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## [^toc](#) All *autoload* file arguments

The **Rembo Wizard** is configured with Rembo-C initialized arguments that are successively searched from *autoload* files in *global*, *group* and *host* scopes, in this order. Therefore only the *global* level *autoload* file contains all the arguments and their default values. When it is necessary to override a *global* or a *group* level setting, the configuration argument is added to the *host* level *autoload* file. This is exactly what the configuration dialog does.

But the configuration dialog does not work with all the possible arguments, there are more parameters that can only be set by modifying the *host* level *autoload* file manually, either with Rembo Toolkit's Server Console (SConsole.exe) utility or by downloading, editing and uploading the *autoload* file using Rembo Toolkit's *netclnt* utility program.

Following is the list of all arguments and their settings.

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+ + + +
The Rembo Wizard's Configuration Dialog Variables
+ + + +

```

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MachineType (str) : a string containing six capital letters, split in two
                    groups of three letters. Determining the type of the
                    machine according to The Rembo Wizard's naming convention
                    and as defined on rembo-names file (this file
                    will also be uploaded to all Rembo servers so that it
                    can be viewed with The Rembo Wizard FileViewer within
                    a Rembo client).

SystemDisk (str) : The disk to work with. Rembo OS disk numbering starts from
                    0 (zero) and this also the default value for The Rembo
                    Wizard.
                    Can have any value, but for practical purposes the values
                    can be limited to 0 .. 3.

RCachePart (str) : The disk on which the Rembo OS's cache partition is located.
                    Can have any value, but for practical purposes the values
                    can be limited to 0 .. 3.

SystemPart (str) : The partition to backup. The Rembo Wizard is designed to
                    backup the system partition. The entire system to backup
                    must locate on one primary partition, defined here. Rembo
                    OS assigns partiton number 0 (zero) for Master Boot Record.
                    Therefore the first primary partition is 1 (one), which
                    is the default value for The Rembo Wizard.
                    There is four primary partitions (1..4) and extended
                    partitions are numbered (5..8).

LxSwapPart (str) : For the automated operations in The Rembo Wizard we have
                    to define where the Linux swap partition is located so that
                    it can be preformatted before the restored image starts.
                    The swap partition must be a primary partition. Default
                    value is 2 (two).

AutoBoot (bool) : false - do not boot automatically but stay on the menu
                  true  - boot automatically if no menu buttons pressed before
                        the delay of BootDelay has elapsed:
                        Windows: boot from the hard disk
                        Linux:   boot with the network kernel or from the hard
                                disk, according to the menu selection.

```

Unattended (bool) : false - do not force the operating system installation  
true - force the operating system installation

AutoRepair (bool) : false - Do not check partition table for corruption.  
true - Hard disk's partition table is checked against the partition table signature stored on the server when the disk was generated or backed up for the first time. If a difference is found, the OS partition is regenerated.  
This is intended to be used in the case where the maintenance personnel change the hard disk, and where the immediate regeneration is wished (example, control system machines).

AutoFix (bool) : false - Do not allow the the MD5 checksum synchronization.  
true - OS partition is returned to its original state, using the MD5 checksum method of Rembo, i.e. the file is not replaced if it appears to be the same than in the original installation. This is intended to be used with the public access workstations. AutoFix includes AutoRepair. If you define both flags, this will just slow down the operations; define just AutoFix if you want both operations.

autofixMD5 (bool) : false - Do not use MD5 in AutoFix, just date, time and size. This will usually speed the synchronization up but you are warned that you may lose some reliability  
true - (default) Let AutoFix to use MD5 to compare files

AutoBackup (bool) : false - Do not allow automatic base image backup  
true - When the system starts, after the AutoBoot delay take a new base image of the system partition before continuing according to the AutoBoot setting. There must be a base image archive on the server, taken manually, before this feature is used. The image archive is used to determine the scope of the operation (global, group, host). The existing base image archive is renamed with a backup name (TSTW2K.bas becomes TSTW2K.bas\_bup, for example. If the backup named archive file exists on the scope, it is deleted first.

KickStart (int) : A switch and a counter for Red Hat KickStart installations. If non-zero, the KickStart module is activated. It uses this persistent variable at host level as a counter of KickStart related boots. The states presented are:  
0 = no KickStart module interaction  
1 = Start of KickStart module in interactive mode  
2 = KickStart installation's reboot  
3 = KickStart installation terminated  
101 = KickStart installation has failed  
1000 = Launch KickStart with default architecture, version  
1001 = same but with first architecture, its default version  
1002 = same but with second architecture, its default version

BootDelay (int) : Time in seconds for all unattended operations (Unattended, AutoRepair and AutoFix) and AutoBoot "false".

IsNetDefaultBoot (bool) : false - With Linux, boot with the hard disk kernel as defined in /etc/lilo.conf's first entry. With Win\*, keep false (not considered)  
true - With Linux, boot with the network kernel.

AllowFloppyBoot (bool) : false - do not allow the user to boot from the floppy inside Rembo.  
Note: you must disable this on BIOS as well in public access workstations.  
true - allow the user to boot from the floppy

UseCache (bool) : false - do not use local hard disk as a cache for network operations but always use NetFS transfer protocol.  
true - use local hard disk drive as a cache for network operations.

ReadBackShared (bool) : false - do not automatically read back archive's shared files back to the cache when a system or software is taken.  
true - always read back archive's shared files back to the cache.

UseMulticast (bool) : false - If UseCache=true, UCAST protocol is used. Otherwise NetFS protocol is used. In server's rembo.conf-file you have to define  
Options unicast  
line for the group.  
true - If UseCache=true, MCAST protocol is used. Otherwise NetFS protocol is used. In server's rembo.conf-file you have to remove  
Options unicast  
line for the group.

UseDiffs (bool) : false - The differential images are taken as base images, and they represent a full snapshot of the system at the time taken. When restoring, the system partition is quick-formatted and the system is restored strictly to the state it was when the snapshot was taken. The differential aspect comes with the Rembo shared file system where the actual base image contains the majority of the files and the snapshots needs to store actually only changed files. It is recommended to use local disk cache (UseCache 'true') with this setting.  
true - The current contents of the disk is compared to the base image and only the differences are stored. This technique is useful when images are "add-ons" to the base image. Typical usage of this setting is by the system administrator who creates a base image, a differential with Office (Microsoft or Sun before you flame me) installed, an other differential with Office and with yet an other standard application used in the organization.

MaxDiffs (int) : Adjust the maximum number of snapshots or differential images that can be taken after the base image. 0 (zero) setting disables the differential backup button but does not disable the restoration of existing snapshots/differential images. It is wise to keep this limiter in maximum of 5 (five) or so, for the display limitations. The default value is 3 (three) snapshots or differential images.

HostDiffs (bool) : true - Snapshot images and differential images are always stored at the host level, no matter what is the Scope of operation for the base image. For example, if the base image is located, say at group level, each host in the group can have its own snapshot images. This way a group of machines can be generated from a single source (base image) while their individual modifications can be stored in snapshot images without taking an individual base image for the host.  
false - With this setting snapshots and differential images will be taken at the same level on which the base image is located (global/group/host). In other words, the snapshot and differential images are always located in the same directory than the base image to which they are compared to. This behavior is compatible with The Rembo Wizard

versions prior to 2.0.10.

ClientMCASTSpeed (int) : Limit the MultiCAST Speed. This value does have the same effect with the UniCAST transfer protocol.  
 Allowed values are:  
 0 - MultiCAST speed is unlimited. This is dangerous!  
 1 - MultiCAST is limited to 20mbit/s  
 2 - MultiCAST is limited to 10mbit/s  
 3 - MultiCAST is limited to 5mbit/s  
 4 - MultiCAST is limited to 2mbit/s

ClientCompression (bool) : false - Don't use image compression. This sets 'Settings.Compression' to 0.  
 true - Use image compression on the server when backing up images. This sets 'Settings.Compression' to 5 (of max. 9).

Next persistent variables are used for authentication policy

PWOnStartUp (bool) - Ask username and password in boot up  
 PWOnCreateBase (bool) - Ask username and password when creating base image  
 PWOnOverWrBase (bool) - Ask username and password when overwriting old baseimage and creating a new one (dangerous to set false this one!)  
 PWOnCreateDiff (bool) - Ask username and password when creating differential images  
 PWOnRestoreAll (bool) - Ask username and password when doing image restoration

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 Following persistent variables are miscellaneous settings that are set generally in the global level autoloading file.  
 Nothing prevents to declare different values in the group or in the host level autoloading files, if needed.  
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ScreenSaverDelay (int) : Time in minutes for the Rembo (blank) screen saver to activate.  
 The default is no screen saver (0).

KeyboardCountry (str) : The file prefix of the Rembo's keymaps. For example, "us", "uk", "fr", etc. The default is "us".

CodePageId (int) : Code page ID for Windows 95/98 installations.  
 If the installation is anything else than an English installation, this argument must be set. The default value is (0) - no code page.  
 Linux and Windows NT/2000 installations are not concerned.

ScreenResPref (str) : The preferred screen resolution. For example, "1024x768".  
 When The Rembo Wizard starts, available video modes are scanned. If the preferred video mode is available, it is selected. Otherwise an attempt is made for "800x600" resolution.  
 If even that fails, then the first available, non-textual video-mode is selected and the available video modes are printed on the system console. If no video is available, The Rembo Wizard continues to operate in textual mode.

ReportEmail (str) : Send copy of the events that are SysLog()'ed on the server to this e-mail address. Requires that you have the TCPTunnel set to the mail server in the rembo.conf, before groups:

```
TCPTunnel sendmail {
    RemoteHost "mailserv.mycompany.com"
    RemotePort 25
}
```

The events that are logged with SysLog() can be modified with the compilation switches (see the "Compilation with options" above). This will also alter the e-mail reports.

FromEmail (str) : If ReportEmail is set, the "from:" field must be set too. It is not a good idea to set it to the same e-mail address than the ReportEmail, since this is a sure way to get your message marked as 'junk'.

startPlugin (bool) : Your Rembo Toolkit installation allows execution of the third party plugins (The Rembo Wizard): set "true". If you have a demo version or an other Rembo Toolkit version that allows only (slower) scripting execution: set "false".

startDebug (bool) : Usually set "false" to execute the normal version of The Rembo Wizard. If set to "true" a debug printing version will be executed, with Authentication disabled.

startAuthentication (bool) : For normal operation, set to "true". If you cannot set your server to respond to authentication requests or otherwise do not care about passwords, set "false", at your own risk, of course. Note that debug version is always non-authenticating, no matter what is the setting of this persistent variable.

disklessLinux (bool) : Usually set "false" for normal operation. Defining "true" here means that The Rembo Wizard is used only with AutomaticBoot to boot a Linux kernel, with an initial ramdisk and kernel arguments, all files loaded from the server. About all other operations are disabled. Use this option with NFS-root cluster nodes, Linux based X-terminals and such.

setTimeUTC (bool) : Usually set "false" for normal operation. On Linux systems where the automatic switching between the Daylight Savings Time and normal (winter) time is an issue (servers, for example) because a simple reboot is not possible, set this variable as "true". The Rembo Wizard will consult the Rembo Toolkit server about its time zone information related to the Coordinated Universal Time (UTC). The offset is then added to the system clock, normally set by Rembo to Local Time, so that it will be actually set to UTC.

opmodeNIC (str) : Usually leave empty. When set, makes the rembowiz\_start - module to load The Rembo Wizard NIC management module. The module scans for all the devices on the PCI-bus and searches all the NET-class type of devices for Intel 825xx or 3Com 3c90x based NICs. The NIC that has the same MAC-address than the device that Rembo is using will be set to auto-negotiation off. Forced parameters will be applied according to opmodeNIC string.

"100", "100F"	- 100 Base-Tx, 100 Mbit/s Full Duplex
"100H"	- 100 Base-Tx, 100 Mbit/s Half Duplex
"10", "10H"	- 10 Base-T, 10 Mbit/s Half Duplex
"10F"	- 10 Base-T, 10 Mbit/s Full Duplex

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There are few more persistent variables,  
but they should be left 'alone'  
and used only within The Rembo Wizard. These are:

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GroupConfigured (bool) - Tells whether group level is configured with The Rembo Wizard Configuration tool. If this variable is false then prompt Configuration Screen right after boot. These values configured with the Configuration tool will afterwards used as a default to all hosts in this group.

HostConfigured (bool) - Same thing as 'GroupConfigured' but for a particular

host only.

- PartitionTable (str) - Hosts partition table will be registered with this variable and it is used for checking if the partition table has been corrupted. This allows disk layout to be restored to original state.
- ePartitionTable (str) - This is the extended partition table part, see above.

## [^toc](#) Customized Versions

If you have a GNU-C compiler available (on a Linux system, for example) you can compile customized versions of [The Rembo Wizard](#) using *compilation switches*. First, you would study distribution's *Makefile* to set the *CC* to point to your GNU-C compiler and *SDK* to point to your Rembo Toolkit SDK's Rembo-C compiler. Then you can issue a command such as

```
make all switch='-DnoHDBlog'
```

To compile a version of [The Rembo Wizard](#) that does not log hard disk boots in the host's log-file and/or to the reporting e-mail address. Following is the list of all available compilation switches.

- C - preserve source comments (not with -Ddebug)
- Ddebug - for debug printing level 1
- Ddebug=2 - for debug printing level 2
- Ddebug=3 - for debug printing level 3 (max)
- DnoFSIZE - Use Rembo's default max. file size settings
- DnoDHCPInfo - No DHCP-info request, even if on-line
- Dnoreadpci - No code to read the PCI diagnostics info
- Dnodmi - With an older BIOS, no manufacturer info
- DnewHDauto - Forced installation if no partition table
- DnoMCwarns - No unlimited MCAST speed warning message-boxes
- DnoCachewarns - No warnings of not using Cache (and NetFS)
- DnoLXlog - No logging of LXBoot() calls
- DnoHDBlog - No logging of HDBoot() calls (Windows)
- DnoMBRops - No (re)store Master Boot Record (W2K/Linux,AutoRepair)
- DnoNTBiosName - Do not change the Windows BIOS name with DHCP-name
- DnoLogin - No authentication from server (no security)
- DnoUntdFlip - Do not flip the Unattended setting to false
- DnoHooks - Never call user hook functions
- DnoProbeArch - Do not probe of archives on the server (if buggy)
- DnoCacheUpd - Do not use unconditional cache:// URI for uploads
- DnoAutoFixRep - If AutoFix fails, stop, do not re-install system
- DdoW2KHDDReg - Do W2KHDD registering functions (Rembo says "no")

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