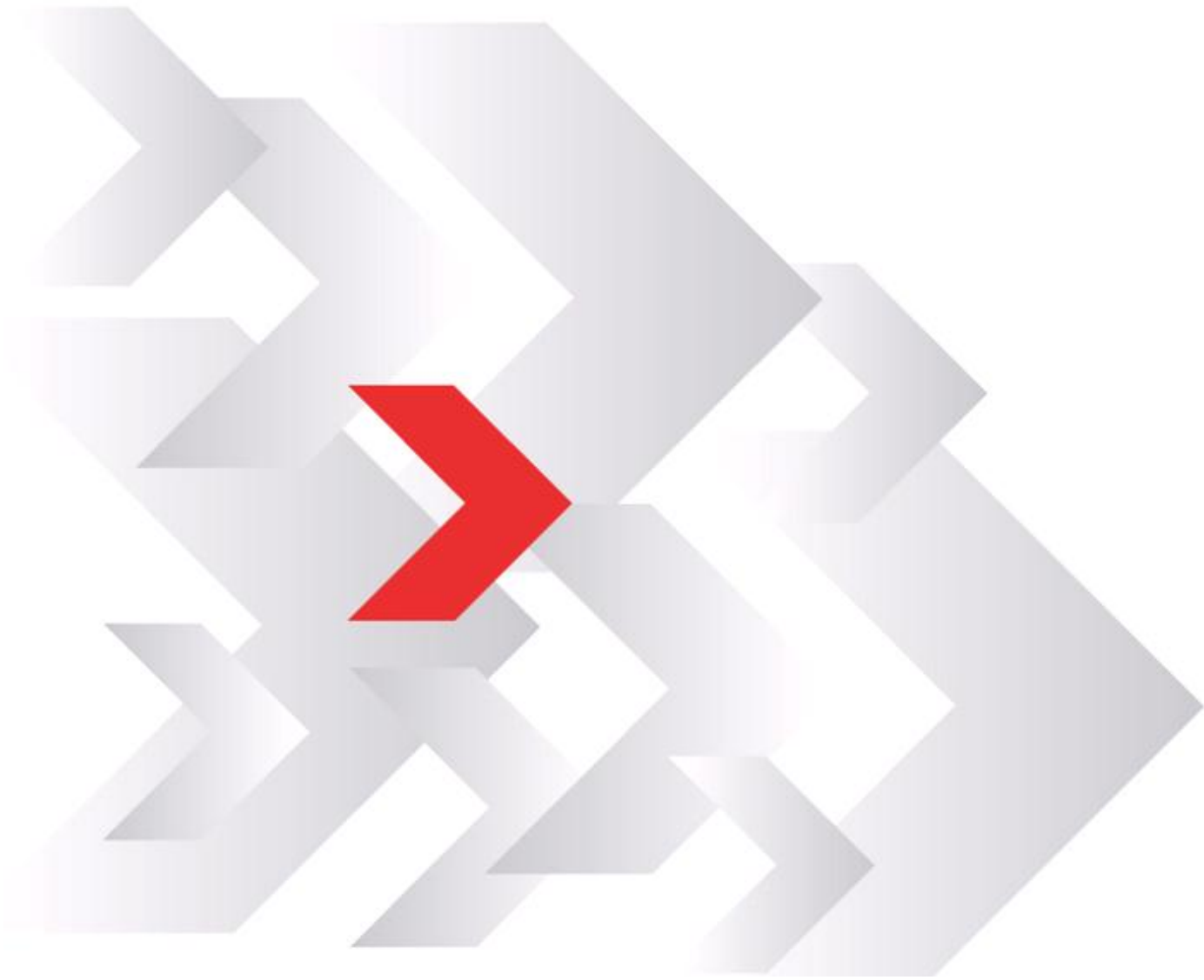


2X Manual

VirtualInfrastructureDesigner
v10.0





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2X VIRTUALINFRASTRUCTUREDESIGNER MANUAL

The 2X VirtualInfrastructureDesigner (VID) allows administrators to view and change their Virtual Desktop infrastructure graphically, providing ease of use and administrative control. Users can add and remove servers, gateways, hypervisors and other network components.

Administrators using the 2X VID can now view their installation graphically in Microsoft Visio format, allowing new scenarios to be created quickly and painlessly. Administrators can save configuration settings and use the Visio interface to tweak changes at any time, while monitoring the user's server environment.

Some of the VID product features include:

- Wizards for quick scenario creation
- Ability to import existing configurations, to view and modify farm setup
- Modification of a farm scenario design can be easily exported for use by 2X ApplicationServer (v.10.0) or higher
- Includes ready-to-use templates for typical scenarios
- Drag-and-drop functionality
- Allows for zooming and panning when viewing farm setups
- Print and print preview integration

Pre-Requisites

- Microsoft Visio 2003 or higher



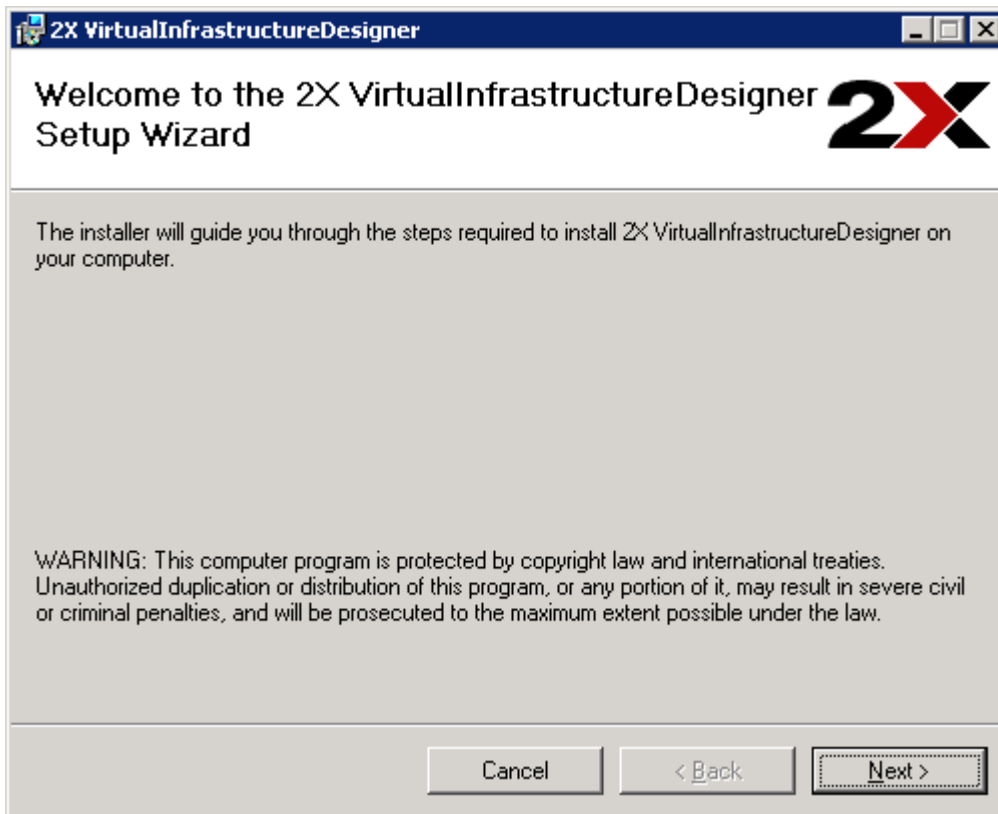
Installation

Make sure all Windows programs are closed before you begin the installation.

Install the 2X VirtualInfrastructureDesigner application by clicking [here](#).

Or go to www.2X.com and click on 'Download' under 2XApplicationServer. Scroll down to the bottom of the page and click on the link for the latest versions. Then on the right-hand side you will see the link for 2X ApplicationServer 10.0, (Beta).

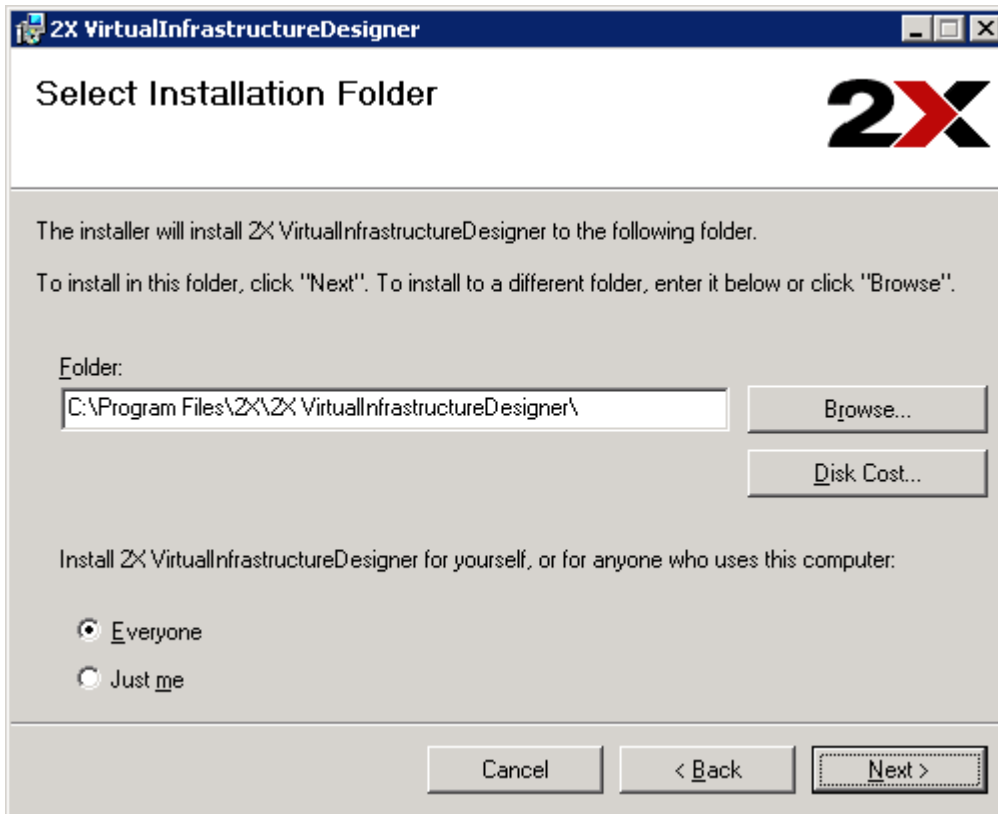
When the installation begins, a welcome dialog box appears. Close all other Windows programs and click 'Next'



Welcome to the 2X Virtual Infrastructure Designer Setup Wizard



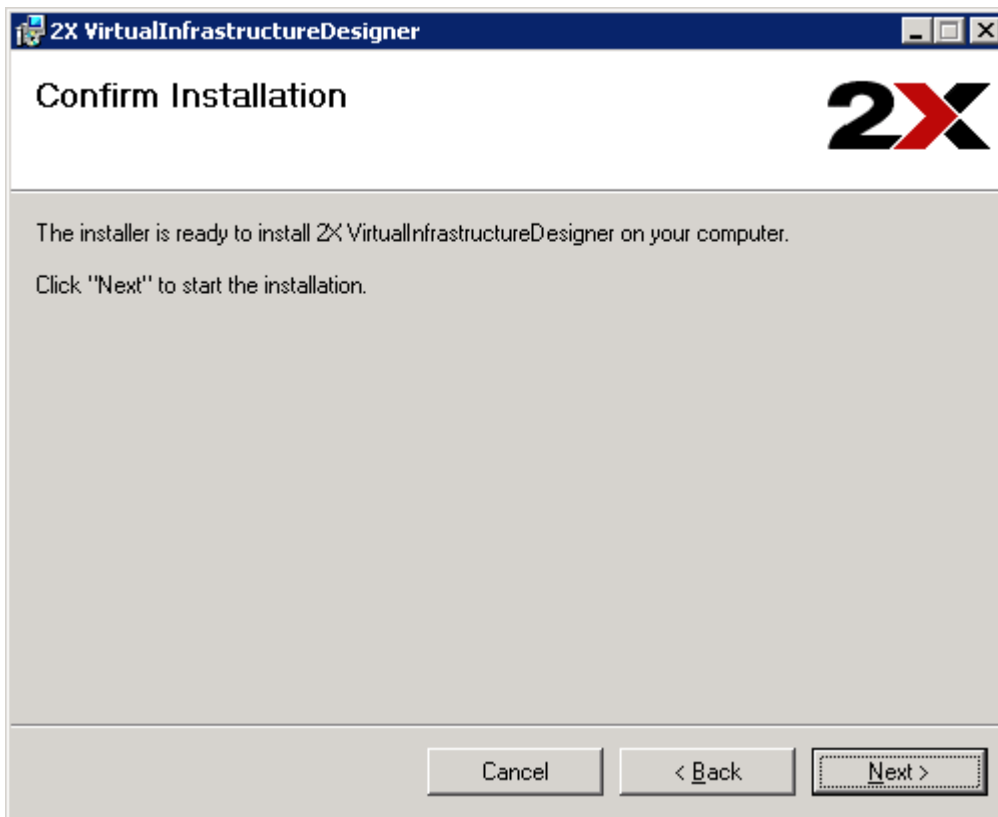
Accept default destination folder that the 2X VirtualInfrastructureDesigner program will be installed in; or browse for new location.



Accept End-User License Agreement

Choose to install the 2X VID program just for yourself, or anyone who uses the computer that the program has been installed on. Click Next.

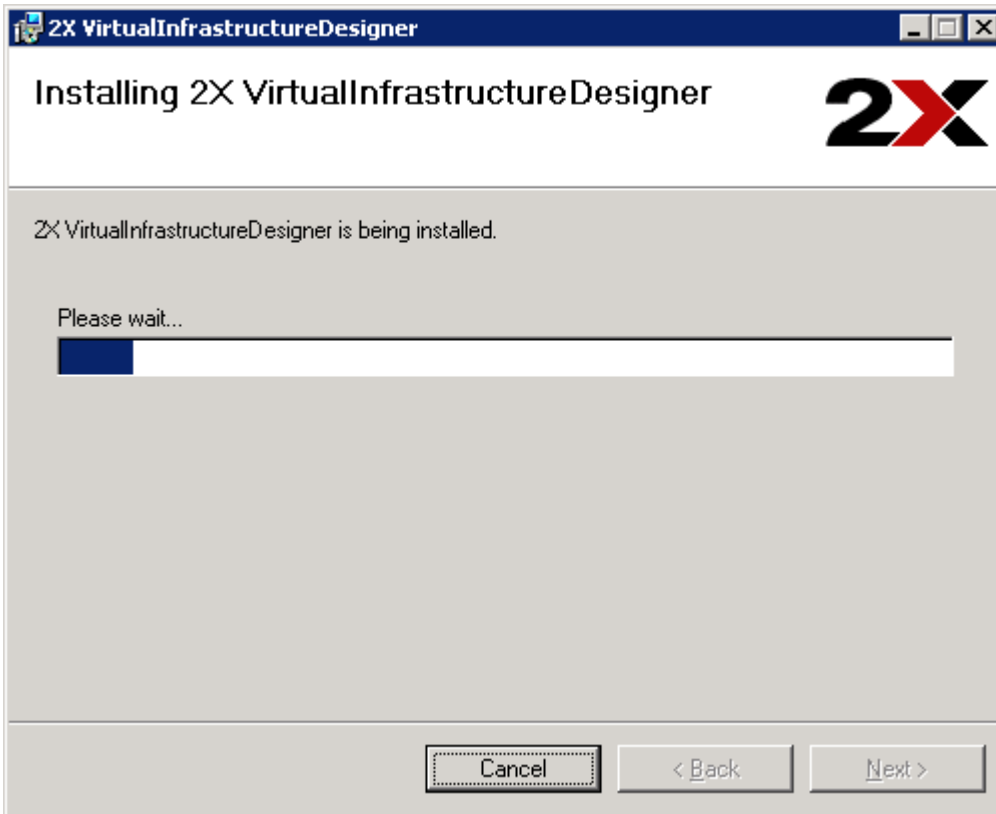




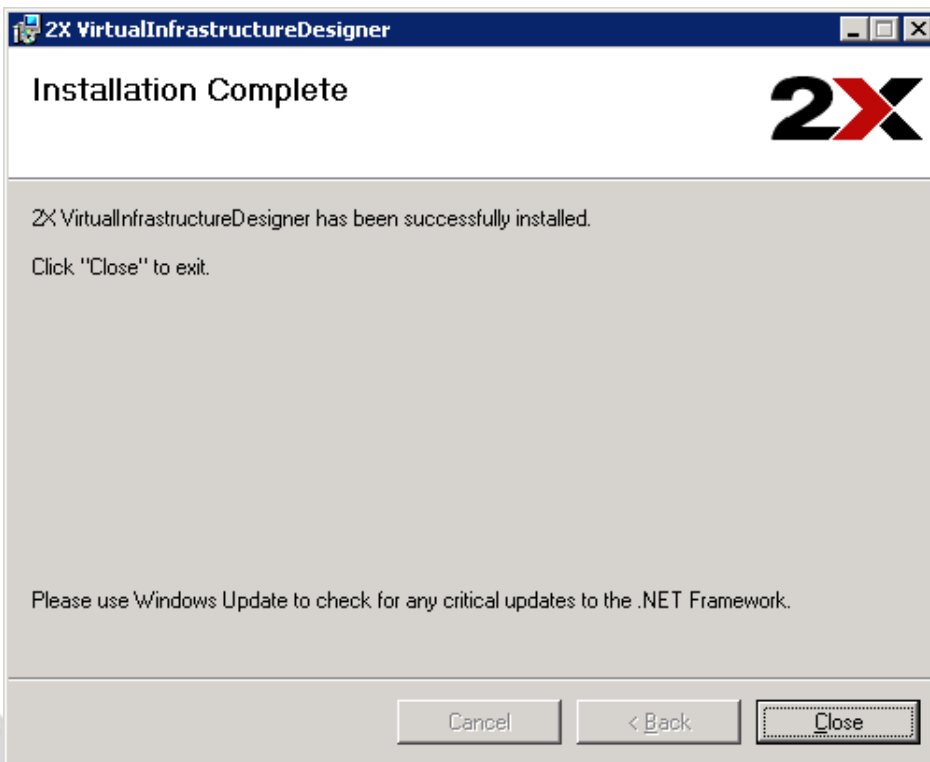
Confirm Installation

The installer is now ready to install the 2X VirtualInfrastructureDesigner program on your computer. Click Next.





Installation begins.



Installation is complete





You can open the 2X VID product using the shortcut on the desktop or browse to the file in the Start Menu



Configuration

Double-click on the 2X VirtualInfrastructureDesigner icon on the on your desktop. The 2X VID wizard dialog box opens.

You can choose to use the wizard or enable the 'Skip the wizard' checkbox.

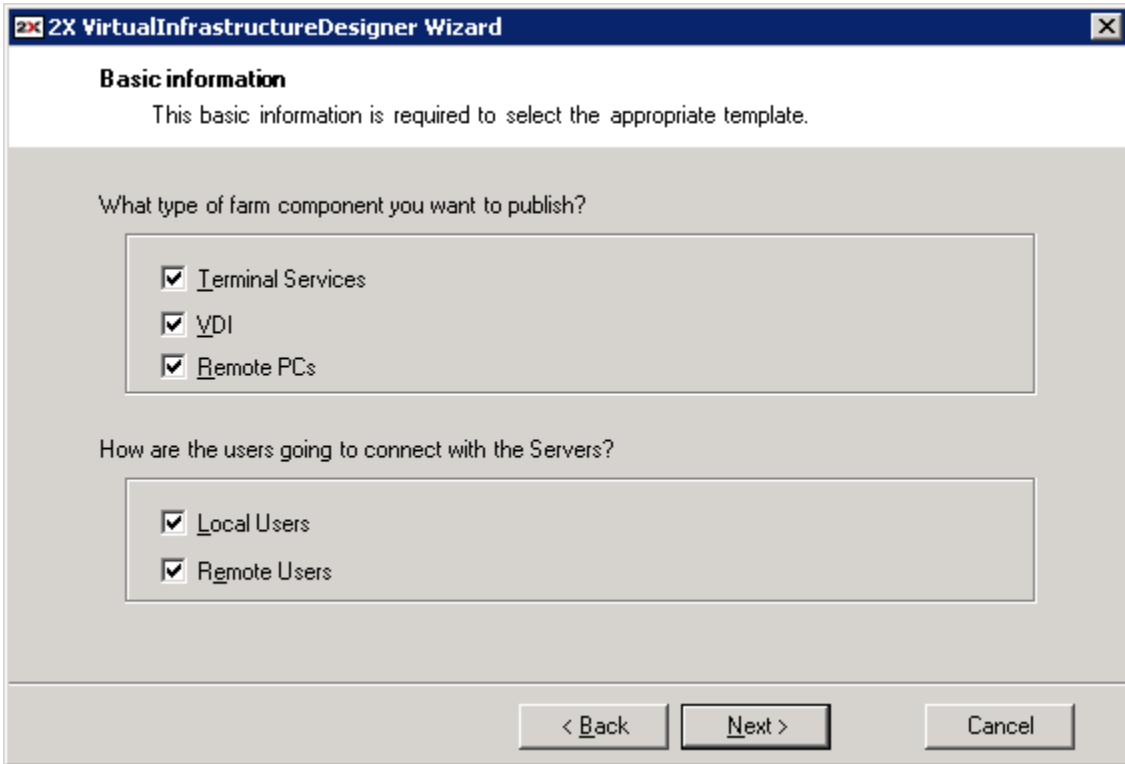
Skipping the wizard will open your last saved configuration.



Configuring 2X VirtualInfrastructureDesigner

For instruction purposes of this manual, we will be demonstrating the configuration process using the wizard.





Basic Information

The Basic information dialog box appears. Select the type of farm components you want to publish from.

Terminal Services: Users who are deploying applications or desktops from Microsoft Terminal Services.

VDI: Users who are deploying Virtual desktops (i.e. VMware Server; MS Virtual Server, etc.)

Remote PC's: Users who connect to PC's from remote locations

Choose how your users connect with the servers; Local Users or Remote Users or both.

Choose all that apply and click next.



2X VirtualInfrastructureDesigner Wizard

Number of Components
Fill in the number of componets that you want in the farm.

Number of Terminal Servers:	<input type="text" value="1"/>	Starting IP: <input type="text" value="172 . 113 . 123 . 111"/>
Number of VDI Hosts:	<input type="text" value="2"/>	Starting IP: <input type="text" value="172 . 114 . 123 . 111"/>
Number of Remote PCs:	<input type="text" value="1"/>	Starting IP: <input type="text" value="172 . 115 . 123 . 111"/>
Number of 2X Secure Client Gateways:	<input type="text" value="2"/>	Starting IP: <input type="text" value="172 . 116 . 123 . 121"/>
Number of 2X Publishing Agents:	<input type="text" value="2"/>	Starting IP: <input type="text" value="172 . 116 . 123 . 131"/>

< Back Next > Cancel

Number of Components

Depending on the components you had previously chosen, you can now enter the number of the components you would like represented in your scenario.

Enter the starting IP address for each component selected. If you choose more than one server in range, the next consecutive IP address will be selected. After you have entered the appropriate information, click Next.

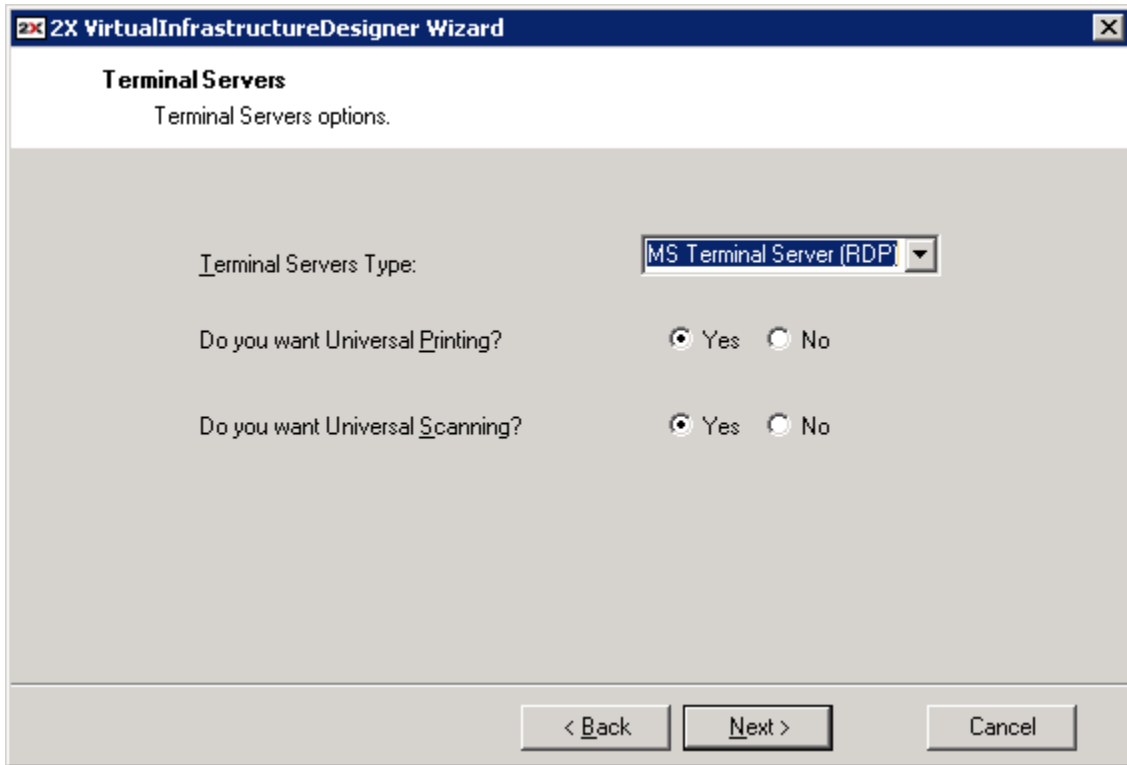


The screenshot shows a window titled "2X VirtualInfrastructureDesigner Wizard" with a close button in the top right corner. The main heading is "VDI Technology" with the instruction "Here you can select which VDI technology you want to use". Below this, there is a "VDI Type:" label followed by a dropdown menu currently showing "VMware Server 2.0.1 Linux 64bit". A blue hyperlink below the dropdown reads "For specific provider information, please click here.". A "Credentials" section is enclosed in a rounded rectangle and contains two input fields: "Username:" with the text "Administrator" and "Password:" with a masked password of ten dots. At the bottom of the window are three buttons: "< Back", "Next >", and "Cancel".

Choose VDI Technology Type

After you have selected a VDI Type, enter the user credentials and then click on Next.



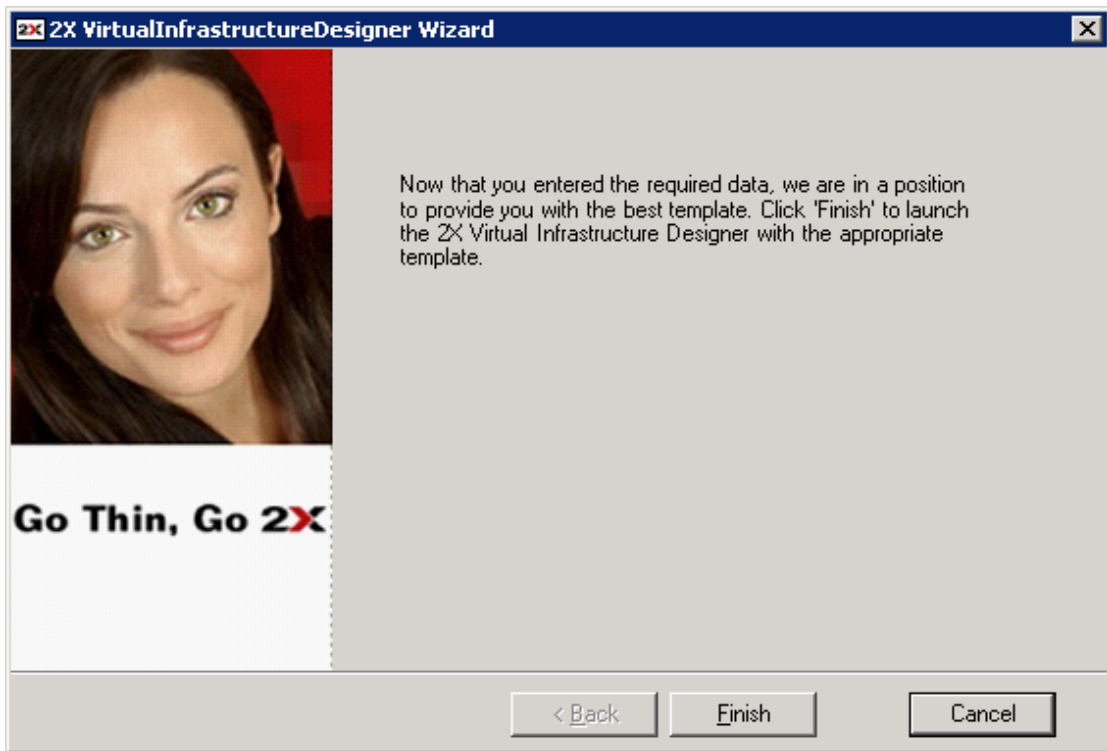


Terminal Servers Options

If you have selected Terminal Servers, choose MS Terminal Server (RDP), Citrix Server (ICA) or both.

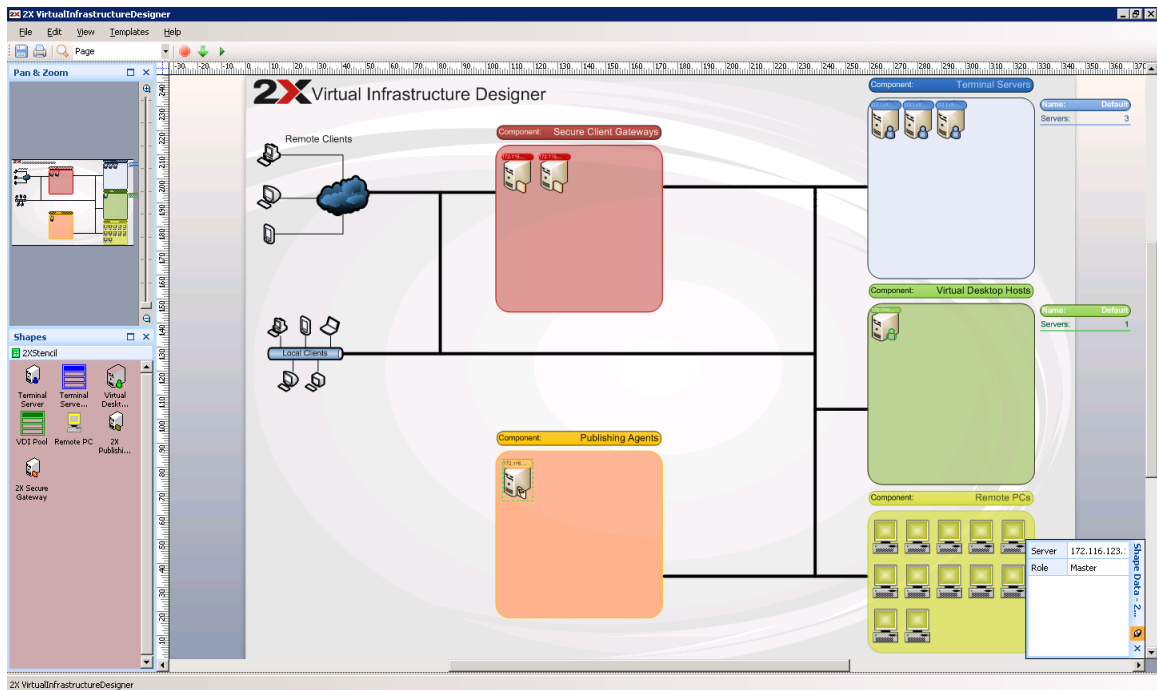
Choose to add Universal Printing and/or Universal Scanning to your scenario design.





Click on Finish and 2X VirtualInfrastructureDesigner (VID) products will be launched and ready to use.





VDI Layout

2X VirtualInfrastructureDesigner opens and you are now able to view your installation graphically. VDI supports drag and drop capabilities as you add and remove network components, allowing you to create new environment scenarios with ease.



2X VirtualInfrastructureDesigner Main Menu

File Menu

New: Create a new design scenario; you will be prompted that the current solution will be deleted, so make sure you save it before opening a new layout.

Open: Open an existing design scenario; you will be prompted that the current solution will be deleted.

Save: Save current scenario. (You need a ApplicationServer Enterprise Edition license to access this feature.)

Export: Save the .vsd file to your computer.

Print and Print Preview: Print the design or view the design before printing. (A ApplicationServer Enterprise Edition license is needed to access this feature.)

Exit: Exit the VirtualInfrastructureDesigner program.

Edit Menu

Undo: Undo the last move.

Redo: Redo the last move.

Cut: Highlight a particular component or text to move from one location of the design to another particular location of the design.

Copy: Select a component or text and copy from location to another.

Select All: Select all components of a design to move to another design.

View Menu

The view menu allows you to enable or disable features that customize your workspace layout.

Shape Data Window: Click on a component and the Shape Data box will show you that component's identifying information. The Shape Data Window can float over the workspace area, or you are able to drag it to the left

Pan & Zoom Window: Use the Pan & Zoom view to adjust the size of your configuration by dragging the red border tool. The magnifying slider bar is also used to zoom in or pan out specific components or a specific area of the workspace.

Rulers: Turn the rulers on or off in the workspace.

Guides: When the guides are enabled, drag two-headed pointer onto workspace to create perfect placement of components.

Scroll Bars: Turn the scroll bars on or off in the workspace area only.

Automatic Zoom: When components are dragged onto the workspace area and automatic zoom is enabled, the component will become larger automatically.

Templates Menu

The Templates menu shows all the available template scenarios. If you are changing your template design you will be prompted that the current solution will be deleted. Save your original design if needed before changing the template.

The available templates are:

Full Infrastructure: Use this template for a complete picture of your entire infrastructure including VDI Pools, Terminal Services Groups and all 2X Publishing agents.

Terminal Servers & VDI Hosts: This template provides you with a detailed layout of your organization's terminal servers and VDI Hosts.

Terminal Servers & Remote PC's: A template used for the design of your terminal servers and remote pc's.

VDI Hosts & Remote PC's: Use this template to design your VDI hosts and remote pc structure.

Terminal Servers: Design your terminal services deployment using this template.

VDI Hosts: Use this template to view VDI Host arrangements.

Remote PC's: This template is useful for a graphical view of an organization's remote pc's.

Help Menu

Click on the help menu and you have two choices; a link to the 2X website and 'About' which gives you information and a link to the 2X info and sales email addresses.



2X Tool Bar



Save Icon: Save VSD Layout

Print Icon: Print Preview and Print

Magnifier: Choose size of page orientation; click on magnifying glass for 'Fit to Page setting'.

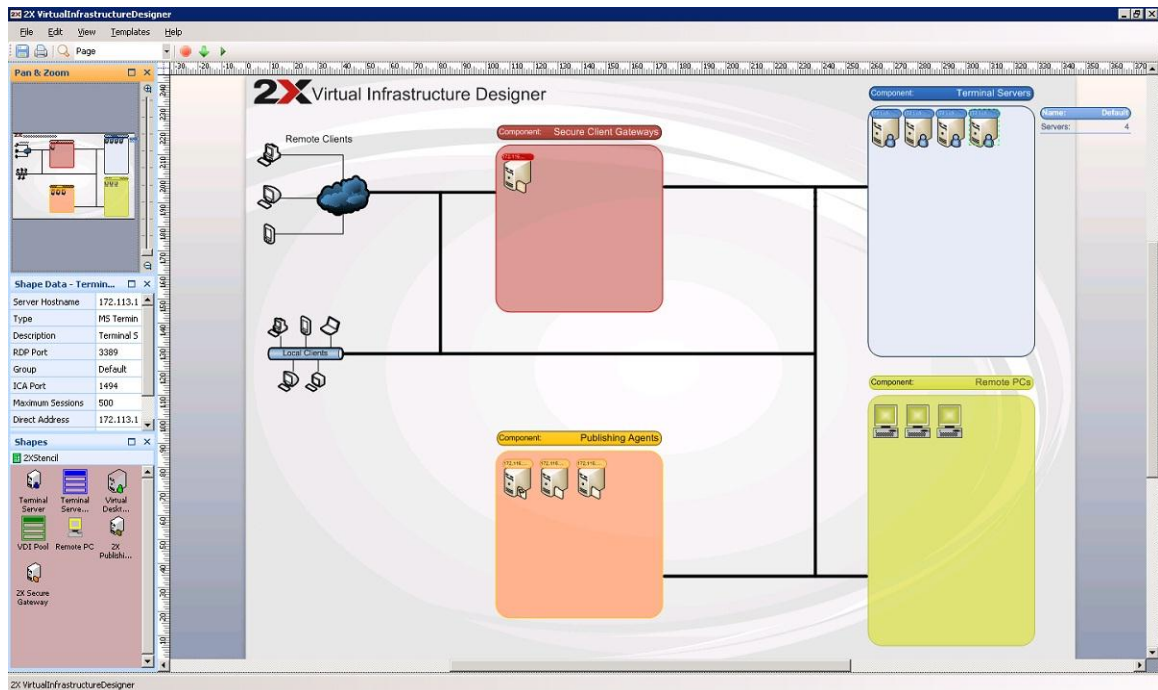
Stop Sign: Clear Solution

Down Arrow: Import 2X Settings

Forward Arrow: Export to 2X Solution



2X VID Workspace Area



2X VID Workspace Layout

The 2X VID workspace area is divided into two areas, the scenario workspace and information and tools. Drag the panels anywhere on the desktop for easy access and individual customization.

VID 2XStencil Components

The 2XStencil panel allows you to drop and drag each component to the VID workspace area.



Terminal Server: This component represents the Terminal Server or Citrix servers in the farm. It provides terminal server information to the 2X Publishing Agent.

Terminal Server Group: Create a terminal server group when you want to publish an application or a desktop which is located on a number of terminal servers but not in the entire farm.

VDI Pool: VDI Pools are useful when you want to publish a virtual desktop which is located on a number of VDI Hosts but in the entire farm.

Remote PC's: With Remote PCs, a physical machine's desktop can be published (after it is added to the Farm). This will enable 2X Clients connected to 2X ApplicationServer to open RDP connections directly to a physical computer as opposed to a virtual desktop or a terminal server session.

Virtual Desktop Host: The Virtual Desktop Host allows you to add VDI Hosts (VMware, Microsoft Hyper-V, Citrix, Parallels, Microsoft Virtual Server, Sun VirtualBox, Virtual Iron, etc) to your scenario.

2X Publishing Agent: Provides load balanced applications and desktop publishing.

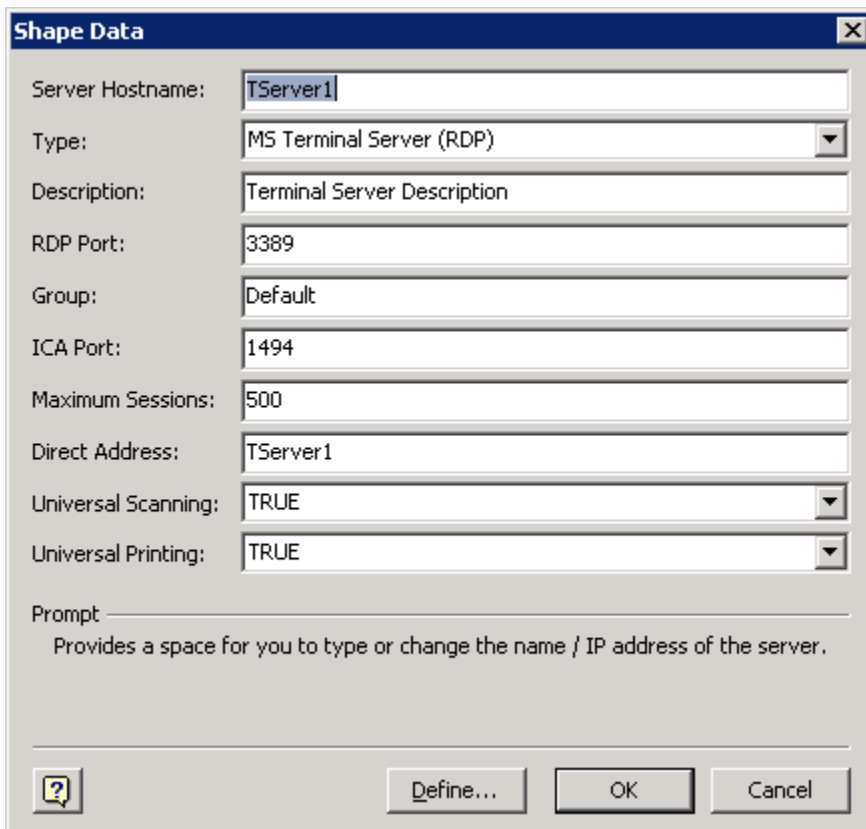
2X Secure Gateway: Tunnels all traffic needed by 2X applications on a single port and provides secure connections.

Shape Data Properties

Create your organization's infrastructure into the design workspace by dragging and dropping the corresponding components into the design work space.

Double click on any of the components listed below and a Shape Data dialog box opens allowing you to further modify the component properties in your organization's infrastructure; or you may modify using the floating Shape Data properties box.

Terminal Server Properties



The screenshot shows a 'Shape Data' dialog box with the following fields and values:

- Server Hostname: TServer1
- Type: MS Terminal Server (RDP)
- Description: Terminal Server Description
- RDP Port: 3389
- Group: Default
- ICA Port: 1494
- Maximum Sessions: 500
- Direct Address: TServer1
- Universal Scanning: TRUE
- Universal Printing: TRUE

Below the fields is a 'Prompt' field with the text: 'Provides a space for you to type or change the name / IP address of the server.' At the bottom of the dialog are three buttons: 'Define...', 'OK', and 'Cancel'.

Terminal Server Shape Data Dialog Box

Server Hostname: Enter name of terminal server.

Type: Each terminal server can be configured to accept RDP traffic, ICA traffic or both.

Description: A 'Description' can be added to each server to clearly identify each terminal server.

RDP Port: Enter RDP port that will be used to connect sessions.

Group: Enter name of Terminal Server Group or change terminal server group.

ICA Port: Enter ICA port (Citrix Server) that will be used.

Maximum Sessions: You can enter the maximum number of sessions you want this server to accept.

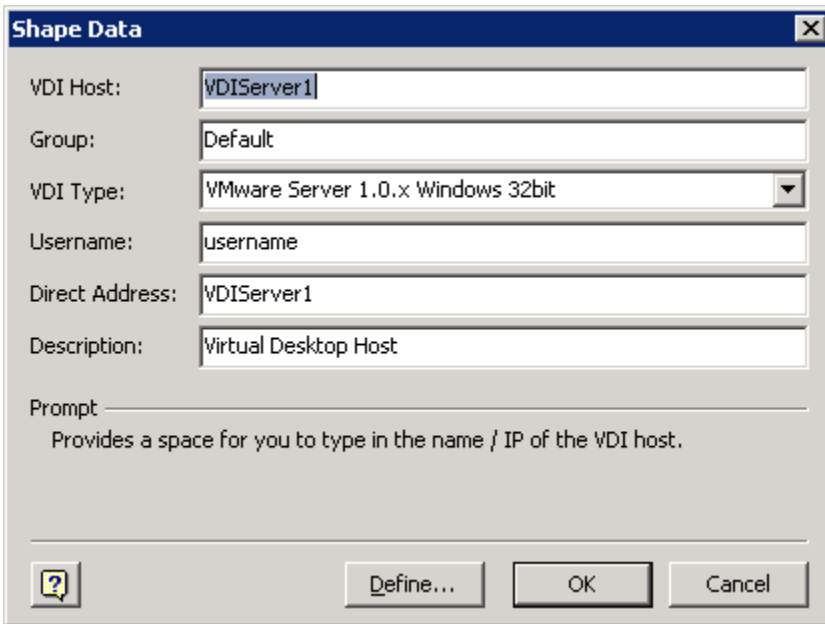
Direct Address: This address is used in Direct Connection mode only (internal or external IP address); depending on where your clients will be.

Universal Scanning: Use this field to enable or disable universal scanning for this terminal server.

Universal Printing: Use this field to enable or disable universal printing for this terminal server.



VDI Host Properties



Shape Data

VDI Host: VDIServer1

Group: Default

VDI Type: VMware Server 1.0.x Windows 32bit

Username: username

Direct Address: VDIServer1

Description: Virtual Desktop Host

Prompt
Provides a space for you to type in the name / IP of the VDI host.

Define... OK Cancel

Virtual Desktop Host Dialog Box

VDI Host: Enter name or IP address of the VDI host.

Group: Enter the name or change the name of the group for this VDI host.

VDI Type: Choose which virtualization technology to use with this VDI host.

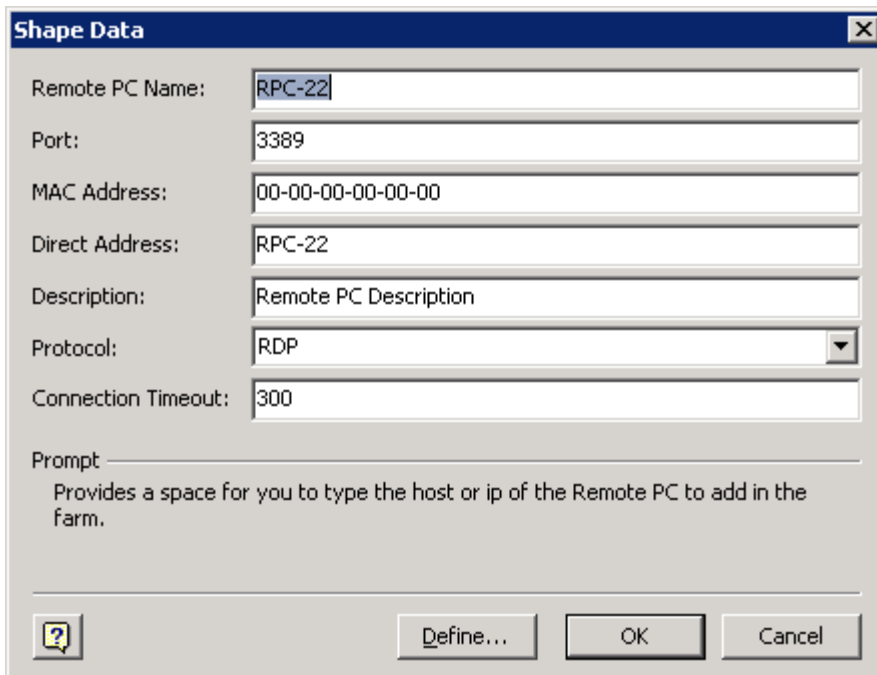
Username: Enter the username.

Direct Address: This address is used in Direct Connection mode only (internal or external IP address); depending on where your clients will be.

Description: Enter a description for the VDI host.



Remote PC Properties



The screenshot shows a dialog box titled "Shape Data" with a close button (X) in the top right corner. It contains several input fields and a dropdown menu:

- Remote PC Name: RPC-22
- Port: 3389
- MAC Address: 00-00-00-00-00-00
- Direct Address: RPC-22
- Description: Remote PC Description
- Protocol: RDP (dropdown menu)
- Connection Timeout: 300

Below the input fields is a "Prompt" section with a text area and a description: "Provides a space for you to type the host or ip of the Remote PC to add in the farm." At the bottom of the dialog box are three buttons: "Define...", "OK", and "Cancel". A help icon (question mark) is located in the bottom left corner.

Remote PC Dialog Box

Remote PC Name: Enter name or IP address of the Remote PC.

Port: Enter the name RDP port of the Remote PC.

MAC Address: Enter the Remote PC MAC address.

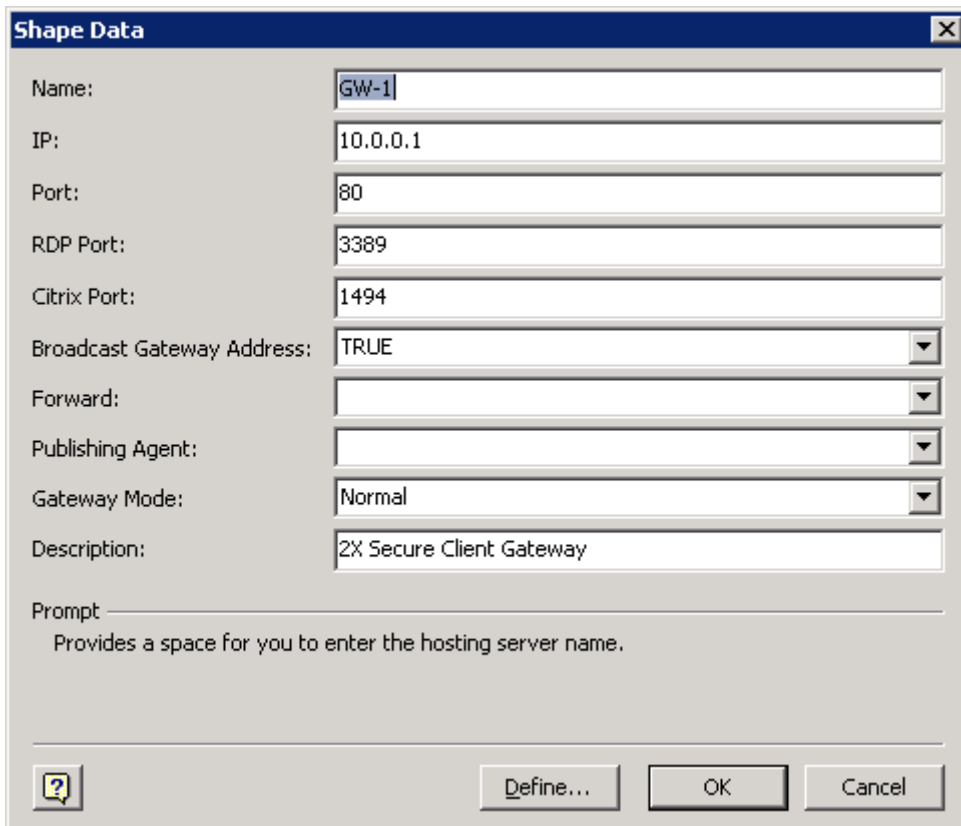
Direct Address: Enter or change direct address. 2X Client uses the direct address to connect to the Remote PC desktop directly.

Protocol: Select a protocol for your Remote PC.

Connection Timeout: Enter maximum time allowed to wait for Remote PC to connect. Value must be between 20 and 3600 seconds.



Secure Client Gateways Properties



Shape Data

Name: GW-1

IP: 10.0.0.1

Port: 80

RDP Port: 3389

Citrix Port: 1494

Broadcast Gateway Address: TRUE

Forward:

Publishing Agent:

Gateway Mode: Normal

Description: 2X Secure Client Gateway

Prompt: Provides a space for you to enter the hosting server name.

Define... OK Cancel

Secure Client Gateway Dialog Box

Name: Enter name of hosting server name.

IP: Enter the server's IP address.

Port: 2X Clients will connect to 2X ApplicationServer on this port and/or the SSL port if enabled. (This port will need to be enabled at the firewall.)

RDP Port: Enter RDP port that will be used to connect basic load balanced desktop sessions.

Citrix Port: Used for the incoming Citrix connections which are forwarded to Citrix servers according to the load balancing configuration.

Broadcast Gateway Address: Set to 'TRUE' so that 2X clients will be able to auto-find the primary server. (2X Secure Client Gateway address)

Forward: Enter next 2X Secure Client Gateway in chain. All requests coming through the 2X Secure Client Gateway will be forwarded to this address.

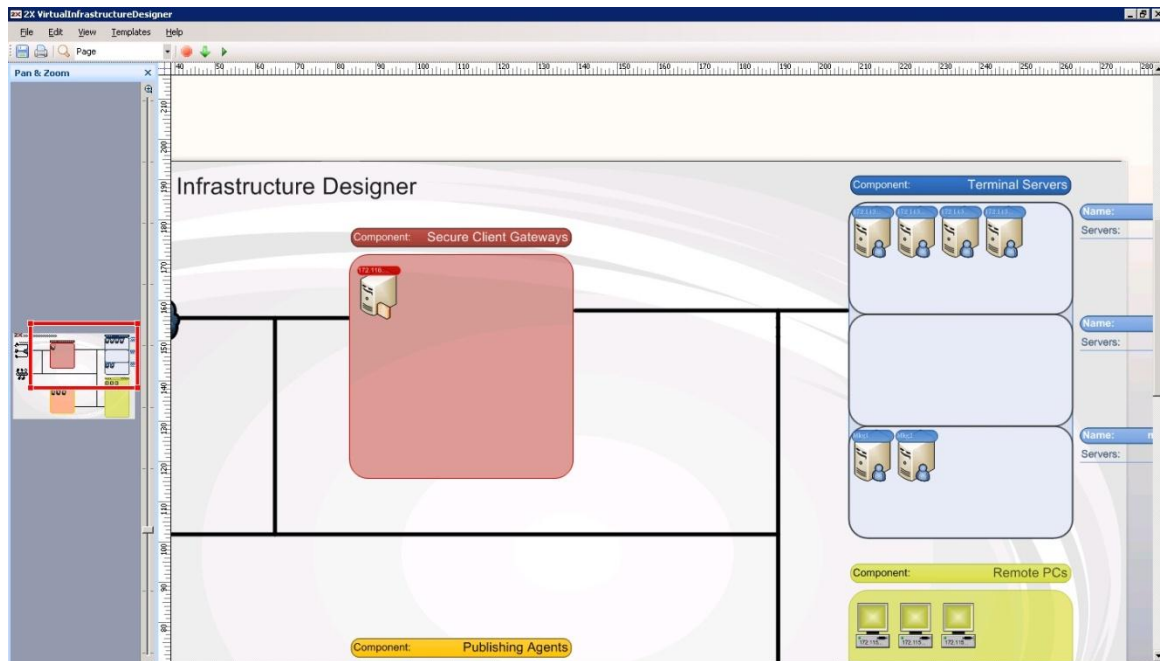
Publishing Agent: Enter or change name of 2X Publishing Agent. 2X Publishing Agent service may be running on another server.

Gateway Mode: Choose between Normal and Forward. Normal mode forwards all requests from the 2X Secure Client Gateway to the 2X Publishing Agent and HTTP Server. Forward mode will forward all requests to the next 2X Secure Client Gateway in the chain (cascading firewalls).

Description: Enter description of 2X Secure Client Gateway.

NOTE: It is not recommended to *Define* the components any further.

VID Pan & Zoom Panel

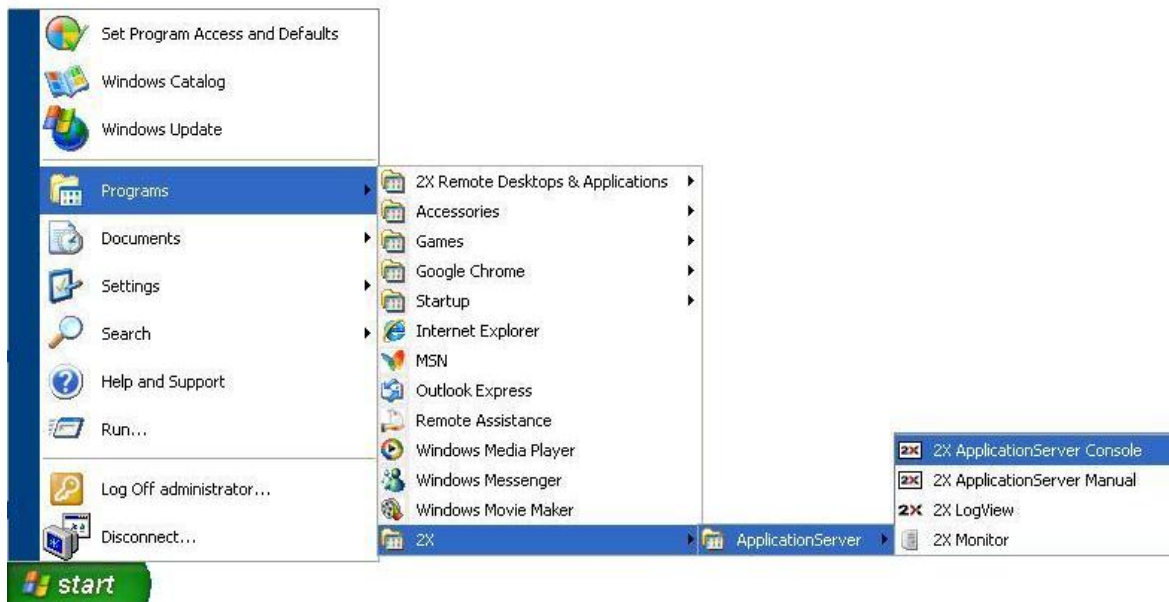


Pan and Zoom Panel

The Pan & Zoom panel allows the administrator the ability to pan out or zoom in on any component or scenario. Use the ruler slide bar to adjust the view as well. Double click on any component to zoom and use the red slider in the Pan & Zoom panel to change the orientation of the layout.

Using 2X VID with 2X ApplicationServer

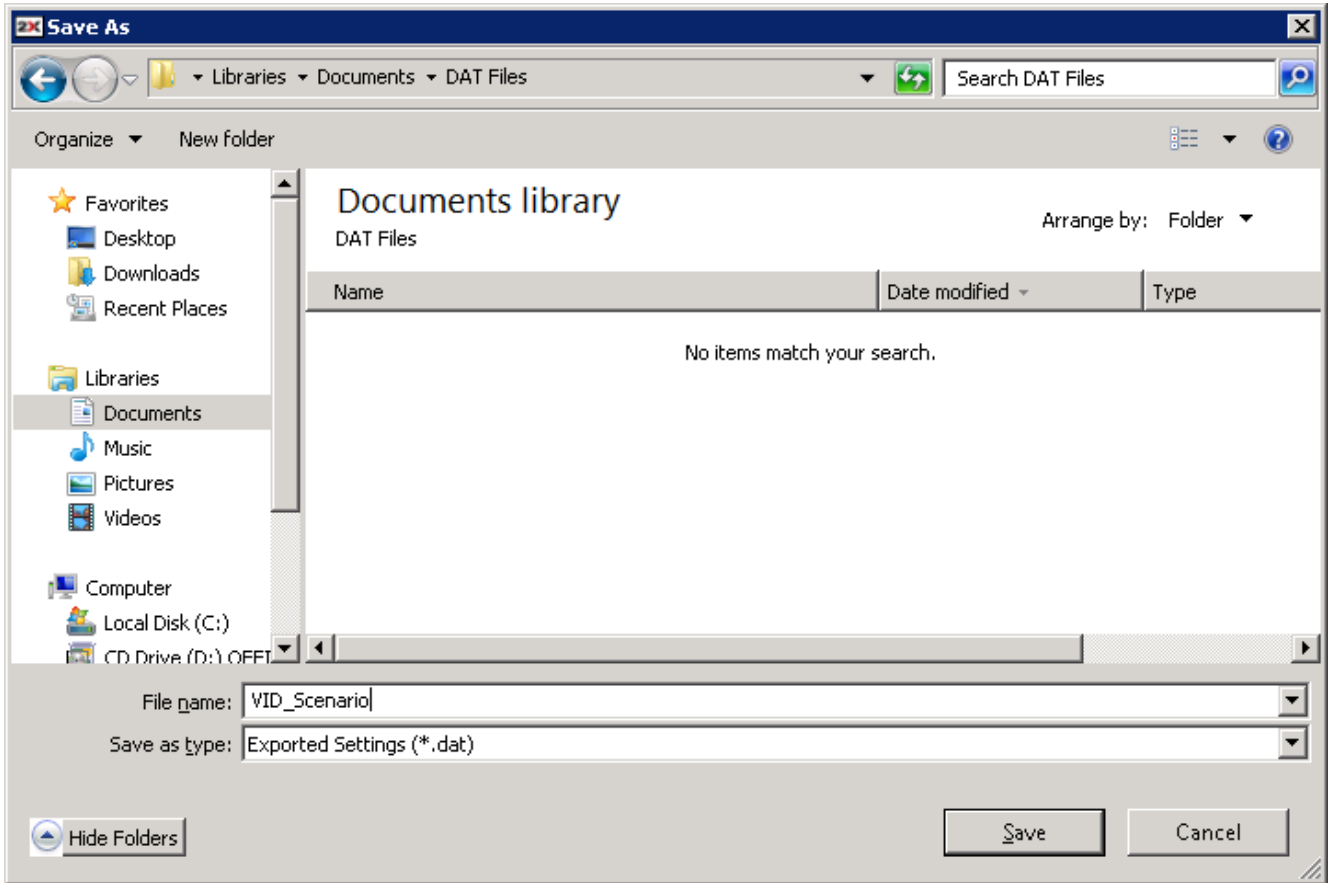
If you have your scenario configured in 2X ApplicationServer (ver.10.0), and you want to use 2X VID to add, edit, delete or create a modified scenario, then follow the directions below.



Opening 2XApplicationServer from the start menu

Open 2X ApplicationServer by going to
Start>Programs>2X>ApplicationServer>2X ApplicationServer Console.





Pan and Zoom Panel

To save the settings of your configured 2X ApplicationServer scenario so that you are able to use them in VID, go to File>Export Settings and export the file. Click on 'Save'.

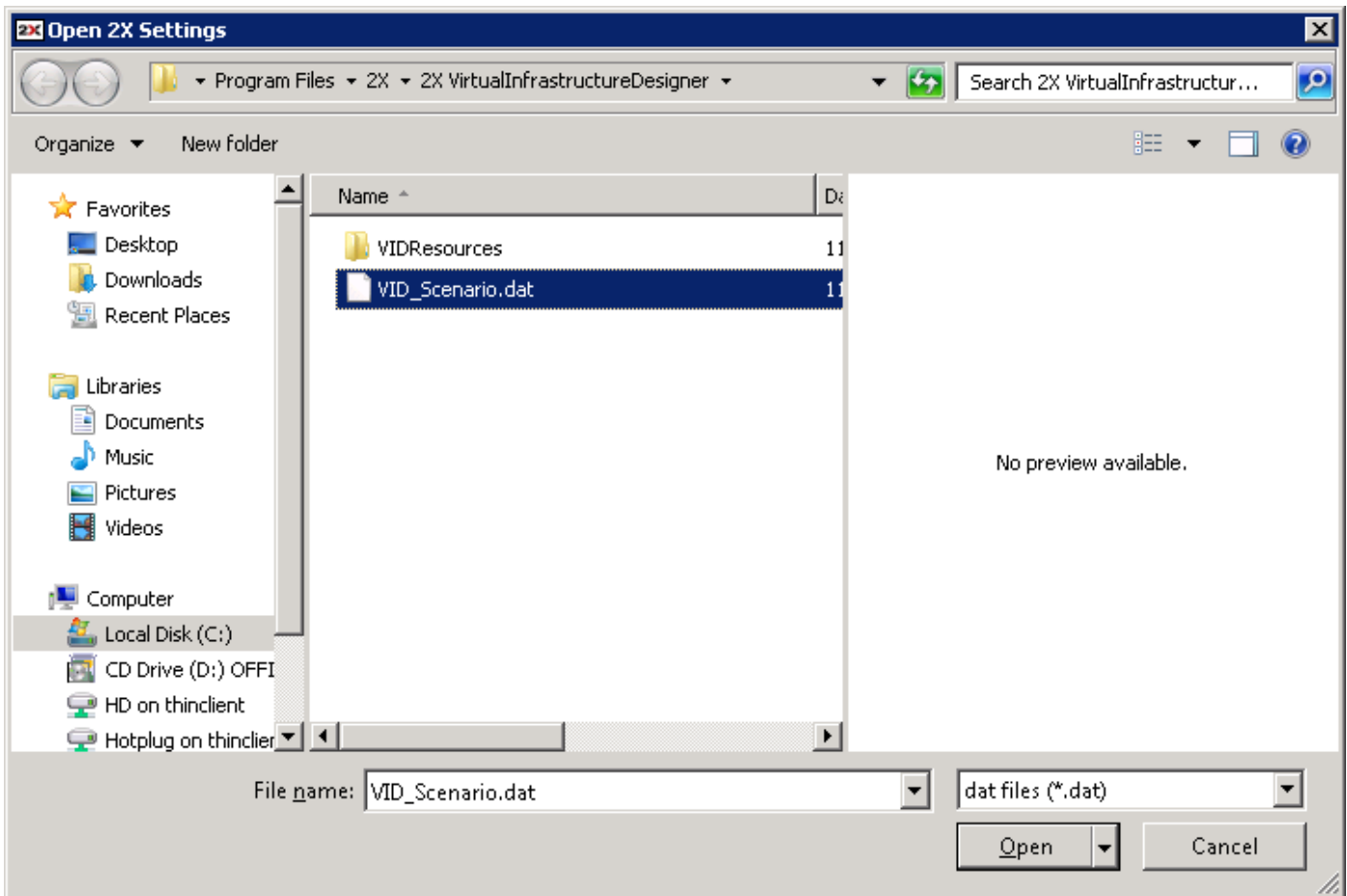




Launching VID to Import Scenario

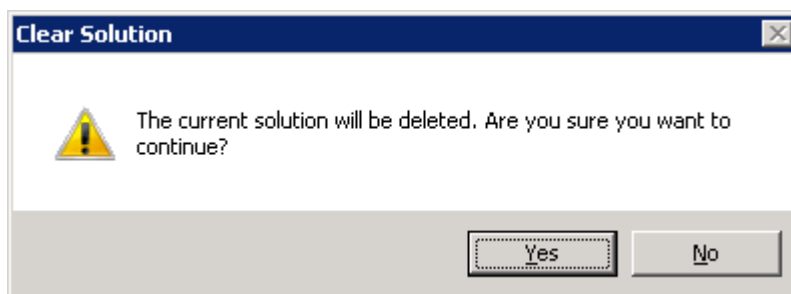
Launch the VID application and check '*Skip the wizard*' and click on 'Next'.





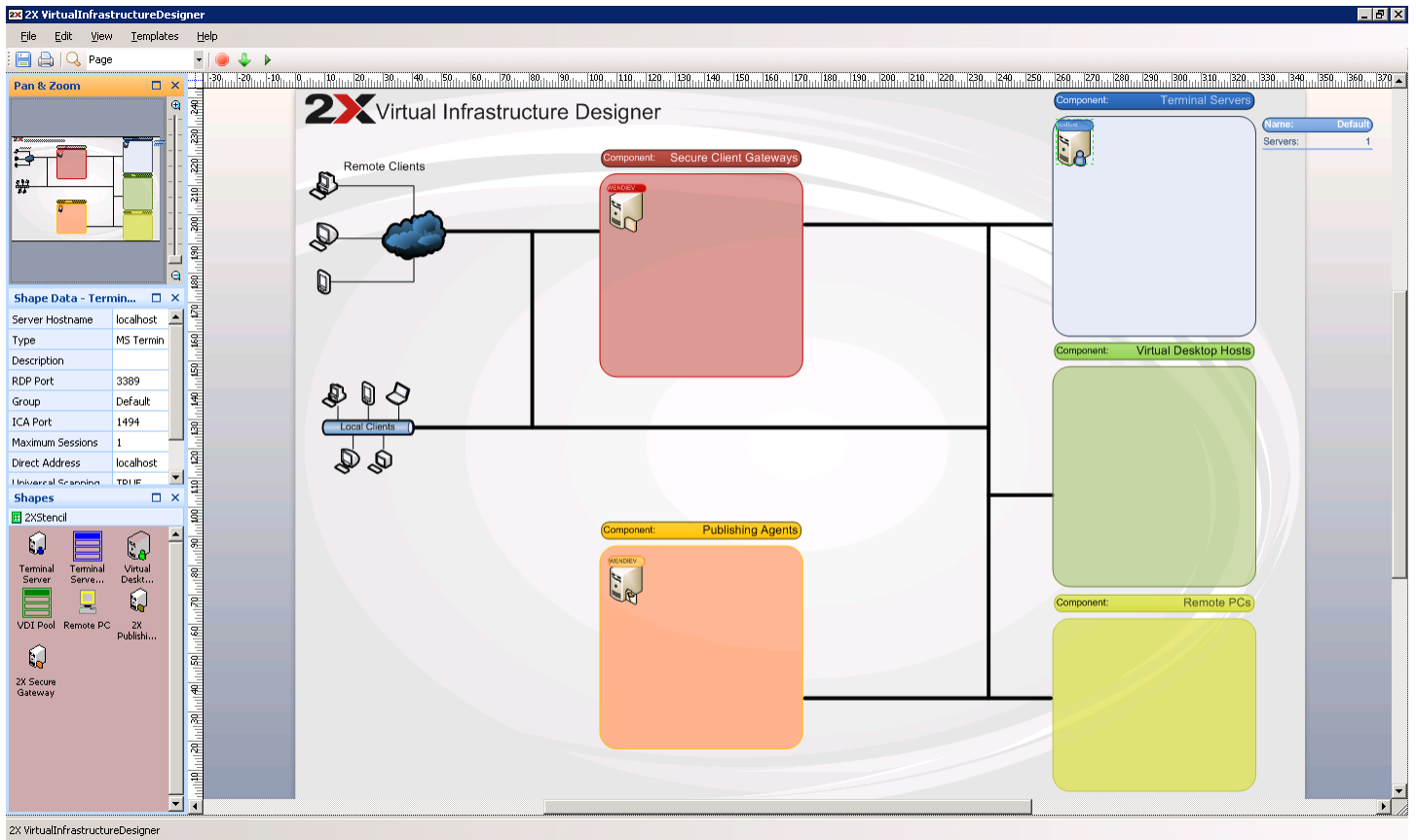
Select file to Export into VID

Click on 'File>Open' and the file that you exported in ApplicationServer is available for you.



You will be prompted that the current solution will be deleted. Click 'Yes'.

NOTE: If you are NOT using 2X ApplicationServer ver.10.0, you will receive a message that some functionality may not work correctly.



Exported Scenario Using VID

Your current farm scenario is added to the VID application and you are able to add and delete components or modify and edit the existing components visually through VID.

When finished, click on *'File>Save'* to save the modified scenario.

Go back to 2X ApplicationServer console and click on *'File>Import'* and select the scenario file that you have just made changes to and saved.



TROUBLESHOOTING AND SUPPORT

Introduction

The troubleshooting chapter explains how you should go about resolving issues you may have. The main sources of information available to users are:

- The manual – most issues can be solved by reading and referring to the manual.
- The 2X support site – accessible from the 2X website. It includes a knowledge base with the most frequently asked questions.
- Contacting the 2X support department by email at support@2x.com
- Contacting our support department by telephone.

Knowledgebase

2X maintains a knowledgebase, which includes answers to most commonly asked problems. If you have a problem, please consult the knowledgebase first. The knowledgebase is continuously updated and contains the-most-up-to-date listings of support questions and patches.

The knowledgebase can be found at <http://www.support.2x.com>

Request Support via E-mail

If you are unable to resolve your issue after using the knowledgebase and referring to this manual, please contact the 2X support department.

Contact us via e-mail, and attach any references or examples of the issue you are experiencing. This will enable us to solve your issue quickly and efficiently.

You may be asked to collect some information and you may be asked a number of questions. Please take your time to answer these questions accurately. Without the proper information it will not be possible to diagnose your problem.

We will answer your inquiry within 24 hours or less, depending on your time zone.

Request Support via Phone

You can also contact 2X by phone for technical support. Please check our support website for the correct numbers to call, depending on where you are located, and for our hours of operation.

<http://support.2x.com>

ABOUT 2X

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