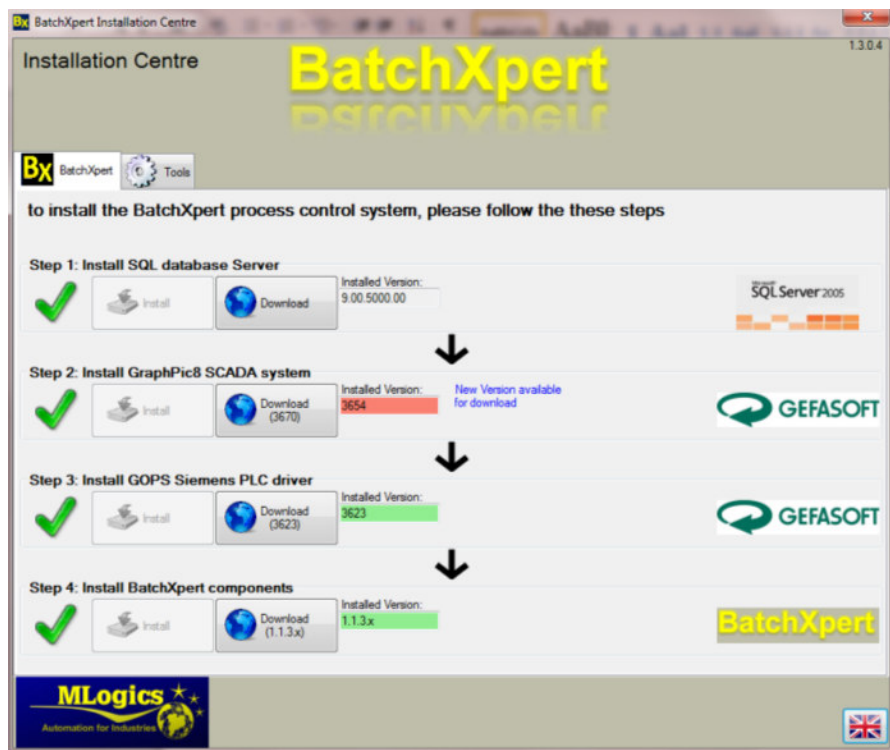# INSTALLATION

Content

1 General

Installing BatchXpert system consists of four main steps:

1. Installation of SQL Server Database
2. Installation of SCADA "GraphPic8"
3. Installation of the Process control system "BatchXpert" from MLogics.
4. Installation of the Project files that include images of the SCADA system and the data base containing the plant configuration.

All needed files for the BatchXpert System are automatically downloaded from the Web installer available at the Mlogics Homepage in the "Member Download" area from the following link:

http://www.mlogics-automation.com/MLogics/Install%20Center/BatchXpert%20Installation%20Center.exe

After starting the Web installer, please follow the instructions from the installers and install all four BatchXpert Components (SQL-Server, GraphPic 8, GOPS PLC Driver and BatchXpert)

The Installed Components are:

1. **MSSQL Server**. The Microsoft SQL Server that stores configuration data and historical data of the plant.
2. **Gops2**. The Communication driver of the Scada System with the PLC. This program is an integral part of the SCADA System "GraphPic8".
3. **GraphPic 8**. The Scada system responsible for gathering the process data and visualizing them in the process images. It also provides tools for editing the configuration of the process images.
4. **BatchXpert**: These are the files necessary for the BatchXpert Process control system.
5. **(Optional) MSSQL Management consoled**. This is the program to manage the Microsoft SQL server Application. Allows administrative tasks on the database.

Under the "Tools" tab you can find other helpful applications that are optional but helpful.

2 Installation of SQL server

WARNING! To avoid Problems with Access Restrictions on the SQL Server, it is important to **install the SQL server as the same user that later will become the default Stations user**, usually "BatchXpert Station". This user Account must have Administrator Privileges during Installation. The Privilege level of this user can be lowered after the installation.

Installing MS-SQL, automatically creates and configures a new instance of SQL Server with the name: **Server Name\ GraphPic**

By default, you can connect to this server with the option "Authentication for Windows" or "Authentication for SQL". In the case of the "Authentication by SQL" credentials are as follows.

User: sa
Password: GraphPic

3   Installation of SCADA System "GraphPic8"

The files needed for installation of the GraphPic 8 System can be downloaded via the installation center or from the website of the German company Gefasoft.

The Web pages Gefasoft Company is:

- Http://www.gefasoft-muenchen.de/
- http://www.gefasoft.com.br/
- http://www.gefatec.com/

The system requires a license obtained from your supplier or directly from Gefasoft. The license is described later in this document. The license is unlimited in respect to the amount of Tag, PLC, images, or any other restriction.

Unlicensed SCADA System function in "DEMO" mode that allows you executes projects for a period of one hour, without editing. After this period you have to restart the GraphPic to continue with an hour longer.

4 Install BatchXpert

The installation program can be obtained from your supplier or directly from MLogics

You can download the installer from the link:

https://docs.google.com/folder/d/0B62dHDytjKGQdDB0dHpzOUZXYzA/edit

The installer will install the basic files and programs for the BatchXpert system. This Installer requires and successful installation of SCADA system.

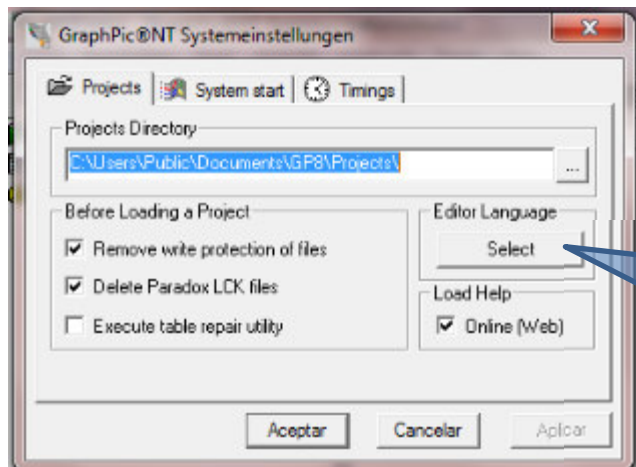During installation, follow the instructions on the screen.

5 Set Language on GraphPic

After opening the "Communication Module" of the GraphPic System (Kommunikationsmodul), Open the following Menu:
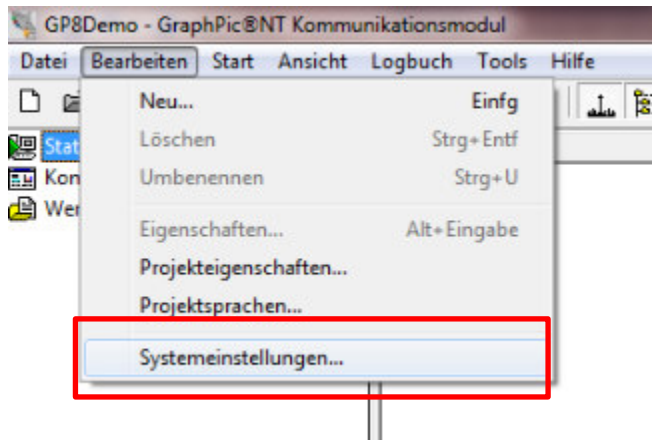
In the opening Dialog, adjust the following Settings

Editor Language. By default this is set to "German", but it is recommended to set to "English". For the GraphPic Editor only "German" and "English" are available, and are not related to the Adjusted Project Languages.
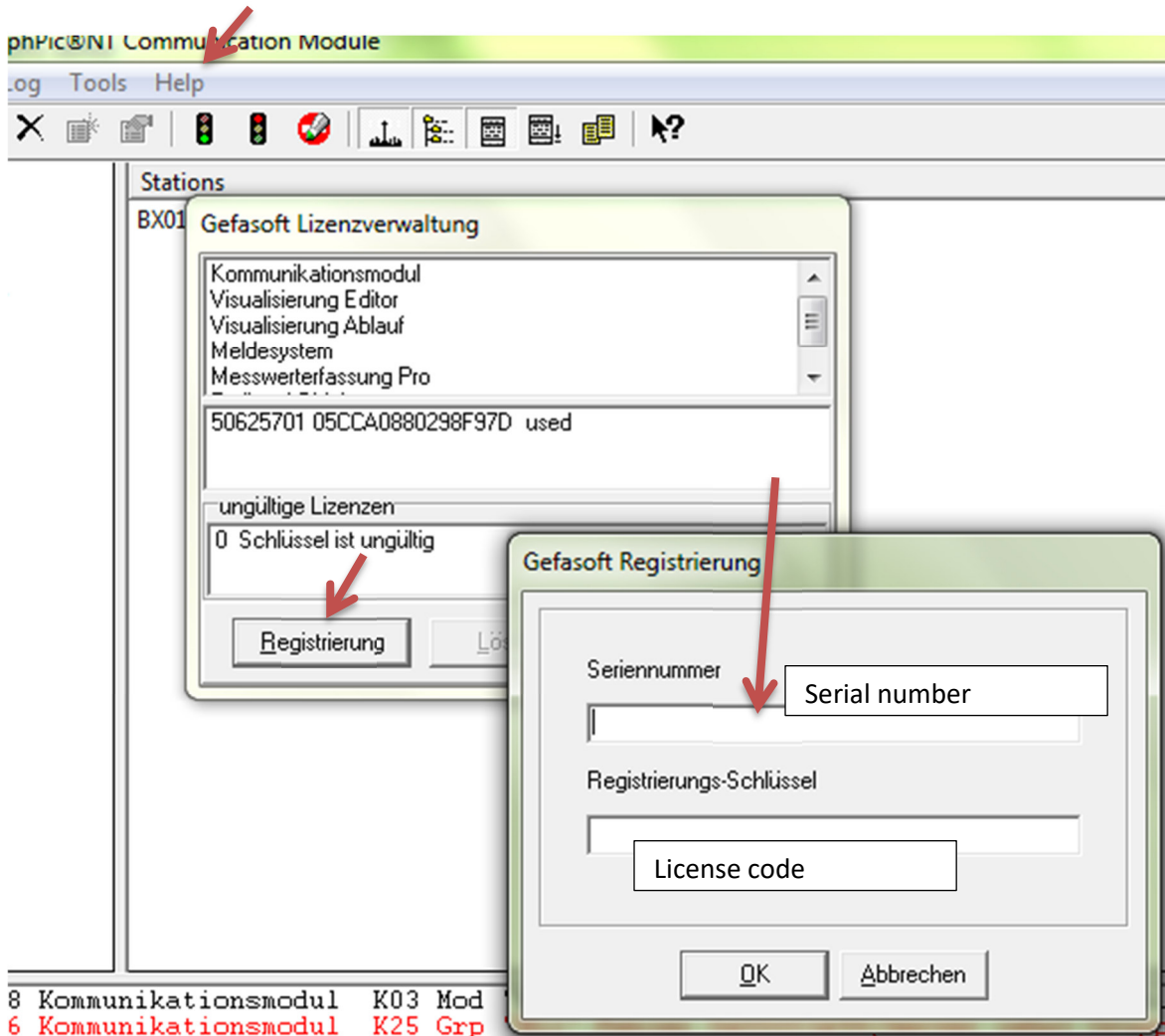
6 Install the license

When everything is installed, you can start the program with the entry in the start menu "Programs \ GefaSoft \ GraphPic \ GraphPic 8" or by clicking the "BatchXpert" icon on your desktop. If the System is started the first time, the application automatically activates its demo mode, due to the still missing license. The demo mode has no restriction regarding the functionality, but the system must be restarted until a valid license is installed. The Demo mode is a good solution for testing and evaluation purposes

Installing the license.

First open the "Help / License Info" menu

Then open the window with the "Registrierung" button

In the next sale must enter the license number.

Each computer of the Plant needs its own license! In test computers the license is not installed, and can be left in "Demo" mode.

The License codes can be obtained from license certificate, you get from your provider. "Seriennummer" is the serial number and "Reg-Schlüssel" license code.

1. Lizenz
Reg.-Schlüssel: █████████████████████
Seriennummer: ██████████

2. Lizenz
Reg.-Schlüssel: █████████████████████
Seriennummer: ██████████

7 Installing project files

After installing the Basic BatchXpert System Aplicatoins, an project specific backup must be restored. These Backups have the file extension ".*bxbak" and can be restored by, and also created, by the "BatchXpert Project Backup and Administration" tool.

This tool lets you restore all configuration and project files with an easy to follow user interface. To restore an Backup, start the application with "Administrative Privileges" from the Startmenu.
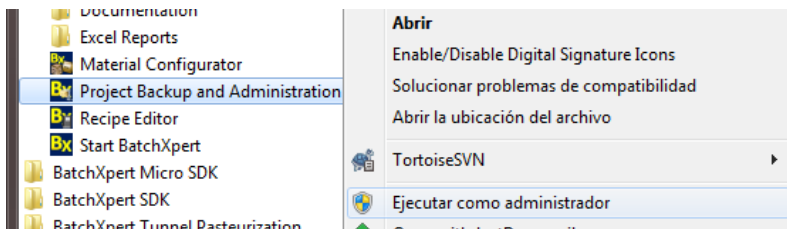
Follow the User interface and select the backup file to restore.
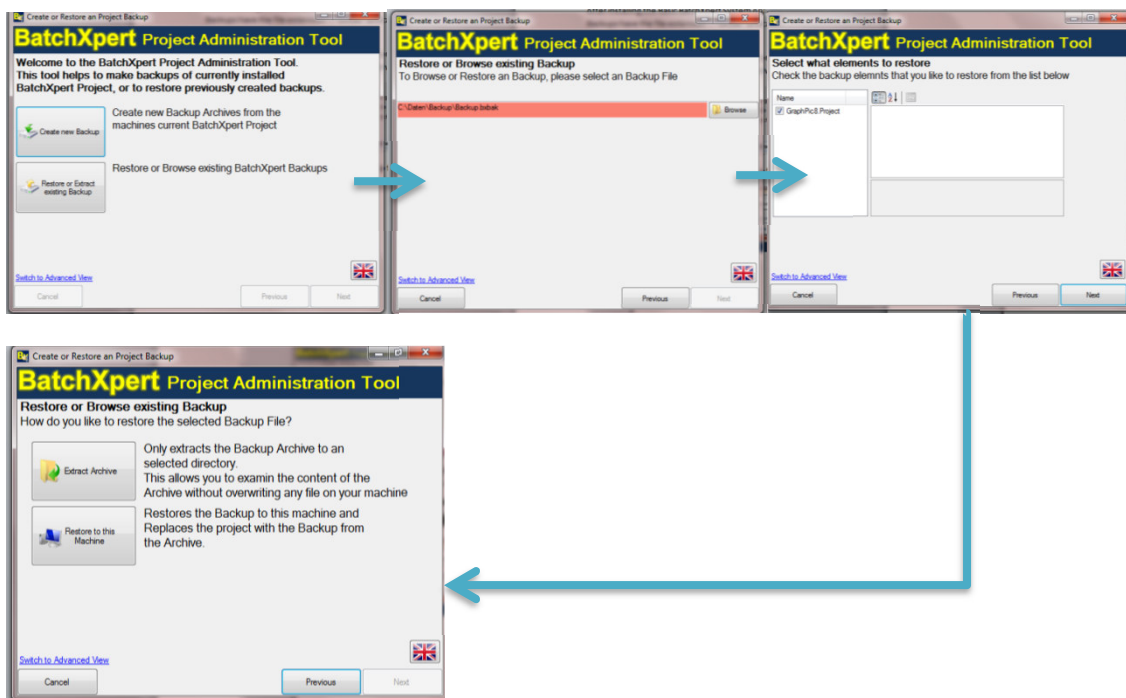
8 Settings in Windows

After the SCADA Project and BatchXpert and installation, the following settings should be revised in the windows operating system.

However these settings are optional but strongly recommended.

8.1 Change desktop background

First you must change the Windows desktop background. This is done by right-clicking the mouse to a free desk space. Select "Customize" to change the windows desktop Background image. On the option "wallpaper" you must select the image in the "Installation Folder BatchXpert \ Resources" folder ("install folder BatchXpert" refers to the folder where the BatchXpert was installed previously).
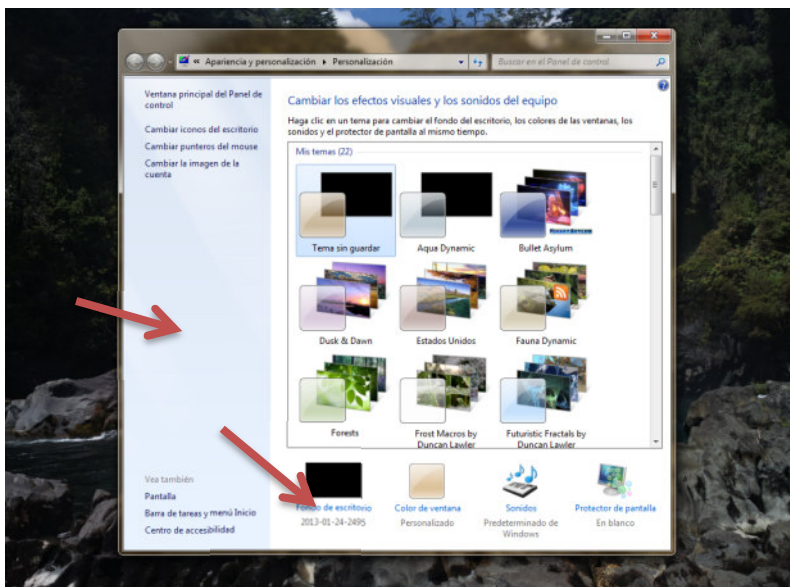
You must select a file "WallpaperZZxZZ" that matches the resolution of your current screen. If there is no file that matches your screen resolution, you must choose the closest resolution to the current file.
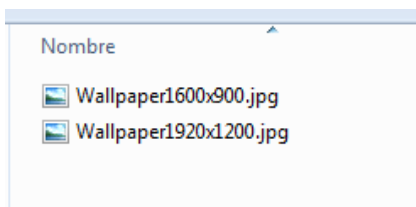
8.2 Create and adjust system user

To prevent that system settings are changed by accident from operators, BatchXpert can be executed under "Limited Permissions" users. Basically, the system separates between two types of users: "Restricted Users" and "Administrators". By default, the user who is installed by the installation of Windows is set to "Administrator.

Basically, one should make a new user account with administrator privileges, and then limit the privileges of the initial account "Limited User".
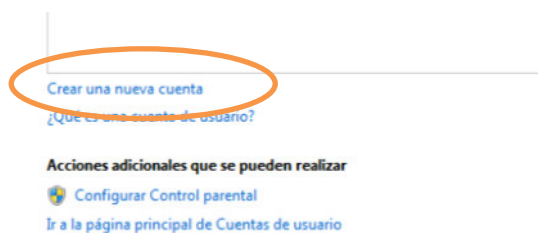
To do this you must follow the following steps. All the following operations are executed in the "Control Panel" in the "User Accounts" section.
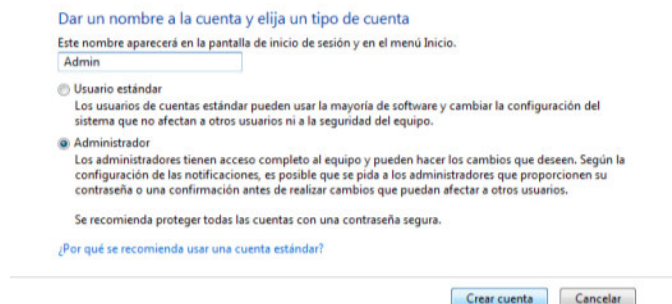
8.2.1 Create new user account

With a menu click "Manage another count"
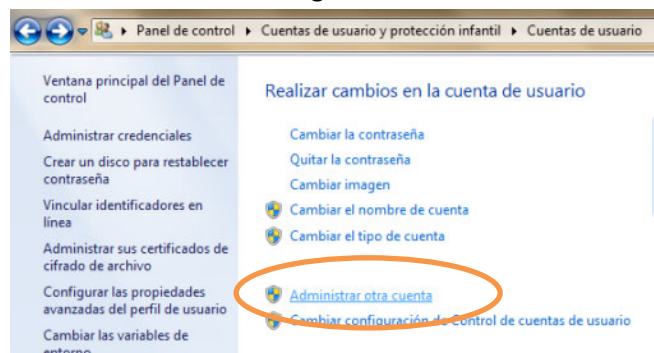
In the next menu select "Create new account"

In the dialog "Administrator" is selected as the account type and "Admin" as name.

After a click on "Create Account" the new account "Admin" will be created. The settings of this new account can then be managed.

In this dialog, one should first create a new password by clicking on "Create a password" for the account. The default password should be "MLogics".
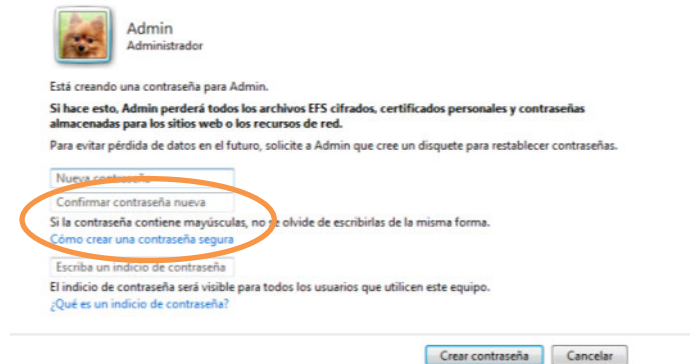
After setting a password, the account picture should be changed by clicking the potion "Change Picture". For the "Admin" you must select the following image:

"BatchXpert install folder \ Resources \ Admin Logo.jpg"
("Install folder BatchXpert" refers to the folder where the BatchXpert was installed previously).

### 8.2.2 Change the startup account

After creating a new "Administrator" which is protected by a password to prevent access to sensitive system settings, you should change the initial account to "Standard User" so that it has only limited access to system settings.

To do this, you must select the initial operator (which should be called "BatchXpert Station") from the list of users on the menu of user account management.

In the menu you should choose "Change the account type."

In the next menu, you must choose "Standard User" and confirm this selection.
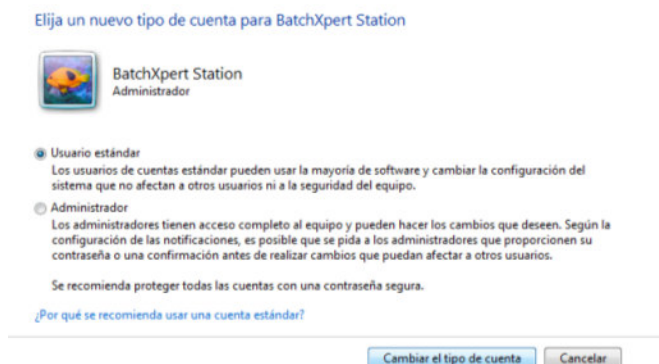
After setting a password, the account picture should be changed by clicking the potion "Change Picture". For the "Admin" you must select the following image:

"BatchXpert install folder \ Resources \ BatchXpert Logo.jpg"
("Install folder BatchXpert" refers to the folder where the BatchXpert was installed previously).

8.2.3 Set "BatchXpert Station" Account to Automatic Log in

It is recommended that the default BatchXpert User will be adjusted to "Automatic Login". This means that this user automatically logs into Windows during startup, without showing the windows Login Screen.

1. First press "Windows + R" to open the Run dialog and enter "**Control Userpasswords2**" and press enter
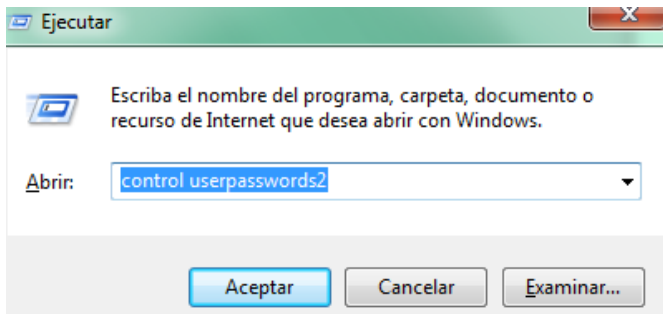

2. Then the advanced user settings screen will appear and select the default user from the list. When the user is selected, uncheck the "User must enter Name and password to use the machine".
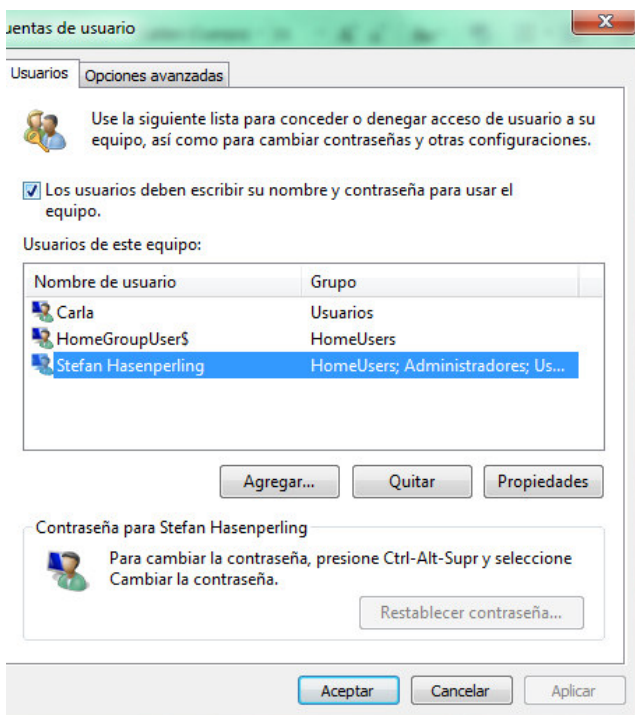
This enables the default user to login without user intervention.

8.3 Turn off Windows Sharing Restrictions for user "without" password

Since by default the BatchXpert user Station does not have any Password adjusted, windows might block remote folder accesses to shared folders by default. To turn off this behavior open the control Panel, select "Network and Internet", "Network and Sharing Center"   and adjust as follows:
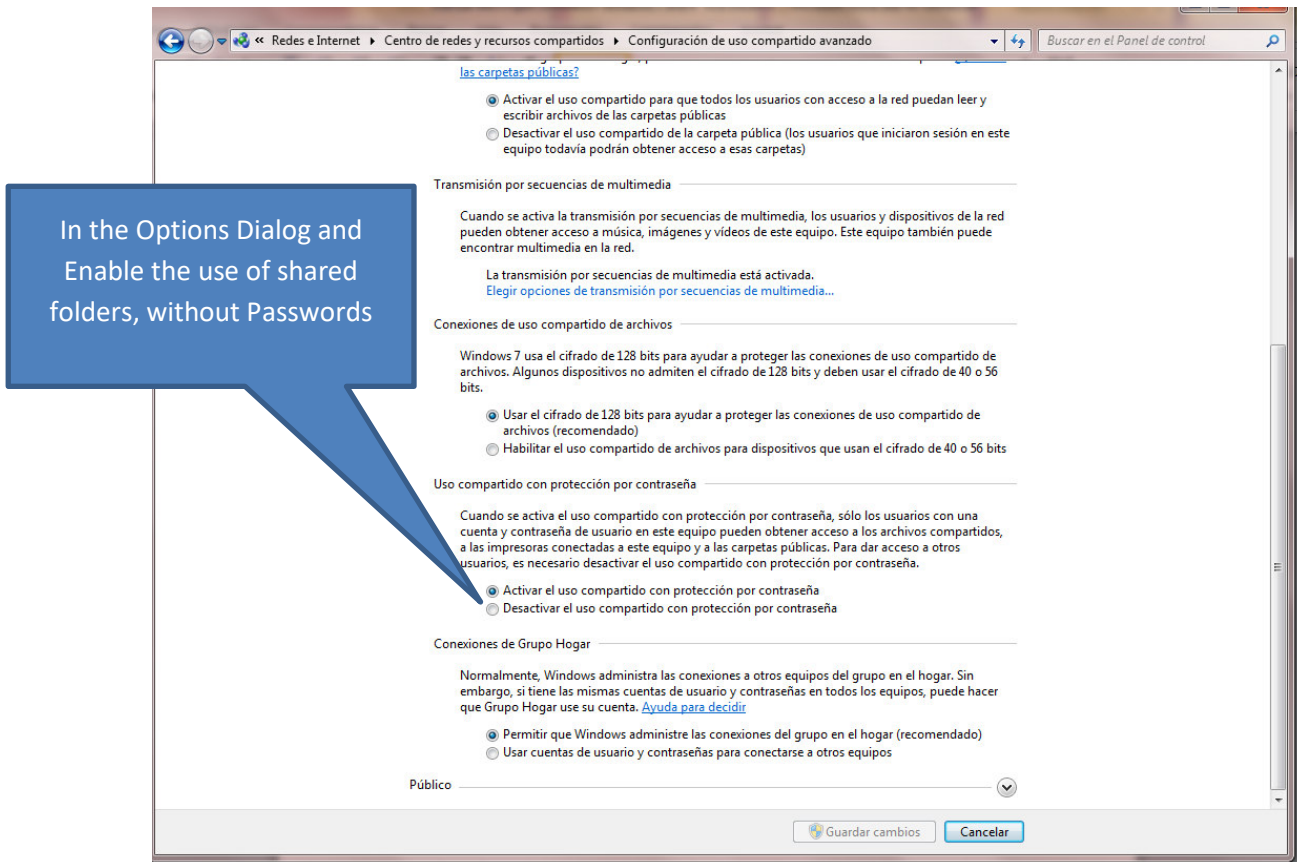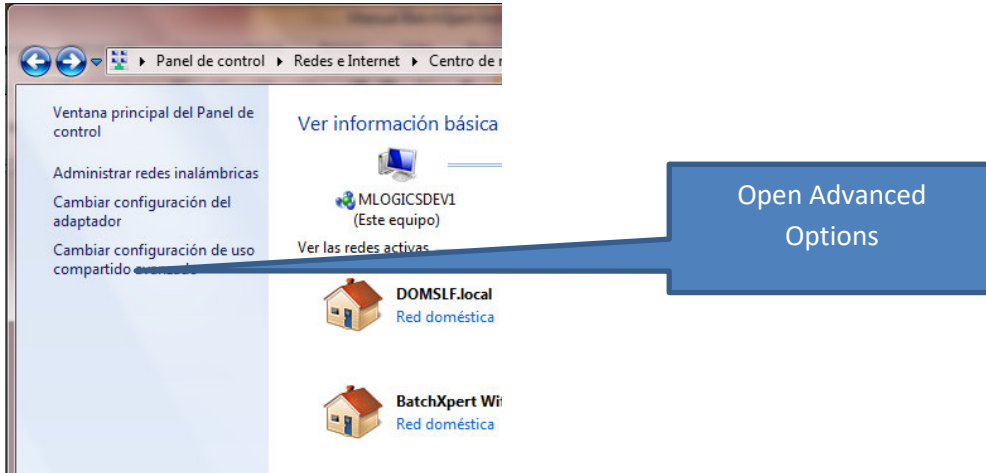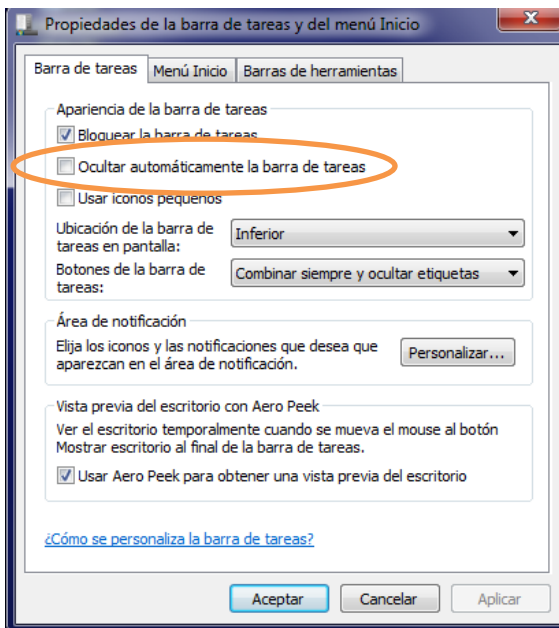
8.4 Hide Windows Start menu

Since the start menu bar of Windows is not involved in the BatchXpert system, you should enable the "Auto hide" for the Start menu bar. To do this, you must first open the properties of the start menu with a right to the start menu and then "Properties" click.
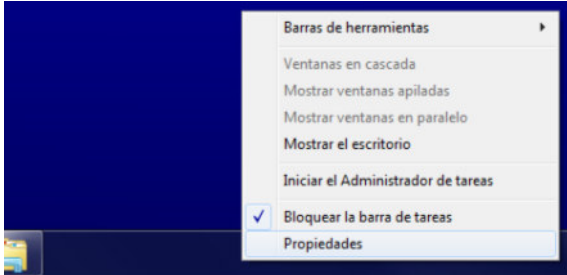

In the properties dialog, mark the option "auto-hide the taskbar"

8.5   Create and Adjust Sharing Options

On Production BatchXpert Operating Stations, there are some Adjustments that have to be done in order to share some folders on each BatchXpert Station.

On Each BatchXpert Station a folder named "**C:\Transfer"** Must be created. And the Sharing options must be adjusted as follows:
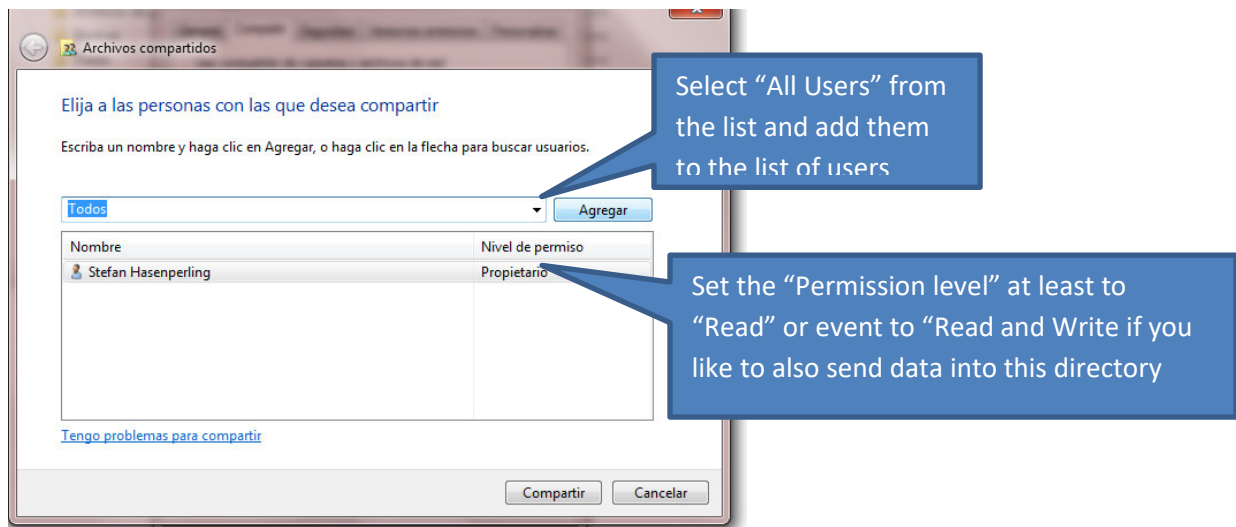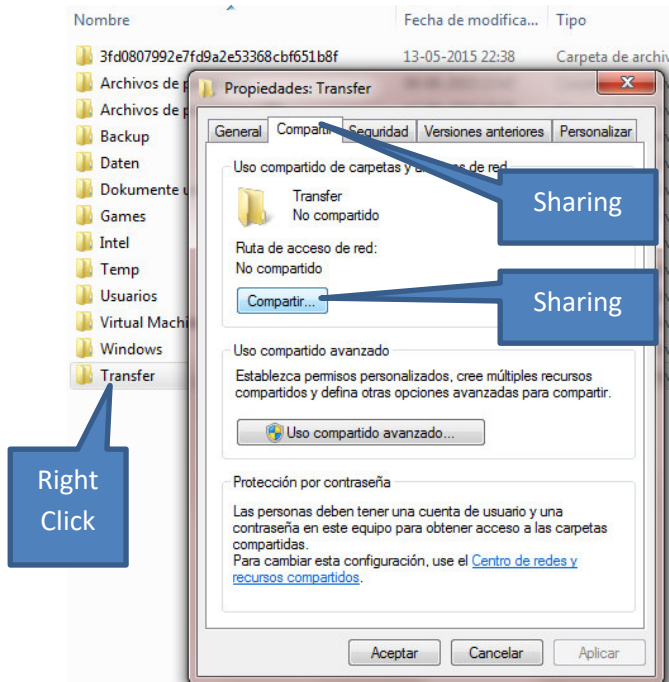
8.6   Check and Adjust the security Privilege on the Directories

The following Two Directories must have "Full Control" access to the "Users" Group:

C:\Temp and **C:\Transfer**

Right click on the Directory

Select "Security"

Select "Properties"

Select "Edit"

Select the "Users" group

Check the "Full Control" check box and Accept

9 Adjust "Power Management" Settings

It is strongly advised that some power management Settings is adjusted for better performance and to avoid problems with the system.

These settings are optional, but strongly recommended to adjust on "Operating Stations". These settings should not be adjusted on "Development Stations".

To open the Power Management settings of windows, please open the "Control Panel" and go to "Power Management".
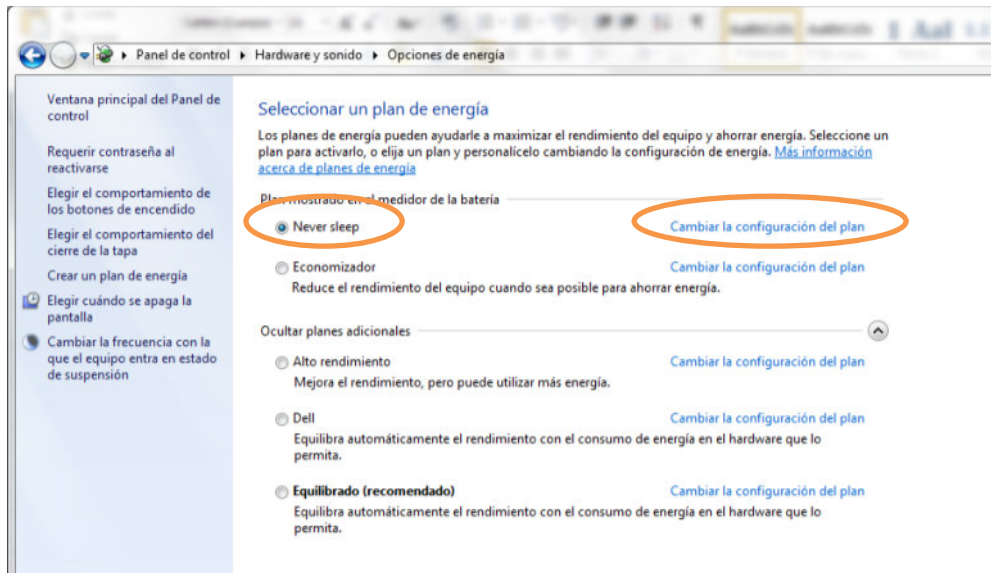

On the currently selected "Plan", please select "Change and configure". This opens the basic settings of the power management plan.
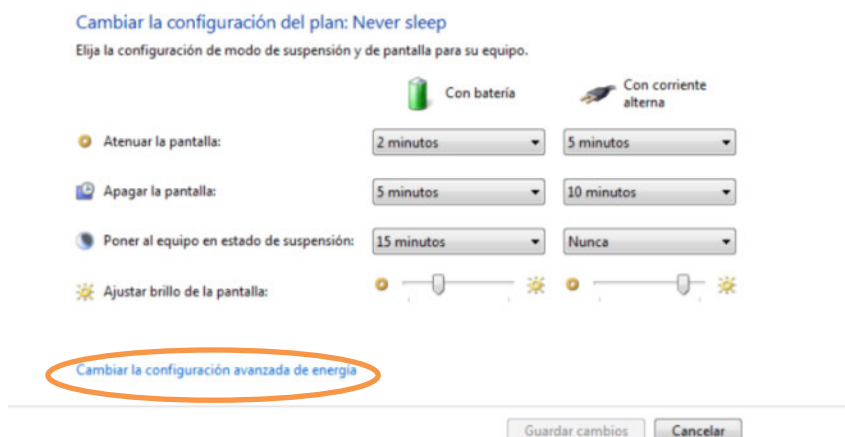
In this window click on "Change Advanced configuration" to open the advanced settings. The settings that should be adjusted are as follows:

A BatchXpert Station must be running all time, to be able to record trending graphs and Batch events. On some stations however, the windows system spins down the hard drive after the Station was unused for an certain amount of time. Then the operator returns to the station, the hard disk must be spinned up again, resulting in an "apparently frozen PC for a short period of time". To avoid this, on has to disable the automatic shutdown of the hard drive.
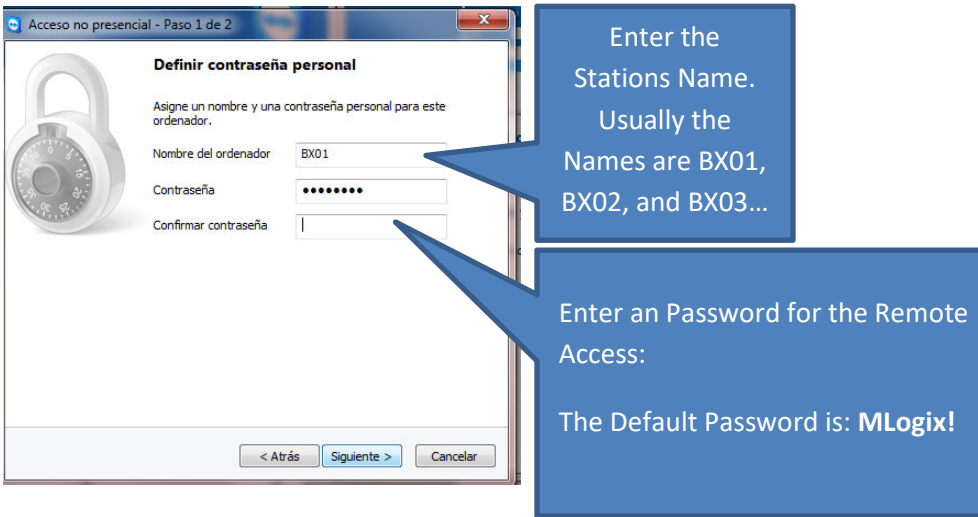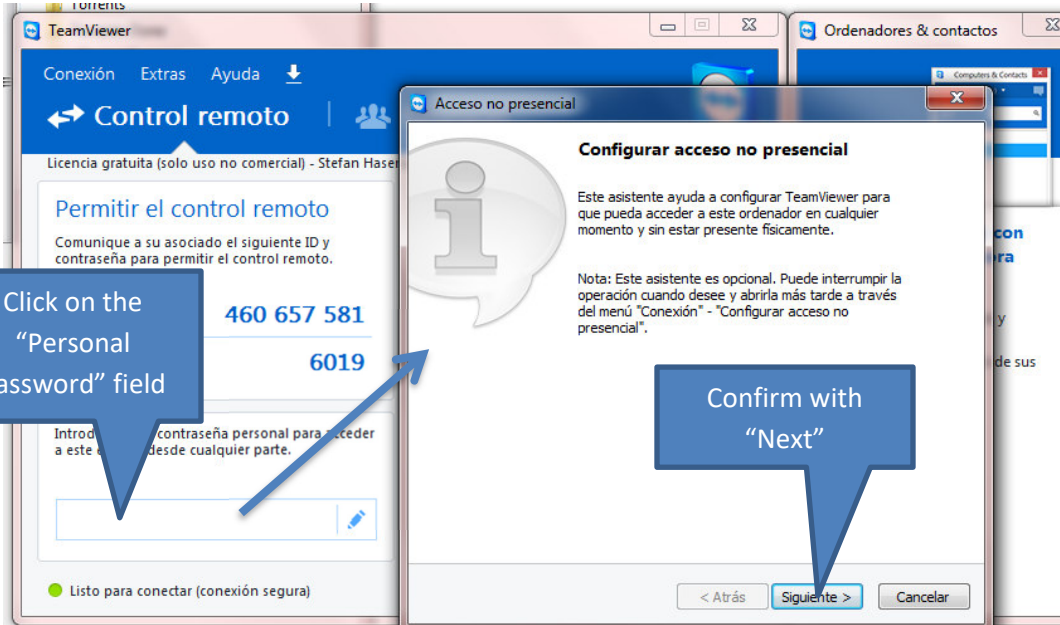
To turn of the Hard drive Spin down, open the section "Hard Drive" and the Subsection "Turn off after".
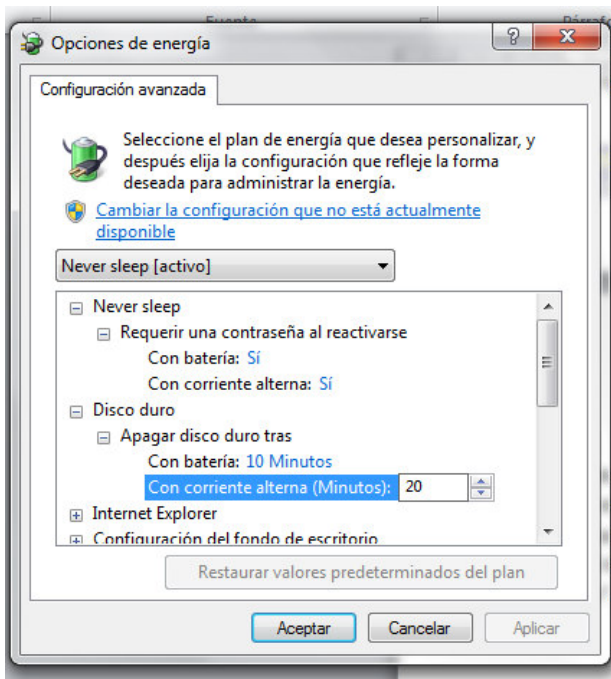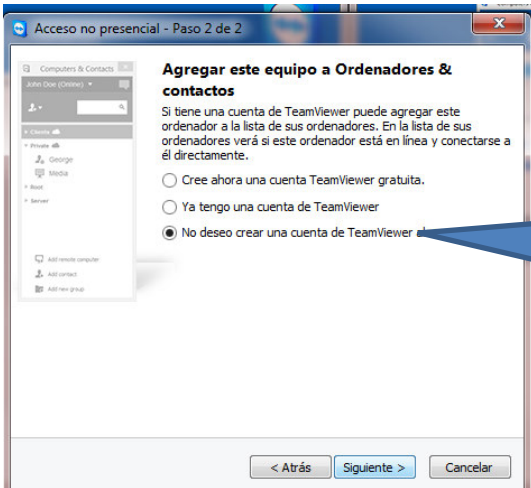

These values must be turned to "0", to never turn off the hard drive.

10 Install and Adjust the "TeamViewer"

In order to enable local LAN Access via TeamViewer one has to adjust the default TeamViewer Installation as follows. After installing the "TeamViewer" with its default settings:

Click on the "Personal Password" field

Confirm with "Next"

Enter the Stations Name. Usually the Names are BX01, BX02, and BX03…

Enter an Password for the Remote Access:

The Default Password is: MLogix!

Select the 3rd option and click next end on the following Screen on "End"

Then open the "Options" dialog from the TeamViewers Menu and adjust the following Settings:
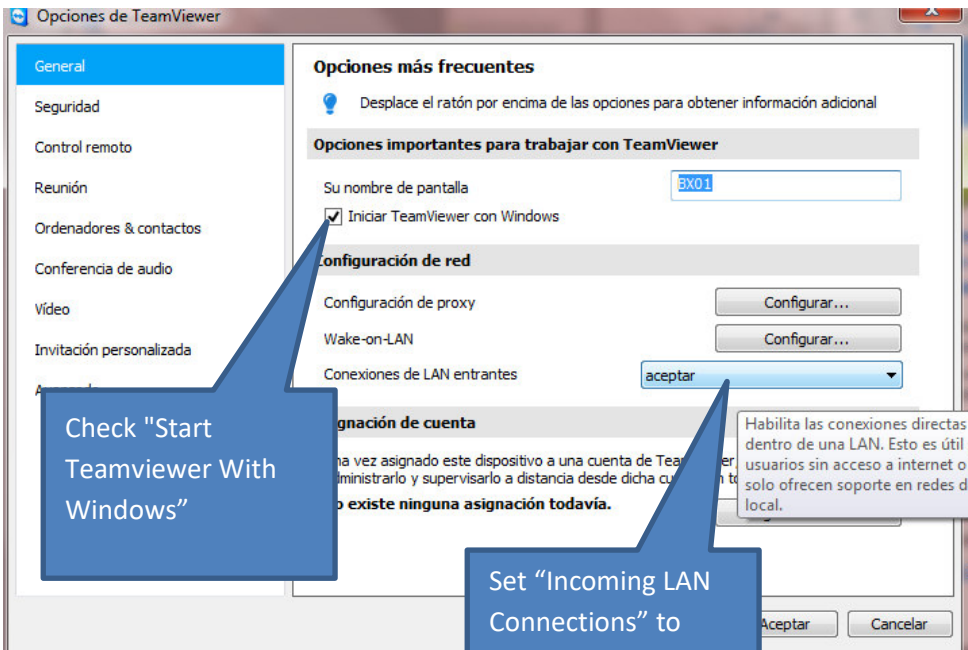
Check "Start Teamviewer With Windows"

Set "Incoming LAN Connections" to "Accept"