

MAP_9x

The Most flexible program for Network's Shares Mapping

Executive Summary:

This Document describes the basic characteristics of the MAP_9x program, including functionality, configuration, and installation.

An integral part of this document are the licensing rules.

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Introduction

Program's Goals

To Connect network units as local drives, depending on the user's identity and the global groups that the user belongs to.

The Problem

When a NT Administrator needed each user to map different shares, depending on his/her username, he/she commonly recurred to the LOGIN Script, where he/she included a sentence like:

```
NET USE <drive>: \\SERVERNAME%\%USERNAME%
```

However, such a solution didn't work on a Windows 95 workstation, because the variable %USERNAME% doesn't have a value (Windows NT, on the other hand, assigns the username to that environment's variable).

Many System administrators end up generating a unique share, with a directory for each user, and assigning the correct access rights to each directory. Others (usually for security and confidentiality reasons) keep the "one share per user" schema, but they were forced to generate a different LOGIN Script for each user (!!!).

The Solution: "MAP_95"

As System administrator for an Academic LAN, I've faced this inconvenient. With over 500 users who changed of workstations freely (more than 80% of which were W'95 workstations), I've decided that none of those ways were a reasonable approach.

The same day, I began to seek for the way to identify the interactive user, and how to emulate the "NET USE" command, all that from VB. The result of that investigation (and many hours of "try & error") was called MAP_95.

For over a year, MAP_95 complied its task very well, in W95 workstation as in WNT workstations. But I've never thought of MAP_95 as a long-term solution, Since I was expecting MS to release some kind of fix or service pack to resolve the problem. That never happened, and MAP_95 kept mapping units.

When we received the first beta versions of Windows'98, I was amased to discover that these versions couldn't work with %USERNAME% either, but I've attributed it to the fact that it was still a Beta version. Finally, when W'98 was released, the problem was still unresolved.

Some workstations in our academic LAN were migrated to W'98, but no modification was needed for MAP_95 to work with them. We even found a very greatly surprised: W'98 includes the runtime for VB5, so we didn't have to install any additional DLLs.

After that, I decided to "publish" MAP_95 as a freeware (I just added the .EXE to my home page, even without recompiling it).

The Evolution: "MAP_9x v2.0"

Many people downloaded and used MAP_95, many of them wrote me to share some ideas, suggestions, and of course some critics. *To all and each one of them, my more grateful "THANKS"*.

They were the ones that impulsed me to enhance MAP_95, which, in turn gave birth to MAP_9x (or MAP_95 v2.0).

Many of their queries found an answer in this new and highly improved version, which has a better performance, and a few "personal touches".

Characteristics of MAP_9x v2.0

- ⇒ Allows you to map MULTIPLE “Home Directories” for each user.
- ⇒ Can map different units, depending on which global groups the user belongs to.
- ⇒ Gives a detailed information for each task carried on, and a final global report (Number of mapped units, Errors occurred, etc.).
- ⇒ The welcome screen shows your Organization’s name and it’s Logo.
- ⇒ The Welcome screen includes a message section (of almost unlimited length), which can be used to communicate corporate news, rules, restrictions or any other text you may wish to make publicly known.
- ⇒ The Welcome Screen will close automatically (after a preset time delay).
- ⇒ Easy Installation and configuration on the client’s workstations, as on the server.
- ⇒ You can specify the language to use for the user interface (This Version supports Spanish and English)
- ⇒ Allows System administrators to use Environment variables that does not exists in Windows 9x workstations, like %USERNAME% (Name of the interactive user), y %PDC% (Name of the Primary domain controller).

Step by step description

- ⇒ Once the user is logged on, a key on the registry executes the program. (As it will be described later on this document, the program can also be run manually).

- ⇒ The MAP_9x process is the following:
 1. Searches for the MAP_9x.INI file in the same directory that the EXE program is located.

 2. Reads the program's configuration data from the INI:
 - Whether or not Errors should be informed.
 - Time delay for the welcome screen.
 - Language to use.
 - Whether or not the "MS System Info" should be available to the user.

 3. Reads the Company's information from the INI:
 - Company Name.
 - Path to the Company's Logo.
 - Path to the message's text file.
 - Name of the Account's Domain.

 4. Retrieves the username of the current interactive user.

 5. Loads the Company's logo, and adds it to the welcome screen.

 6. Reads the Message's text file, and fills the message section.

 7. Retrieves the workstation's ID.

 8. Shows the welcome screen.

 9. The program checks the [current user] section at the INI file, and for each key in the section:
 - If the drive letter is currently used, it will disconnect it.
 - Will try to map the network's share to the designed drive.
 - Reports the operation's result.

 10. Will determine which server is the PDC for the Account's Domain, and will retrieve from it the list of global groups that the user belongs to.

 11. For each global group that the user belongs to, the program will:
 - Check the INI file, looking for a section named with the Global Group's name.
 - If such a section is found, it will proceed to map the units specified on it, as described in step 9.

 12. Reports the number of connections (mappings) intended.

 13. Reports the number of errors encountered.

 14. Activates the countdown to close the welcome screen.

 15. When the user push the "CLOSE" button or the countdown reaches Zero (whatever happens first), the program will close the welcome screen, ending.

Installation and Configuration

Contents of *MAP_9x.zip*

- MAP_9x.EXE Executable Program.
- MAP_9x.INI Configuration's file.
- MAP_9x_DOC.ZIP Documentation.
 - MAP_9x_S.DOC Documentation in Spanish.
 - Trans_E.DOC Phrases to translate to add new language (Spanish).
 - MAP_9x_E.DOC Documentation in English.
 - Trans_E.DOC Phrases to translate to add new language (English).
- MAP_9x.REG File to be used with REGEDIT o REGEDT32.
- MAP_9x_DLL.ZIP DLLs for the VB5 Runtime¹.
- Mensaje.TXT “demo” messages file.
- BEANY.BMP “demo” Logo file.

¹ This DLLs are included in Windows 98, Office 95 y Office 98 (among others), because of that, it's already installed on most Systems. This ZIP is rarely used

Server

Installation

Unzip the MAP_9x.ZIP file in a temporal directory.

Verify that you have each and every item detailed before.

Copy the program (MAP_9x.EXE) to the NETLOGON2 share in the Domain Controller or any other network share available to all the users of the program.

Copy the configuration file (MAP_9x.INI) to the same share.

Copy the message file to the NETLOGON3 share in the Domain Controller, or any other network share.

Copy the graphic file (containing the company's logo) to the NETLOGON4 share of the Domain Controller, or any other share on the network.

Edit the MAP_9x.INI (see the Configuration section).

Configuration

The only configuration needed consist of editing the MAP_9x.INI file.

The MAP_9x.INI file contains four sections, each one with a very specific functionality.

Section [MAP_9x]

⇒ **Controls the Application functionality and its interaction with the interactive user.**

Contains the following keys:

<i>Key</i>	<i>Function</i>	<i>Possible Values</i>
Show_W_Screen	Time delay for the welcome screen	0 a 1000 (in seconds)
Language	Language to use on for the interface and the different messages	1 = English 2 = Spanish
SysInfo	Enables / Disables access to the "MS System Information"	0 = False = Disabled 1 = True = Enabled
ShowErrors	Determine whether or not error messages should be detailed	0 = False = Disabled 1 = True = Enabled

Section [Company]

⇒ **Contains the data for the organization or company that is using the program.**

Contains the following keys:

<i>Key</i>	<i>Function</i>	<i>Possible Values</i>	<i>Example</i>
Name	Company's name		My Company
Image	Path (or URL) to the graphic file containing the logo to be showed	Path or URL	\\server\share\logo.gif
Message	Path (or URL) to the text file.	Path o URL	\\server\share\message.txt
Domain	Name of the Account's domain	NT Domain Name	NTDOMAIN

² Usually, this share can only be modified using this Path %SYSTEMROOT%\ system32\Repl\Import\Scripts.

³ Usually, this share can only be modified using this Path %SYSTEMROOT%\ system32\Repl\Import\Scripts.

⁴ Usually, this share can only be modified using this Path %SYSTEMROOT%\ system32\Repl\Import\Scripts.

Section [Current User]

⇒ Controls the mapping of “home” drives, according to the username of the interactive user.

Contains the following keys:

KEY	Function	Possible Values	Example
Drive1	First drive to Map.	Local drive letter, and URL to the share. <Drive>:\\<server>\%username%	U:\\someserver%\%username%
Driven	N-Th. drive to Map.	Local drive letter, and URL to the share. <Drive>:\\<server>\%username%	X:\\anotherserver%\%username%

Section [Global Group's Name]

⇒ Controls the mapping of “home” drives, according to the username of the interactive user.

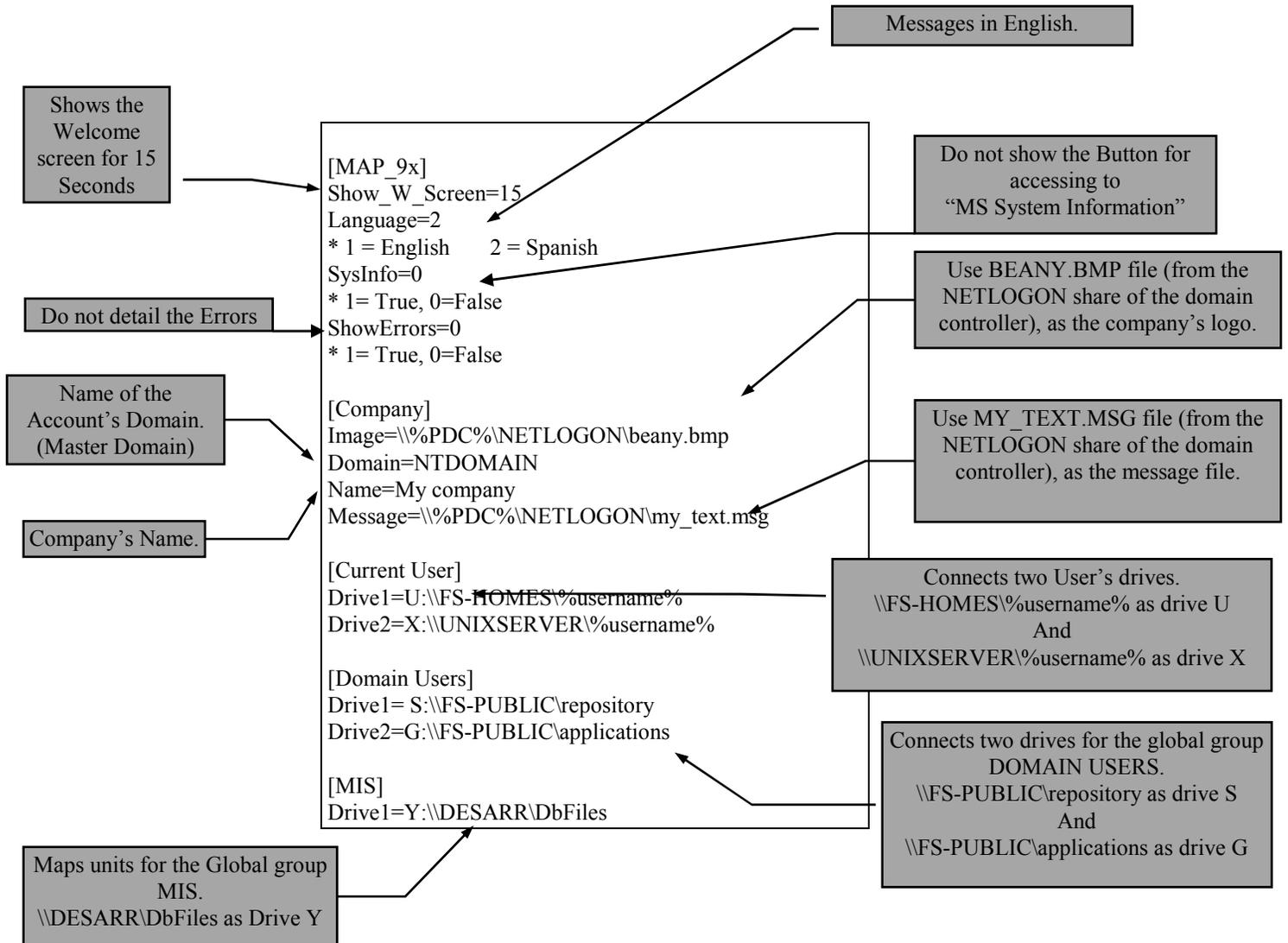
⇒ You must include a section for each group that you want to be considered.

Contains the following keys:

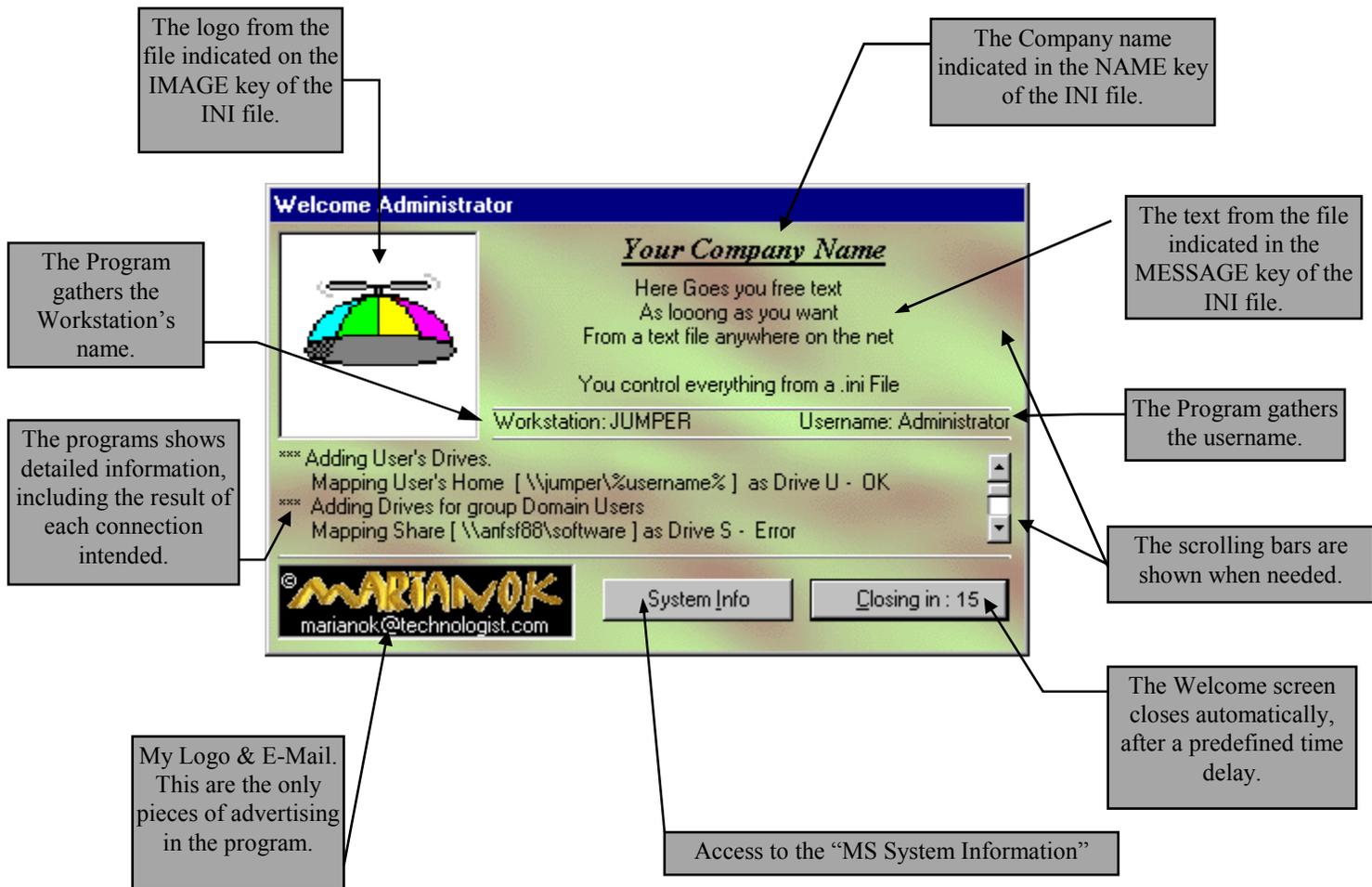
KEY	Function	Possible Values	Example
Drive1	First drive to Map.	Local drive letter, and URL to the share. <Drive>:\\<server>\%username%	U:\\someserver%\%username%
Driven	N-Th. drive to Map.	Local drive letter, and URL to the share. <Drive>:\\<server>\%username%	X:\\anotherserver%\%username%

Example: MAP_9x.INI (included in the ZIP file)

The MAP_9x.INI file originally included in the ZIP file possess the following characteristics:

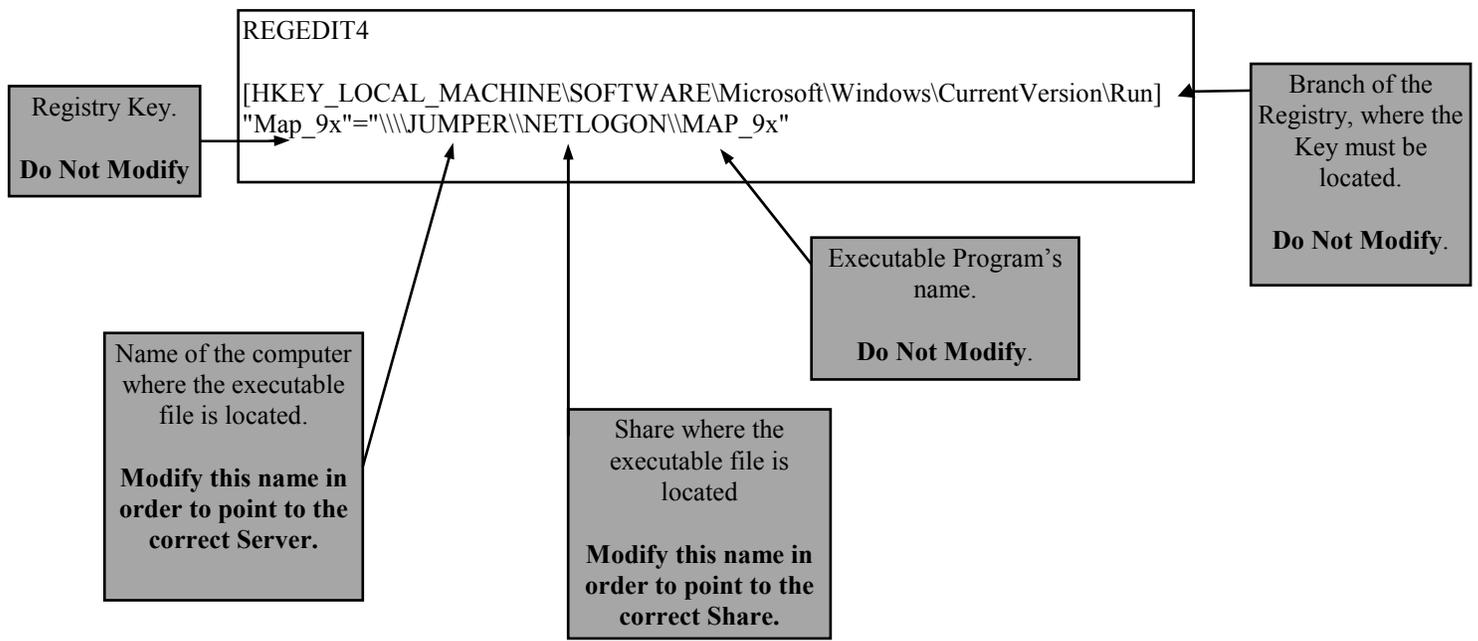


Example: Welcome Screen



Example: MAP_9x.REG (Registry file included in the ZIP)

The MAP_9x.REG file originally included in the ZIP, file possess the following characteristics:



Client

Installation

Given the fact that the program executes from a network share, It is NOT necessary to install it on the clients.

However, and just to make sure that the application will execute properly, it is necessary to include an invocation to the program in the registry of each client station.

This can be done in several ways, depending on the user's policies, the number of clients' workstations, and the software utilized in the organization.

The following ones are a few ways to do it (among others):

⇒ **Using the LOGIN Script**

- ☉ It's the easiest way.
- ☉ Allows you to update every workstation very fast and with very little effort.
- ☉ Requires the user's policies to execute the Login script.
- ☉ The user's policies must allow the users to make changes to the Registry.

Step-by-step Instructions:

1. Edit the MAP_9x.REG file, in order to point the network share where the MAP_9x.EXE program is installed.
2. Copy the MAP_9x.REG file to the NETLOGON share.
3. Edit the LOGIN SCRIPT, and the execution of the MAP_9x.REG file.

`START MAP_9x.REG`

Or

`REGEDIT MAP_9.REG`

Or

`REGEDT32 MAP_9x.REG`

⇒ **Using SMS (System Management Server).**

- ☉ It's a very easy way, if your company is currently using SMS.
- ☉ Allows you to update every workstation very fast and with very little effort.
- ☉ Does not require the user's policies to execute the Login script.
- ☉ Useful when the user's policies do not allow the users to make changes to the Registry.
- ☉ SMS will provide you with a detailed report indicating which workstations had received the Update, and when.
- ☉ It's only applicable in companies using SMS.

⇒ ***Manually, using the MAP_9x.REG file.***

- ⊗ Useful when the user's policies do not allow the users to make changes to the Registry.
- ⊗ You must work on each and every workstation.
- ⊗ The users performing the task must be allowed to make changes to the registry.

Step-by-step Instructions:

1. Edit the MAP_9x.REG file, in order to point the network share where the MAP_9x.EXE program is installed.
2. On each Workstation,
 - In Windows:

Double click on the MAP_9x.REG file.

Or

- In DOS, any of the following commands:

START MAP_9x.REG

Or

REGEDIT MAP_9.REG

Or

REGEDT32

⇒ ***Manually, editing the registry***

- ⊗ Useful when the user's policies do not allow the users to make changes to the Registry.
- ⊗ You must work on each and every workstation.
- ⊗ The users performing the task must be allowed to make changes to the registry.
- ⊗ MANUALLY EDITING OF THE REGISTRY, MAY TURN YOUR SYSTEM UNSTABLE, YOU SHOULD BE REALLY CAREFULL IN THIS PROCEDURE.

Step-by-step Instructions:

1. Run the Registry Editor.
2. Open the HKEY_LOCAL_MACHINE Section.
3. Navigate to the SOFTWARE\Microsoft\Windows\CurrentVersion\Run branch.
4. Add a new key: **MAP_9x**
5. Assign to it the complete path (or URL) to the MAP_9x.EXE program file.

Command Line Parameters

Sometimes, the System Administrator wishes to make a detailed control of the program's working (For example to detect problems, or check functionality).

In those cases, the behavior of MAP_9x can be modified, by the use of several command line parameters.

Those parameters are:

/V o /v

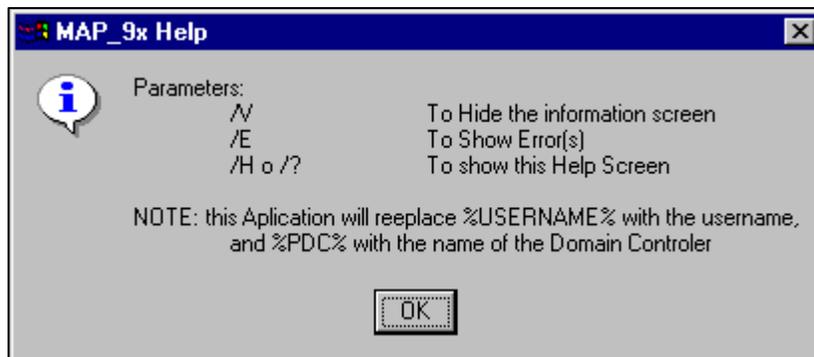
Shows the welcome screen for 10 seconds. (Even when the INI is set to HIDE the Welcome Screen)

/E o /e

Details each error occurred, even if the ShowErrors key is set to FALSE in the INI file.

/H o /h o /?

Shows the following Help screen (Will NOT Map network's shares):



Frequent Asked Questions

Why must be added a key to the registry?

Once the user has logged on, the program can be executed whenever, and it will work properly. With that in mind, a System administrator may decide not to use the registry KEY technique (i.e. if he/she doesn't want to "mess" with the registry), and invoke the program by other methods, like including it in the START->PROGRAMS->STARTUP for the user, or for the workstation.

This is a perfect valid decision, but you must take in consideration that the programs registered in the RUN branch of the registry, will be executed EVERYTIME a users logs on; meanwhile the ones at the "STARTUP" section of the START menu, can be "skipped" with a simple keys combination.

I want the User Interface in a Language or Idiom other than English or Spanish. How can that be done?

Look for a file called Trans_E.DOC (English version), translate each phrase to the language you want, and fill out the additional information that the DOC requests.

Once you have done that, send me the file, and I'll include the translated text in the next revision of MAP_9x, as a new language option.

Miscellanies

Cost

- The program “AS-IS” can be used free of charge (according with the instructions and restrictions expressed in this document), either by companies or particulars.
- This program will not show any kind of “NAG SCREEN”, and has not time restrictions, or a maximum number of simultaneous users.
- Any gift o contribution (specially monetary), that you may wish to send me, will be more than welcome, and at the same time it will encourage me to write some new utilities.
- The welcome screen shows a logo that points to my Home Page, and/or my E-Mail address. That logo is an integral part of the program and should not be removed or replaced, doing so would be a violation to my right over the software.
- If you, or your company, wish to have a logo-free version, or want to include some new characteristics to the program, you can contact me to talk about it. Depending on the modifications that you ask, I'll decide whether to include them in a new version or to write a “customized” version for your company.

Registration

MAP_9x is a shareware Program

- However, you are not, by any means, obliged to register as user.
- The functionality and characteristics of the program are the same, for the registered users as for the Unregistered ones.
- However, if you register as user, I'll get to know the distribution that the program is experimenting, how many people is using it, and what do they think about it.

Advantages of Registering

- As a registered user, your questions and consults will be attended with priority.
- You will receive information about any updates of MAP_9x, and some other programs that I may develop in the future.

How to Register

- The programs is Free, registering it's also free.
- All you have to do is to send an E-Mail to marianok@technologist.com with the following information:

***Full Name
Company
E-Mail Address
City, State and Country where you are from
Number of people using the program***

- You can also register by normal mail, just send a letter (containing the data detailed before). Send your correspondence to:

**MARIANO S. COSENTINO
Avda. La Plata 443 - 10 “C”
Capital Federal – Argentina
(C 1235)**

Contributions

- The program and the registration are free of charge.
- However, if you find this program to be Useful, to alleviate your job, or to give you better control of your Systems; Please, feel free to send me any kind of contribution or appreciation that you may consider fitting.
- It may consist on anything (material or immaterial) that you may think of, from a gift to a simple “Thanks”.
- If instead of a plain Registration, you send along any kind of contribution, whether material (money, equipment, etc.) or immaterial (suggestions, critics, ideas, your programs, etc.), I’ll be very grateful and you will receive a special treatment from me.
- At the same time, your contribution will encourage me to write new programs, and to finish the projects that I’m developing at this moment.

Technical Support

- Given the simplicity of the system, I doubt that someone may need much technical support.
- All questions, consults, doubts and suggestions can be send by E-Mail to marianok@technologist.com.
- Given the fact that this is a FREE program, I won’t compromise to reply all consults I may receive. All consults will be attended on my spare time and in a completely voluntary way.
- When attending consults, I’ll prioritize those from individuals (or companies) that figure in my files as registered users, especially those that had collaborated with me in some way.

Security

- This program does not access, nor can be used to access, to any kind of information about the user’s account, besides of that expressly detailed in this document.
- This program does not modify, nor can be used to modify, any kind of files, system configuration, or information about the user’s account, besides of that expressly detailed in this document.
- This program does not have any backdoors, nor access to confidential or restricted information.
- This program does not modify, nor can be used to modify, the configuration of the workstations where it runs, except for mapping network resources (Shares) as local units (Letters).

The Legal Stuff

Intellectual Property

- I, Mariano Sergio Cosentino, am the only person that has taken part in the development of this program. This development was based on my own original ideas, during my spare time, and under my own free will; not being ordered, subventioned or solicited by any other person, company, nor any kind of physical or juridical entity.
- Under those bases: I, Mariano Sergio Cosentino, reserve all intellectual's rights over this material, and over any other based on it.
- This material is registered in the "Registro Nacional de Propiedad Intelectual de la República Argentina" ("Dirección Nacional de Derecho del Autor").

Licensing

1. I, Mariano Sergio Cosentino, authorize you to use the program, in its original version and without any modification, according to the instructions and restrictions expressed in this document.
2. I, Mariano Sergio Cosentino, do NOT give any kind of warranty (either Implicit or Explicit) of the functionality of the program. If this clause is not valid in your Country/Province/State/or locality, then YOU ARE NOT ALLOWED TO USE THE PROGRAM.
3. This program is free and its use is completely voluntary. Using it you assume total responsibility of the consequences that it may cause.
4. I authorize you to copy and distribute the program as many times as you want, with the restriction that you do it including all the accompanying material (examples, manuals, etc.), in their original state and without any kind of modification.
5. The utilization of the program constitutes your acceptance of all the clauses, rules and restrictions expressed in this document.

Copyrights

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- All other copyrighted marks or names used in this document belongs to their correspondent holders or owners, and are mentioned only for exemplification or reference reasons.

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Curriculum Vitae available upon demand.