

Using ManageSoft in a Citrix or Microsoft Windows Terminal Services environment

ManageSoft knowledge base article 100375

Introduction

This article describes how to use ManageSoft in a Citrix or Microsoft Windows Terminal Services environment.

A common use of Citrix and Microsoft Windows Terminal Services products is to configure a machine to perform as an application server, providing concurrent user access to applications.

This article assumes:

- ManageSoft will be used to distribute machine policy and schedules only, not user policy and schedules
- The ManageSoft Selector will not be used on the Citrix server.

There is a range of technical issues involved in managing scheduling, policy and application updates in an environment where multiple users may be accessing the same application concurrently.

For more information on these issues, contact your nearest ManageSoft support representative.

Background

Citrix originated as a modified version of the Windows NT 3.51 kernel, allowing access by multiple users, and management of their sessions. Microsoft licensed the Citrix terminology, releasing it as Windows NT 4 Terminal Server Edition (TSE). Both the Microsoft and Citrix products have subsequently evolved further.

While there are some differences between the Citrix and Microsoft products and versions, their common base allows this article to discuss in general terms the installation of ManageSoft, and applications managed using it, on machines running Terminal Services.

Where this article refers generally to a terminal server or a machine running "Terminal Services", it refers to a machine running one of:

- Citrix Winframe 1.7
- Citrix MetaFrame 1.8
- Citrix MetaFrame XP

- Microsoft Windows NT 4 Terminal Server Edition (TSE)
- Windows 2000 Server, Windows 2000 Advanced Server, or Windows DataCenter Server with Terminal Services enabled.

Terminal services and install/execute modes

Terminal Services products run in two modes:

- *Remote Administration* mode, designed to allow systems administrators to work on the machine by accessing it over a Remote Desktop Protocol (RDP) link.
- *Application Server* mode, designed to allow simultaneous access to software by multiple users.

There are no implications for ManageSoft running on a terminal server that is running in **Remote Administration** mode.

One difference between the Microsoft and Citrix technologies is that, in its simplest format, a Citrix Administrator can “publish the desktop” on the Citrix server. This makes any application on the desktop and/or Start menu available to Citrix clients.

In such an environment the Citrix server behaves in the same way as any Windows 2000 managed device:

1. As it joins the domain it obtains its policy from the local domain controller
2. ManageSoft is installed and downloads/installs the appropriate applications
3. The device carries out reporting requirements as dictated by the schedule distributed to it.

There are no configuration or procedural changes required to use ManageSoft in this environment.

The rest of this article focuses on how to use ManageSoft on terminal servers running in Application Server mode where terminal services are being used to manage application access for groups of users.

Install/execute modes

If you want an application to be available to multiple users concurrently, changes are required at the operating system level. The install process can perform these automatically, but you must enter the terminal server’s **install** mode in order for it to do so. When not in install mode, terminal servers run in execute mode.

The key to successfully installing applications managed with ManageSoft to terminal servers is to enter install mode before the application installation, then revert to execute mode after installation. More details are provided later in this article.

Installing ManageSoft

You can install the software warehouse, distribution server or managed device components of ManageSoft on a terminal server.

If you are installing a release of ManageSoft earlier than 6.2, the following are recommended:

- Close any MMCs before installing ManageSoft (see [Troubleshooting](#))
- Disconnect any mapped drives before installing ManageSoft (copy the installation source files to a local drive for installation if necessary).

Transforms and application compatibility scripts

Some applications require changes in order to run successfully with Terminal Services in Application Server mode. The changes for many commonly-used applications are available as transforms (for MSI applications) or *application compatibility scripts* (batch files).

Transforms (.mst) may be available with the product media, from the vendor's web site, or from Microsoft's web site (<http://www.microsoft.com>). You can also create your own transforms.

For application compatibility scripts, check <WINDOWS SYSTEM ROOT>\Application Compatibility Scripts\Install (where <WINDOWS SYSTEM ROOT> is the directory at which Windows 2000 is installed (often c:\winnt)), and http://www.microsoft.com/windows2000/en/server/help/default.asp?url=/windows2000/en/server/help/sag_termsrv_topnode.htm.

If an application compatibility script is available, it's important that you run it after the application has been installed. You may choose to create a callout to do this automatically as part of your ManageSoft deployment of the application.

Installing applications managed with ManageSoft to terminal servers

The following overview will help you to plan your deployment of applications managed with ManageSoft to terminal servers:

Notes:

- Steps **1** and **4** are typically achieved with a callout associated with packages to be installed on Citrix servers.

- Steps **2** and **3** are achieved through appropriate structuring of ManageSoft packages.
- 1. Enter install mode from the command line (for Windows 2000 servers, **change user /install**; for other servers, consult your server documentation) or use a callout from your ManageSoft package.
- 2. Install the application, using any necessary transforms.

During application install, the system tracks registry entries and files in the system folder, in order to make these available as necessary to users of the application.

- 3. Run any application compatibility scripts available for the application.
- 4. Revert to execute mode from the command line (for Windows 2000 servers, **change user /execute**; for other servers, consult your server documentation), or use a callout from your ManageSoft package.

Troubleshooting

My application doesn't work as expected (or at all)

Some applications will not work in the terminal services environment. Check the Microsoft web site at <http://www.microsoft.com/ntserver> for more information about troubleshooting applications and tweaking them for the terminal services environment.

DLL errors appear when launching the deployment policy editor or opening the Distribution node from the ManageSoft software warehouse

For releases of ManageSoft earlier than 6.2, MMCs open during the ManageSoft installation mean that Windows cannot update its settings with the ManageSoft path until the machine is rebooted. This causes errors when attempting to access the deployment policy editor or the Distribution node of the software warehouse.

The workaround is to reboot the machine, or reinstall without open MMCs.

Installation of ManageSoft distribution server fails

Installation of the distribution server component of ManageSoft releases earlier than 6.1 fails on machines that do not have a c:\ partition.

The workaround is to create a c:\ partition on the machine.

The problem is fixed in release 6.1 and later of ManageSoft.

Problems running Norton Anti-Virus Corporate Edition from terminal services client

The Symantec website suggests that releases of Norton Anti-Virus Corporate Edition earlier than 7.6 are incompatible with Windows 2000 Server and Windows 2000 Advanced Server Terminal Server.

See <http://service1.symantec.com/SUPPORT/ent-security.nsf/3d2a1f71c5a003348525680f006426be/3a2385a49658553b88256a220026aa51?OpenDocument>

Recommended: Install release 7.6 or later of Norton Anti-Virus Corporate Edition.