# Table of Contents

## About This Document

Introduction ................................. 5
Architecture .................................. 6
Security .......................................... 8
Getting Started .............................. 9

1. Installing Thinfinity® Remote Desktop Workstation ................................. 10
2. Configuring Thinfinity® Remote Desktop Workstation .............................. 11
3. Using Thinfinity® Remote Desktop Workstation for the first time ............. 12

## Features

1. Remote Desktop ........................................ 15
   - Display Preferences .................................. 16
   - Resources Preferences ............................... 17
   - Program Preferences ................................ 18
   - Experience Preferences ............................. 21
     - Multitouch Redirection ............................ 23
     - RemoteFX ............................................ 24
   - Advanced Preferences ................................ 25
   - Security Preferences ................................ 27
   - Supported RDP Shortcut Keys .................... 28

2. Screen Sharing .................................... 29
   - Display Preferences ................................ 30
   - Control Preferences ................................ 31
   - Advanced Preferences ............................. 32
   - Toolbar ................................................ 34
   - Shortcut Keys ....................................... 36

3. File Transfer ...................................... 37
   - Security Preferences ............................... 38
   - Navigating ............................................. 38
   - File Options .......................................... 40
   - Remote Folder Area Options .................... 41

4. Presentation Manager .......................... 42
   - Setting up the Invitation Template ........ 43
   - Using the Presentation Manager ............... 44
     - Participants ......................................... 45
     - Local Monitor ....................................... 46
     - Application Selection ............................ 47
   - Attending a Presentation ......................... 48

5. Remote Printing .................................. 50

## Advanced Settings

1. General ............................................. 53
2. Communications ............................... 54
   - Verifying the Communication Settings ........................................... 56
     - Thinfinity® Remote Desktop Workstation Listening Port ................ 57

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<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Configuring Internet Access</td>
<td>58</td>
</tr>
<tr>
<td>Enabling RDP Connections</td>
<td>59</td>
</tr>
<tr>
<td>Dynamic DNS and Certificate Sharing</td>
<td>60</td>
</tr>
<tr>
<td>Configuring PIN Resolution</td>
<td>61</td>
</tr>
<tr>
<td>Accessing Through ThinVNC.net</td>
<td>62</td>
</tr>
<tr>
<td>Security</td>
<td>63</td>
</tr>
<tr>
<td>Authentication Mode</td>
<td>65</td>
</tr>
<tr>
<td>No Login Required</td>
<td>66</td>
</tr>
<tr>
<td>Digest</td>
<td>67</td>
</tr>
<tr>
<td>Windows Logon</td>
<td>68</td>
</tr>
<tr>
<td>Managing the SSL Certificate</td>
<td>69</td>
</tr>
<tr>
<td>The Default Embedded Certificate</td>
<td>70</td>
</tr>
<tr>
<td>A Self-signed Certificate</td>
<td>71</td>
</tr>
<tr>
<td>A CA Certificate</td>
<td>72</td>
</tr>
<tr>
<td>Screen Sharing</td>
<td>74</td>
</tr>
<tr>
<td>General</td>
<td>75</td>
</tr>
<tr>
<td>Presentation</td>
<td>77</td>
</tr>
<tr>
<td>Customizing the Web Interface</td>
<td>79</td>
</tr>
<tr>
<td>Changing the logo</td>
<td>80</td>
</tr>
<tr>
<td>Customizing the web files</td>
<td>81</td>
</tr>
<tr>
<td>Files Location</td>
<td>82</td>
</tr>
<tr>
<td>License</td>
<td>84</td>
</tr>
</tbody>
</table>
1 About This Document

On this help file you will find information about Thinfinity® Remote Desktop Workstation. This document is intended to teach users how to configure and use Thinfinity® Remote Desktop Workstation. Check the 'Getting started' section and follow the instructions to quickly install, configure and start using Thinfinity® Remote Desktop Workstation.

About us:

Cybele Software is a leading provider of software solutions that enable companies to extend their existing technology foundation by integrating with trend-setting technology innovations. Whether you want to improve the user interface for a mainframe application or need to enable remote Web access to Windows desktops, Cybele Software has a solution for you. Since 2004, we have been enabling companies to bridge the gap between cutting-edge technologies and proven client/server and mainframe systems. Our team of experienced developers strives to deliver flexible software solutions that increase the efficiency and usability of legacy systems and data.

Cybele Software products are designed to provide the simplest implementation pathways possible, while ensuring the integrity and security of your existing environment. Our track record of delivering on these commitments is evidenced through our rapidly-expanding, global customer base.

You can find out more about our products and our company on our website at www.cybelesoft.com
2 Introduction

Thinfinity® Remote Desktop Workstation is an HTML5-based solution that allows users to access their remote machines by taking full control of the Windows machine using Microsoft Remote Desktop or sharing their Windows Desktops.

Why Thinfinity® Remote Desktop Workstation?
1. It is Cross-browser, Cross-device, Cross-platform and requires zero-client setup.
2. Thinfinity® Remote Desktop Workstation offers three connection modes: Screen Sharing, Remote Desktop (via RDP) and File Transfer.

Some using scenarios:
1. Telecommuting
2. Remote assistance
3. Online presentations
4. File transfers

Technology details:
Thinfinity® Remote Desktop Workstation grants access to applications and desktops running on Windows Terminal Services. You can even remote into RDS / VDI platforms, such as session-based applications or virtual desktops.

Thinfinity® Remote Desktop Workstation screen sharing rests on today's web standards: AJAX, JSON and HTML5.

Thinfinity® Remote Desktop Workstation does not require Flash, Java, ActiveX, Silverlight or any other setup on the end-user side and can be used from almost any device.

The application supports Internet Explorer 9, Firefox, Chrome, Safari, and other HTML5 capable web browsers. IE8 and earlier versions may be enhanced with HTML5 features by the addition of the Chrome Frame plug-in.

See more:
Architecture
Security
Getting Started
Features
Advanced Settings
3 Architecture

The architecture for a Thinfinity® Remote Desktop Workstation deployment is composed of:

- a Server Machine running Thinfinity® Remote Desktop Workstation
- Thinfinity® Remote Desktop Web Client (which loads on an HTML5 browser)

Thinfinity® Remote Desktop Workstation acts as a secure, high-performance HTTP / WebSockets server, which serves the web pages needed to run the Thinfinity® Remote Desktop Web Client on the web browser.

When the end-user accesses the Thinfinity® Remote Desktop main page and enters the appropriate connection parameters, the Thinfinity® Remote Desktop Web Client communicates with the server machine, using Ajax and WebSockets (if available) to start the connection to the remote-end.

Once the connection is established, the server machine will receive RDP commands, optimize them for the web, and send the resulting data stream to the Thinfinity® Remote Desktop Web Client.

The remote computer can be accessed from any OS platform through any HTML5 compliant browser like Mozilla Firefox, Google Chrome, Safari, Opera, Internet Explorer 9, etc. Versions 8 and previous of Internet Explorer do not support HTML5. However, they can be enhanced with Google Chrome Frame to make them fully compliant with Thinfinity® Remote Desktop Workstation.

Requirements

With Thinfinity® Remote Desktop Server any Windows, Mac OS X, Linux, Android and iOS user can remote into Windows Desktops or work with single Windows Applications.

Server Machine
Windows XP 32-bit / Windows XP 64-bit
Windows Vista 32-bit / Windows Vista 64-bit
Windows 7 32-bit / Windows 7 64-bit
Windows Server 2008 32-bit / Windows Server 2008 64-bit
Windows Server 2012

Requirements:

With Thinfinity® Remote Desktop Server any Windows, Mac OS X, Linux, Android and iOS user can remote into Windows Desktops or work with single Windows Applications

**Web Client**
- OS independent
- HTML5-compliant Web Browser
  - Internet Explorer 9.0, 10.0
  - Firefox 17+
  - Chrome 22+
  - Safari 6.0.1+
  - iOS 5.1.1+
  - Android 2.3, 4.0+

**Server Machine**
- Windows XP 32-bit / Windows XP 64-bit
- Windows Vista 32-bit / Windows Vista 64-bit
- Windows 7 32-bit / Windows 7 64-bit
- Windows Server 2012
Security

Security and privacy are essential when accessing remote desktops through the Internet. Thinfinity® Remote Desktop Workstation provides a reliable, state-of-the-art security that keeps the exchanged information safe.

Secure connections
All the connections to Thinfinity® Remote Desktop Workstation from the browser are performed over HTTPS. Thinfinity® Remote Desktop Workstation provides you with the means to install your own 256-bit SSL certificate.

Authentication levels
Thinfinity® Remote Desktop Workstation allows you to set different authentication levels and modes. You can choose a simple User/Password authentication and specify your own credentials, or use Active Directory authentication, which will enable you to authenticate against Windows local or domain users.
5 Getting Started

Installing Thinfinity® Remote Desktop Workstation is quick and simple. You are only three steps away from using Thinfinity® Remote Desktop Workstation:

1. **Install the server**
2. **Configure Thinfinity® Remote Desktop Workstation** and
3. **Access the remote PC** using any of the three different available connection modes.

**Quick setup guide:**

1. Download the latest Thinfinity® Remote Desktop Workstation setup and run the installation on your PC.
2. Launch Thinfinity® Remote Desktop Workstation and set the authentication type and the listening port for HTTP or HTTPS. Save your changes. Click in 'Allow Access' if prompted by the Windows Firewall.
3. Go to another PC and type: http/s://pc-name-or-ip-address:port/
4. Enter your credentials and you are ready to connect to the remote machine.
5.1 Installing Thinfinity® Remote Desktop Workstation

Thinfinity® Remote Desktop Workstation is very simple to deploy. All you need to do is install it on a machine you want to access remotely.

1. Download the installer from the link below:


2. Execute the installer on the target machine.

3. Thinfinity® Remote Desktop Workstation will be installed as a service. Look for the Thinfinity® Remote Desktop Workstation icon in the tray bar in order to access the 'Settings' and the 'Presentation utility tool'.
5.2 Configuring Thinfinity® Remote Desktop Workstation

In most cases, the default values will work well and it will not be necessary to make any setting changes before starting to use Thinfinity® Remote Desktop Workstation.

If you want to make sure everything is running as expected before connecting from another machine, verify the communication settings.

After that, you can use Thinfinity® Remote Desktop Workstation for the first time.
## 5.3 Using Thinfinity® Remote Desktop Workstation for the first time

Once Thinfinity® Remote Desktop Workstation is installed and configured, access Thinfinity® Remote Desktop Workstation from any other machine or device, by following the next steps:

1. Open your preferred web browser.


3. Now you can choose between three connection modes to get into the remote machine, select the one of your preference and follow the steps on the matching column below:

<table>
<thead>
<tr>
<th></th>
<th>Remote Desktop mode</th>
<th>Screen Sharing mode</th>
<th>File Transfer mode</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Select the</strong></td>
<td>Select 'Remote Desktop' as the connection mode:</td>
<td>Select 'Screen Sharing' as the connection mode:</td>
<td>Select 'File Transfer' as the connection mode:</td>
</tr>
<tr>
<td><strong>connection</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>mode</strong></td>
<td><strong>mode</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2. Set up your</strong></td>
<td>Click on the 'Config' button, located below the icons and to the right, and take a look at the Display, Resources, Program, Experience, Advanced and Security personal preferences. Customize them if you please.</td>
<td>Click on the 'Config' button, located below the icons and to the right, and take a look at the Display, Control and Advanced personal preferences. Customize them if you please.</td>
<td>Click on the 'Config' button, located below the icons and to the right, and take a look at the Security personal preferences. Customize them if you please.</td>
</tr>
<tr>
<td><strong>personal</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>preferences</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Connect</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4. Enter the</strong></td>
<td>After entering the remote machine credentials, press 'Log in'.</td>
<td>Not applicable.</td>
<td>After entering the remote machine credentials, press 'Log in'.</td>
</tr>
<tr>
<td><strong>remote</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>machine</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>credentials</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>when required.</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>5. Press Log</strong></td>
<td>After entering the remote machine credentials, press 'Log in'.</td>
<td>Not applicable.</td>
<td>After entering the remote machine credentials, press 'Log in'.</td>
</tr>
<tr>
<td><strong>In</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>6. Enjoy your</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Remote</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>connection.</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>7. Disconnect</strong></td>
<td>On the Windows 'Start' menu press 'Log off', or just close the browser tab.</td>
<td>Press the 'Disconnect' button on the upper toolbar, or just close the browser tab.</td>
<td>Close the File Transfer browser tab.</td>
</tr>
</tbody>
</table>
6 Features

Thinfinity® Remote Desktop Workstation has unique features.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automatic</td>
<td>Choose this option and press 'Connect' to connect to the remote screen using the configured automatic option.</td>
</tr>
<tr>
<td>Remote Desktop</td>
<td>Choose this option and press 'Connect' to connect to the remote screen using the Remote Desktop Mode, or press 'Config' to configure the Remote Desktop Mode options. Read more.</td>
</tr>
<tr>
<td>Screen Sharing</td>
<td>Choose this option and press 'Connect' to connect to the remote screen using the Screen Sharing Mode, or press 'Config' to configure the Screen Sharing Mode options. Read more.</td>
</tr>
<tr>
<td>File Transfer</td>
<td>Choose this option and press 'Connect' to connect to the remote screen using the File Transfer Mode, or press 'Config' to configure the File Transfer Mode options. Read more.</td>
</tr>
</tbody>
</table>
Connect automatically and bypass this page  Check this option to bypass this landing page when you access Thinfinity® Remote Desktop Workstation and connect automatically to the configured connection. You can later on access this setting and change it using the remote toolbar.

Open in a new browser window  Check this option to open the connection in a new browser tab. Uncheck it to open the connection in the same tab as this page.

Config  Press this button to access the configuration for the selected connection mode.

Connect  Use this button to connect to the remote desktop using the connection mode selected above.

1. Remote Desktop
2. Screen Sharing
3. File Transfer
4. Presentation Utility
5. Remote Printing
6.1 Remote Desktop

The ‘Remote Desktop’ connection mode logs into an exclusive Windows session. It works like a regular RDP session.

**Opening a Remote Desktop connection:**

1. Open your preferred web browser.

2. Type into the address bar the URL in the following format protocol://ip:port_number http(s)://ThinfinityRemoteDesktopWorkstationServerIP:Port/.

3. Select 'Remote Desktop' as the connection mode.

4. You can also customize the personal settings (Display, Resources, Program, Experience, Advanced and Security).

5. Press the 'Connect' button.

6. Enter the remote machine credentials and press 'Log In'.
   * If you are using 'Windows Logon' as Authentication mode, this screen won't be shown, since the application will log in using the same credentials already authenticated against Thinfinity® Remote Desktop Workstation.

7. Here is your Remote Desktop session loading. Enjoy the Remote Desktop connection as you if you were in front of the remote machine.

Get to know about the available Supported RDP Shortcut Keys.
6.1.1 Display Preferences

The Remote Desktop 'Display' tab presents you with the following options:

<table>
<thead>
<tr>
<th>Color Depth</th>
<th>Choose the color depth for the remote computer view.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resolution</td>
<td>Choose from the available list of resolutions. The options include: 'Fit to browser window' and 'Fit to screen', ideal for hiding the browser and working on full screen mode.</td>
</tr>
<tr>
<td>Image Quality</td>
<td>The connection image quality is related directly with the application performance (higher quality = lower performance). The default Image quality is 'Optimal', because it presents the best cost benefit between quality and performance cost. If you need to have more quality or better performance, take a look at the other options below: 'Highest' - Works only with PNG images and has no compression (0% compression) 'Optimum' - Combines PNG and JPEG images (20% compression). 'Good' - Works only with JPEG images (40% compression) 'Faster' - Works only with JPEG images (50% compression).</td>
</tr>
</tbody>
</table>
6.1.2 Resources Preferences

The Remote Desktop 'Display' tab presents you with the following options:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enable Printer</td>
<td>Choose the color depth for the remote computer view.</td>
</tr>
<tr>
<td>Enable Remote Sound</td>
<td>Check to enable remote sound. The remote sound feature allows you to listen to the sound playing on the remote machine. This feature is only available for Chrome and Firefox browsers for the moment.</td>
</tr>
</tbody>
</table>
6.1.3 Program Preferences

The Remote Desktop 'Display' tab presents you with the following options:

- Do Nothing: Connect to a remote desktop.
- Start a Program: Connect to an application
- Execute as RemoteApp: Connect to a RemoteApp application

The 'Start a Program' option presents you with the following options:
Remote desktop

Display Resources Program Experience Advanced Security

On Connection...

Start a Program

Program path and file name:

Arguments:

Start in the following folder:

Available only within Windows Server versions.

<table>
<thead>
<tr>
<th>Program path and file name</th>
<th>Specify here the complete path to the executable file of the program you wish to connect to.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arguments</td>
<td>Add any arguments you need to pass onto to the program, if necessary. This field can be blank.</td>
</tr>
<tr>
<td>Start in the following folder</td>
<td>Inform a context directory for the program set on the field 'Program path and file name'. Most times it's the path where the executable file is located.</td>
</tr>
</tbody>
</table>

If you choose the 'Execute as RemoteApp' option you will be presented with the following options:
## Program tab

**On Connection...**

- **Execute as RemoteApp**

**Program path and file name:**

Specify here the complete path to the executable file of the program you wish to connect to.

**Arguments:**

Add any arguments you need to pass onto to the program, if necessary. This field can be blank.

**Start in the following folder:**

Inform a context directory for the program set on the field 'Program path and file name'. Most times it's the path where the executable file is located.

**Show Windows Login and Logout Screen**

By default the Windows Login and Logout screen that show the username are not shown so the connection to the RemoteApp application is more seamless.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program path and file name</td>
<td>Specify here the complete path to the executable file of the program you wish to connect to.</td>
</tr>
<tr>
<td>Arguments</td>
<td>Add any arguments you need to pass onto to the program, if necessary. This field can be blank.</td>
</tr>
<tr>
<td>Start in the following folder</td>
<td>Inform a context directory for the program set on the field 'Program path and file name'. Most times it's the path where the executable file is located.</td>
</tr>
<tr>
<td>Show Windows Login and Logout Screen</td>
<td>By default the Windows Login and Logout screen that show the username are not shown so the connection to the RemoteApp application is more seamless.</td>
</tr>
</tbody>
</table>
The Remote Desktop 'Experience' tab presents you with the following options:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Smart Sizing</strong></td>
<td>By checking this option, the connection image will be scaled. The 'smart' stands for a behaviour in which the maximum size of the connection will be the original desktop size.</td>
</tr>
<tr>
<td><strong>Multitouch Redirection</strong></td>
<td>Check this option to enable Multitouch Redirection. Read more about Multitouch Redirection.</td>
</tr>
<tr>
<td><strong>RemoteFX</strong></td>
<td>Check this option to enable RemoteFX. Read More about Remote FX. This option affects other visual settings.</td>
</tr>
<tr>
<td><strong>Desktop Background</strong></td>
<td>Check this option to show the desktop background.</td>
</tr>
<tr>
<td><strong>Visual Styles</strong></td>
<td>Check this option to show Windows Visual Styles: the appearance of common controls, colors, borders, and themes.</td>
</tr>
<tr>
<td><strong>Menu and Windows Animation</strong></td>
<td>Check this option to show menu and windows animations when you scroll or expand a drop down menu.</td>
</tr>
<tr>
<td><strong>Font Smoothing</strong></td>
<td>Check this option to allow 'Clear Type', a font smoothing option added to Windows Server 2008.</td>
</tr>
<tr>
<td><strong>Show Window Content</strong></td>
<td>Check this option to show the contents of the window.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>-------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>While Dragging</strong></td>
<td>while being dragged. Otherwise a transparent border is dragged.</td>
</tr>
<tr>
<td><strong>Desktop Composition</strong></td>
<td>Check this option to configure the DWM to redirected the desktop drawing to off-screen surfaces in video memory. Also, the desktop will present many visual effects.</td>
</tr>
</tbody>
</table>

All of these options enhance the look of the remote desktop and use more bandwidth.
6.1.4.1 Multitouch Redirection

Thinfinity® Remote Desktop Workstation now supports Multi-touch input in desktop touch devices. This means you can use touch options remotely, as long as the Windows version of the remote desktop supports touch input. Using Windows 8 and Windows Server 2012, the remote Windows desktop will receive your touch input and interpret it as if you were touching the remote screen.

Multi-touch Redirection is enabled will work in desktop touch devices as long as the browser supports touch features and the OS of the remote desktop can interpret it. Otherwise, or if you disable this option, all touch input will be interpreted as mouse movements.

Thinfinity® Remote Desktop Workstation will redirect the touch of up to 10 simultaneous fingers for it to be interpreted by Windows.
6.1.4.2 RemoteFX

The RemoteFX Codec implemented in Thinfinity® Remote Desktop Server enables Microsoft® RemoteFX™, which is an RDP extension. Remote FX attempts to provide an experience similar to a local computer, enabling the delivery of a full Windows user experience. This enables end users to run graphical applications on a virtual machine: Youtube videos, games, animations or moving images can be seen with much more fluidity than when using the RDP traditional mode.

Changing the data compression and transmission, it checks screen content changes between frames and transmits the changed bits for encoding; it also tracks network speed and then dynamically adjusts according to the available bandwidth.

Thinfinity® Remote Desktop Server is set by default to choose the best user experience. The 'Enable Remote FX' option is set to true by default and comes into effect when the host and guest are configured properly. Otherwise, the Thinfinity® Remote Desktop Server connection will be established without Remote FX.

When Remote FX is enabled, it will override the settings in the 'Experience' tab and the 'Color Depth' option in the 'Display' tab. All the settings in the 'Experience' tab will work as if they were enabled and the color depth will be 32, regardless of the values configured in Thinfinity® Remote Desktop Server, because they are part of the RemoteFX experience.

Remote FX is a Microsoft extension that has several requirements in order to work. When Remote FX is working with traditional RDP, that means it's ready to be enabled with Thinfinity® Remote Desktop Server using our Remote FX Codec. Please contact Microsoft Support to get it started!

If you are using Windows Server 2012 in the host, you will also need to configure some policies for RemoteFX to work. If these policies are not enabled the connection will not use Remote FX nor tell the user or administrator, either.

Follow these steps to configure Windows Server 2012 to work with Thinfinity® Remote Desktop Server Remote FX Codec:

1) Run gpedit.msc

2) Search for the RDP settings in the 'Local Group Policy Editor': Local Computer Policy\Computer Configuration\Administrative Templates\Windows Components\Remote Desktop Services\Remote Desktop Session Host\Remote Session Environment'

3) Set the 'Enable RemoteFX encoding for RemoteFX clients designed for Windows Server 2008 R2 SP1' option to [Enabled]

4) Set the 'Limit maximum color depth' option to [Enabled] and the 'Client Depth' option to [Client Compatible]

These are the required features your browser must support in order to use RemoteFX:

- WebSockets.
- ArrayBuffers and the Uint8Array, Uint16Array, Uint32Array types
## 6.1.5 Advanced Preferences

The Remote Desktop 'Advanced' tab presents you with the following options:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unicode Keyboard</td>
<td>Uncheck this option to choose the remote keyboard layout. Otherwise, the local keyboard layout is used. Used to connect to Unix computers through xRDP.</td>
</tr>
<tr>
<td>Keyboard layout</td>
<td>This option is enabled when you uncheck the Unicode Keyboard option. Choose the remote keyboard layout.</td>
</tr>
<tr>
<td>Connect to console session</td>
<td>Check this option to connect to the console session. This requires confirmation from the logged on user to log out of their current session.</td>
</tr>
<tr>
<td>Disable NLA Login</td>
<td>Check this to skip NLA as the default login and have the authentication done by an alternative method.</td>
</tr>
<tr>
<td>Websocket compression</td>
<td>Check this option to enable the compression for the exchanged Websocket data and have the application performance improved.</td>
</tr>
<tr>
<td>Relative mouse movement</td>
<td>The relative mouse movement is a mouse behaviour encountered in touch screen mobile devices, in which the screen cursor moves relatively to the touch. Uncheck this option to have a mouse behaviour similar to the real desktop mouse in which the cursor will be always positioned under the touch.</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th><strong>Minimum Drag Distance (in Pixels)</strong></th>
<th>Specify maximum distance in pixels that you can move the finger and have it be considered a touch instead of a drag movement.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Touch to hold delay (Milliseconds)</strong></td>
<td>Specify time in milliseconds that you need to hold a touch until you can drag.</td>
</tr>
</tbody>
</table>
6.1.6 Security Preferences

The Remote Desktop ‘Security’ tab presents you with the following options:

<table>
<thead>
<tr>
<th>Ask for credentials</th>
<th>Prompt the user for new credentials to access the remote desktop.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use these credentials:</td>
<td>Enter credentials to connect to the remote desktop.</td>
</tr>
</tbody>
</table>
6.1.7 Supported RDP Shortcut Keys

The supported shortcut keys for Remote Desktop connections are the same as in regular RDP. Here is a list of the shortcut keys:

- **ALT+PAGE UP**: Switches between programs from left to right.
- **ALT+PAGE DOWN**: Switches between programs from right to left.
- **ALT+INSERT**: Cycles through the programs using the order in which they were started.
- **ALT+HOME**: Displays the Start menu.
- **CTRL+ALT+BREAK**: Switches the client between full-screen mode and window mode.
- **CTRL+ALT+END**: Brings up the Windows Security dialog box.
- **ALT+DELETE**: Displays the Windows menu.
- **CTRL+ALT+MINUS SIGN (-)**: Places a snapshot of the active window, within the client, on the Remote Desktop Session Host (RD Session Host) server clipboard (provides the same functionality as pressing ALT+PRINT SCREEN on the local computer).
- **CTRL+ALT+PLUS SIGN (+)**: Places a snapshot of the entire client windows area on the RD Session Host server clipboard (provides the same functionality as pressing PRINT SCREEN on the local computer).
6.2 Screen Sharing

The Thinfinity® Remote Desktop Workstation 'Screen Sharing' feature allows users to share a remote machine's screen and interact with it in many ways. This connection mode will show the user exactly what is being shown on the remote environment. It replicates the remote desktop image on your browser and is updated continuously.

**Opening a Screen Sharing connection:**

1. Open your preferred web browser.

2. Type into the address bar `http(s)://Thinity_Remote_Desktop_Workstation_Server_IP:Port`.

3. Select 'Screen Sharing' as connection mode.

4. You can also customize the personal settings (Display, Control and Advanced).

4. Press the 'Connect' button.

5. Here is your new Screen Sharing Connection. Enjoy it as if you were in front of the remote machine.

Learn also, how to use the Screen Sharing Toolbar and the available Shortcut Keys.
6.2.1 Display Preferences

The Screen Sharing 'Display' tab presents you with the following options:

| Color Depth | Choose the color depth for the remote computer view. |
| Resolution  | Choose whether you want to use the 'Remote' (remote machine resolution) or 'Local' (accessing machine resolution) resolution. |
| Image Quality | The connection image quality is a directly related with the application performance (higher quality = lower performance). The default image quality is 'Optimal', because it presents the best cost benefit between quality and performance cost. If you need to have more quality or better performance, take a look at the other options below: |
|             | 'Highest' - Works only with PNG images and has no compression (0% compression) |
|             | 'Optimum' - Combines PNG and JPEG images (20% compression). |
|             | 'Good' - Works only with JPEG images (40% compression) |
|             | 'Faster' - Works only with JPEG images (50% compression). |
6.2.2 Control Preferences

The Screen Sharing 'Control' tab presents you with the following option:

<table>
<thead>
<tr>
<th>Allow mouse control</th>
<th>Uncheck this if you want the connection to be view-only.</th>
</tr>
</thead>
</table>

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### 6.2.3 Advanced Preferences

The web interface 'Advanced' tab presents you with the following options:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connect to console session</td>
<td>Check this option to connect to the console session.</td>
</tr>
<tr>
<td>Disable NLA Login</td>
<td>Check this to skip NLA as the default login and have the authentication done by an alternative method.</td>
</tr>
<tr>
<td>Websocket compression</td>
<td>Check this option to enable the compression for the exchanged Websocket data and have the application performance improved.</td>
</tr>
<tr>
<td>Relative mouse movement</td>
<td>The relative mouse movement is a mouse behaviour encountered in touch screen mobile devices, in which the screen cursor moves relatively to the touch. Uncheck this option to have a mouse behaviour similar to the real desktop mouse in which the cursor will be always positioned under the touch.</td>
</tr>
<tr>
<td>Minimum Drag Distance (in Pixels)</td>
<td>Specify maximum distance in pixels that you can move the finger and have it be considered a touch instead of a drag movement.</td>
</tr>
<tr>
<td>Touch to hold delay (Milliseconds)</td>
<td>Specify time in milliseconds that you need to hold a touch until you can drag.</td>
</tr>
</tbody>
</table>
6.2.4 Toolbar

Once connected, you will find a toolbar that looks like the one above on the top of the Screen Sharing. Find the behaviour of each one of the toolbar options below:

**The Actions menu**

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refresh</td>
<td>Press refresh to request a screen refresh.</td>
</tr>
<tr>
<td>Pause/Play</td>
<td>Press pause to freeze the screen image. This will not disconnect your session but you will not receive the screen image of the remote desktop. Press play to resume the remote screen viewing.</td>
</tr>
<tr>
<td>Keyboard</td>
<td>Displays the keyboard options.</td>
</tr>
<tr>
<td>Ctrl + Alt + Del</td>
<td>Sends this keyboard combination to the remote desktop because if you press this it will be interpreted by the local machine.</td>
</tr>
<tr>
<td>Ctrl + Esc</td>
<td>Sends this keyboard combination to the remote desktop because if you press this it will be interpreted by the local machine.</td>
</tr>
<tr>
<td>Remote Keyboard Layout</td>
<td>Toggle this option on or off to use the local or remote keyboard layout.</td>
</tr>
<tr>
<td>Help</td>
<td>Displays a list of shortcuts you can use to send key combinations to the remote screen. Read More.</td>
</tr>
</tbody>
</table>

**The Options menu**
Control
Toggle mouse control on and off. When mouse control is off you will not be able to use the mouse in the remote screen.

Scale
Press to scale the remote screen to the current size of the browser. Press 'Scale' again to show the remote screen unscaled, using the remote screen resolution specified in the Display Preferences.

Colors
Choose '256 colors' or 'Full color' for the remote screen image. This can affect the bandwidth used.

Settings
Access the Thinfinity® Remote Desktop Workstation settings in a popup above the remote desktop.

The Disconnect menu
Press 'Disconnect' to end your screen sharing session.
6.2.5 Shortcut Keys

Here is a list of the shortcut keys available on Screen Sharing connections:

- **ALT+PAGE UP**: Switches between programs from left to right.
- **ALT+PAGE DOWN**: Switches between programs from right to left.
- **ALT+INSERT**: Cycles through the programs using the order in which they were started.
- **ALT+HOME**: Displays the Start menu.
- **CTRL+ALT+BREAK**: Switches the client between full-screen mode and window mode.
- **CTRL+ALT+END**: Brings up the Windows Security dialog box.
- **ALT+DELETE**: Displays the Windows menu.
- **CTRL+ALT+MINUS SIGN (-)**: Places a snapshot of the active window, within the client, on the server clipboard (provides the same functionality as pressing ALT+PRINT SCREEN on the local computer).
- **CTRL+ALT+PLUS SIGN (+)**: Places a snapshot of the entire client windows area on the server clipboard (provides the same functionality as pressing PRINT SCREEN on the local computer).
6.3 File Transfer

The File Transfer feature allows you to seamlessly exchange files between the remote and the local machine.

Opening a File Transfer connection:

1. Open your preferred web browser.
2. Type into the address bar http(s)://Thinfinity_Remote_Desktop_Workstation_Server_IP:Port.
3. Select 'File Transfer' as the connection mode.
4. Press the 'Connect' button.
5. Enter the remote machine credentials and press 'Log In'.
   * If you are using 'Windows Logon' as Authentication mode, this screen won't be shown, since the application will log in using the same credentials already authenticated against Thinfinity® Remote Desktop Workstation.
6. Here is your File Transfer Connection.

6.3.1 Security Preferences

The File Transfer 'Security' tab presents you with the following options:

- **Ask for credentials**
- **Use these credentials:**

<table>
<thead>
<tr>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ask for credentials</td>
</tr>
<tr>
<td>Use these credentials:</td>
</tr>
</tbody>
</table>

6.3.2 Navigating

On the upper part of the screen you will see your remote files and folders. Browse to the remote location by double clicking on the folders on the right, or expanding the tree structure on the left.

In order to upload files, drag them from your local PC and paste them into the remote view area, or press the 'Browse' button.

The lower part of the screen shows the status of the transferred files.
Get to know about the File Options and the Remote Folder Area Options.
6.3.3 File Options

Right click on a remote file to access these options:

- **Update File...**
  Choose this option to replace the selected remote file with a local file.

- **Download**
  Choose this option to open or download the selected file.

- **Copy**
  Choose this option to copy the file into the remote clipboard. You can paste it into another remote folder.

- **Cut**
  Choose this option to cut the file into the remote clipboard. You can paste it into another remote folder.

- **Rename...**
  Choose this option to change the name for the remote file.

- **Delete**
  Choose this option to delete the selected file.

- **Properties...**
  Choose this option to see the remote file's properties.
6.3.4 Remote Folder Area Options

Right click on the blank remote folder area any time to access the following options:

- **New Folder**: Choose this option to create a new folder in the remote location.
- **Upload Files**: Choose this option to upload one or more files to the remote location.
- **Upload Folder**: Choose this option to upload one or more folders to the remote location.
- **View**: Select if you want the File Transfer screen to show Large Icons, Medium Icons or Details.
- **Paste**: Choose this option to paste a remote file that is in the clipboard into the remote location. It will be enabled only after you have copied a file into the clipboard.
- **Refresh**: Choose this option to refresh the view of the remote folder.

Find the behaviour for each one of these options below:
6.4 Presentation Manager

Using the presentation manager, you can securely invite people to show them the whole desktop or selected applications. The presentation attendees will be able to see the remote screen or selected applications from the Web using a view-only mode.

Read the next topics and learn how to set up your own presentation with Thinfinity® Remote Desktop Workstation:

1. Setting up the invitation template
2. Using the Presentation Manager
   2.1 Participants
   2.2 Local Monitor
   2.3 Application Selection
3. Attending a Presentation
6.4.1 Setting up the Invitation Template

To prepare a presentation, it's important to configure the Invitation Template first. If you haven't done so, please check out the Thinfinity® Remote Desktop Workstation Manager Presentation Tab section and learn how to set it up.
6.4.2 Using the Presentation Manager

The Thinfinity® Remote Desktop Workstation 'Presentation Manager' is the tool for creating, configuring, hosting and supervising your own presentations. Right click on the Thinfinity® Remote Desktop Workstation tray icon and choose the option 'Manage Presentation'.

Click on the panels (Participants, Local Monitor and Application selection) to expand or collapse them and keep reading the next topics so you can learn how to configure your first presentation:

- Participants
- Local Monitor
- Application Selection
6.4.2.1 Participants

Use this panel to manage the users and invitations to your presentation. Enter your guests emails in the text field and press the Add email button to add a participant to the list.

Each participant will be listed with the following information:

- The red or green light indicates in real time whether the participant is viewing the presentation or not.
- The first button copies the invitation text (as configured in the Invitation template) to the clipboard. You can paste the information in a document, in a chat conversation, or any other media you find useful.
- The second button opens an email with the participant's address and the invitation text in the body, so you can easily invite the participant just by pressing "Send".
- The third button removes a participant from the list. If they are connected at the time of removal, they will not be able to see the rest of the presentation.

Once you have added the participants on the list, remember to send the invitations to them. When the green light turns on by the side of a participant's name, it means that this participant has entered to view the presentation.

The invitation links, usernames and passwords remain available and can be re-accessed at any time during the presentation. The presentation is finished by closing the presentation manager.
6.4.2.2 Local Monitor

This panel shows exactly what a presentation attendant will visualize in the browser. It's useful for you to check whether the applications are showing and are not overlapped by other invisible applications. Notice that the guests do not see the Presentation Manager.
6.4.2.3 Application Selection

This panel lists the applications that are running currently on the presentation machine, so that you can choose which ones to display in the remote browser. Select the applications from the list. Expand or collapse the application groups to see the list of grouped applications:

- **Include Selected**: Show only the selected applications.
- **Exclude Selected**: Show everything on the desktop, except for the specific applications you select.
6.4.3 Attending a Presentation

If you want to attend a Thinfinity® Remote Desktop Workstation presentation, you probably have received an invitation that looks like the one below.

Hello,

Please join the presentation on https://Thinfinity_Remote_Desktop_Workstation_Server_IP:8081/join.html
Use the following data to log in:

**Ticket ID:** 412379168
**User ID:** john@cybelesoft.com
**Password:** BoiAKtw

Regards

1. To attend the application have this invitation at hand.
2. Open your preferred web browser.
3. Type the provided URL into the address bar [http(s):// Thinfinity_Remote_Desktop_Workstation_Server_IP:Port/join.html](http(s):// Thinfinity_Remote_Desktop_Workstation_Server_IP:Port/join.html)
4. On the 'Ticket' field enter the Ticket ID information found inside the invitation.
5. Press the 'Join' button.
6. You will be prompted to enter the credentials (UserID and Password) also provided on the invitation. Enter the credentials and press OK.
7. Now you should be already viewing the remote presentation

8. To exit the remote presentation press the 'Disconnect' button, located on the upper toolbar.

9. If you want to get to know more about the other toolbar buttons, read the Toolbar topic.
6.5 Remote Printing

Thinfinity® Remote Desktop Workstation enables you to print a document located in the remote computer. In order to do that, when you print a document from the remote computer, make sure that the Thinfinity® Remote Desktop Workstation Remote Printer is selected:

The document will be opened as a PDF file by your local browser. It will be a pop up, so make sure it is not blocked by the browser:

After you open the PDF file in the browser, you can choose to send it to your local printer.
In order to configure the Advanced Settings you will have to open the Thinfinity® Remote Desktop Workstation Manager. Look for the Thinfinity® Remote Desktop Workstation icon in the tray bar, click on this icon and select the 'Settings' option.

On the next topics you will find a detailed explanation for each tab of the Thinfinity® Remote Desktop Workstation Manager:

- General
- Communications
- Security
- Screen Sharing
- License

The Settings tool main menu is composed by the two sub menus that follows:

**File Menu:**

<table>
<thead>
<tr>
<th>File</th>
<th>Help</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language</td>
<td></td>
</tr>
<tr>
<td>Close</td>
<td></td>
</tr>
</tbody>
</table>

The File Menu is composed by the following options:
<table>
<thead>
<tr>
<th>Language</th>
<th>Allows you to choose different languages for the application. Click on the Language that you want the application to work with. English is the default language.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Close</td>
<td>Click on this option to exit the Thinfinity® Remote Desktop Workstation Manager.</td>
</tr>
</tbody>
</table>

**Help Menu:**

- **File**
- **Help**
  - Help
  - Buy Thinfinity® Remote Desktop Workstation
  - About Thinfinity® Remote Desktop Workstation...

The Help Menu is composed by the following options:

<table>
<thead>
<tr>
<th>Help</th>
<th>Takes you to the application online Guide.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buy Thinfinity® Remote Desktop Workstation</td>
<td>Takes you to the Cybele Software Buying page, so that you can purchase your Thinfinity® Remote Desktop Workstation.</td>
</tr>
<tr>
<td>Buy Thinfinity® Remote Desktop Workstation</td>
<td>Click on the About to see the application version and build number.</td>
</tr>
</tbody>
</table>
7.1 General

On the Thinfinity® Remote Desktop Workstation Manager ‘General' tab you will find the following options:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remote Desktop</td>
<td>Uncheck this option to disable Remote Desktop connections to this machine.</td>
</tr>
<tr>
<td>Screen Sharing</td>
<td>Uncheck this option to disable Screen Sharing connections to this machine.</td>
</tr>
<tr>
<td>File Transfer</td>
<td>Uncheck this option to disable File Transfer connections to this machine.</td>
</tr>
</tbody>
</table>

Status message

The bottom message shows you the Thinfinity® Remote Desktop Workstation Service status. If the icon is green, it means Thinfinity® Remote Desktop Workstation service is working, if it is red, you will have to review the Communication Settings.

Always remember to press 'Apply' in order to save the changes.
7.2 Communications

The Thinfinity® Remote Desktop Workstation Manager ‘Communication’ tab presents you with the following options:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bind to IP</td>
<td>Use this option to restrict access to the service through one specific IP. The 'All unassigned' option allows access through all the possible IPs for the computer.</td>
</tr>
<tr>
<td>Protocol</td>
<td>Choose between the http and https protocol. The https protocol uses SSL. Hence, it's more secure.</td>
</tr>
<tr>
<td>Port</td>
<td>Choose the port number for this computer to be accessed.</td>
</tr>
<tr>
<td>Use UPnP</td>
<td>If you support UPnP, check this option to make this computer available from outside your LAN in the port number chosen in the 'Port' field. If this port is already in use in the router, you might see this error message: 'UPnP Error: This port is assigned to another service/computer' If this happens, choose a different port number in order to use UPnP.</td>
</tr>
</tbody>
</table>
Enable Dynamic IP Address Resolution & Shared SSL Certificate

This option works as a Dynamic DNS service to link your IP to a public address in Thinfinity® Remote Desktop Workstation.net and provide you with a Pin code that identifies the Thinfinity® Remote Desktop Workstation server's IP address uniquely. Also in this way you use the SSL certificate provided by the Thinfinity® Remote Desktop Workstation.net site. It is a simple way to provide public access to Thinfinity® Remote Desktop Workstation.

Always remember to press 'Apply' in order to save the changes.

If you still have problems connecting to Thinfinity® Remote Desktop Workstation, take a look at the following items:

1. **Verifying the communication Settings**
   1.1 **Port**
   1.2 **Configuring internet access**
   1.3 **Enabling RDP connections**

2. **Dynamic DNS and Certificate Sharing**
   2.1 **Configuring PIN resolution**
   2.3 **Accessing through ThinVNC.net**
7.2.1 Verifying the Communication Settings

The topics below might be helpful to troubleshoot your connection to Thinfinity® Remote Desktop Workstation:

- Port
- Configuring Internet access
- Enabling RDP Connections
7.2.1.1 Thinfiniti® Remote Desktop Workstation Listening Port

Thinfiniti® Remote Desktop Workstation listens on port 8081 by default. If you are not using this port yet it won't be necessary to change the Thinfiniti® Remote Desktop Workstation port. Validate whether Thinfiniti® Remote Desktop Workstation is running properly by looking at the status message of the ‘General’ tab, located on the bottom of the window. It should say:

✅ Service started. Listening https on port 8081.

If you see the message ‘HTTPS port 8081 in use’, it means that you will have to use another port number, since this one is already in use by another application.

1. Identify a port number that is not used yet in the computer where you have installed Thinfiniti® Remote Desktop Workstation.

2. Change the port number on the Thinfiniti® Remote Desktop Workstation Manager ‘Communications’ tab.

3. Press ‘Apply’. You might need to wait a couple of minutes for this change to be applied.

4. Verify whether Thinfiniti® Remote Desktop Workstation is running in the status message of the ‘General’ tab, located on the bottom of the window. It should say ‘Server started. Listening https on port...’. 
7.2.1.2 Configuring Internet Access

In order to make Thinfinity® Remote Desktop Workstation available from the internet, all you need to do is to check the 'Use UPnP option' present on the Communications tab.

1. Configuring the router:

Once you have enabled the UPnP option, the application will try to automatically open the port for you on the router. If this doesn't work, you can manually forward the external port to your computer's Thinfinity® Remote Desktop Workstation listening port.

2. Test the access:

Test the internet access from a outside machine, by typing into a browser the following url:

http(s)://external-ip:port
or
http(s)://your-domain:port

Check out a different way to make Thinfinity® Remote Desktop Workstation available from the internet in the Dynamic DNS and Certificate Sharing section.
7.2.1.3 Enabling RDP Connections

In order to make Remote Desktop connections through Thinfiniti® Remote Desktop Workstation you will have to enable the Windows RDP connections:

For Windows 7, 8 and Vista:

1. Click the Windows 'Start' button (Orb).
2. Right click on 'Computer' and go to 'Properties'
3. In the left column search for 'Remote Settings'
4. A new window will pop-up
5. In the 'Remote Desktop' section in the 'Remote' tab you'll see options to enable RDP
6. Choose the correct option and click 'Apply - OK'

For Windows XP or 2000:

1. Click the Windows 'Start' button
2. Right click on 'Computer' and go to 'Properties'
3. A window will pop-up
4. Go to the 'Remote' Tab
5. In the 'Remote Desktop' section enable the checkbox to allow users to connect remotely.
6. Click 'Apply - OK'
7.2.2 Dynamic DNS and Certificate Sharing

Thinfinity® Remote Desktop Workstation provides you with a Dynamic DNS service to link your local and public machine IP with a subdomain under the ThinVNC.net domain. The Thinfinity® Remote Desktop Workstation DNS service gives you a PIN code to identify your installed Thinfinity® Remote Desktop Workstation uniquely.

Using this option, you are also able to use a wildcard SSL certificate provided under the ThinVNC.net domain.

Follow the next topics so you can learn how to configure and access Thinfinity® Remote Desktop Workstation with the 'Dynamic DNS and Certificate Sharing' option.

- Configuring PIN resolution
- Accessing through ThinVNC.net

Note: If you use this option, Thinfinity® Remote Desktop Workstation will use its embedded certificate, even when the user has already configured another certificate.
7.2.2.1 Configuring PIN Resolution

1. Setting up:

Go to the Thinfinity® Remote Desktop Workstation Manager ‘Communications’ tab and mark the ‘Enable Dynamic IP Address Resolution & Shared SSL Certificate’ option. This will generate your own ThinVNC.net public address, similar to the blue link shown on the figure below and will generate also a PIN number.

![Thinfinity® Remote Desktop Workstation Manager](image)

2. Configuring the router:

If you have UPnP, enabling Dynamic IP Address Resolution & Shared SSL Certificate can automatically open the port for you on the router.

In order to test if this option did open the port, access Thinfinity® Remote Desktop Workstation through the provided address (https://pin_number.ThinVNC.net) from a computer outside the network. If it connects to the application it means the port is already open and you are ready to go. If you get an 'Invalid parameters' message, it means you will need to forward the port manually, as follows:

2.1. Port Forwarding:

a. Access the router by typing into a browser the IP for the Default Gateway.
b. Authenticate with the router credentials.
c. Go to the port forwarding section and pick a port for internet access. It can be the same port number as the one Thinfinity® Remote Desktop Workstation is running on, or a different one.
d. Forward the internet port to the machine internal IP where you have installed Thinfinity® Remote Desktop Workstation and the port where it's running.
e. Save the changes.

If you need help configuring the router, contact us at support@cybelesoft.com

You can then distribute this address to provide internet access to this machine, via Thinfinity® Remote Desktop Workstation.
7.2.2.2 Accessing Through ThinVNC.net

There are two ways of accessing Thinfinity® Remote Desktop Workstation through the generated Dynamic IP Address:

1. Use the whole address:
   a. This address is generated on the Thinfinity® Remote Desktop Workstation Manager 'Communications' tab. You can click on it directly or distribute this complete address. This will direct you into the Thinfinity® Remote Desktop Workstation Application located inside your LAN. Observe that the 'PIN' field is already completed with your PIN number and you only have to fill in the 'Username' and 'Password'.

2. Use the PIN Number only:
   a. Use https://www.ThinVNC.net/. The screen below will be presented:

   ![Thinfinity® Remote Desktop Workstation](image)

   b. Enter the pin number (also located in the 'Communications' tab) and the credentials in order to access the Thinfinity® Remote Desktop Workstation application.

The rest of the connection process is equal to the static IP's. Check it out on the Using Thinfinity® Remote Desktop Workstation for the first time section or on the connection modes sections (Remote Desktop, Screen Sharing and File Tranfer).
7.3 Security

The 'Security' tab includes the Authentication settings and also the options to Manage the SSL Certificate. If you want to learn how each of these features work, click on the related link above.

On the Thinfinity® Remote Desktop Workstation Manager 'Security' tab you will find the following options:

<table>
<thead>
<tr>
<th>Authentication</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>No authentication for Thinfinity® Remote Desktop Workstation access. This is only recommended for local access.</td>
</tr>
<tr>
<td>Digest</td>
<td>Set your own credentials for Thinfinity® Remote Desktop Workstation access authentication.</td>
</tr>
<tr>
<td>Windows Logon</td>
<td>Manage the authentication with the Windows Active Directory. When you enable this option, type the 'Allowed Users' in the box below, separated per line or using a semi-colon.</td>
</tr>
</tbody>
</table>

| Manage SSL Certificate | Press this button to access the options for replacing the default Thinfinity® Remote Desktop Workstation installed certificate with your own. |
Always remember to press 'Apply' in order to save the changes.
7.3.1 Authentication Mode

You will find two authentication levels while using Thinfinity® Remote Desktop Workstation. The first level is the application authentication, it will prompt anytime you access Thinfinity® Remote Desktop Workstation from a browser. The second level will be required every time you establish Remote Desktop or File Transfer connections and it corresponds to the remote machine's security authentication.

1. Application Login:
   
   The first level provides access to users into the Thinfinity® Remote Desktop Workstation application. You can set three different authentication modes to access the application: **None**, **Digest** and **Windows Logon**.

2. Remote Desktop Credentials:
   
   Once logged into the application, the users will be able to make 'Screen Sharing' connections without having to authenticate again. However, if they start 'Remote Desktop' or 'File Transfer' connections, they will be prompted to authenticate again on the remote machine.
   If you have set up 'Windows Logon' as authentication mode, the application will use the same Thinfinity® Remote Desktop Workstation credentials to log into the remote machine (*Single Sign-on*) and won’t ask the user for new credentials.

In order to set up the application access security control, go to the 'Security' tab in the Thinfinity® Remote Desktop Workstation Manager and select the authentication mode that best fits your need.

1. **None**
2. **Digest**
3. **Windows Logon**
7.3.1.1 No Login Required

When you first install Thinfinity® Remote Desktop Workstation, the authentication will be set to 'None'. In other words: it will not require any login information.

If you set the security to 'None', it means that everyone can access the Thinfinity® Remote Desktop Workstation application without identifying themselves: the first security level is disabled.

This option is only recommended for a controlled environment that doesn't allow outside access.
7.3.1.2 Digest

When you choose this kind of access security level, you will be able to create a single user name and password. This way, all users will have to use the same credentials (user name and password) to access the application.

To set up this authentication mode, follow these steps:

1. Choose the authentication level by selecting 'Digest' and specify your own credentials.

2. The default credentials are User: 'admin' and Password: 'admin'. We suggest you change at least the default password.

3. Press 'Apply' when you are done.

4. When you access the application via web browser, provide these credentials to get into the Thinfinity® Remote Desktop Workstation application.
7.3.1.3 Windows Logon

Choose 'Windows Logon' to use Integrated Windows Authentication, taking advantage of the current company's security policy. If you need to restrict the application access with Active Directory Authentication or unify the application and the remote machine authentication in a Single Sign-on schema, you might use this authentication mode.

1. Set the 'Windows Logon' option as the authentication mode on Thinfinity® Remote Desktop Workstation 'Security' tab.

2. Specify the users that will be allowed to access this computer by entering domain\username or username@domain. Separate users per line or using a semi-colon.

3. Use the '*' character as a mask to select all domains for a user (*\username).

Users will be prompted by the browser to enter their username in the format domain\username with the corresponding password. Thinfinity® Remote Desktop Workstation will always try to log into the remote machine using the same credentials provided when entering the application. It will work as a Single Sign-on schema.
Managing the SSL Certificate

An SSL certificate is an effective way to secure a website against unauthorized interception of data. At its simplest, an SSL Certificate is used to identify the website and encrypt all data flowing to and from the Certificate holder's Web site. This makes all exchanges between the site and its visitors 100 percent private.

A valid SSL certificate is included with the Thinfinity® Remote Desktop Workstation installation and all communications are already encrypted with the product's default certificate. You may want to create your own certificate to identify your company better.

Managing the SSL Certificate:

1. There are two ways of creating your own SSL certificate:
   a. Create A self-signed certificate
   b. Use A CA Certificate

2. Once you already have your certificate files, go to Thinfinity® Remote Desktop Workstation Manager 'Security' tab.

3. Click on the 'Manage Certificate' option. If it is disabled, it means that you have chosen to use 'Enable Dynamic IP Address Resolution & Shared SSL Certificate'.

4. On this screen you should inform the location of the certificate files, as follows:
   b. CA File: If the certificate is issued by a unknown CA, you should fill in the pathname to the CA certificate.
   c. Private Key: You should inform the pathname to the certificate private key file.
   d. PassPhrase: Inform the password, if there is any, used when the private key was generated.

   Note: The path names can be absolute (C:\MyCertPath\UserThisCert.pem) or relative to the path where Thinfinity® Remote Desktop Workstation is installed ('cert\UserThisCert.pem).

Using Dynamic DNS and Certificate Sharing:

When the 'Enable Dynamic IP Address Resolution & Shared SSL Certificate' option is marked, it means that you are going to have a shared SSL Certificate provided by the https://www.ThinVNC.net service.

In this mode, you will not be able to manage your own SSL Certificate. And for this reason the 'Manage Certificate' button located on "Security Tab" will be disabled.
7.3.2.1 The Default Embedded Certificate

A certificate called ‘self-signed.pem’ is included with the Thinfinity® Remote Desktop Workstation installation. You will find it inside the \cert directory, located inside the Thinfinity® Remote Desktop Workstation application path.

If you want to use this default certificate you should have the files set as the image below:

Note: Because this certificate is not issued by a known Certificate Authority (CA), the web browsers will warn you they can not verify its authority.
7.3.2.2 A Self-signed Certificate

This option is used to create your own self-sign certificate.


2. Press the 'Create a self-signed certificate' button.

3. Fill in the form below with your organization data:

4. The 'Common Name' field should be filled with the server+domain that will be used to access Thinfinity® Remote Desktop Workstation (Thinfinity_Remote_Desktop_Workstation.mycompany.com).

5. Press Create.

6. Select the location where you want the certificate to be stored.

7. The application will start using this self-signed certificate just created by you.

Note: Because this certificate is not issued by a known Certificate Authority (CA), the web browsers will warn you they can not verify its authority.
7.3.2.3 A CA Certificate

In order to use this option you will have to get a certificate from a known Certificate Authority (CA). Some CA examples are GoDaddy, VeriSign, Thawte, GeoTrust and Network Solutions.

The CA will ask you for a 'certificate request'. Create one following the next steps:


2. Click on the 'Create a certificate request' button.

3. Fill in the form below with your organization data:

   ![Create certificate request and private key](image)

   4. The 'Common Name' field should be filled with the server+domain that will be used to access Thinfinity® Remote Desktop Workstation (Thinfinity_RemoteDesktop_Workstation.mycompany.com)

   5. Press 'Create' and the application will generate two files.

6. The first window will ask you a location to keep the private key file: 'Where do you want the private key file to be stored'.
   
   a. Inform a name for your private key.
   b. Select a place to keep it safe.
   c. Press the 'Save' button.

7. The second window will ask you a location to keep the request file: 'Where do you want the request file to be stored'.
   
   a. Inform a name for the request file.
   b. Select a directory where you can find the file later on to send to the CA.
c. Press the ‘Save’ button.

8. The first file is the certificate private key. It should always be kept safe with you.

9. Send only the request file to the CA.

After the CA validation process, place the certificate they sent to you on Thinfinity® Remote Desktop Workstation cert directory and inform the path to the files on Thinfinity® Remote Desktop Workstation Manage Certificate option (Certificate file, CA file and Private Key).
7.4 Screen Sharing

This tab will only be available when the General tab 'Screen Sharing' option is checked. It allows you to configure settings related to Screen Sharing Connections. On the bottom of the tab, you will see two inner tabs. On the links below you will learn more about each 'Screen Sharing' setting:

- General
- Presentation
7.4.1 General

The Screen Sharing 'General' tab presents you with the following options:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use Video Driver</td>
<td>If the option is checked the video driver is used. This enhances image and performance.</td>
</tr>
<tr>
<td>Show Remote Pointer</td>
<td>When accessing the remote desktop, shows the remote cursor image. Disable it to use the local cursor.</td>
</tr>
</tbody>
</table>
### Remote Access Permission

Choose whether the application will ask for permission before a 'Screen Sharing' connection gets established.

<table>
<thead>
<tr>
<th>Permission Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Allow access at all times</strong></td>
<td>Does not ask for authorization, allowing all connections.</td>
</tr>
<tr>
<td><strong>Ask for authorization. On Timeout allow access</strong></td>
<td>Asks for authorization, and if the machine user does not answer the authorization dialog within the timeout margin, the application allows the remote connection.</td>
</tr>
<tr>
<td><strong>Ask for authorization. On Timeout deny access</strong></td>
<td>Asks for authorization. If the machine user does not answer the authorization dialog within the timeout margin, the application denies the remote connection.</td>
</tr>
</tbody>
</table>

### Prompt timeout

Set up the timeout for the 'Ask for authorization' options of the 'Remote Access Permission' field.

### Inactivity timeout

Set up the amount of time that Thinfinity® Remote Desktop Workstation will wait before disconnecting and inactive Screen Sharing session.

*Always remember to press 'Apply' in order to save the changes.*
7.4.2 Presentation

These settings are used for presentations, initiated from the Presentation Manager.

The Screen Sharing 'Presentation' tab presents you with the following options:

| Invitation Template | Use this textbox to enter the template for your presentation invitations. Use the following variables to represent the information that will be replaced automatically in each session:
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>#URL#</td>
<td>The URL where the viewer will access to see the presentation. This is the URL you enter in the External URL field below</td>
</tr>
<tr>
<td>#TICKET#</td>
<td>The Ticket number to enter in the presentation landing page in order to access the presentation.</td>
</tr>
<tr>
<td>#USERID#</td>
<td>The email or user ID of your guest, entered when creating the presentation. The browser will require the guest for User ID and password in order to attend the presentation.</td>
</tr>
<tr>
<td>#PASSWORD#</td>
<td>The password is generated automatically by Thinfinity® Remote Desktop Workstation and is valid for a particular user and a particular presentation. The browser will prompt the guest for User ID and password in order to attend the presentation.</td>
</tr>
<tr>
<td>External URL</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td></td>
</tr>
</tbody>
</table>

Enter the information of the external URL of your computer. This is, the external IP and port (redirected in the router if you are in a LAN) necessary to access your computer from the internet. This information will be used to create invitation to presentations.

Important: If you do not enter a valid external URL in this field, the presentation manager will produce invalid invitation links. If you need to find out the your external IP, you can use a service, for instance the web page [http://www.whatismyip.com](http://www.whatismyip.com) provides this kind of information.

Always remember to press 'Apply' in order to save the changes.
7.5 Customizing the Web Interface

Thinfinity® Remote Desktop Workstation allows you to modify the web interface and tailor it to your branding scheme.

Customizing the application logo and other image files can be very simple, once it only requires you to have the new image file and tell the application where it is located.

Customizing the structure and style of the application may be a little bit more complex. These kind of customizations have to be done at a programming level (HTML and CSS).

Read also how to protect the customized web files in the Files Location topic.
7.5.1 Changing the logo

Modifying the application logo can be as simple as copying the new logo image and telling Thinfinity® Remote Desktop Workstation application where it is located:

1. Create a folder called "BrandingFiles", if it doesn't exist yet, under the folder web located inside the Thinfinity® Remote Desktop Workstation installation directory. (e.g.: C:/Program Files/Thinfinity® Remote Desktop Workstation/web)

2. Copy your own logo image file to the "BrandingFiles" folder.

3. Create the WebAliases.ini file and configure it:

   a. Create a file called "WebAliases.ini" in the installation directory (e.g.: C:/Program Files/Thinfinity® Remote Desktop Workstation/WebAliases.ini). If the file already exists, only append the lines to it.

   b. Configure the redirection of the logo files you want to substitute, following the two examples below (ThinVNC.png and favicon.ico):

   ```
   [Alias]
   ;=================
   ;Main logo
   ;=================
   /images/ThinVNC.png=BrandingFiles\MyLogo.png
   ;=================
   ;Favicon
   ;=================
   /favicon.ico=BrandingFiles\MyFavicon.ico
   ```

   c. Save it.

4. Open the application to see the changes.

Take into account:

a. Any line in the "WebAliases.ini" file starting with a semicolon will not be considered by the application. It can be used to leave comments in the file.

b. You can substitute any interface image or file, by following the same steps described above.

c. Sometimes the favicon is not shown right the way, because the browser keeps history of the images. In that case, you should clean the browser cache before trying out the changes.
7.5.2 Customizing the web files

To customize the web files, you should:

1. Create a folder called "BrandingFiles", if it doesn’t exist yet, under the folder web located inside the Thinfinity® Remote Desktop Workstation installation directory. (e.g.: C:/Program Files/Thinfinity® Remote Desktop Workstation/web)

2. Make copies of the original web files that you want to modify to the "BrandingFiles" folder. Copy only the files to be modified without their associated folder structure.

3. Customize the files (html, css, etc) as you prefer.

4. Create the WebAliases.ini file and configure it:

   a. Create a file called "WebAliases.ini" in the installation directory (e.g.: C:/Program Files/Thinfinity® Remote Desktop Workstation/WebAliases.ini). If the file already exists, only append the lines to it.

   b. Configure the redirection to the files you have modified, by adding a line similar to the examples below for each modified file:

   ```
   [Alias]
   /index.html=BrandingFiles\my_index.html
   /css/index.css=BrandingFiles\my_index.css
   ```

   c. Save it.

5. Open the application and check out the changes.

Take into account:

a. Any line in the "WebAliases.ini" file that starts with a semicolon will not be considered by the application. It can be used to leave comments.

b. The paths located in the HTML, CSS, and other contents will be kept relative to the original file location. This means that you won't have to change the content paths when customizing this files.
7.5.3 Files Location

We recommend that you to create a new folder in order to keep the customized files instead of leaving it all together with the original ones. On doing so, you will:

a) Have the possibility to get back to the original interface configuration, at anytime
b) Make sure that your files will be safe after a version upgrade.

You can also choose whether to place the files inside or outside the webroot structure. Read next, how each option will behave differently.

**Inside the webroot :**

When the directory that will keep the customized files is created inside the webroot directory:

1) The files will be accessible externally from a URL similar to: https://127.0.0.1/BrandingFiles/customizedFile.html

2) The paths to the files, indicated in the "WebAliases.ini", can be relative to the webroot directory. (e.g. "img/ThinVNC.png=BrandingFiles/MyLogo.png"). You will find other relative path examples on the topics [Changing the logo](#) and [Customizing the web files](#).

**Outside the webroot :**

The customized files, can also be placed in any other disk location. In that case:

1) The files will be protected, because it won't be possible to access the customized files from an URL.
2) The paths to the files, indicated in the "WebAliases.ini", have to be absolute, as the example
below:

[Alias]

/index.html=c:/BrandingFiles/my_index.html
/images/ThinVNC.png=c:/BrandingFiles/MyLogo.png
7.6 License

In the license tab you can:

**a. Register a license:**

If you have your Thinfinity® Remote Desktop Workstation license, you should register it by following the next steps:

1. Click on the 'Register' button.
2. Enter the License 'E-mail' and 'Serial' number information, received by e-mail.
3. Press Activate.
4. If the information is correct and the license has available seats, you will be able to register Thinfinity® Remote Desktop Workstation.
5. Verify the new licensing information on the 'License' Tab.
6. Contact us if you want to increase your license limits or if you want to enable a new feature.

**b. Deactivate this machine:**

You may want to deactivate a machine in order to use this license on another machine. The deactivation button will be enabled only when a license is already registered on this machine. To deactivate your already registered license, follow the steps below:

1. Click on the 'Deactivate' button.
2. Press 'Yes' on the Confirmation Dialog.
3. You will receive a message confirming the license deactivation.

**c. Show the current Licensing Status:**

| Trial | Right after you install Thinfinity® Remote Desktop Workstation, the license status will be 'Trial'. This status will be kept until the trial period is over. You are able to see how many days the trial period still has left. |
After buying Thinfinity® Remote Desktop Workstation license and registering, you will have the application status turned to 'Registered'. You will be able to view your registration information:

1. Registered to
2. Email
3. Serial Number,
4. License type,
5. Expiration date,
6. License limits and
7. Enabled features.

If you do not register a license and your trial period is over, the status will turn to 'Trial Expired'. During this status the application won't be available.

Contact us regarding pricing and/or licensing questions or visit our website

http://www.cybelesoft.com/buy/