

Virtual CD v6

Terminal Server



Manual

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Introduction

Foreword

Thank you for choosing Virtual CD Terminal Server Edition. Virtual CD TS is an expanded version of the classic Virtual CD program that lets you manage and provide user access to virtual CDs on a terminal server independent of sessions.

As a supplement to the standard Virtual CD documentation, the following pages describe the additions, special features, and differences between VCD TS and the classic Virtual CD edition. Like the main documentation, this can be read straight through for a close look at how Virtual CD TS works and how you can work with it, or used as a reference for looking up specific points as you need them. The information provided here is divided into the following sections:

- **Introduction:** Provides an overview and general information.
- **Installation and Configuration:** Describes the procedures for installing and configuring your Virtual CD TS program on a terminal server.
- **Working with Virtual CD TS:** Explains special features that are particular to the TS edition and gives step-by-step instructions for management of virtual CDs in your network.
- **Troubleshooting:** Lets you know how and where you can find answers if any question arise.



This documentation describes the special functions that are available only in the Terminal Server Edition of Virtual CD. For details on the functions that are available both in the basic Virtual CD program and in the TS edition, please refer to the standard Virtual CD documentation.



This documentation was written on the basis of a full Virtual CD TS version installed under Windows Server 2003. If you use a different operating system or have already changed some of the Virtual CD settings, the windows displayed and the controls available may not be the same as those shown here.



The examples given in this documentation often describe only one of several possible methods for executing a particular task. Once you know your way around the program, you may find other techniques for activating the functions you need.



This documentation refers on occasion to some of the administrative functions in a Windows network. The reader is presumed to be familiar with these functions in the network in which Virtual CD TS is installed. If you have any questions about these administrative functions, please refer to the documentation on your network system.

Legal Notices



If you use Virtual CD with CDs or DVDs that are under license, then creating or distributing multiple virtual images from a given CD/DVD or running the Virtual CD program with a given virtual CD on more than one computer at a time may constitute a breach of the software licensing agreement you entered into with the manufacturer of the CD/DVD in question. Make sure to check the licensing agreements you have with the CD/DVD manufacturer(s) for detailed information.

Copyrights on the software, the Virtual CD trademark and all corresponding documentation are owned by H+H Software GmbH. Microsoft and Windows are registered in the US as trademarks of Microsoft Corporation. The names of products mentioned in this manual are used for identification purposes and may be trademarks or registered trademarks of their manufacturers.

Document Conventions

For added clarity in these texts, this documentation uses the following conventions: Texts quoted from the program (buttons, menu items, dialog texts, etc.) are in **bold** type.

Information that is particularly important is marked by one of the symbols shown below. These notes contain information that is essential for trouble-free operation of the software.



Notes or procedures that are especially important are marked by the “exclamation point” symbol you see here.



Tips and tricks for simplifying procedures are marked by the “light-bulb” symbol shown here.



Features or procedures in which the TS edition differs from the standard edition are marked by the symbol shown here.

In some cases, step-by-step examples are given of certain tasks or configuration procedures. The individual steps are marked as follows:

1 *Step 1*

2 *Step 2*

What Virtual CD TS can do for you

Virtual CD TS lets you configure the presentation of virtual CDs in user sessions on your terminal server. You can use profiles to configure the use of virtual CDs and have your settings applied automatically at login without requiring any further action on the part of the user.

What you can do with Virtual CD TS:

- Provide user-specific access to virtual CDs in each session
- Let your users access virtual CDs without letting them make changes in any CDs
- Provide access to a given virtual CD in all sessions, or only specified sessions
- Use profiles for automatic configuration of Virtual CD settings and features at the start of a session
- Add virtual CD drives “on the fly”
- Use existing network resources to identify users and user groups, for simplified profile configuration
- Install the standard Virtual CD program, and create and test virtual CDs, on up to 5 workstations

New Features in Version 6

If you have already used an earlier version of Virtual CD TS, you will notice that the Virtual CD TS program has been redesigned and adapted to the classic edition of Virtual CD. The new version lets you use all the functions of the classic Virtual CD edition, including the creation of virtual CDs, but the Administration program is no longer a part of Virtual CD TS.

Now, the Virtual CD Network Management Server is available for centralized administration of all Virtual CD clients in a network, and for administration of multiple Virtual CD TS servers.

All of the new features that affect terminal server operation are listed here:

- In the interest of compatibility and the highest possible stability, we have obtained Microsoft certification for the Virtual CD driver. Virtual CD is the first program of its kind to receive this certification.



- You can create virtual CDs in a session, or on the terminal server console.
- Virtual CD TS user profiles let you define various Virtual CD program properties (virtual CD drives, virtual CDs, available features, etc.), which are automatically assigned as soon as a user logs on in a session. These profiles are configured using the new Profile Editor.
- Improved integration in the Virtual CD Network Management Server, for direct access to the virtual CD drives available in the individual sessions.



The Virtual CD Network Management Server enables highly efficient administration of the Virtual CD clients in your network. Network Management Server is available separately; it is not included with Virtual CD TS.

In addition to these terminal server-specific functions, of course Virtual CD TS includes all of the new features integrated in the standard edition of Virtual CD v6.

Virtual CD TS Licensing

Virtual CD TS is licensed on a per-server basis. In other words, you need one basic license code for each server on which Virtual CD TS is installed. The license code that comes with Virtual CD TS authorizes installation of Virtual

CD TS on the terminal server and operation in up to 5 concurrent sessions. The following types of license are available for Virtual CD TS:

- **Basic license:** One basic license is required for each Virtual CD TS server. The license code must be entered on the server on which the VCD TS program is installed, even if licenses will be retrieved from the Virtual CD Network Management Server in later sessions. The basic license code enables use of Virtual CD TS in up to 5 concurrent sessions.
- **Supplementary license:** Supplementary licenses increase the number of concurrent sessions in which Virtual CD TS can be used.



A Virtual CD TS license is in use from the moment a virtual CD is inserted in a virtual drive within a session. When all virtual CDs inserted within a given session have been ejected, the license is released.

The basic Virtual CD TS license code also includes licensing for 5 single-user versions of the classic Virtual CD edition, for installation on separate workstations. You can use these separate installations to create and test your virtual CDs before they are made available for general use on your terminal server.

The license code can be entered either during program setup or later, in the CD Management program.

If you wish to test the Virtual CD TS program, you can use the demo version for **up to 30 days** without entering a basic license code.



When you purchase Virtual CD your license code will be transmitted to you electronically, or is included in the packaging.

System Requirements

The following system specifications are required for running Virtual CD v6:

- Windows 2000 Server with service pack 4 or Windows Server 2003
- Optional: Citrix MetaFrame Presentation Server
- Optional: Citrix MetaFrame XP Presentation Server
- Microsoft Internet Explorer version 6.0 or later
- 50 MB hard disk space for installation of the Virtual CD TS software
- Recommended display resolution: 1024 * 768



Virtual CD TS must be installed on a Windows-based terminal server that meets the minimum requirements. You can store the configuration files and your virtual CDs on a network server that uses any platform (Windows, Novell, Linux, etc.), as long as the Virtual CD TS Service can access this data.



How much hard disk space you will need in addition to the 50 MB required for installation of the Virtual CD TS program depends on how many virtual CDs or DVDs you create and the volume of data they contain.

Technical Support

If you have any problems with Virtual CD TS, we'd like to ask that you check the manual, the Help program and our continuously updated Web pages for assistance:

Virtual CD Online: <http://www.virtualcd-online.com/>

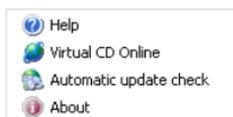
Knowledge Base: <http://www.virtualcd-online.com/kbase>

Support Forum: <http://www.virtualcd-online.com/support>

It is quite likely that your question has already been answered. You are also welcome to publish your own questions in the Support Forum.

The Virtual CD software is under continuous development. We offer **Service Packs and new program versions** on our Web site as they become available, so you can keep your software up to date. If you activate the “**automatic update check**” in your new Virtual CD program, the program will automatically check our site for updates, at intervals that you define.

This setting, as well as links to our Web site, are easy to find in CD Management, the main program window of Virtual CD; for example, under “Tasks.”



We are always interested in hearing from our customers, whether you have questions, suggestions or complaints. After all, we make this software for **you**, so it's important for us to know what you want! Please use the Virtual CD forum to let us know what you think.

If you have questions that are not answered in any of the resources listed above, please do not hesitate to contact us.



Installation and Configuration

Notes on Installation

Please observe the following when installing Virtual CD TS:

- **Virtual CD TS and the Virtual CD Network Management Server:** If you already have a basic license code for Virtual CD TS, this code must be entered during installation. If you do not have a basic license code at this time, you can enter the code later in the CD Management program. This also applies if you activate the option to have Virtual CD TS retrieve licenses for individual sessions from the Virtual CD Network Management Server. This locally stored basic license code is required by the service that makes the virtual CD drives available.



If you do not enter a Virtual CD TS basic license code on the machine on which you install the program, the Virtual CD TS Service will run in demo mode and will cease to operate after 30 days.

- **Creating virtual CDs on your own workstation:** The license code included with Virtual CD v6 TS permits you to install the standard Virtual CD v6 edition on up to 5 workstations. This is intended to allow you, as administrator, to create and test virtual CDs before making them available over the network. This single-user version **cannot** be installed using the Setup program that installs Virtual CD TS. You need the standard Virtual CD v6 Setup, which is included on your Virtual CD installation CD or can be downloaded over the Internet.



For details on the installation and configuration of Virtual CD v6, please refer to the Virtual CD documentation.

Installation



*If you are updating an earlier version of Virtual CD TS, you need to **deinstall** the older version and then **restart** the server before installing the new Virtual CD TS program. **If you install multiple Virtual CD TS instances on a single server, your terminal server may not boot up correctly.***

Install Virtual CD TS from the terminal server console, making sure first that no sessions are active. Place the installation CD in a CD drive and wait a moment for Windows to detect it and start the Setup program.

If installation does not start automatically, double-click on “**My Computer**” in your Explorer and then on the symbol for the drive where you inserted the installation CD.

When the program starts up, select “Installation” to run the Setup program. If you have accessed the CD content directly in your Explorer, or have downloaded your Virtual CD program over the Internet, double-click on the EXE file to run the Setup program.

Follow the instructions as the Setup Wizard guides you through the installation procedure. After the prompts for license code and target directory, the program is installed and the virtual drives are set up.



All of the settings configured during installation can be changed at a later point. If you are not sure which settings you should choose, you can use the default values for the time being.



*Virtual CD v6 comes with a Plug & Play driver, which means you do not have to restart the computer after the virtual drives are set up, or after changing the number of virtual drives at a later stage. In some cases, however, you will be prompted by your Windows operating system to restart your computer. **During the installation procedure, it is important that you do *not* restart the computer before the installation has been completed, regardless of any operating system messages. Otherwise, the installation will not work.***

After Installation

Once you have installed Virtual CD TS, its programs are stored on your server and, in some cases, running. Since the virtual CD drives are mapped by user profiles at login, no virtual CD drives are visible in your Explorer at this point.

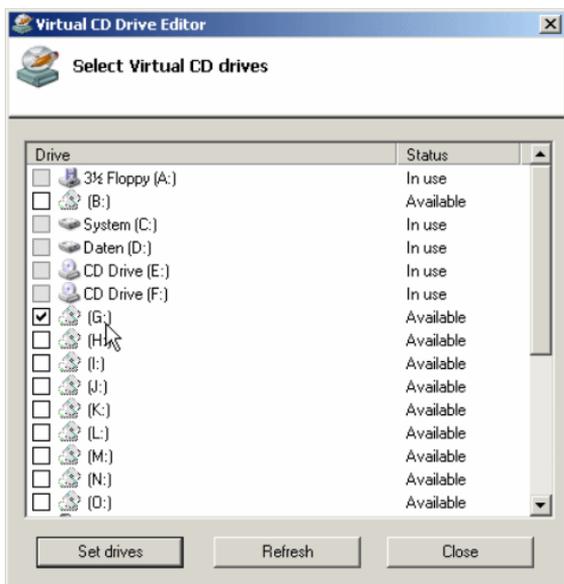
To test Virtual CD TS now, you can run the Virtual CD Drive Editor and add a virtual CD drive.

1

Double-click on the “Virtual CD” icon on your desktop; this opens the Toolbox. Select **Adding/Removing Virtual CD Drives** to open the Drive Editor.

2

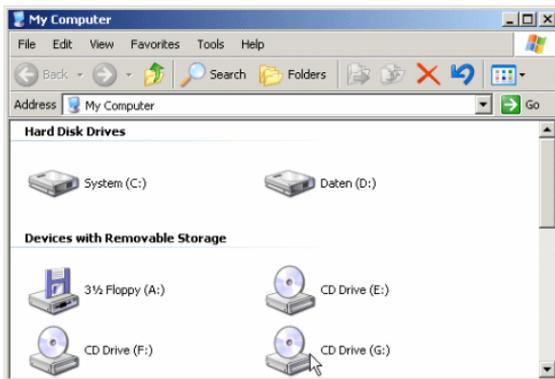
The Drive Editor makes it possible to add or remove virtual drives in a session at any time. Select the drive letter that you want you use for a virtual CD drive.



Mark the desired letter, and click on **Set** to add the new drive.

3

Open the Windows Explorer. The virtual CD drive you have just set up is visible, and can be used.



In our example, the virtual CD drive is empty since the program has just been installed and no virtual CDs have been created yet.



The procedure for setting up a virtual CD drive has been described here as a way to test the functioning of Virtual CD TS. Generally, virtual CD drives are mapped automatically when a user logs on in a session.

The Virtual CD TS Service

All Virtual CD programs install a service called the **Virtual CD v6 Management Service**. Virtual CD TS installs another service as well, called the **Virtual CD v6 NetAccess Helper**, on the computer on which Virtual CD TS is installed. This service provides a number of functions for managing virtual CD drives in the terminal server environment. One of its main tasks is to make virtual CDs accessible that are stored on other servers in the network.



The service is installed to start up automatically. If this service is not running, a number of important Virtual CD TS functions will not be available, which in turn will result in errors.

Configuring Virtual CD TS for Network Access

If you plan to store all your virtual CDs on the same terminal server on which Virtual CD TS is installed, no further steps are necessary to complete the installation procedure. On the other hand, if you will be providing access over the network to virtual CDs stored on other servers, you need to configure a few more settings first.

Because there can be a large number of users with various access privileges accessing your system in a terminal server environment, Virtual CD TS Service has “the final word” on access to virtual CDs (“insert/eject” privileges). To insert a particular virtual CD, the service must have “read” privileges for that CD. Because the service runs under a system account, this is no problem with virtual CDs that are stored on the terminal server. If you have virtual CDs stored on other network resources, however, the service will not be able to insert them.

To solve this problem, we recommend creating a special user account, called a “gateway user.” The purpose of the gateway user account is to provide a user context that grants “read” privileges covering all virtual CDs in the network. The procedure for configuring this account is described in the following.



The easiest method is to create the gateway user account in a domain or ADS. If there is no domain nor ADS available, however, you have to create more than one instance of this user account: one as a local user on the terminal server on which Virtual CD TS is installed, and another on the server on which your virtual CDs are stored. It is essential that these accounts use the same password.

1

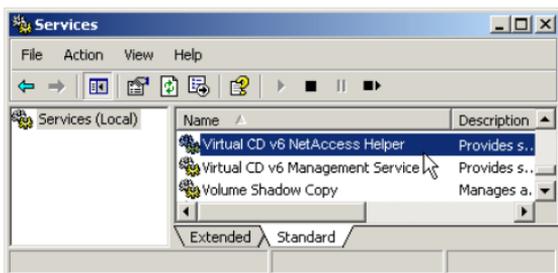
Create a gateway user account – in our example, this account is called “**vcdgateway**” – and give it “read” privileges in all directories in which virtual CDs are stored.



To make sure the assigned privileges are effective, log in on a network station under this account and check whether you can see all virtual CDs in the Explorer.

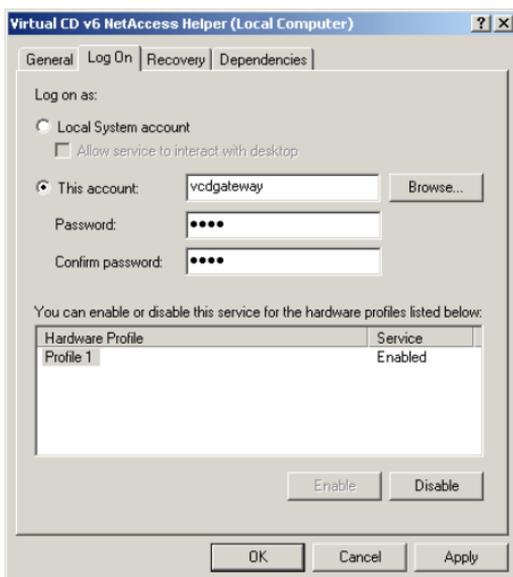
2

Open the services on the terminal server on which Virtual CD TS is installed and double-click on **Virtual CD v6 NetAccess Helper** to open its properties.



3

Select the **Login** page and enter your new gateway user with password under **This account**.



Before this user context can be used to access data over the network, the service must be shut down and then started again. From this point on, all virtual CDs that the gateway user account can access are available through this service, regardless of who is logged on to the terminal server or whether the server has been restarted or not.



When you create a new directory for storing virtual CDs, remember to grant “read” privileges in that directory to the gateway user account; otherwise the Virtual CD TS Service—and thus your users—will not be able to access virtual CDs in that directory.



If you do not perform this step, Virtual CDs that are stored on the network cannot be used—even if they are visible to users.

Removing Virtual CD TS from Your System

To remove the Virtual CD TS program from your terminal server, use the **Add/Remove Programs** function in the Windows Control Panel. Select “Virtual CD v6 TS” and begin the deinstallation. The Setup Wizard removes all components of the Virtual CD TS program from your terminal server.



Work from the terminal server console when deinstalling the program, and make sure beforehand that no sessions are active.

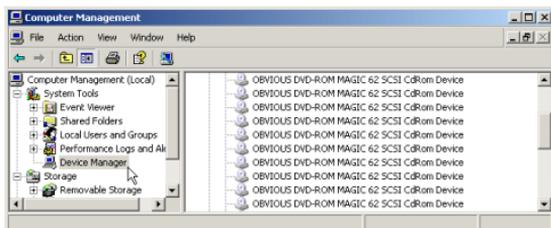


Working with Virtual CD TS

How Virtual CD TS Works

Administration of Virtual CD Drives

With a terminal server as platform, the administration of virtual CD drives and virtual CDs differs in many ways from administration on a standard workstation. Because a large number of users can be logged on to the terminal server at any one time, Virtual CD TS requires a high degree of flexibility in providing virtual CD drives within individual sessions at run time. This is why the installation program creates 64 virtual CD drives as devices, but does not map any drive letters to them. These devices can be seen in the Windows Device Manager.



The number of devices is limited to 64 because some programs, including the Windows operating system, can create difficulties if the total number of devices – virtual plus physical – is too high.

The devices are made available at run time when the session is started, or during the session if the number of devices is changed while the session is open (using the Drive Editor). When a virtual CD is required in a particular session, Virtual CD TS inserts it and then maps it to a drive letter designated for use as a virtual CD drive in the user profile under which that session was opened. (In other words, the virtual CD is inserted exactly one time and then distributed.)



The limitation entailed by this technique is that the number of virtual CDs available at any one time is restricted to a maximum of 64 per terminal server. This number has generally been found to be sufficient.

Differences between VCD and VCD TS

User profiles have been introduced in Virtual CD specifically for the Terminal Server edition of the program. Because Virtual CD TS runs on a terminal server, it differs from the standard Virtual CD edition in the following respects as well:

- **It is not possible to create Client Setup programs.** Since Virtual CD TS does not entail any installation on client machines, the Client Setup feature is not included with this edition of Virtual CD.
- **Virtual CD TS is always installed on a terminal server.** Unlike Virtual CD, which is usually not installed on a server, the Virtual CD TS edition always runs on a server.
- **You cannot configure security settings for physical CDs.** Because Virtual CD TS is used within sessions, the features for defining security settings to control the use of physical CD drives and CDs are not available.

Profiles, Step by Step

Working with Profiles

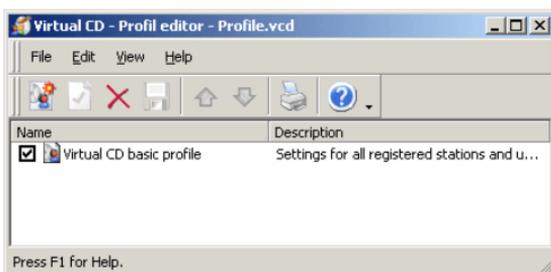
Profile Editor

You may have noticed that Virtual CD TS did not set up any virtual CD drives during program installation. To test the program, virtual drives are set up „by hand“ using the Virtual CD Drive Editor. However, you probably don't want to leave it up to users to create whatever drives they may need, or want. This is why we have developed user profiles, which make it easy for you to configure the VCD conditions that are effective when a user opens a session. You can create and edit profiles in the Profile Editor, opened from the “Tasks” pane of your CD Management program.



The main window of the Profile Editor shows all of the existing user profiles. Before you create your own profiles, this list contains only the **Virtual CD**

basic profile. This profile is applied by default; i.e., to users for whom no specific profile has been designated. The “basic profile” cannot be deleted.



The Profile Editor lets you create, edit, print and save profiles. Profile definitions are stored in **Profile.vcd**, in your Virtual CD TS system directory. To allow a user to run the Profile Editor, you must give that user “write” permission in the “Profile.vcd” file.



Because the settings to be configured for each user are retrieved from the user profiles, any user who does not have “read” permission in the “Profile.vcd” file will not be able to run Virtual CD TS.

When you change the properties of a profile, the new settings are active only after:

- the changes have been saved, and
- a new session is opened.



Your new settings are not effective in sessions that were already open when the changes were made.



It is a good idea to back up your “Profile.vcd” file regularly, so that you always have a recent version available in case of emergencies.

Types of Profile

The Profile Editor recognizes two types of profile:

- The **Virtual CD basic profile**: This profile comes with your VCD TS installation and cannot be deleted. It is applied to all users for whom you have not designated a specific profile.
- **User profiles**: You can create your own customized profiles; for example, to be applied to certain groups of users. Every user must be assigned to a particular profile to have your specified settings loaded for that user. Otherwise, the settings defined in the “basic profile” are applied.

Virtual CD Basic Profile

The first time you run the Profile Editor, the Virtual CD Basic Profile is the only user profile available. The basic profile lets you define the configuration status for all users who log in on the terminal server and for whom no other profile is explicitly designated. For example, you can edit the basic profile so that any users who are not assigned to one of your customized profiles are denied access to some—or all—Virtual CD functions. The Virtual CD basic profile differs from your customized profiles in the following aspects:

- It will not be applied simultaneously with any other profile. (If you assign a customized profile, more than one profile may be applied.)
- It is applied by default; i.e., to any user for whom no other profile has been allocated.
- It cannot be assigned to users or user groups.
- It cannot be deleted.
- It cannot be deactivated.



When you first install Virtual CD TS, the settings in the basic profile permit all users to access all functions in Virtual CD TS.



If you want to have a single configuration applied to all of your terminal server users, simply configure the Virtual CD basic profile as desired; no further configuration of profiles is necessary.

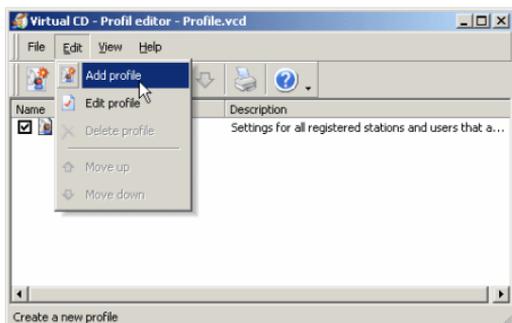
Creating a User Profile

To define properties for Virtual CD TS that will be applied only to a specific set of users, you need to create at least one user profile of your own.

In the following example, we will create a user profile for Virtual CD TS administrators.

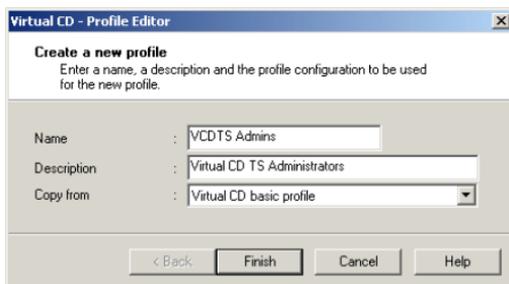
1

Run the Profile Editor and select **Add profile** from the **Edit** menu.



2

Enter a **name** for the new profile. Under **Description**, we recommend entering a meaningful text, from which you will still be able to recognize the purpose of the profile in future. In the **Copy from** field, you can select an existing profile from which settings will be loaded in your new profile.



To create a profile with all options activated, select <blank profile>.

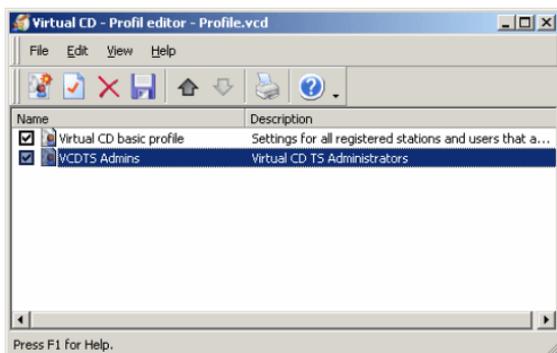


3

When you have completed input in this dialog, click on **Finish** to close it; the new profile is added to the list shown in the Profile Editor.

4

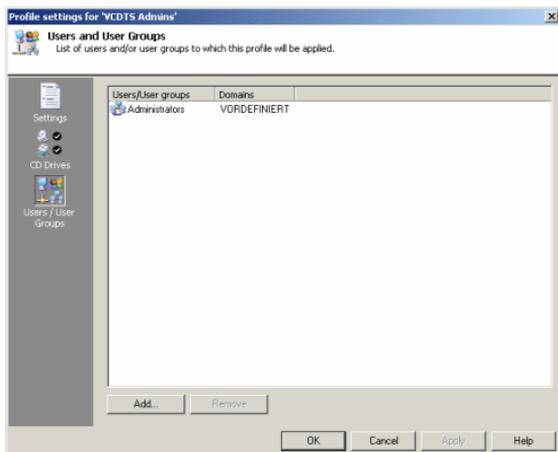
So far, the new profile has not been assigned to any user or user group. This is performed in the next step, which entails editing the profile properties. To do this, start by double-clicking on the new profile.



In the Profile Settings, select **Users / User Groups**. On the next dialog page, click on **Add** and select the user or user group to which you want to assign this profile. In our example, we choose the “Administrators” group.



If you do not belong to the “Administrators” group, you need to add your own user account to the list of users in this profile now, so that you will still be able to run the administrative programs.



Since the blank profile you started with already had all features activated, you do not need to configure any more settings in the profile. Click on **OK** to conclude configuration of this profile.

Assigning Users to a Profile

It is up to you to decide which users are assigned to a profile you create. You have the following options when assigning users to profiles:

- Enter a user name directly.
- Specify a global user group in a domain.
- Specify a local user group defined on a particular computer.
- Select a predefined user group.



Working with user groups is usually the most convenient method, because new users are automatically added to the corresponding profile when you add them to the user group at the operating system level. If you add individual users to profiles, you will have to go through the same process every time a new user is added to your system, which can lead to a lot of unnecessary work.



Exercise caution when using predefined user groups. Predefined groups (such as “Administrators”) are integrated in Windows, and can exist on all computers. Thus the use of these groups can lead to unexpected results, since the group membership data loaded when a user logs on is read from the client computer.



If you assign a profile to the predefined user group called “Everyone,” the Virtual CD basic profile will not be applied, since the profile you specified will be used—as the name indicates—by everyone.

Profile Properties

The configuration settings activated by a profile are defined in the profile properties. To edit these properties, double-click on a profile to open the Profile Settings window.



The title bar of the “Profile Settings” window shows the name of the profile opened for editing.

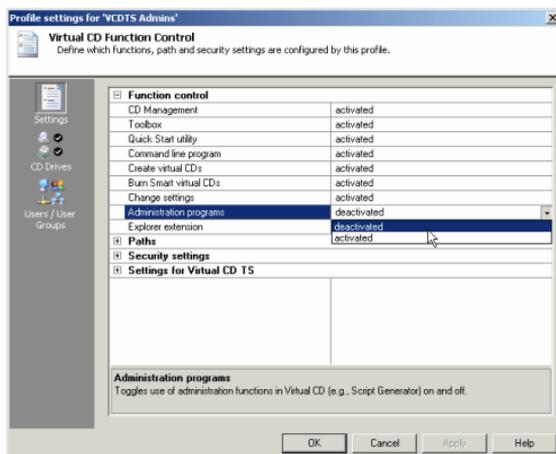
The profile properties are divided into two pages: **Settings** and **CD drives**. The “Settings” page is divided into the following sections:

- **Function control:** Lets you determine which Virtual CD programs and program options are available to the user(s).
- **Paths:** For defining the paths used by Virtual CD for its folders.
- **Security settings:** Lets you specify where and how CDs are provided.
- **Settings:** For defining program settings that are specific to the TS edition of Virtual CD.

These settings can be edited for both the basic profile and for your custom profiles.

Virtual CD TS Function Control

The „Function control“ lets you define which features are available to the Virtual CD TS user(s) for whom the profile is applied.



You can grant or deny access to the following Virtual CD programs:

- **CD Management:** Enables the CD Management program.
- **Toolbox:** Enables the Toolbox program.
- **Quick Start Utility:** Enables the Quick Start Utility.
- **Command Line Program:** Enables the Command Line Program.
- **Create Virtual CDs:** Enable the programs for creating virtual CDs on the workstation (Image Wizard, Editor, Copy Template Editor). This setting also controls use of the Copy Wizard.
- **Create Smart Virtual CDs:** Enables the Smart Virtual CD Burner.
- **Settings program:** Enables the Virtual CD Settings and CD Security Editor programs.
- **Administration programs:** Enables Virtual CD administration programs (Script Generator, Drive Editor, License Monitor, Client Setup).
- **Explorer Extension:** Adds Virtual CD-specific controls to the Windows Explorer on the workstation.

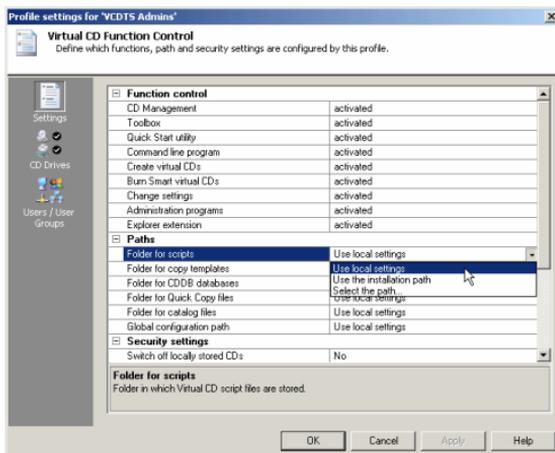
When you deactivate a program in the profile settings, it is no longer available to the user(s) assigned to that profile, but is still present on the hard disk. If a user attempts to start a program that is not permitted—for example, by double-clicking on the executable in the Windows Explorer—the following error message is shown:



The Toolbox and Quick Start Utility will only present those programs that have not been deactivated. In other words, you can leave these two programs active without enabling access to programs that are otherwise not permitted.

Paths

Virtual CD stores its configurations files in various folders.



You can define paths for the following Virtual CD folders:

- **Folder for script files:** Folder in which scripts created using the Script Generator are stored.
- **Folder for copy templates:** Folder in which Virtual CD copy templates are stored.

- **CDDB database folder:** Folder in which data retrieved from the FreeOrg CDDB database is stored.
- **Folder for Quick Copy files:** Folder in which Virtual CD Quick Copy files are stored.
- **Folder for catalog files:** Folder in which catalog files are stored whenever a catalog is created.
- **Global configuration path:** To manage virtual CDs that are shown in the CD Management program on all client machines, a “Global configuration path” must be specified here. This is where Virtual CD stores the configuration files required for working with virtual CDs in the network. All workstations that use the same configuration path have the following in common:
 - They display virtual CDs that are available to multiple workstations.
 - They have the same tree structure in the Global view.

The following options are available for all paths specified in this section:

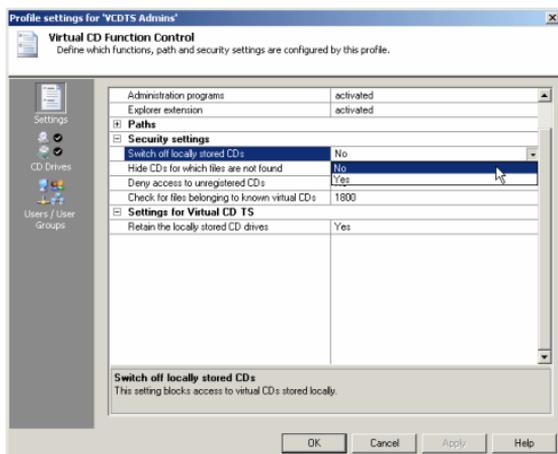
- **Use local settings:** The path entered for folders on the local machine is used.
- **Use the installation path:** The path designation is restored to the path that was specified in the original Virtual CD installation.
- **Select the path:** Lets you select the path for the folders.



When you specify a path in a user profile, we recommend using UNC syntax to ensure that the path will be available to all users.

Security Settings

The security settings defined in the profile properties affect the way virtual CDs can be displayed and used.



You can configure the following options:

- **Hide any locally stored virtual CDs:** Prevents the display of virtual CDs which are available only on the local workstation.
- **Hide CDs for which files are not found:** Prevents the display of virtual CDs for which one or more component files are not found.
- **Prevent use of unregistered CDs:** Deny permission to use virtual CDs (e.g., insertion using the Explorer Extension) that are not known to your Virtual CD system.
- **Intervals (in seconds) at which Virtual CD checks for existing virtual CDs:** Defines how often Virtual CD checks in the background for virtual CDs. When this option is active, you can select a value between **0** and **1800** (seconds).



If you select 0, the Virtual CD program checks only once, when the program is started up, for the existence of virtual CD files.



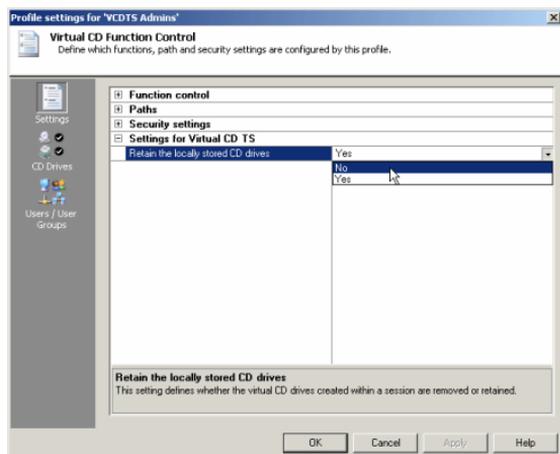
If you have a large number of virtual CDs, this process might have a negative effect on performance. In this case, we recommend switching off this function (by setting the interval to "0").



When this function is switched off, Virtual CD always shows all virtual CDs both in the Quick Start Utility and in the Windows Explorer extension.

Settings for Virtual CD TS

The „Settings for Virtual CD TS“ define properties that are specific to the Terminal Server edition of Virtual CD.

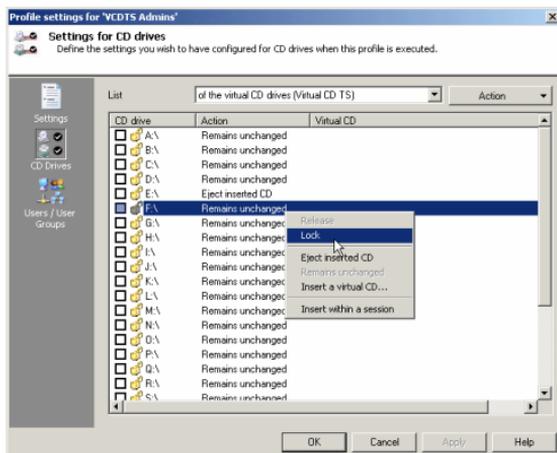


The following options are available:

- **Retain the locally stored CD drives:** When this setting is active (“Yes”), any virtual CD drives created using the Drive Editor are still available the next time the user opens a terminal server session, regardless of whether the profile also defines CD drives.

Virtual CDs and CD Drives

The user profiles make it possible to define which virtual CD drives are available to a user in a session, as well as the status of the drive(s):



To have the profile provide a virtual CD drive, put a checkmark (click) in the box next to the drive letter. Click on the “Action” button to open a list of the options available for the selected drive. You can choose from the following actions:

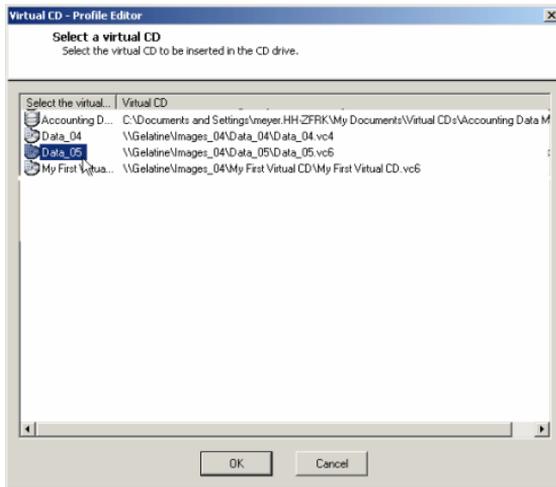
- **Release:** The virtual CD drive is available, and users can insert their choice of virtual CDs.
- **Lock:** The virtual CD drive is locked; i.e., users assigned to this profile cannot insert virtual CDs here.



The “padlock” icon next to the drive letter indicates whether the drive is locked or not.

- **Eject inserted CD:** If any virtual CD is in the drive, it is ejected.
- **Remains unchanged:** The status of the virtual CD drive is not altered.

- **Insert a virtual CD:** Lets you have a virtual CD inserted at user login. A dialog opens in which you can choose from all virtual CDs known in your system.



- **Insert within a session:** Selecting this item has the same effect as putting a checkmark in the box next to the drive name; i.e., it simply makes the drive available within the session.

Profile Analysis

When a user logs on, any profile(s) assigned must be analyzed to determine the settings to be activated. A user can have:

- no user profile assigned: In this case, the settings in the Virtual CD basic profile are activated.
- one user profile assigned: In this case, only the settings in that profile are assigned.
- multiple user profiles assigned: This case is a little more complicated, since the various profiles generally have different settings.



We recommend having only as many profiles applied to a given user or group as are absolutely necessary; otherwise, it can be difficult to keep track of the options available and the Virtual CD properties that are active.



When multiple user profiles are applied, the settings are analyzed in accordance with the following rules:

- All of the properties under **Function control** can be **activated** and **deactivated**. If a function is activated in one of the profiles assigned to a given user, then that function is available to that user regardless of whether it is **deactivated** in another of that user's profiles.
- The **Paths** for Virtual CD folders are set according to the last profile in the list of profiles assigned to the user.
- For the **Security settings** options that can be set to **Yes** or **No**, an option is set to **Yes** for the user in question if "Yes" is the setting in any one of that user's profiles.
- The "Check for files..." option, also in the Security settings, is set to **0 (off)** if this setting is active in any one of the user's profiles. Otherwise, if the profiles do not all set the same value, the highest value over all a user's profiles is set for that user.
- In the **Settings for Virtual CD TS**, the **Retain the locally stored CD drives** option is set to "Yes" **only** if this setting is active in **all** of the user's profiles.
- If **CD drives** are configured in a user's profiles, the sum of all drives specified are mapped to that user's session. If a particular drive is specified in more than one profile, the status of the drive (e.g., the virtual CD inserted, etc.) is set according to the last profile that specifies drive definitions. A virtual CD drive is locked as soon as one of the user's profiles specifies "locked" as the status for that drive.



If the "Retain locally stored drives" option is active, virtual CD drives set up on the client computer are mapped to the user's session in addition to any drives specified in profiles.

What you need to keep in mind when using VCD TS

The Virtual CD TS Profile Editor makes it easy to manage your profiles. Still, there are a couple of points that you need to keep in mind to make sure your profile specifications have the desired effects:

- **First save, then test:** Do not forget to save your changes when using the Profile Editor. Your changes cannot take effect in Virtual CD TS until you have stored them.
- **No login, no effect:** When you change a profile, the new settings are not effective until a new session is started.

- **Profiles must be activated:** In the list of profiles shown in your Profile Editor, the profiles can be activated and deactivated. Remember: only active profiles are analyzed at login!
- **The order makes a difference:** When a user's profiles are analyzed, some properties (such as "Paths") are set according to configuration of the last profile in the list. Make sure that the changes you configure will be active once the entire list of profiles has been analyzed, and change the order of profiles as needed.
- **Profiles need users:** After you create a profile and edit it in accordance with your requirements and preferences, remember to assign users and/or user groups to it; otherwise, it will not be applied to anyone.

If you find that Virtual CD TS does not behave as expected when the next new session is opened, check whether the user in question is assigned to multiple profiles, and whether any of the settings in the various profiles cancel each out when analyzed. To keep things as simple as possible, remember the old saying:

LESS IS MORE!

Make this your motto, and create only as many profiles as you really need.



For a clear overview of all your profile properties, print the profiles and keep these hardcopies handy.

Potential pitfalls

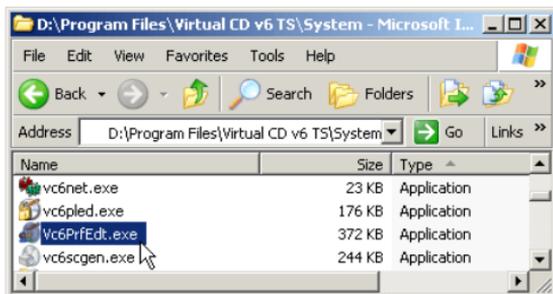
Unable to Run Virtual CD TS

When a terminal server session is opened, Virtual CD TS user profiles perform the initial configuration of the Virtual CD program for the user.

If the user (account) does not access the profile file when the session is opened, Virtual CD will not run in that session. There are some situations in which this might occur; for example:

- **The user does not have permissions in the profile file.** Configure the permissions so the user has "read" privileges for the profile file in the Virtual CD TS system directory.
- **The profile file has been deleted.** Open the Profile Editor to re-write the profile file.
Since the Virtual CD program will not run if no profile is assigned on login, you need to call the Profile Editor directly. To do this, open Windows Explorer, change to the Virtual CD TS system directory and double-click

on the Profile Editor program file: **vc6PrfEdt.exe**. When the program is opened, a Profile.vcd file is written.



Now log out and then log in again to activate Virtual CD TS. When the profile file has just been re-written, it contains only the Virtual CD basic profile. Your customized profiles must be created and configured all over again.

Unable to Run Profile Editor

The Profile Editor can be started by any user who has permission to run administrative programs (configured in the user profile properties). If the situation should arise that all permissions to run the Profile Editor have been canceled, the Profile Editor program is not shown among the Virtual CD programs, and cannot be started from the Windows Explorer. In this case, you have to overwrite the profile file before the Profile Editor can be started again.



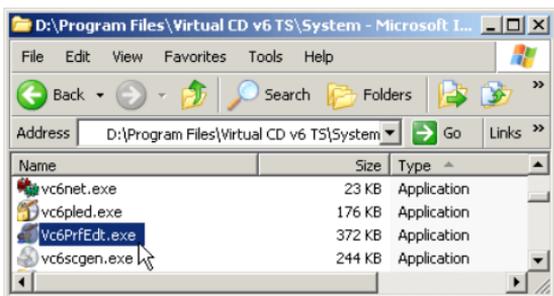
This procedure cannot be undone, since it is not possible to edit the profile file directly.

Open the Windows Explorer and delete the profile file, "**Profile.vcd**," from the Virtual CD TS system directory.



Now log out and start a new session in which no profile is loaded. As long as the current session (without permission to run administrative programs) is active, you will not be able to run the Profile Editor and thus cannot re-write the profile file.

Open the Windows Explorer again. Run the Profile Editor by double-clicking on “**vc6PrfEdt.exe**” in the Virtual CD TS system directory. A new profile file is written automatically.



Now log out and then log in again to activate Virtual CD TS. When the profile file has just been re-written, it contains only the Virtual CD basic profile. Your customized profiles must be created and configured all over again.

Examples

Using Profiles

The user profiles Virtual CD TS give you a powerful tool for configuring user-specific settings that applied automatically on login. To get the most out of this tool, we highly recommend taking a little time to familiarize yourself with all of the options available. To help you get to know the program we have put together some practical examples, under Example of a Basic Configuration and One CD for All, to demonstrate a few of the possibilities.



When you go through the examples, you will need a few virtual CDs to test the functions described. If you have not created any virtual CDs yet, please do so before continuing with the examples.

Example of a Basic Configuration

This example describes the procedure for creating a basic configuration of Virtual CD TS with the following defaults:

- Users who are not assigned to any specific user profile cannot run Virtual CD TS.
- There is a group of Virtual CD TS administrators who can use all Virtual CD functions, but for whom no virtual CD drives are explicitly mapped.
- There are users who can insert and eject any of the virtual CDs known to the program, and for whom V:, W: and X: are mapped as virtual CD drives.

1

Run the Profile Editor and select **Add profile** from the **Edit** menu. Enter a **Name** and a **Description** and select **<blank profile>** in the **Copy from** field. Click on **Finish** to write the profile.

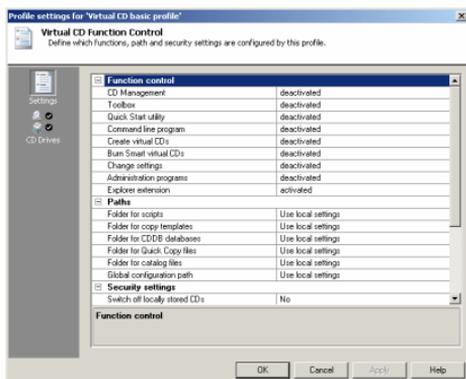
Because a blank profile was used as the basis, all functions are initially activated in the new profile. Assign those users to this profile who will act as Virtual CD TS administrators.



The procedure for creating a user profile for Virtual CD TS administrators is described in detail under “Creating a User Profile;” this example presents only a summary.

2

Double-click on the **Virtual CD Basic Profile** to edit its settings, deactivate all functions, and click on **OK** to close the dialog.



3

Select **Add profile** from the **Edit** menu again to create a profile for users who will work with Virtual CD.

In our example, we enter “Management” as the name, and “Management-level employees” as the description. Select **<blank profile>** in the **Copy from** field again; this time we will change some of the settings. Click on **Finish** to write the profile.

4

Double-click on the new profile (“Management”) to edit its settings. Remove the checkmarks from **Create virtual CDs**, **Making Smart Virtual CDs**, **Changing settings** and **Administration programs** to deactivate these features.

Function control	
CD Management	activated
Toolbox	activated
Quick Start utility	activated
Command line program	activated
Create virtual CDs	deactivated
Burn Smart virtual CDs	deactivated
Change settings	deactivated
Administration programs	deactivated
Explorer extension	activated

Paths	
Folder for scripts	Use local settings
Folder for copy templates	Use local settings
Folder for CDDB databases	Use local settings
Folder for Quick Copy files	Use local settings
Folder for catalog files	Use local settings
Global configuration path	Use local settings

Security settings	
Switch off locally stored CDs	No

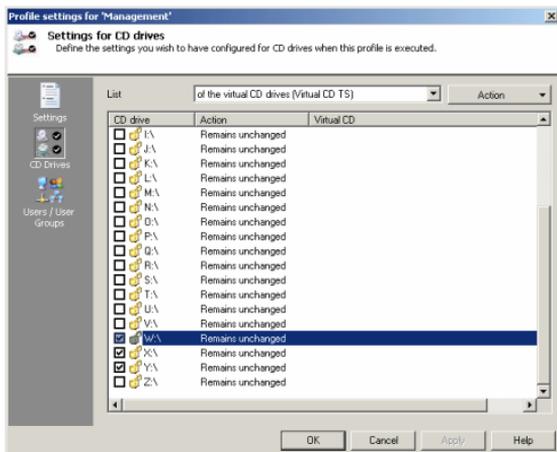
Administration programs
Toggles use of administration functions in Virtual CD (e.g., Script Generator) on and off.



We leave the interfaces (CD Management, Toolbox, etc.) active to allow users quick access to the features that are permitted. Programs that these users are not permitted to run will not be shown in these program interfaces.

5

Open the **CD Drives** page and activate V:, W: and X as virtual CD drives by putting a checkmark (i.e., by clicking) in the boxes next to these drive letters.



To permit these users to insert and eject their choice of virtual CDs, all other settings for virtual CD drives remain unchanged.

6

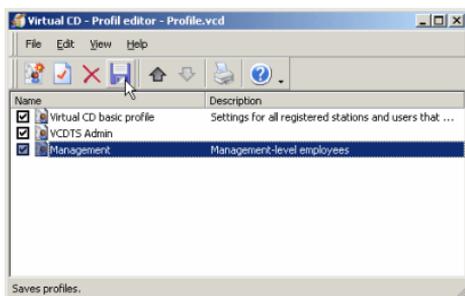
The last step is to assign the desired users to this profile.



If you do not assign any users, the profile will be stored as you have configured it, but will never be used!

When you have finished, click on **OK** to close the dialog. The basic Virtual CD TS configuration is now complete. Save the changes in the profiles to activate them in Virtual CD.

Test your configuration by logging on under various user accounts to activate the different profiles.



One CD for All

You may at some point have one virtual CD that you want to make available to all users who log on. This is easy to implement with a user profile.

In the following example, we will use the Z: drive to provide a virtual CD that cannot be ejected.

Run the Profile Editor and select **Add profile** from the **Edit** menu. We will now create a profile that provides access to virtual CDs for all users.



In this example, we will call our profile “CDs for Everyone” and enter “Virtual CDs for all users” as the description. Select **<blank profile>** in the **Copy from** field; afterwards, we will change some of the settings. Click on **Finish** to write the profile.

2

Double-click on the new profile to edit its settings, and deactivate all of the functions.

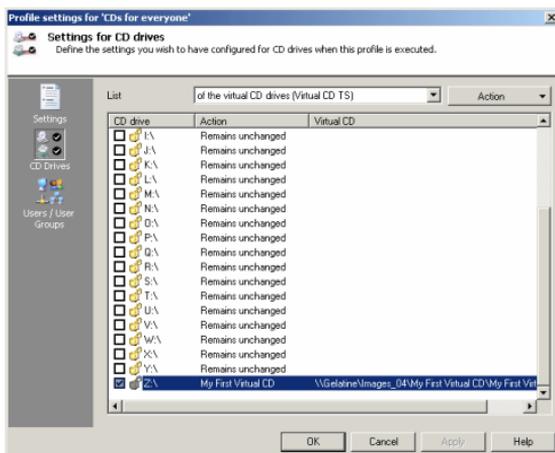
Since the sole purpose of this profile is to make certain CDs available to all users, the functions can be deactivated in this profile and activated as desired in other profiles for users or for user groups.



If you do not deactivate the functions in this profile, all users will be able to use all Virtual CD TS features!

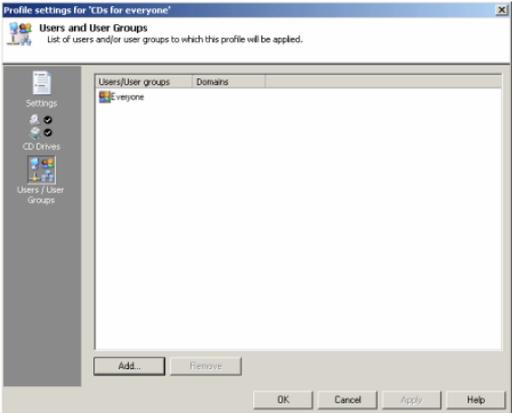
3

Open the **CD Drives** page and activate Z: as a virtual CD drive by putting a checkmark (i.e., by clicking) in the box next to this drive letter. Click on **Action** and select **Insert a virtual CD...** A dialog opens showing all of the available virtual CDs. Select the virtual CD to be inserted in the CD drive and click on **OK** to close the dialog. Click on **Action** again, and select **Lock** to lock the virtual CD drive.



4

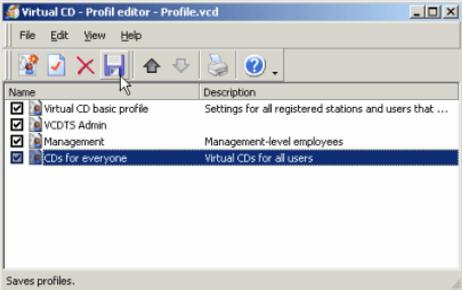
Open the **Users / User Groups** page to assign users and/or groups to this profile. In our example, we select the predefined **Everyone** group.



*When you select the **Everyone** group, this profile is applied to every user who logs on for a session. In this case, the Virtual CD TS basic profile is not used. This is why we deactivated all functions in this profile.*

5

When you have finished, click on **OK** to close the dialog. This completes the configuration. Save the changes in the profiles to activate them in Virtual CD, and then test the new profile.

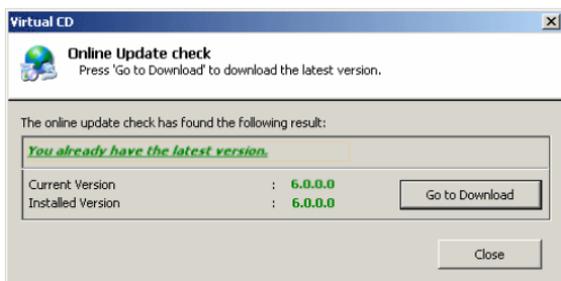




Troubleshooting

Stay up to date!

We are continuously developing the Virtual CD TS software. When a problem is reported, we release an update that solves it. If you have a problem with Virtual CD TS, please check whether you have all the updates that have been released. To check whether you are using the latest program version, select **Automatic update check** in CD Management.



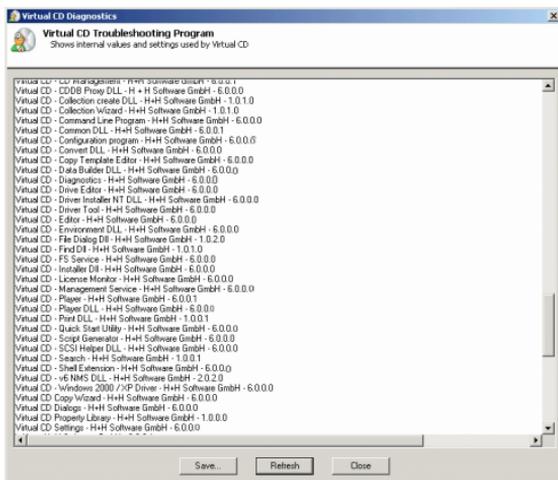
If you do not have the latest version, please download it and then check whether the problem still exists.

Contacting VCD Support

If you do not obtain an answer to your question, or a solution to your problem, from any of the sources listed under "Questions and Answers," please send your request for support to the VCD Support Forum (<http://www.virtualcd-online.com/support>). To help us help you as quickly as possible, please observe the following as far as applicable:

- Formulate your question as precisely as possible.
- Describe the steps that preceded the problem.
- Check beforehand whether the problem is reproducible.

In the process of finding a solution to your problem, we may find that we need additional information about your system. If this is the case, please run the VCD Diagnostics program from the **Help** menu in your Virtual CD Management program.



The Diagnostics program detects a number of parameters relating to your system and your Virtual CD installation which can be helpful in understanding and solving the problem. Please save the contents of this program window (click on “**Save**”) in a file, and send the file to our Support Department.



Please send only complete Diagnostics files. If anything is deleted from the file you will be sent a request for a complete file, which will delay the process of solving your problem.

Questions and Answers

Virtual CD TS is a complex software suite that gives you a wide range of controls for working with CDs. Because we want to provide the best possible support for our users, there are a large number of sources – both on-line and off-line – for answers to your questions.

- **Documentation:** The documentation gives you an overview of the controls and functions available in Virtual CD. It includes step-by-step examples of many of the procedures used in Virtual CD, and can provide very useful tips even for the experienced user.

- **On-line help:** The on-line help describes each of the individual Virtual CD programs. It also contains details that we did not find space for in the documentation.
- **Knowledge Base:** Our on-line “knowledge database” at <http://www.virtualcd-online.com/kbase> has the answers to a lot of frequently-asked questions. If anyone else has reported the same problem you are having, you will probably find the solution here.
- **Forum:** The latest issues concerning Virtual CD are discussed around the clock in the VCD users forum, at <http://www.virtualcd-online.com/support>. Here, too, you can find help with problems that have already been solved for others.



Glossary

G

Gateway user account: This is a user account used by the “Virtual CD v6 NetAccess Helper” Service to access virtual CDs on the network.

P

Profile: Profiles are used to configure the settings (such as virtual CD drives, program functions, etc.) that are active when a particular user logs in for a terminal server session.

Profile file: The profile file, “Profile.vcd,” is stored in the Virtual CD TS system directory and contains the data that defines profiles. Users who work with Virtual CD TS require “read” permission in this file.

T

terminal server: A type of server with the primary task of providing platform-independent access to applications within “terminal server sessions.”

TS: The Terminal Server edition of Virtual CD. This Virtual CD version is specifically designed for use on a terminal server and provides special controls for this particular purpose.

U

User context: Data referred to at login (such as permissions or user privileges) defining which data the particular user is allowed to access. The Virtual CD TS Service, “Virtual CD v6 NetAccess Helper,” requires a gateway user account with “read” privileges for all virtual CDs, in order to make these available when no users are logged on.



User profile: A user profile defines program settings for specified users (see “Profile”). When a user is assigned to a specific user profile, none of the settings in the “Virtual CD Basic Profile” are applied for that user.

V

Virtual CD basic profile: This profile comes with your VCD TS installation, and is applied to all users for whom you have not designated a specific profile. There is only one instance of this profile.

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H+H Software GmbH | Maschmuehlenweg 8-10 | D-37073 Göttingen |
fon 49 551 52208-0 | fax -25 | hh@hh-software.com | www.virtualcd-online.com