

Tisio Recovery Guide



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Tisio System Recovery

When the terminal is powered on, the “Tisio” logo appears while loading its operating system. After the operating system has been loaded, the Tisio will display the initial screens for normal use. If the initial screens do not display properly or the Tisio boot screen never disappears, then a system recovery should be performed.

The Tisio system recovery process downloads a new Operating System image from the Tisio Device Management recovery server. See the section on installing and configuring the Tisio Device Management recovery server.

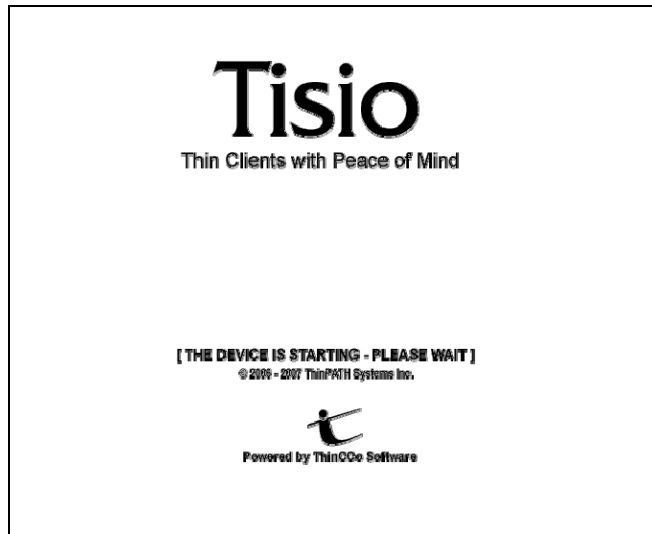


Figure 1 - Tisio Boot Screen

The Tisio system recovery process is initiated just after power on by a key press sequence. During the system recovery process the boot screen image below is shown.

Note The power to the Tisio terminal should not be interrupted until the system recovery has completed.



Figure 2 - Tisio Recovery Screen

Initiating System Recovery

When the terminal is powered on, system recovery can be initiated using the key sequences below.

Key Press Sequence	Use
Ctrl+Alt+F10	Used to initiate a normal system recovery of the Operating System.
Ctrl+Alt+F2	Used to initiate an advanced system recovery of the Operating System with logging enabled.

The system recovery key sequence can only be pressed within a short period of time and only during the initial power up sequence. After power on, wait till you here a second beep or till you see the Figure 1 - Tisio Boot Screen. After the Tisio Boot Screen is displayed, there is a 3 second window in which the system recovery key sequences can be pressed. If the system recovery key sequence is pressed after the 3 second window it will be ignored. The diagram below shows what happens during power on and the recovery process.

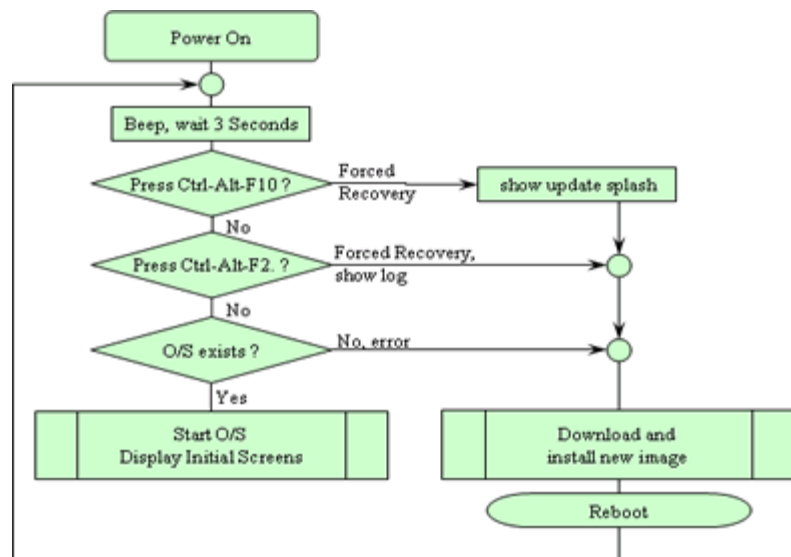


Figure 3 - Tisio Recovery Process

Start System Recovery

The system recovery key sequence can only be pressed within a short period of time and only during the initial power up sequence. To start Tisio system recovery, follow these steps.

1. Power on the Tisio terminal.
2. After power on wait for the PC Bios boot screen, and a short while later there will be the Tisio Boot screen. After the Tisio

Boot screen there is a three second window in which the system recovery key sequences can be pressed.

3. Press the system recovery key sequence during the three second window. You will be prompted to approve the recovery.
4. If the system recovery key sequence is pressed after the three second window it will be ignored. Repeat the steps until the prompt to approve the recovery is shown.

After the Tisio recovery sequence completes, the Tisio Startup Wizard will appear indicating Tisio thin client has been fully recovered and set to factory defaults. Follow the steps in the section When the Tisio Setup Wizard Appears to configure your Tisio Device.

Tisio Recovery server

Introduction

Below describes what a Tisio Recovery server is and how it is used to provide recovery O/S images for the Tisio Thin Client devices.

The Tisio Recovery server is a Windows or UNIX/Linux web server containing the Tisio recovery files. The Tisio Thin Client devices request a recovery image using a special URL address through a special key sequence. This request is sent to the Tisio Recovery server when Tisio devices are asked to rewrite the flashed operating system.

Requirements

The local network has specific requirements so the Tisio thin clients will be successful when requested to perform a recovery of the local operating system. There must be available on the network a Tisio Recovery server. The recovery process requires a DHCP server available on the network so the Tisio thin client can obtain a

network TCP/IP address. Tisio device must also be able to resolve the host name **thinccodm** or **thinccodm.yourdomain**. An entry for this name should be added to the local DNS server as an alias name of the Tisio Recovery server.

Recovery URL Search Path

Tisio device searches a number of predefined URL paths to locate the Recovery server on the network and the correct recovery image during a recovery process. The Tisio Thin Clients uses the following values to search for a recovery server and files using the search order listed below.

Search URL
https://thinccodm/.....
http://thinccodm:8080/.....
http://thinccodm/.....
https://thinccodm.yourdomain/.....
http://thinccodm.yourdomain:8080/.....
.
http://thinccodm.yourdomain /.....
https://thinccodm.thincco.com/.....
http://thinccodm.thincco.com:8080/.....
http://thinccodm.thincco.com/.....

Table 1 - URL Search Path

The next portion of the URL is determined by the Tisio model and O/S type performing the recovery. Add the URLs above to the path below to determine the path of recovery files located on the Tisio Recovery server, **<URLs Above>/ThinCCo/tcc_kits/tisio_0n/<O/S Type>/**.

Model	Path is based on Model and O/S type
Tisio 96CE	ThinCCo/tcc_kits/tisio_04/ce
Tisio 300CE	ThinCCo/tcc_kits/tisio_02/ce
Tisio 96XP	ThinCCo/tcc_kits/tisio_04/xp

Model	Path is based on Model and O/S type
Tisio 300XP	ThinCCo/tcc_kits/tisio_02/xp
Tisio 96LX	ThinCCo/tcc_kits/tisio_04/lx
Tisio 300LX	ThinCCo/tcc_kits/tisio_02/lx

Table 2 - Model & O/S Defines Rest of URL

During the Recovery process two files are requested. They are **thincco.zip** and **md5sum**.

Note: The recovery image must be installed on to the correct model device otherwise the Tisio device will not function. Licensing safeguards have been built in to ensure the correct O/S image matches the model of the original Tisio device.

As an example, if a Tisio 96CE device was performing a recovery, the first three requests would use the URL:

1. https://thinccodm/ThinCCo/tcc_kits/tisio_04/ce/md5sum
2. http://thinccodm:8080/ThinCCo/tcc_kits/tisio_04/ce/md5sum
3. http://thinccodm/ThinCCo/tcc_kits/tisio_04/ce/md5sum

Downloading the Tisio Recovery Images

The recovery images for all products are found on ThinPATH Systems Website. Open the link below in a browser to download the Tisio recovery images. Follow the instructions on the page to locate the recovery images for your Tisio product.

<http://www.tp-sys.com/index.php?modules=support&content=patches>

Installing Tisio Recovery files

The Tisio Recovery files can be installed on most web servers. This document describes how to install the Tisio Recovery Images on the following Web based platforms.

- Tisio Device Manager server
- Windows IIS Web Server
- ThinPATH Portal Server
- Linux/UNIX Web server such as Apache

Installing Recovery Files on the Windows TDM server

The Tisio Device Manager server is used to remotely manage Tisio devices. This installation requires that you have already installed the Tisio Device Management Software on a Windows PC and you have downloaded the Tisio Recovery Images. Please refer to the TDM Installation manual on the ThinPATH Systems Website, www.tp-sys.com.

To install the Tisio Recovery Images on the Windows based TDM server perform the following steps:

1. The Tisio Recovery Images are self extracting executables. Download the appropriate Tisio Recovery Image and execute it.
2. When prompted for the location where to install the files change the installation path to "**C:\Program Files\Apache Software Foundation\Tomcat 5.5\webapps\ThinCCo**
3. Click on the Unzip button to extract the files. When complete close the window.
4. Change to the directory C:\Program Files\Apache Software Foundation\Tomcat 5.5\webapps\ThinCCo\

tcc_kits\tisio_04\ce and place both the thincco.zip and md5sum files there.

5. On you DNS server make a DNS alias for thinccodm and point it to the DNS name for the PC that is running the TDM software.
6. Now when you perform the recovery it should download it from your local PC.

Installing Recovery Files on the ThinPATH Portal server.

The ThinPATH Portal server manages the Tisio CE devices, older ThinSTAR thin clients and PCs running ThinPATH PC. The ThinPATH Portal Server uses IIS. To install the Tisio Recovery Images on the ThinPATH Portal server perform the installation procedure under the section [Installing the Recovery Files on Windows IIS](#)

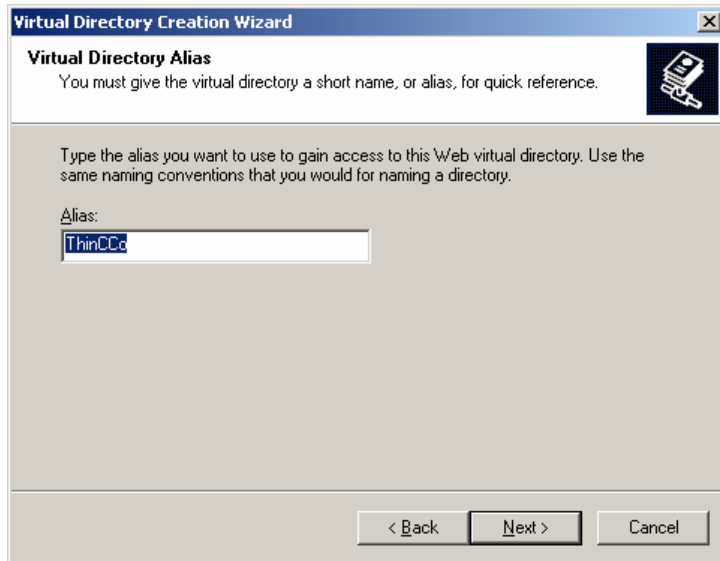
Installing Recovery Files on Windows IIS

This installation requires that you have already installed Windows IIS support on a Windows PC and you have downloaded the Tisio Recovery Images. Please refer to Microsoft installation instructions on installing IIS.

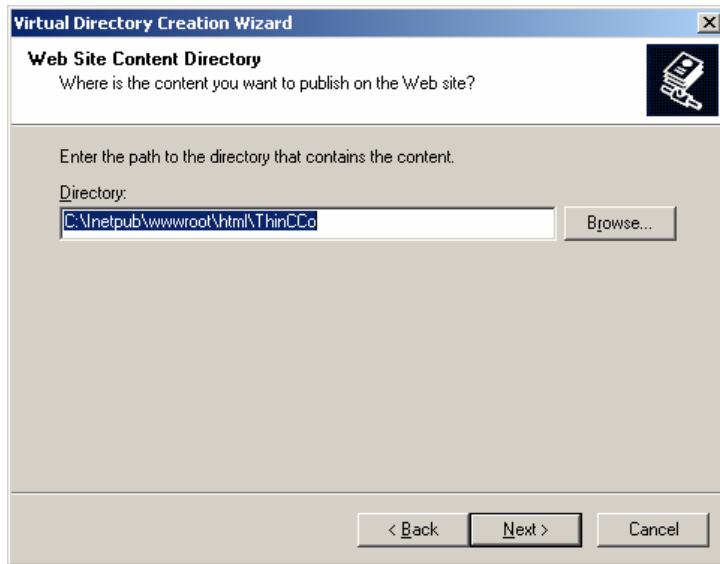
To install the Tisio Recovery Images on the Windows IIS server perform the following steps:

1. This installation will require creating a Virtual Web directory. In the windows file system create the follow directory if not present: **C:\Inetpub\wwwroot\html\ThinCCo**
2. On the PC where IIS is installed, open the Internet Information Services tool. This is normally started from the start menu, **Start> Programs> Administration Tools> Internet Information Services**.

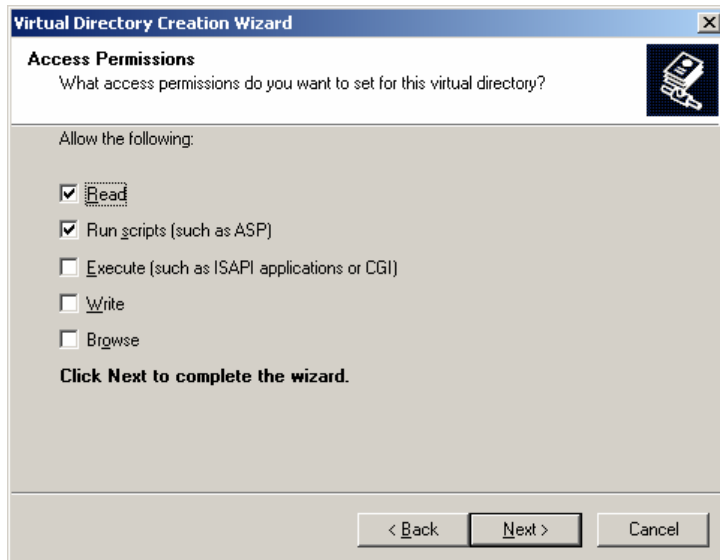
3. In the IIS Administration window expand the Server name and Web Sites to open the **Default Web Site**. Select the **Default Web Site**.
4. Right Click and select **New > Virtual Directory**. You will be prompted to begin creating a new virtual directory, click next to continue.



5. Enter the Alias name of **ThinCCo** as shown and click next. Enter the name ThinCCo exactly as shown paying attention close attention to the case of characters.



6. Click on the Browse button and go to directory: **C:\Inetpub\wwwroot\html\ThinCCo** and click next.



7. Select the Access Permission as listed above and click next.



8. Click finish to complete creating the virtual web directory. Close the IIS Administration window.
9. The Tisio Recovery Images are self extracting executables. Download the appropriate Tisio Recovery Image and execute it.
10. When prompted for the location where to install the files change the installation path to **C:\Inetpub\wwwroot\html\ThinCCo**
11. Click on the Unzip button to extract the files. When complete close the window.

Installing Recovery Files on UNIX/Linux Apache server

This installation requires that you have already installed Apache Web server support on a UNIX/Linux server and you have downloaded the Tisio Recovery Images. Please refer to the Apache documentation for installing Apache 2.0.

To install the Tisio Recovery Images on the UNIX/Linux Apache server perform the following steps:

1. This installation will require creating a Virtual Web directory on the Apache Web server. In the UNIX/Linux file system create the follow directory if not present: **/var/www/ThinCCo**
2. To create a virtual directory on a server running Apache Web server software the configuration file for Apache is a text file and must be edited.

Note: The Apache Web server uses the term alias instead of virtual directory.

3. The Apache configuration file is named conf/httpd.conf and is located in the Apache install directory. Many times it is found at /etc/httpd/conf/httpd.conf.
4. Add the following lines below near the end of the file. Make sure this is not a duplicate or already in the configuration file.

```
Alias /ThinCCo/ "/var/www/ThinCCo/"
<Directory "/var/www/ThinCCo">
    Options Indexes FollowSymLinks
    AllowOverride All
    Order allow,deny
    Allow from all
</Directory>
```

5. After the entry has been added, save and exit from the Apache configuration file.
6. Restart the Apache server to have the change take effect. Usually the command is **/etc/init.d/httpd restart**.
7. The Tisio Recovery Images are tar archives. Download the appropriate Tisio Recovery Image to the /tmp directory.
8. Use the tar command to extract the files and place them in the proper location defined by the virtual directory defined above in step 4.

9. CD to the **/var/www/ThinCCo** directory and issue the tar command: **tar xvzpf /tmp/<recoveryFile>**.
10. To test the recovery files and verify they can be downloaded, open a Web browser and enter the URL **http://<webServer>/<PATH from Table 2>/thincco.zip**. The response should be a request to download the file **thincco.zip**. This indicates the recovery server is working correctly.

Installing Recovery Files on UNIX/Linux Tomcat server

This installation requires that you have already installed the Tomcat Web server support on a UNIX/Linux server and you have downloaded the Tisio Recovery Images. Please refer to the Tomcat documentation for installing Tomcat.

To install the Tisio Recovery Images on the UNIX/Linux Tomcat server perform the following steps:

1. This installation will require creating a Virtual Web directory on the Tomcat Web server. In the UNIX/Linux file system create the follow directory if not present: **/var/www/ThinCCo**
2. To create a virtual directory on a server running Tomcat Web server software the configuration file for Tomcat is a XML file and must be edited. Be careful to place the added lines at the proper location (nested within the **<ContextManager>** element tags and not to break any XML tags.

Note: The Tomcat Web server uses the term context instead of virtual directory.

3. Locate the **conf/server.xml** file in the Tomcat install directory.
4. Add the following entry in the part of the file where other similar entries are located. The **server.xml** file is an XML file, so pay close attention to the required XML file syntax.

```
<Context path="/ThinCCo"  
    docBase="/var/www/ThinCCo"  
    debug="1"  
    reloadable="true" >  
</Context>
```

- Note: If you mis-edit the Tomcat configuration file or have unbalanced angle brackets or quotes, Tomcat cannot start properly. Watch for error messages when you start Tomcat.
5. Stop and restart the Tomcat server (and the Apache server if you are running Tomcat under Apache) to have the change take effect. Usually the commands are:

```
/etc/init.d/httpd restart  
/etc/init.d/tomcat restart
```
 6. The Tisio Recovery Images are tar archives. Download the appropriate Tisio Recovery Image to the /tmp directory.
 7. Use the tar command to extract the files and place them in the proper location defined by the virtual directory defined above in step 4.
 8. CD to the **/var/www/ThinCCo** directory and issue the tar command: **tar xvzpf /tmp/<recoveryFile>**.
 9. To test the recovery files and verify they can be downloaded, open a Web browser and enter the URL
`http://<webServer>/<PATH from Table 2>/thincco.zip`. The response should be a request to download the file thincco.zip. This indicates the recovery server is working correctly.