# Exceed 14 Technical White Paper

Exceed 14 on Terminal Server Windows 2003 and Windows 2008

# **Table of Contents**

Table of Contents	2
Before Beginning	
Installation – Unrestricted Access	
Installation – Access Control Part 1 – Administrative Installation	6
Part 2 - Controlling access to Exceed on Terminal Server	
Customizing Exceed Settings	9
Part 3 - Uninstalling Exceed 14	
Part 4 - Overrides	
Commonly Used Overrides	
Deploying Custom User Files	
Part 5 - Display Management	

### Before Beginning:

You should be logged on the Terminal Server machine as the Local Administrator not as a regular user or as a Domain Administrator when you run the Exceed installation.

Do not put the Terminal Server Machine in Install Mode, leave (or place) it in Execute Mode (the normal mode for the Terminal Server machine to run applications).

To confirm the mode, go to a command prompt and type in "change user /query". To put the system into execute mode enter "change user /execute".

There are 2 different methods of installing Exceed 14 on Terminal Server. The first one is "Unrestricted Access", which is simpler but there is no way to restrict users from accessing Exceed. The second one, "Access Control Method" provides a method of access control.

#### Installation – Unrestricted Access

Beginning with Version 10, a new, simpler installation has been introduced for installing Exceed on Terminal Server and is basically just the same as doing a Personal Installation on a stand-alone system.

Insert the Exceed CD, and when the splash screen comes up choose "Install Opent Text Exceed"



On the next screen choose Personal Installation. You will notice, that unlike earlier versions of Exceed, there is no option for Administrative Installation for Terminal Server.

Another option is simply to run setup.exe from the command line.

From this point you just follow the onscreen prompts and configure Exceed as if it were a stand-alone system. Once it is installed, Exceed will



now be available for all users of the machine.

Unlike previous versions of Exceed on Terminal Server, this method does not provide a method of access control. This means that all users of the Terminal Server will have access to Exceed and will have Open Text icons on the desktop/start menu whether they use the product or not.

After the installation is complete, you will be prompted to reboot the server. If you want to setup for static displays, now is the time to do it. See <u>Part 5 - Display Management</u> for further details

Don't forget with this method there are no overrides so any further customization will be the same as a stand-alone version of Exceed.

Installation – Access Control

### Part 1 – Administrative Installation

Create an administrative copy image of Open Text Exceed 14 by running either of the following commands. You will need to open a command prompt and change to the directory containing setup.exe: (exceed\x86 for 32 bit platforms or exceed\x64 for 64 bit platforms)

setup.exe /A /V"TRANSFORMS=exceedtse.mst" setup.exe /A /V"TRANSFORMS=exceedx64tse.mst" for 64 bit

or

msiexec /A "Open Text Exceed 14.msi" TRANSFORMS="path to> 1033.mst; cpath to> exceedtse.mst"

msiexec /A "Open Text Exceed 14 x64.msi" TRANSFORMS="<path to> 1033.mst; <path to> exceedx64tse.mst" for 64 bit

In the first command line example you select the language transform from a drop-down list; in the second one you specify it yourself.

#### **Binary Installation**

As an Administrator, install Open Text Exceed 14 on the Terminal Server. This is done from a command prompt by running either;

msiexec /i "*AdminPath*\ Open Text Exceed 14.msi" msiexec /i "*AdminPath*\ Open Text Exceed 14 x64.msi" for 64 bit

or

setup.exe from the Admin Path

Note: *AdminPath* is the full path to the administrative image created in Part 1. *AdminPath* must remain available during the lifetime of Open Text Exceed 14 on the Terminal Server. Multiple Terminal Servers can share the same *AdminPath*.

By default, the installation of user files for the Administrator will occur automatically on completion of the Binary Installation. If you want to modify or configure any settings for the Administrator you should create a Windows group named Exceed14\_Users before

running setup.exe. This will prevent the automatic installation from happening. Details about Access and configuration are in the next sections of this document.

## Part 2 - Controlling access to Exceed on Terminal Server

After installation of Exceed 14 on Terminal Server, there are no shortcuts created although Connection Central (which is a shell extension not a normal shortcut) will appear on the desktop. This does not mean that anything is broken. The next time anyone (including the Administrator) logs in to the machine they will automatically receive their own personalized Exceed settings. These personalized settings include shortcuts, registry entries and user files. All settings are stored in the profile of the user who logs in. User files are copied from *AdminPath* so each user must have at least read access to the *AdminPath* install point.

When the User Install is run, usrsetup.exe is hooked into the logon process by adding it to the winlogon key in the registry. This means that it is run every time a user logs on and determines whether or not Exceed needs to be installed.

Registry Editor		
<u>R</u> egistry <u>E</u> dit <u>V</u> iew <u>Eavorites</u> <u>H</u> elp	Edit String	
Setup     SrvWiz     Svchost     Terminal Server     Time Zones     Vindows     Windows     Windogon	Value name: Userinit Value data: [C:\WINNT\system32\userinit.exe,Hummingbird\Connectivity\UsrSetup.exe OK Cancel	Data  Explorer.exe 0x00000001 (1) 1 C:\WINNT\system32\u rundll32 shell32,Contrc 0
My Computer\HKEY_LOCAL_MACHINE\SOFTWARE		<b>_</b>

 $\label{eq:hkey_local_machine} \\ HKey_local_MACHINE \\ SOFTWARE \\ Microsoft \\ Windows \\ NT \\ Current \\ Version \\ Winlogon \\ \\ \end{array}$ 

#### Figure 3

Quite often not all users of the Terminal Server require access to Exceed and may be confused by the unexpected installation of their own personalized Exceed settings. To facilitate access control, Exceed looks for a Windows Group called Exceed14\_Users (Note: this can be changed on a per machine basis).

The default group name is stored in the registry and can be modified directly or through the User Manager interface.

HKEY\_LOCAL\_MACHINE\SOFTWARE\Hummingbird\Connectivity\14.00\Installer\U srSetup {2DF770F4-E9A4-4D0B-A014-82E1A42C7B69}



If the Exceed14\_Users group exists, Exceed will only be installed when a user logging into the Terminal Server is a member of the group. If a user is removed from the group, they are considered to have lost their permission to use Exceed and will have their personalized Exceed settings automatically removed the next time they log in.

If Exceed is installed on an x64 platform the registry path to the group name will be in HKEY\_LOCAL\_MACHINE\SOFTWARE\Wow6432Node\Hummingbird\Connectivity\ 14.00\Installer\UsrSetup\{product guid}

It is advisable to create the group because without it you won't be able to uninstall for individual users who may no longer require access to Exceed

### **Customizing Exceed Settings**

Many aspects of the user installation process can be customized by the administrator. These customizations can be applied globally, by groups or on an individual basis. Most of the time the customizations override the default behaviour so they are known as overrides.

Overrides can be created for three different levels: Global, Group, and User. Global overrides are also known as AnyUser (\*) overrides and apply to all users who log in; Group Overrides allow you to create different settings for groups of users; User overrides are intended to provide the ability for unique customization on a per user basis. Overrides are searched in priority order: User level first, then Group, then Global.

In addition to customizing the settings, overrides can also be used to distribute files to users. See the Override and Deploying Custom User Files sections for further details.

### Part 3 - Uninstalling Exceed 14

If you installed Exceed using Access Control method then uninstalling Open Text Exceed 14 from a Terminal Server consists of two stages – the first being the individual removal of personalized settings when each user next logs in, the second being the removal of the product using Add/Remove Programs

Remove the users from the Exceed14\_Users group. The next time they log in, their personalized settings will be removed

You must be an administrator in order to remove Open Text Exceed 14 using the Add/Remove Program dialog. This will remove the binary files from the Program files folder and prevent existing users from using Exceed.

If you installed Exceed using the new method, then uninstalling it is accomplished through the Add/Remove Programs section in Control Panel. This will remove the product for all users of the Terminal Server.

### Part 4 - Overrides

Managing overrides is done through the User Manager. It is a graphical front end to adding entries to the registry. There is no shortcut and by default can only be accessed by browsing to %windir%\system32\Hummingbird\Connectivity and selecting usrmanager.exe.

On an x64 system you can find the utility in C:\WINDOWS\SysWOW64\Hummingbird\Connectivity

🙀 Open Text User Manager (for UsrSetup)							
1	Managed Product List:						
	Product	ProductCode	Version	Level	Group Name	State	
	Open Text Exceed 14	{2DF770F4-E9A4-4D0B	14.0.0	1	Exceed14	Installed	
			Properties	Unre	egister C	ose	Help
							11.

#### Figure 5

Highlight the Product Name and then choose Properties. A new window with three tabs will open up.

M	lanaged P	Product Pro	perties 🔰
	Options	Overrides 6	aroups
	Produ	ct Name:	Open Text Exceed 14
	Versio	n:	14.0.0
	Install	State:	Installed
	Produ	ct Level:	1
	Loggir	ng Level:	1
	Group	Name:	Exceed14_Users
	Group	Detection:	
	Search	h Type:	Do not search for groups
	Group	File:	Do not search for groups Search local user groups only Search local and global user groups
-		1	Search using specified group file
		OK	Cancel Apply Help

#### Figure 6

The Options tab allows you to change the Product Level in order to deploy new files to your users. For more information see Deploying Custom User Files.

You can also increase the amount of detail captured in the usrsetup.log by the usrsetup.exe. This is useful for diagnosing problems when working with an Open Text Customer Support Representative. The default Group Name that provides access control can also be changed.

The Group Detection feature would be useful in organizations with a large number of domain controllers, users, groups, etc. Since usrsetup.exe needs to search all the groups to determine who has access by way of Exceed14\_Users group membership, this can possibly slow things down

"Do not search for groups" is basically the same as having no Exceed14\_Users group. Everybody who logs in will get access to Exceed. The next 2 options are self-explanatory.

The last option, "Search using specified group file" allows you to skip scanning all the groups and list in the file, those users who should have access. Specify the full path to the file name. By default, the filename is **usergroupfile.ini** but can be modified. The file itself does not exist and will need to be created by the administrator in

C:\winnt\system32\Hummingbird\Connectivity. Following is an example of the file syntax:

[Exceed14\_Users ] DomainName\username=1

The second tab is what lets you create the various overrides. Following is an example of some overrides. Clicking on the Add button will show you some common overrides and if they are not listed you can always add them. The complete list is in Table 1.

Managed Product Propertie	s		×
Options Overrides Groups			
Add Modify Delete	e Filter: A	ll Overrides	•
Name	Category	Value	
CustomUserDirectoryList	Any User [*]	profile	
1			
		1	
OKC	Cancel	Apply	Help

Figure 7

As mentioned earlier this tool is just a front-end tool to the registry. The values created here are stored in



Figure 8

## Commonly Used Overrides

Override Name	Possible Values	Description
HCL_USER_ROOT	[%EnvVariable]	Determines the Root User
	ll comunt charal path	directory.
		Path must be unique for
	[PreDefinedInstallerProperty]	Each User must have
		read/write access to the
		directory specified.
		Default is:
		AppDataFolder\Hummingb
		ird\Connectivity\version\
		where version is the
		current product version.
		F
		Note: The above path
		should end with a
		backslash
TRANSFORMS	Semicolon-delimited list of	You can specify a custom
	transform paths.	transform to use for each
	E.g. C:\Filonomo met	be applieable to the
	E.g. C. (Phename.mst	original product msi file
	C:\abc.mst: C:\def.mst	and be read accessible by
		the current user. Otherwise.
		the installation will
		continue without applying
		the transform.
SOURCEDIR	[%EnvVariable]	Determines the location of
		the MSI file used in the
	<u>\\server\share\path</u>	per-user installation. Must
	[PreDefinedInstallerProperty]	be accessible to all users
		Otherwise the installation
		will fail.
Silent	Integer >= 1	This override prevents the
	_	basic user interface from
		being shown to the user.

Exceed.Xserver.KeepLfpXdb	Integer >= 1	Set this override to prevent install from modifying the lfp.xdb file during install.
Exceed.Xserver.KeyboardType	Valid Keyboard file name e.g. us.kbf	This override allows you to preset the keyboard file during the installation.
Exceed.Xserver.AdminString	Encrypted String	This allows you to set the administrative password for the exceed.xcfg. This override is best set by a transform created by Sconfig. (See TRANSFORM override).
Exceed.Xserver.Tune	N/A	This override is disabled in Terminal Server. Do not try to enable tuning during install or you may have unexpected results.
CustomUserDirectoryList	Semi-colon delimited list.	See Deploying Custom User Files for details.

Table 1

### **Deploying Custom User Files**

If all users will receive the custom files you may simply place the files in the appropriate sub-directory in C:\Program Files\Hummingbird\Connectivity\14.00\Default User. For example, if you want to deploy Xstart or HostExplorer profiles, you would place those files in the C:\Program Files\Hummingbird\Connectivity\14.00\Default User\profile directory. When users login, they will get these custom files installed along with the rest of the regular user files.

If you want to control which individuals or groups receive customer files then you would configure this through User Manager. A special override called CustomUserDirectoryList can be created to allow the per user installation process to distribute custom user files to designated users or groups.

The CustomUserDirectoryList override value is a list of directory name(s). The value for this example is "customfiles". This is an arbitrary value and can be anything the Administrator chooses. (see Figure 7)

For example, assume that you want to distribute some Xstart (\*.xs) files and some HostExplorer profiles (\*.hep) to your users..

With a default installation the both the Xstart and HostExplorer files will end up in c:\Documents and Settings\%username%\Application Data\Hummingbird\Connectivity\14.00\Profile.

C:\Documents and Settings	Administrator\Ap	plication Data\Humn	ningbird\Connectivit;	y\14.00		
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u>	ools <u>H</u> elp					
🕒 Back 👻 🕘 👻 🏂 🔎 Searc	🔇 Back 🔻 🕘 🗸 🏂 🔎 Search 🌔 Fugers 🛛 🔯 🎯 🗙 🏹 🛄 🗸					
Address 🛅 C:\Documents and Set	tings\Administrator\A	Application Data\Hummin	gbird\Connectivity\14.00	)		💌 🄁 Go
Name 🔺	Size	Туре	Date Modified	Attributes		
Accessories		File Folder	12/5/2009 4:15 PM			
Exceed		File Folder	12/5/2009 4:15 PM			
<b>□</b> FTP		File Folder	12/5/2009 4:15 PM			
🛅 HostExplorer		File Folder	12/5/2009 4:15 PM			
🛅 NFS Maestro		File Folder	12/5/2009 4:15 PM			
C Profile		File Folder	12/5/2009 4:15 PM			
C Registry		File Folder	12/5/2009 4:15 PM			
C Security		File Folder	12/5/2009 4:15 PM			
PerUser Migration.ini	5 KB	Configuration Settings	12/5/2009 4:15 PM	А		
PerUser Settings.ini	6 KB	Configuration Settings	12/5/2009 3:37 PM	А		
- 						

#### Figure 9

The path name for both examples is the same right up until the end. We will therefore describe c:\Documents and Settings\%username%\Application Data\Hummingbird\Connectivity\14.00\ as the root of the user directory tree. It is after this that the directory structure branches out to accommodate the different components of Exceed as can be seen in Figure 9. It is these directory names that will determine what directories you create in the root of the Admin directory to distribute your user files

To get the files distributed properly you create the Custom User directory in the root of your *AdminPath*. (see Figure 10). In the above example you would create a parent directory which you can name anything. i.e. "customfiles". Inside this directory you will create a structure that reflects the directories that would hold the user files in a personal installation of Exceed.

In the case of Xstart, or HostExplorer you would create a sub-directory named profile, and in this directory, you would place the xstart (\*.xs) files and the HostExplorer (\*.hep) files you wanted to distribute.

#### i.e. z:\admin\customfiles\profile

The same example could be expanded to include structures for any other files you wanted to distribute.



Figure 10

If Exceed has already been installed and you want to deploy some new files for your users, you can follow the above procedure, but in addition you will need to change the Product Level. (see Figure 6)

The next time users login, usrsetup.exe will see that the Product Level in HKLM does not correspond with the value in HKCU. This will force an updating of the product and distribution of the custom user files.

## Part 5 - Display Management

Each Exceed user must have their own unique display number otherwise they will not be able to see their Xclients properly. Exceed assigns display numbers to users either through Static assignment for permanent use or Dynamic assignment for temporary use. The default method used is dynamic assignment.

Dynamic display assignment works by letting Exceed choose what display number to use each time Exceed is started. Exceed examines the available pool of display numbers and selects the lowest value available. Once a display number is selected it is not available for anyone else. When Exceed exits, the display number is placed back into the pool. Trying to change the display number in the communications dialog in Xconfig will have no effect since Exceed knows that dynamic display assignment is being used.

Static display assignment works by assigning a user a unique display number during the per user installation process. The lowest display from the available pool of display numbers at the time of the installation is selected. This display value is set inside Xconfig and for protection is made read only.

Display settings are controlled in the Exceed Display Controller Console. The values displayed here are saved in the C:\Documents and Settings\All Users\Application Data\Hummingbird\Connectivity\14.00\Global\Exceed\display manager.ini file.

🗭 Exceed Display Controller Console		_ <b>_</b>
Action ⊻iew   ← →   🔁 💽	🔁   🔗   🎔 🖳 🐼 🍛   🖀 🛤 A	×g
Tree	Setting	Value
Exceed Display Controller Console	Minimum Display Number     Maximum Display Number     Dynamic Display Number Allocation     Maximum Dynamic Display Numbers     Automatic Display Number Synchronization	0 9999 Enabled 9999 Disabled

If you click on General Settings in the Console you can see the various settings

To change from Dynamic Display, click on Static Allocation. You will see that "Unique Display Numbers for Users" is set to Disabled. Double click on it and it will change to Enabled.

🗭 Exceed Display Controller Console			
Action Yiew ↓ 🗢 → 🗈 🔃	🖧   🔗   ♥ 🖳   ൽ 🕉   🖆   湾 🦧	<b>X</b>	
Tree	Setting	Value	
Exceed Display Controller Console General Settings Static Allocation User Rules Group Rules	₩ User Rules ₩ Group Rules I Unique Display Numbers for Users	Disabled	

Now when anyone logs in they will receive a static display number.

The User and Group rules would be used if you wanted to assign specific display numbers to certain users or groups.

Remember to save your changes and restart the Display Controller Service.

While Exceed sessions are running, the display numbers are tracked through a dynamic file called Display Snapshot.HumTable. This is located in C:\Documents and Settings\All Users\Application Data\Hummingbird\Connectivity\14.00\Global\Exceed. As this is dynamic, it should not be edited manually.