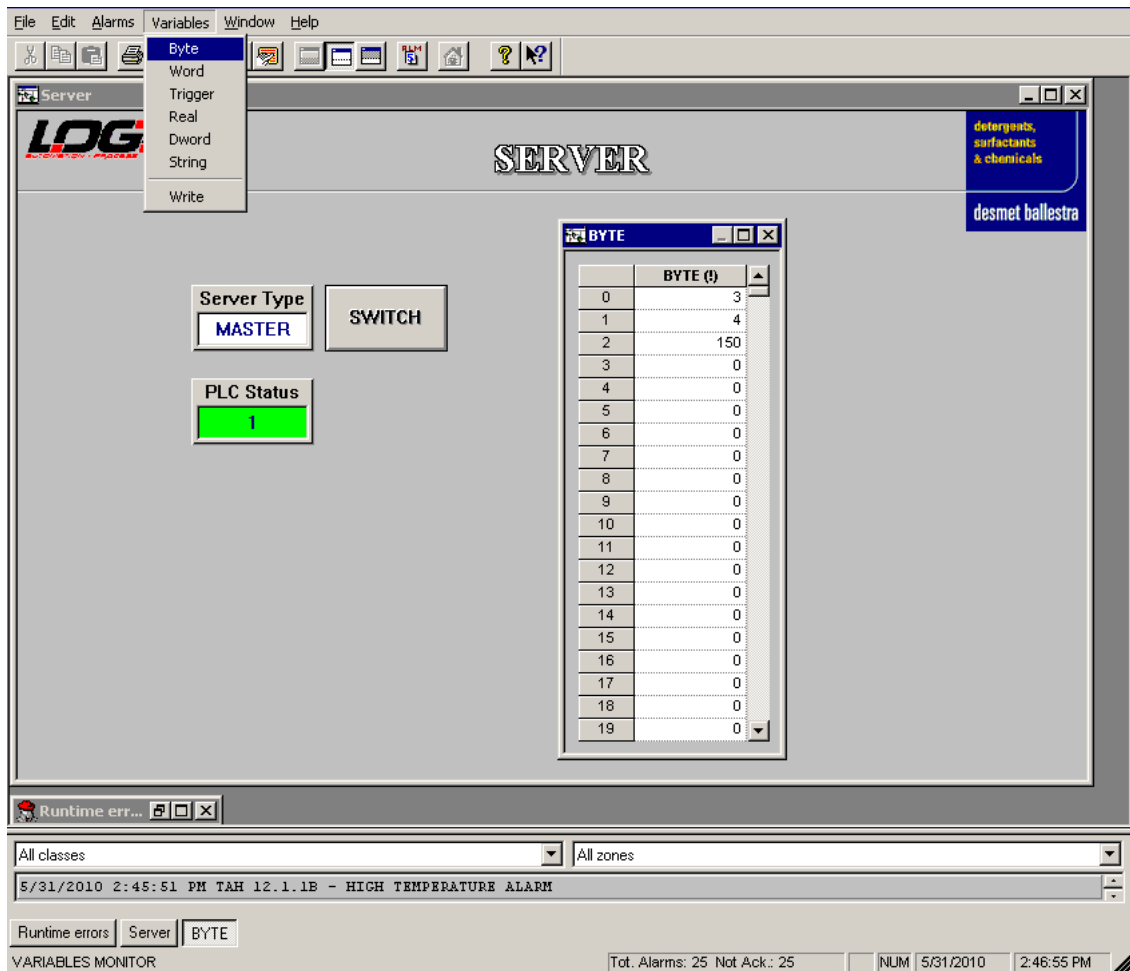
The screenshot shows the 'Communications Status' window. On the left, a list of nodes includes 'M-SERVER' (selected), 'B-SERVER', 'PC1', and 'PC2'. The main area is divided into two sections: 'Connection' and 'Statistics'.

Connection	
Node:	6.1.0.1
Status:	No Connection
Role:	Backup Server
Date/Time:	
Port No.:	1210
No. of Attempts:	35
Conn. Time (ms):	0
No. of	0

Statistics	
Messages Sent:	0
Variables Sent:	0
Files Sent:	0
Bytes Sent:	0.00 Kb
KBytes/Sec Sent:	0.00
Messages Received:	0
Variables Received:	0
Files Received:	0
Bytes Received:	0.00 Kb
KBytes/Sec	0.00

- the list of all **variables** contained in the application. They are classified by the type of the variables, so these lists are useful for debugging and troubleshooting.



This control window shows the diagnostic and statistics data of network communication. Selecting the Alias from Node list is visualized the status of connection to all remote Logoview applications.

## Hardware/software technical features:

The PCs used in the system have following features:

- HP 6000 Pro Microtower PC
- CPU Intel Pentium E5300 Processor
- 1 GB PC3-10600 Memory
- HD 320 GB SATA
- SuperMulti LS optical drive
- Video controller, XVGA
- USB ports
- Serial interface
- 2 Ethernet Gigabit Network Interface Controller
- SST-DHP-PCI Interface Card for Allen Bradley Networks
- PS/2 Standard Keyboard US
- PS/2 Optical Scroll Mouse
- LCD monitor 19"
- MICROSOFT Windows XP Professional SP3
- MICROSOFT Office Home & Business 2010
- Logoview NT v.1.12.14

The following hardware is also part of the system:

- Color LaserJet printer
- Fast Ethernet SWITCH 8x10/100TX RJ45
- LAN cables

## Operator Workstation configuration

To reconfigure an older PC or reconfigure a new PC as CCS Workstation, see the following instructions

### Installation of Windows XP Professional

A single partition NTFS format is recommended.

Normally fields are set as follows:

Language: English

Computer name: PCX (where X is a number of operator station)

Type of keyboard: US

Video setting: Palette = 256 colours, Desktop area = 1280x1024

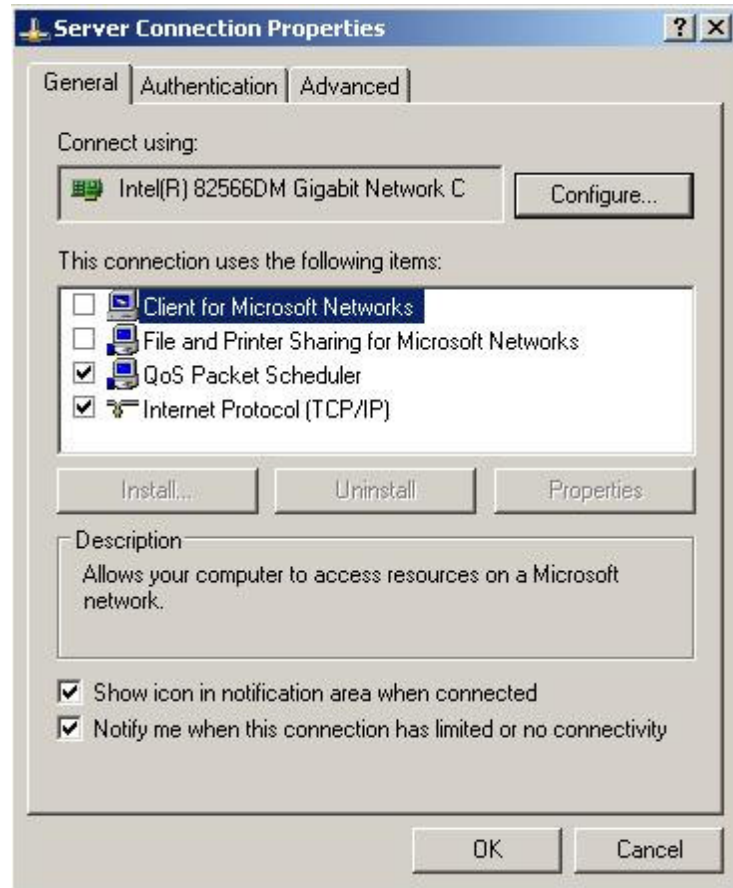
Service Pack 3 (SP3) is suggested.

### Local Area Network connections

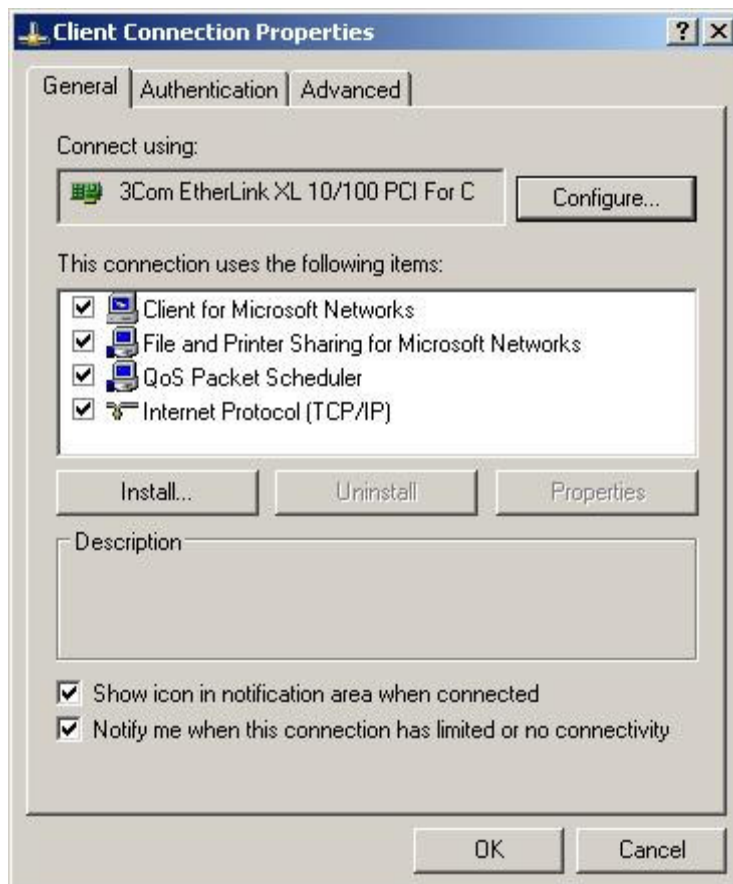
The table here below gives details about the 3 networks used by the system with the corresponding TCP/IP addresses:

	Network Identification	Server Connection (Gigabit)	Client Connection (10/100 Mbps)
Client / Server	PC1	192 . 168 . 2. 1	192 . 168 . 1. 1
Client / Server	PC2	192 . 168 . 2. 2	192 . 168 . 1. 2
Client	PC3		192 . 168 . 1. 3
PLC	PLC 1	-	192 . 168 . 1. 101
Printer	HP [Name]	-	192 . 168 . 1. 201
Subnet Mask		255 . 255 . 255 . 0	255 . 255 . 255 . 0

**Server Connection:** it is used for the updating between Master and Backup Server. In the Server Connection Properties the services "Client for Microsoft Networks" and "File and Printer Sharing for Microsoft Networks" have to be disabled.



**Client Connection:** it is used for the communications between Master Server and PLC, all the Clients and printer. In the Client Connection Properties all services and protocol have to be enabled as default.

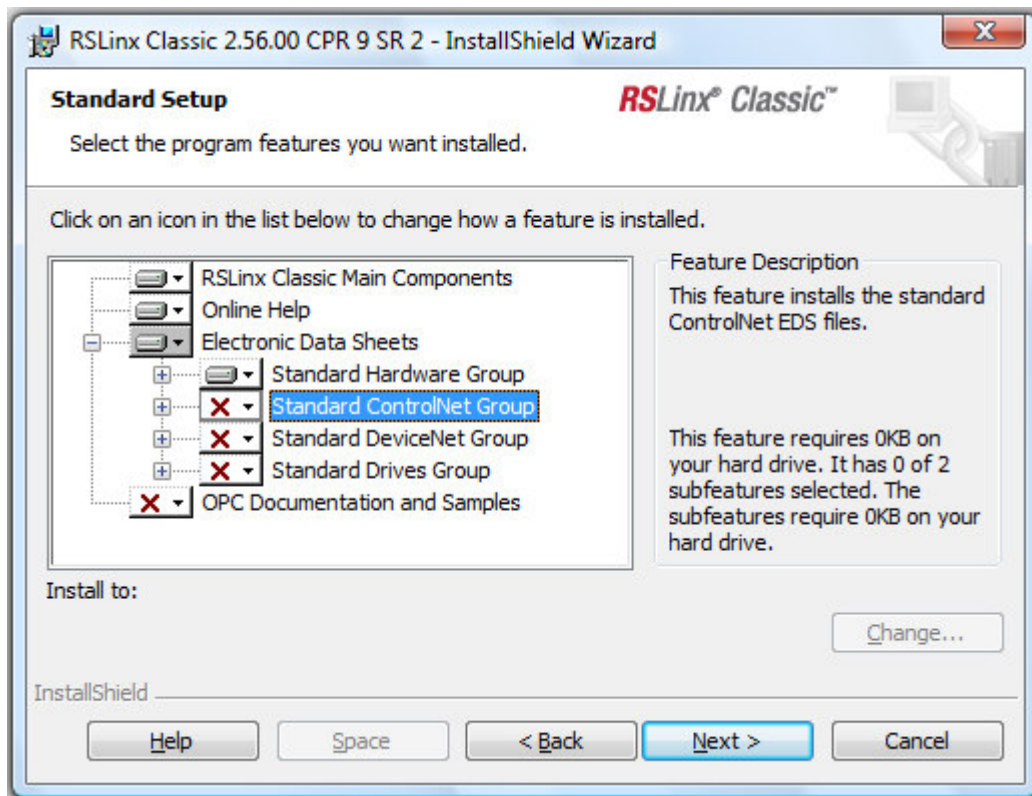




## RSLink Classic

Insert RSLink Classic CD:

- select “Required Steps”
- select “Install RSLink Classic”
- accept License Agreement
- enter User Name (PCx), Organization and Serial Number
- select these components and begin the installation:



- select “View the Optional Steps page”
- select “Install Factory Talk® Activation”
- if this question is visualized: “Factory Talk Activation Server ... optionally uses HASP USB dongle drivers. Would you like to install it now?”; select No
- accept License Agreement
- enter User Name (PCx) and Organization
- select Complete installation and begin the installation

Therefore you can activate the license, following the instructions contained in the Rockwell CD.

## Microsoft Office activation

All the PCs are supplied Office Ready by HP, only the product activation is requested to obtain complete features from the software (also in trial period). The Basic version of Office supplied with this system include Microsoft Excel (required for recipe management), Word (used for document management but not essential) and Outlook (not used from the system). The activation require internet connectivity or telephone call:



- Start Microsoft Word
- Insert the "Product Key" printed on Certificate of Authenticity
- See the instructions for the product activation (internet connection or telephone call required)

## Logoview NT installation

Insert the Logoview NT CD-R and wait the autorun Setup launch.

Select the installation in "English", the "ANSI" mode and confirm the default for the installation path (C:\ProgramFiles\LogoNT) and other choices.

## Application Programs restore

Folders where the applications must be loaded are:

- CLIENT: C:\Program Files\LogoNT\Lgw08039sz
- SERVER: C:\Program Files\LogoNT\Srv08039sz

## Network printer Configuration

Insert the HP Color LaserJet starter CD, and follow the installation by setting for each PC the printer as Ethernet Address:

- IP Address: 192 . 168 . 1 . 201
- Subnet mask: 255 . 255 . 255 . 0
- Default gateway: 192 . 168 . 1 . 201

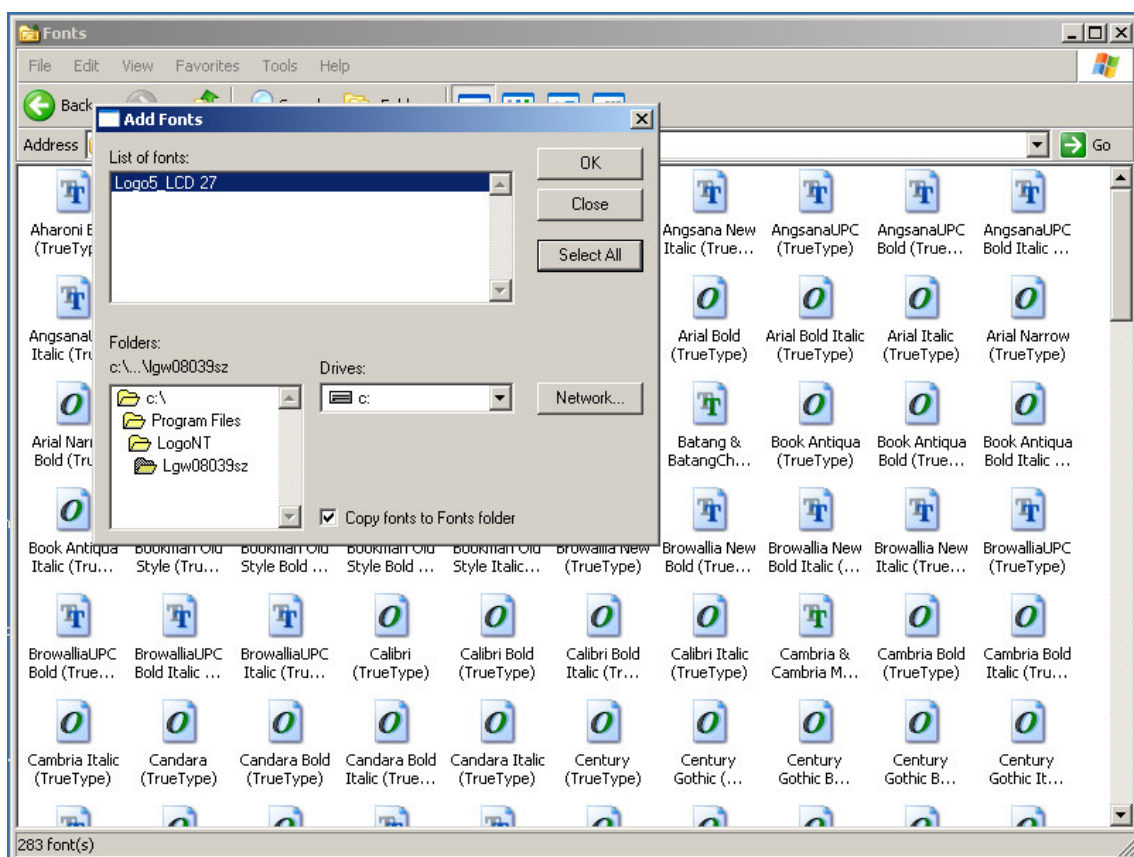
Install the printer in each PC (not shared).

## Fonts installation

From the Windows Control Panel start the Font installation utility by icon click:



Select the directory C:\Program Files\LogoNT\Lgw08039sz:



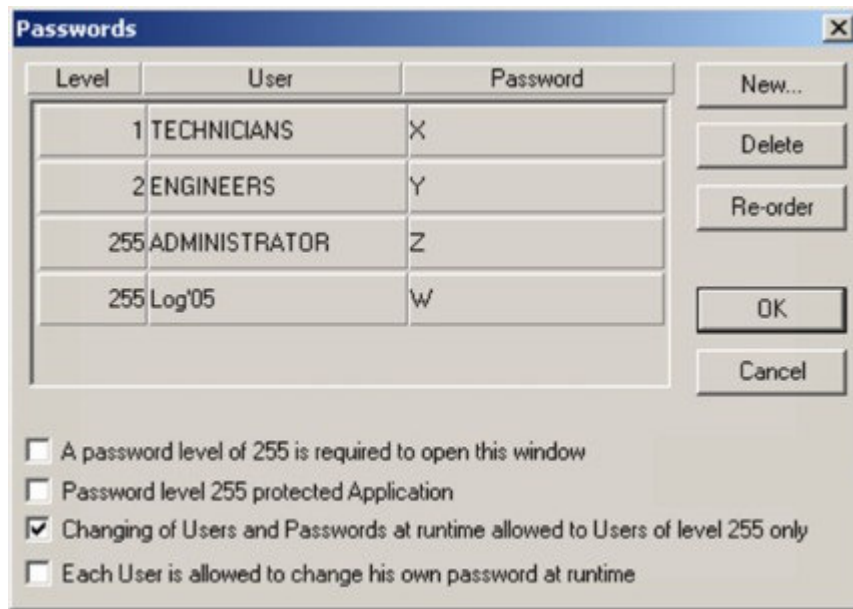
Select ALL and press OK button.

The Utility will install all additional fonts for Windows.

Install the fonts in each PC.

## Password Management

Password management is enabled under the Development Environment. To start password management choose “Modify password” under “Options” of the application main menu:



Through the password management is possible to control the access possibilities of each User, add new Users to existing Levels, modify passwords.

Levels are limited to 255. There is not limit in number of User for each level.

The system is pre-configured with these levels that shall not be modified:

Level 1: Technicians

Level 2: Engineers

Level 255: Administrator

New Users added at Level 1 will have “technicians functionalities” enabled, as new Users added at level 2 will have “engineers functionalities” enabled and so on.

“Log'05” user is reserved to customer activities and shall not be modified.