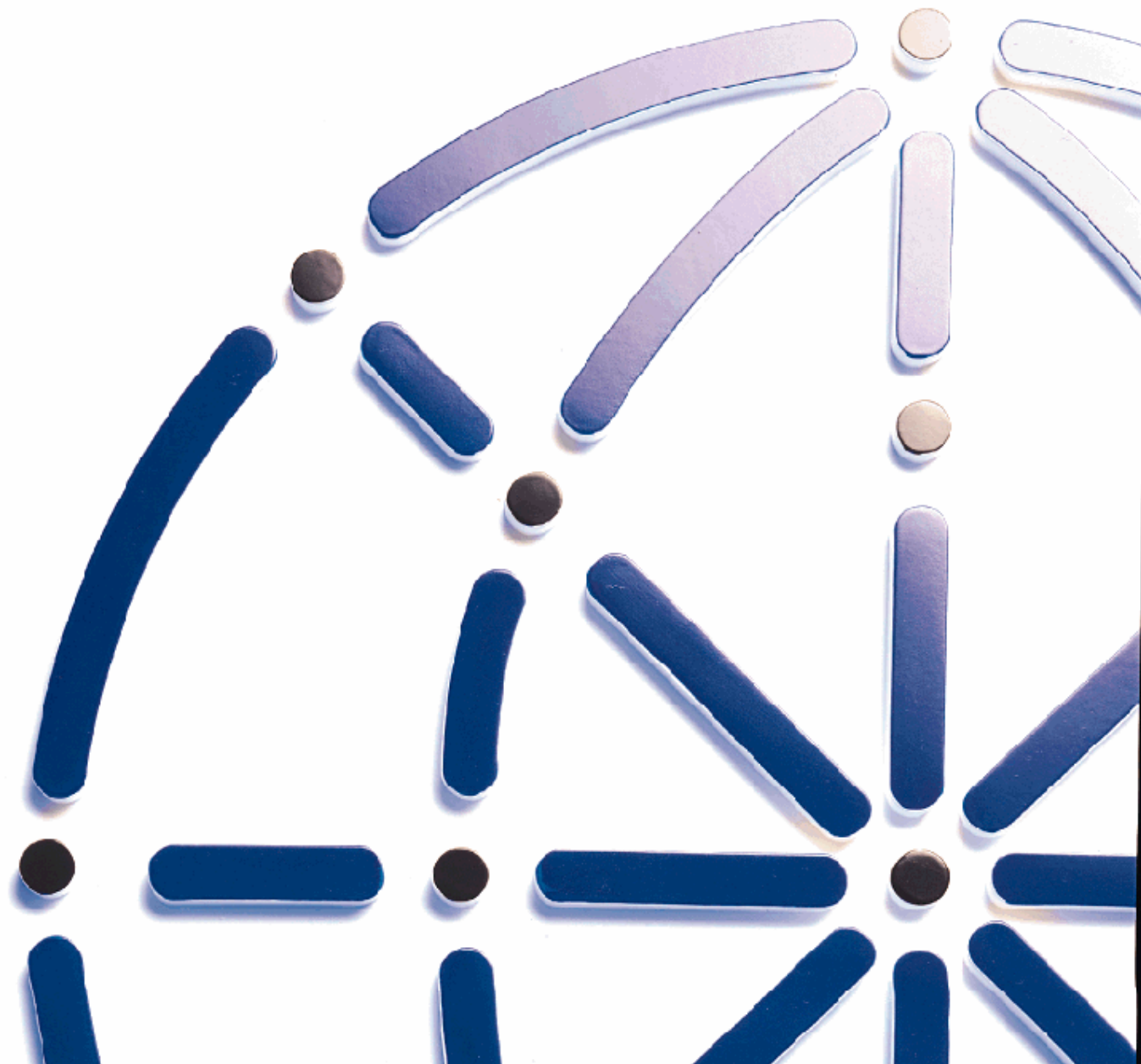

Installing Galileo Desktop[®] in Citrix Environments

March 01, 2004



Copyright

Copyright © 2003 Galileo International. All rights reserved.

Information in this document is subject to change without notice. The software described in this document is furnished under a license agreement or nondisclosure agreement. The software may be used or copied only in accordance with the terms of those agreements. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or any means electronic or mechanical, including photocopying and recording for any purpose other than the purchaser's personal use without the written permission of Galileo International.

Trademarks

Galileo International may have patents or pending patent applications, trademarks, copyrights, or other intellectual property rights covering subject matter in this document. The furnishing of this document does not give you any license to these patents, trademarks, copyrights, or other intellectual property rights except as expressly provided in any written license agreement from Galileo.

All other companies and product names are trademarks or registered trademarks of their respective holders.

Table of Contents

Introduction	1
Requirements	1
Assumptions	1
Preparing the Citrix Server	2
Configuring the Client Workstation for the Focalpoint Path from Citrix	4
Configuring a Thin Client Workstation	4
Configuring a Windows Workstation for the Focalpoint Path from Citrix	6
Installing Focalpoint	9
Configuring Focalpoint	15
Setting Up User Accounts for Configuration	15
Configuring Galileo Desktop	16
Duplicating the Machine Directory	16
Modifying DAT32COM.INI	17
Modifying WIN.INI	18
Publishing Galileo Desktop	19
Confirming Galileo Desktop Connectivity	23

Introduction

This guide is intended as an aid for installing and configuring Galileo Desktop[®] version 3.2 TCP/IP , or higher, to function in a multi-user environment from a Citrix Server or Microsoft Terminal Server (MTS).

This guide was created in response to customer requests; however, Citrix Server and Microsoft Terminal Server are not supported in Galileo Desktop by Galileo International; however, these environments may be supported by customer, vendor, or NDCs/SMOs. Contact your regional support organization for more details.

The following documentation is based on internal testing at Galileo International, as well as feedback from beta site users. These procedures will vary depending on site requirements and server administration differences.

Requirements

This guide supports the installation of Galileo Desktop in a Citrix and MTS environment for either:

- Thin client terminals.
- Windows-based workstations or other clients supported by Citrix client software.

The following hardware and networking must be installed and functioning before Galileo Desktop is installed and configured:

- Citrix MetaFrame or MetaFrame XP Server.
- Thin client (if used).
- Microsoft[®] Windows[®] 2000/NT Administration.
 - Windows 2000 Server or Advanced Server.
 - Windows NT Terminal Server 4.0 with MetaFrame 1.8.**Note:** If using thin client terminals, MetaFrame must be installed.

Assumptions

This guide is intended to document the process for installing a Citrix server in most environments. However, these procedures cannot duplicate the process that will be required for every installation. This guide assumes that:

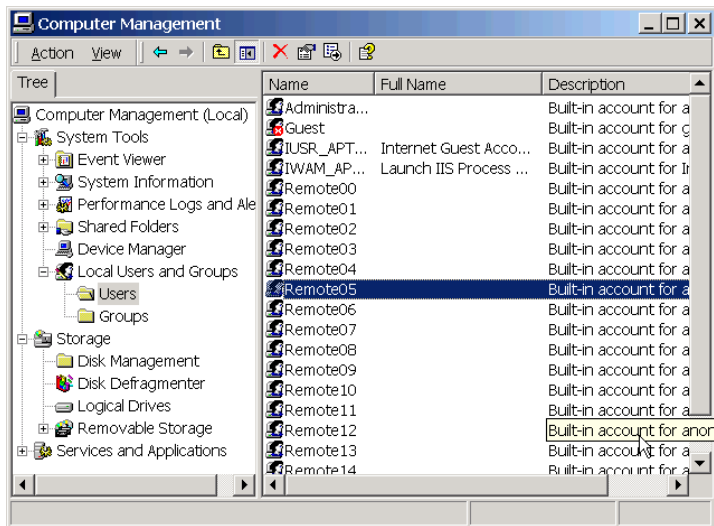
- Galileo Desktop will be installed on the Citrix server. The procedures are written for Galileo Desktop version 3.2 which incorporates Focalpoint[®] 4.0.
- The drive locations will vary depending on the server environment. For this document, the following standards apply:
 - Drive *N* designates the local drive of the Citrix server.
 - Drive *A* designates the floppy drive.

-
- Drive *D* designates the CD-ROM drive.
 - *WINNT* designates the Windows directory on the Citrix server.

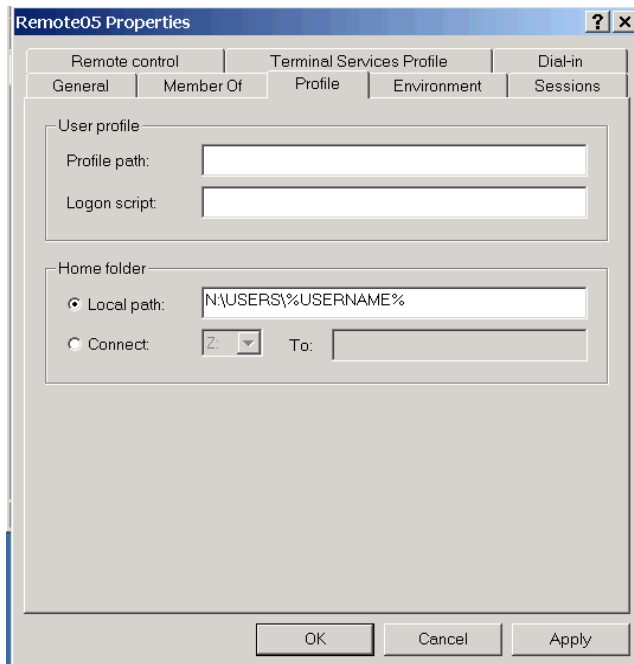
Preparing the Citrix Server

To prepare the Citrix server for Galileo Desktop installation, you must be logged on with Administrative authority to the server itself. This procedure also assumes that the Citrix environment is already running.

1. Right-click **My Computer** on the Windows 2000 Server Desktop.
2. Select **Manage**, then select **Local Users and Groups**, then select **Users** to display the user list. The following example shows default remote user names of *Remote00* through *Remote14*.

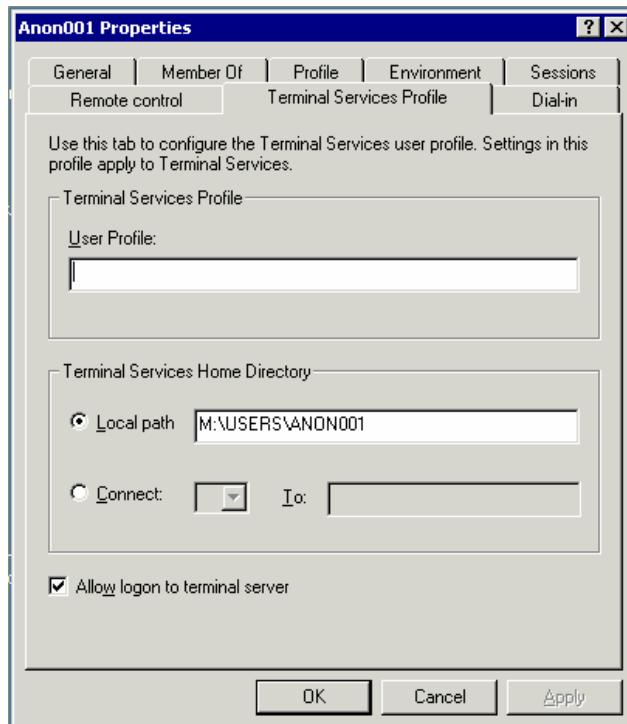


3. Double-click one of the user names that was installed with MetaFrame or MetaFrame XP to display the User Properties dialog for that user.
4. Click **Profile** in the upper tool bar of the User Properties dialog to display the User Profile Environment dialog.



5. In *Home folder*, select **Local path**. The location of the Local Path field will vary depending on your administration.
6. In the *Local Path* field, enter **N: \USERS\ %USERNAME%**. %USERNAME% is a valid wild card directory name for all users.

Note: If you plan to have user profiles, you must add the path to each profile in the *User Profile* field.
7. Click the Terminal Services Profile tab.



8. In the local Path of Terminal Services Home Directory field enter the same data:
N: \USERS\%USERNAME%.
9. Click **OK** to redisplay Computer Management.
10. Repeat this procedure for each Focalpoint client workstation.

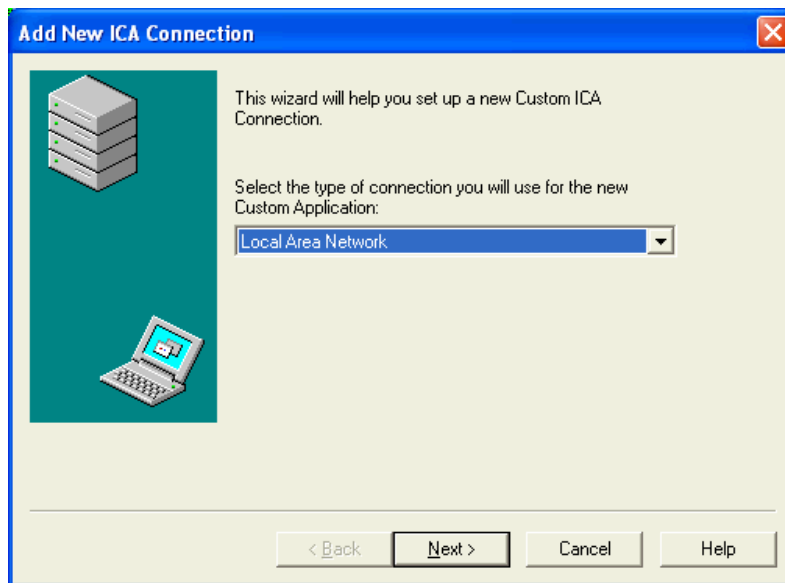
Configuring the Client Workstation for the Focalpoint Path from Citrix

The procedure for configuring the client workstation depends on whether a thin client workstation or Windows workstation is used. Configurations for both types of workstations are listed in the following two procedures.

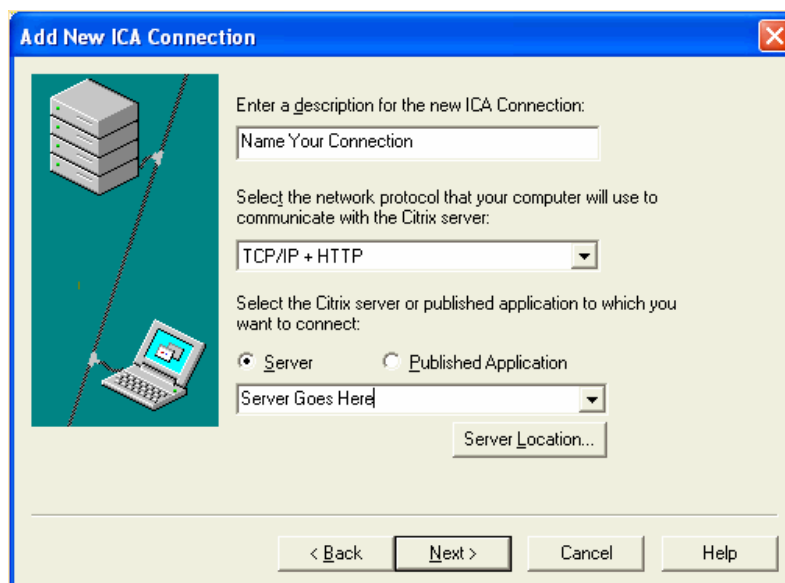
Configuring a Thin Client Workstation

To configure a thin client workstation for the Focalpoint path:

1. In the Connections dialog, click **Setup** to display the Connect Setup dialog.
2. Click **New** to display the New Connection dialog.



3. Select **ICA Connection**, and click **Next** to display the Connection Properties dialog.



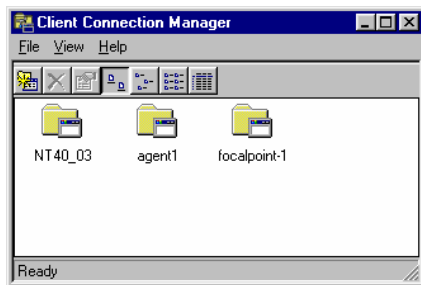
4. In the Connection Properties dialog, configure the following fields:
 - *Description*
Enter the desired application name for Focalpoint.
 - *Username, Domain, and Password*
Enter site-specific security information, if applicable.
 - *Communications*
Select the appropriate communications method for your network.
 - *TCP/IP*
Enter or browse for the server name (IP address) of the Focalpoint server.

- *Command Line*
Enter **N:** \FP\SWDIR\VIEWPOINT.EXE.
 - *Working Drive*
Enter **N:** \FP\SWDIR\.
5. Click **Next** to redisplay the Connection Setup dialog.
 6. Click **Close** to return to the Connections dialog.

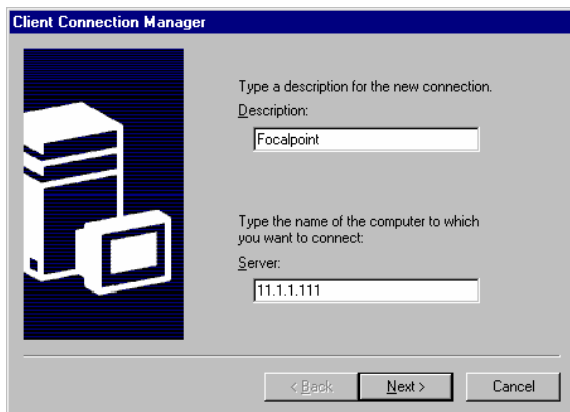
Configuring a Windows Workstation for the Focalpoint Path from Citrix

To configure a Windows workstation for the Focalpoint path:

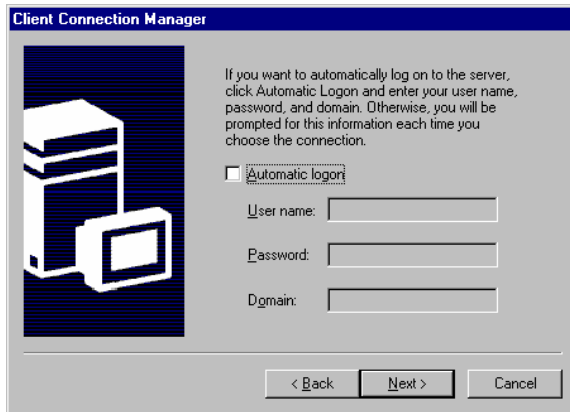
1. Click **Start** on the Desktop of the Windows client workstation.
2. Select **Programs**, then **Terminal Server Client**, and then **Client Connection Manager**



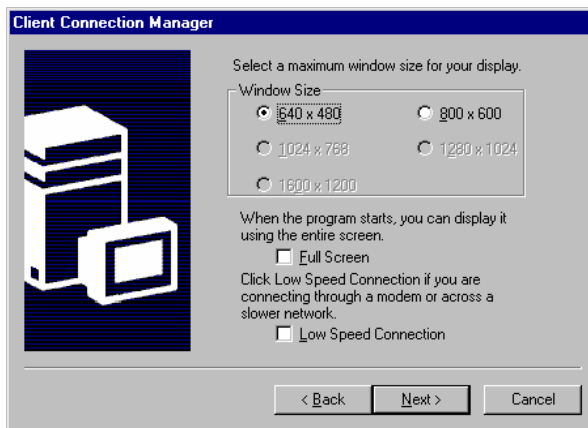
3. Select **New** from the **File** menu to display the Client Connection Manager dialog.



4. In the *Description* field, enter a connection name, such as **Focalpoint**.
5. In the *Server* field, enter the IP address of the server that will be used to access Focalpoint. *11 . 1 . 1 . 111* is a sample address.
6. Click **Next** to display the Automatic Logon dialog. The automatic logon allows the client terminal to log directly into the Citrix server during startup.

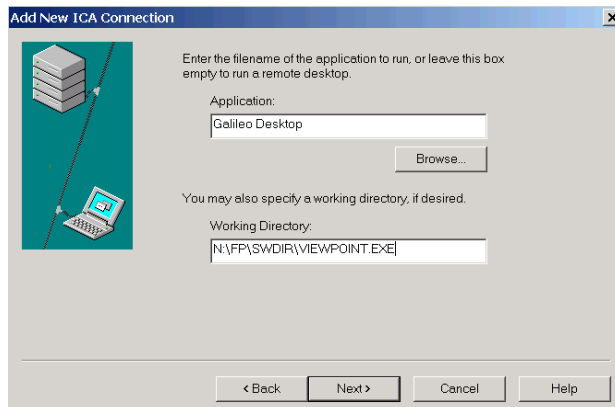


7. Set the desired status for automatic logon.
 - If you do not want automatic logon, ensure that the **Automatic Logon** check box is cleared.
 - If you want automatic logon:
 - a. Select the **Automatic Logon** check box.
 - b. In *User Name*, enter the client workstation's NT user name.
 - c. In *Password*, enter the logon password for server access.
 - d. In *Domain*, enter the appropriate server domain.
8. Click **Next** to display the Window Specification dialog.

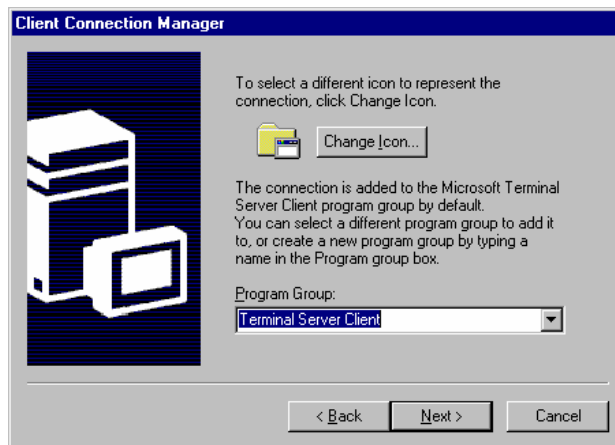


9. Select the **Window Size** of the workstation's monitor.
10. Select the **Full Screen** check box if you want Focalpoint to default as a full screen application when the user logs on.
11. Select the **Low Speed Connection** check box if you access the server through a modem or slower network.

12. Click **Next** to display the **Startup** dialog.



13. To connect to Galileo Desktop during startup, select **Program File Name**.
14. In the *Program File Name* field, enter **N:\FP\SWDIR\VIEWPOINT.EXE**.
15. In the *Working Directory* field, enter **N:\FP\SWDIR**.
16. Click **Next** to display the Icon Display dialog.



17. To optionally use a different icon for Focalpoint, click **Change Icon** to browse for the icon.
18. To optionally select another program group for the Focalpoint connection, click the **Program Group** drop-down box to select an existing program group or enter a new program group name.
19. Click **Next** to display a Confirmation dialog for the new connection.
20. Click **Finish** to complete the configuration.

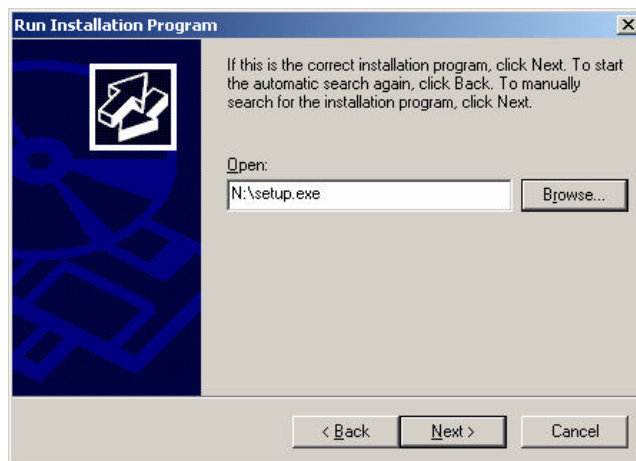
Installing Focalpoint

To install Focalpoint:

1. Insert the Galileo Desktop CD into the appropriate server drive.
2. Click **Start Settings Control Panel** on the Windows desktop.
3. Select **Add/Remove Programs**.
4. Select **Add New program**, then click **CD** or **Floppy** to display the Run Installation Program dialog box.

In the *Open* field, type the correct path to **SETUP.EXE** on Galileo Desktop CD.

Note: The CD-ROM or disk drive may be different for your workstation.

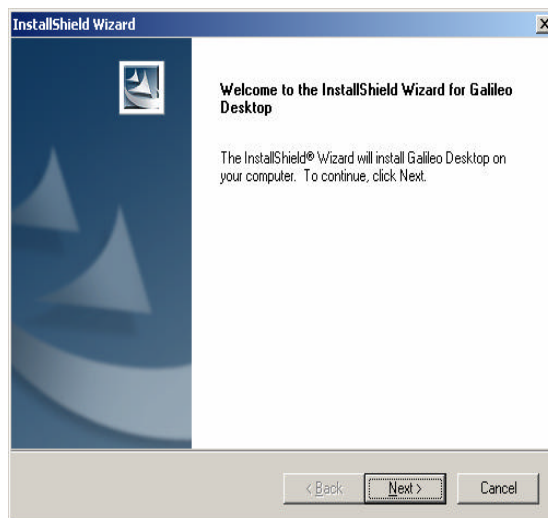


5. Click **Next** to run the Galileo Desktop installation. The Options window displays.

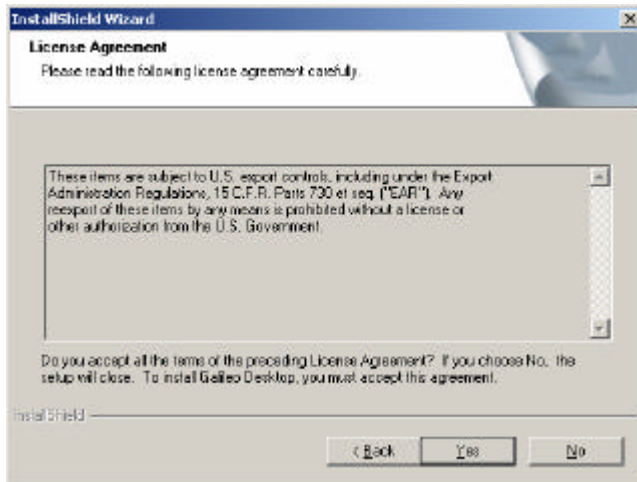


6. Click **Galileo Desktop** button to display the Welcome window .

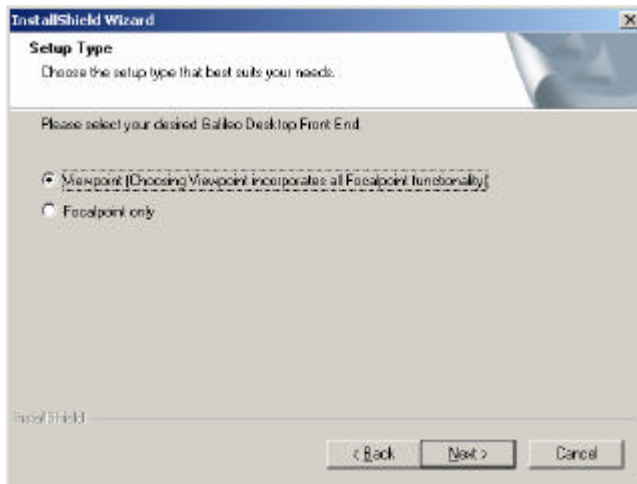
Note: It is highly recommended that in a Citrix environment all required software is previously installed prior to installing Galileo Desktop; therefore, there is no need to select additional software.



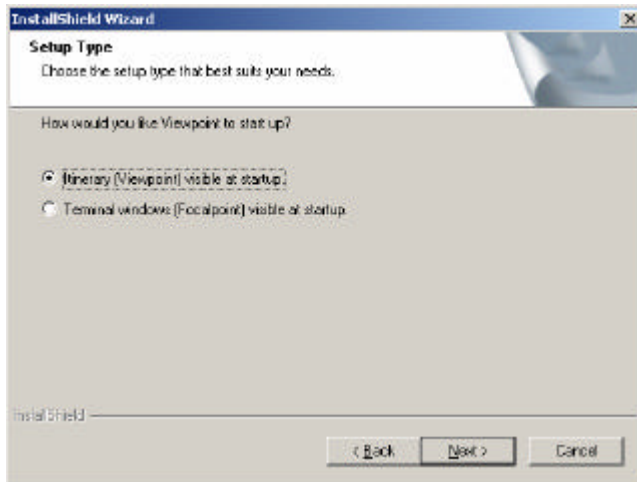
7. Click **Next** to display the License Agreement window.



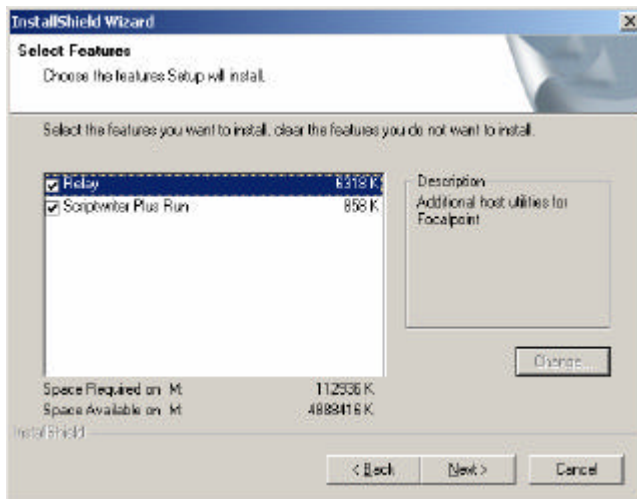
8. Click **Yes** to accept license agreement. The first Setup Type dialog box displays.



9. For BOTH Viewpoint (Itinerary) and Focalpoint (Terminal) windows click **Viewpoint**.
10. Click **Next** to display the second Setup Type dialog box.



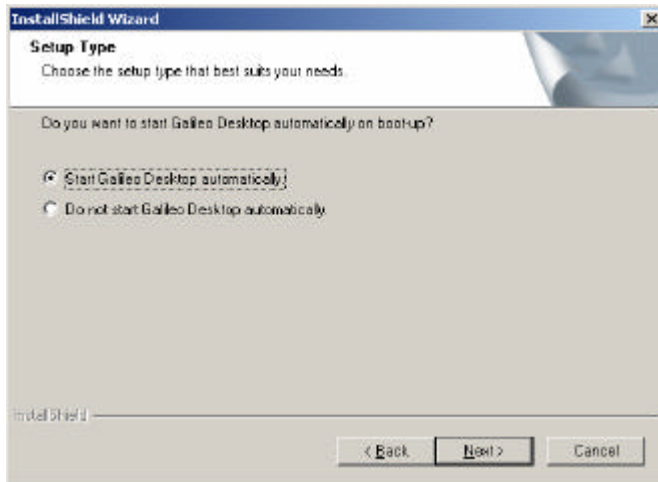
11. Select whether Viewpoint or Focalpoint displays by default at startup.
12. Click **Next** to display the Select Features dialog box.



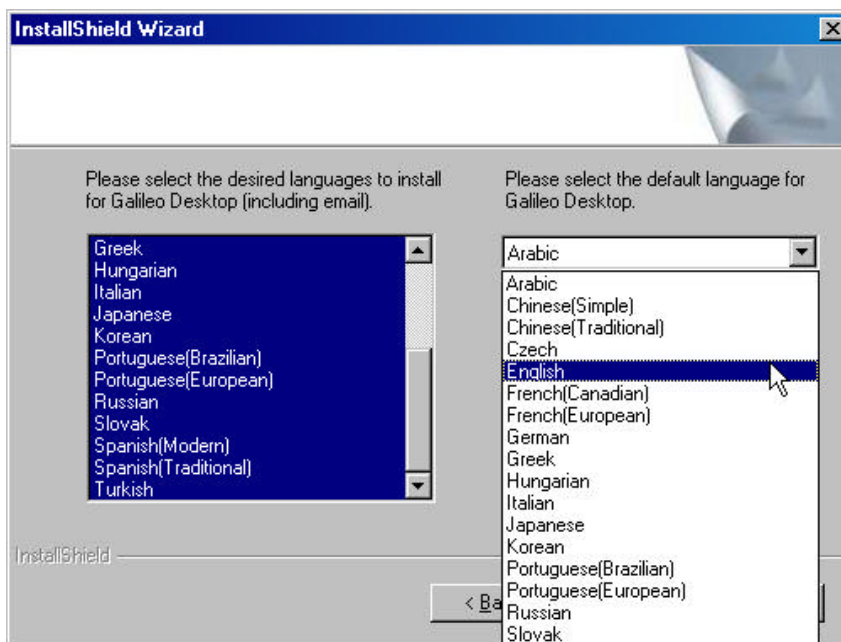
13. Select **Relay** and/or **ScriptWriter Plus** to include either of these Focalpoint features in the installation.

Note: It is recommended to not allow any applications on this server, including Focalpoint and Viewpoint utilities, to start automatically at Windows startup.

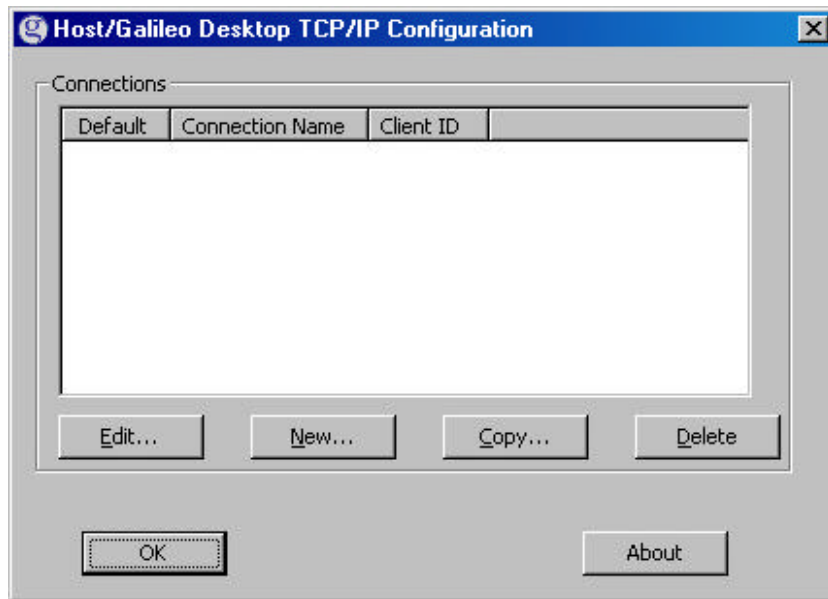
14. Click **Next** to display the next Setup Type dialog box.



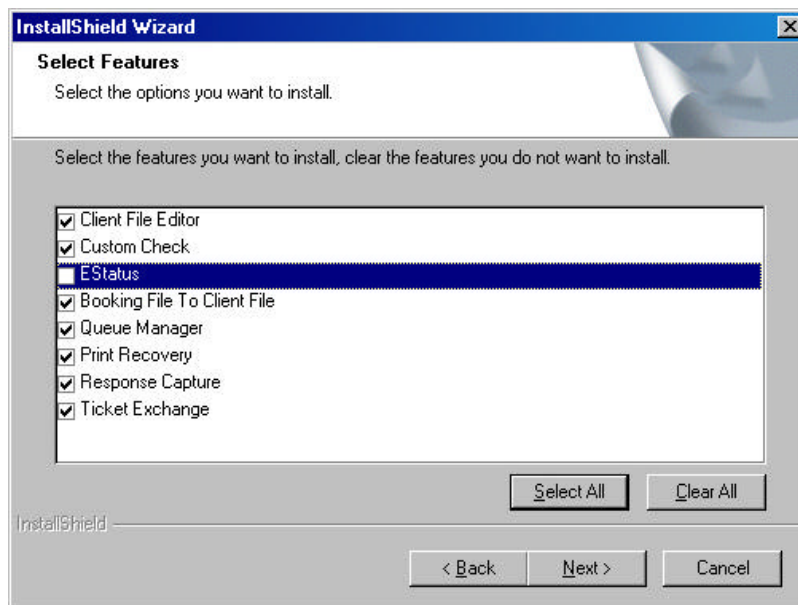
15. Select whether to allow Galileo Desktop to automatically open on startup.
16. Click **Next** to display the Galileo Desktop language options.



17. Choose the desired language for Galileo Desktop from the list on the left.
18. Click the drop-down arrow on the right to select a default language for Galileo Desktop.
19. Click **Next** to display the Host – Focalpoint TCP/IP Configuration dialog box.



20. Click **New**.
21. Enter the Client Identifier information.
 - For Galileo keyboard layout (end-item) choose **Galileo mapped keyboard**.
 - For special characters, choose **Windows layout**.
22. Enter the correct IPCS information
23. Confirm each field to ensure that all paths are correct, especially paths to the system directories.
24. Click **OK**.
25. If Focalpoint Relay was not selected, go to Step 27. If the option to install Focalpoint Relay was previously selected, the following Select Features dialog box displays.



26. Select each required option.
27. Click **Next** to start copying files.
28. After the files are copied, click **OK** to finish the Galileo Desktop installation.

Configuring Focalpoint

Focalpoint must be configured on the server to permit use by client machines. Configuration involves copying Focalpoint directory information into the User home directory of each client workstation, and confirming or modifying the networking information.

Setting Up User Accounts for Configuration

Configuring user accounts for Galileo Desktop varies depending on the status of the account. Follow these procedures to prepare user accounts for configuration.

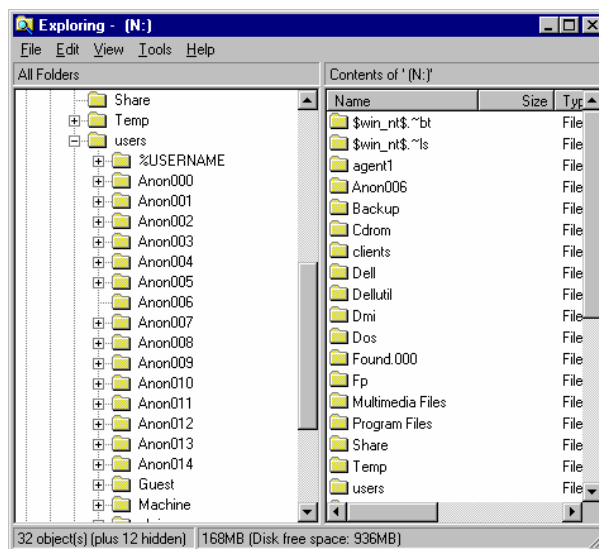
- If the client workstation is new and has not been logged on to the Citrix server, log on from the workstation before configuring Galileo Desktop. Logging on to the server will create a Windows System directory for that user.
- If the client workstation has been logged on to the Citrix server, before Focalpoint was installed, the System directory has already been created for that user. However, slightly different modifications are needed for the files in the System directory.

Configuring Galileo Desktop

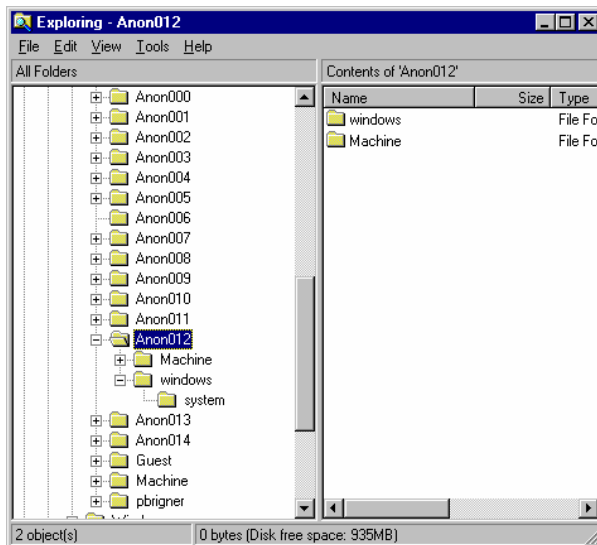
Within this procedure, *ANON12* is used as the sample username and indicates the Windows 2000 identification for an individual client machine. *User subdirectory* designates the home directory for any client machine.

Duplicating the Machine Directory

1. In the Windows 2000 Explorer window, locate the N:\USERS\ subdirectory. This subdirectory should contain the user directories for client machines that were created when MetaFrame was configured on the Citrix server. In the graphic below, the 15 users display the default names *Anon000* through *Anon14*.



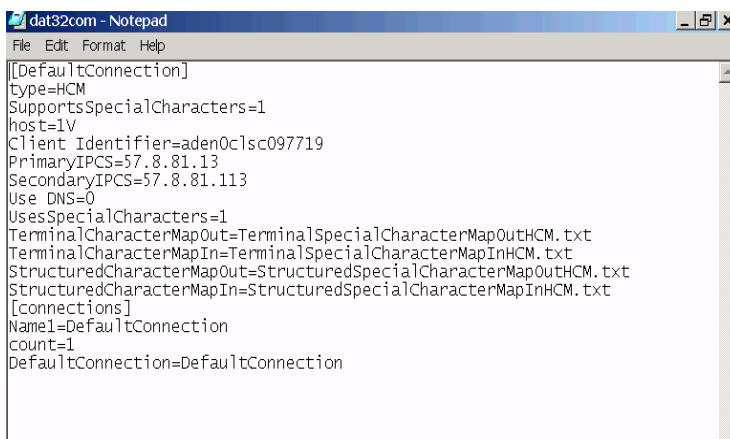
2. Right-click on N:FP\MACHINE\ and select **Copy**.
3. Open the User subdirectory of the first client machine. The graphic below displays the *Anon012* User subdirectory as an example.



4. Right-click within the User subdirectory and select **Paste**, to duplicate the Machine subdirectory.
5. Repeat the copy process for each remote user.

Modifying DAT32COM.INI

6. Open the first Machine subdirectory that you have just copied to the User subdirectory.
7. Double-click DAT32COM.INI to display the file in Notepad format.



8. The **Client Identifier** line should list the client identification entered during installation. This procedure uses **XXXXXX** as the client identifier.
9. Change **Client Identifier = XXXXXX** to the user's client identification.
10. Select **Save** from the **File** menu.

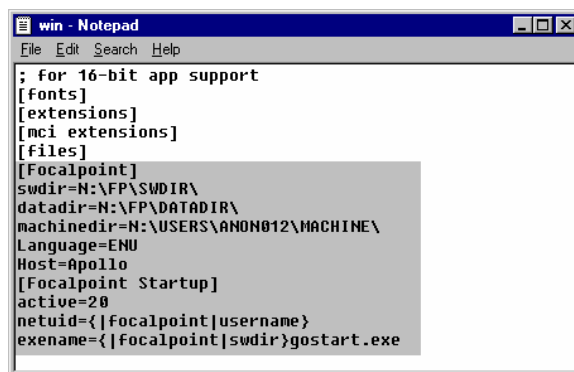
11. Close the file.
12. Repeat the procedure for each remote client.

Modifying WIN.INI

13. Open the System directory in the User subdirectory.

Note: There will be no System directory in the User subdirectory if the client has not already logged in to the Citrix server. See *Setting Up User Accounts for Configuration* (page 15) for more information.

14. Open WIN.INI.



```
win - Notepad
File Edit Search Help
; for 16-bit app support
[fonts]
[extensions]
[mci_extensions]
[files]
[Focalpoint]
swwdir=N:\FP\SWDIR\
datadir=N:\FP\DATADIR\
machinedir=N:\USERS\ANON012\MACHINE\
Language=ENU
Host=Apollo
[Focalpoint Startup]
active=20
netuid={|focalpoint|username}
exename={|focalpoint|swdir}gostart.exe
```

15. The procedure will vary depending on whether the client was *first* logged in to the Citrix server before or after Galileo Desktop was installed on the server.

If the client was logged in to the server before Galileo Desktop was installed, you will need to copy all of the Galileo Desktop information from the Focalpoint WIN.INI. (N:\WINNT.INI) to the client's WIN.INI. The information to be duplicated is shaded in the graphic above. Continue to Step 14 when the duplication is completed.

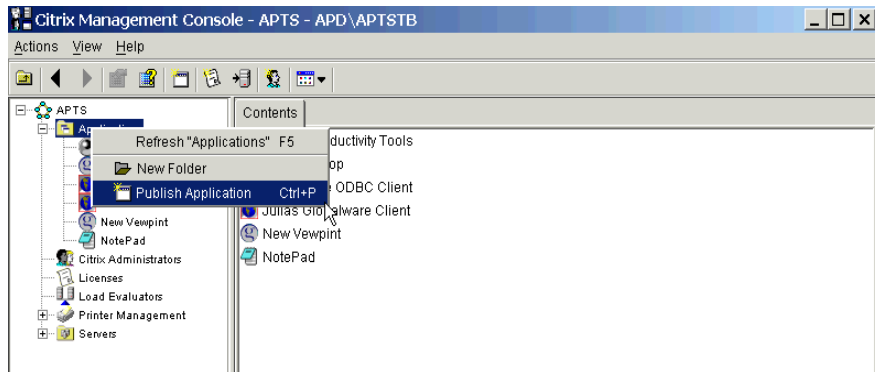
If the client was logged in to the server after Galileo Desktop was installed, all of the Galileo Desktop information should already be in the client's WIN.INI.

16. The **Machinedir** line displays N:\USERS\MACHINE\. Enter the individual client identification into the path. For example, the Anon012 user name should display as **N:\USERS\ANON012\MACHINE**.
17. Confirm that the paths to the Galileo Desktop directories match the paths selected during Step 9 of "Installing Galileo Desktop." In the sample graphic, N:\FP\SWDIR and N:\FP\DATADIR display.
18. Select **Save** from the **File** menu.
19. Close the file.
20. Repeat the WIN.INI modification for each remote user.

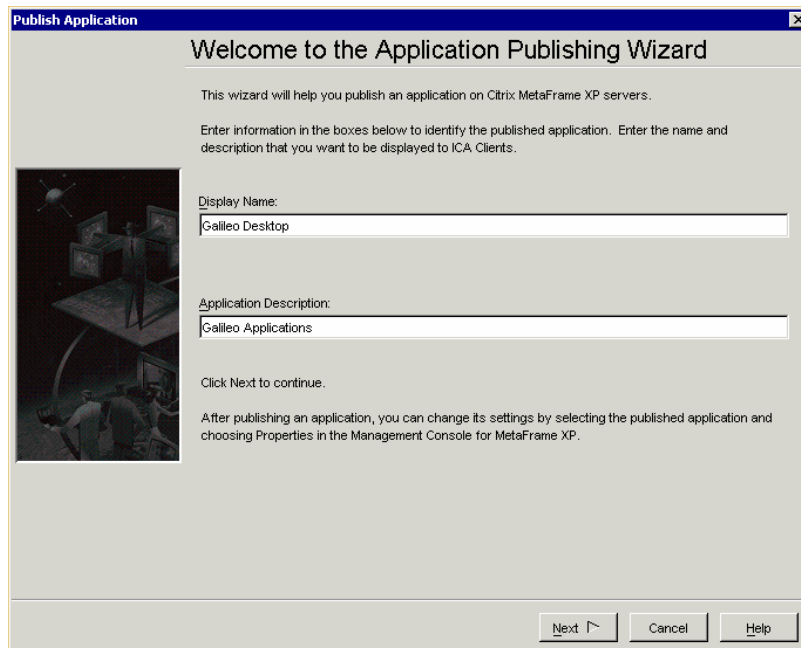
Publishing Galileo Desktop

The publication for Galileo Desktop varies slightly, depending on whether Windows NT 4.0 Server with MetaFrame or Windows 2000 XP Enterprise is used.

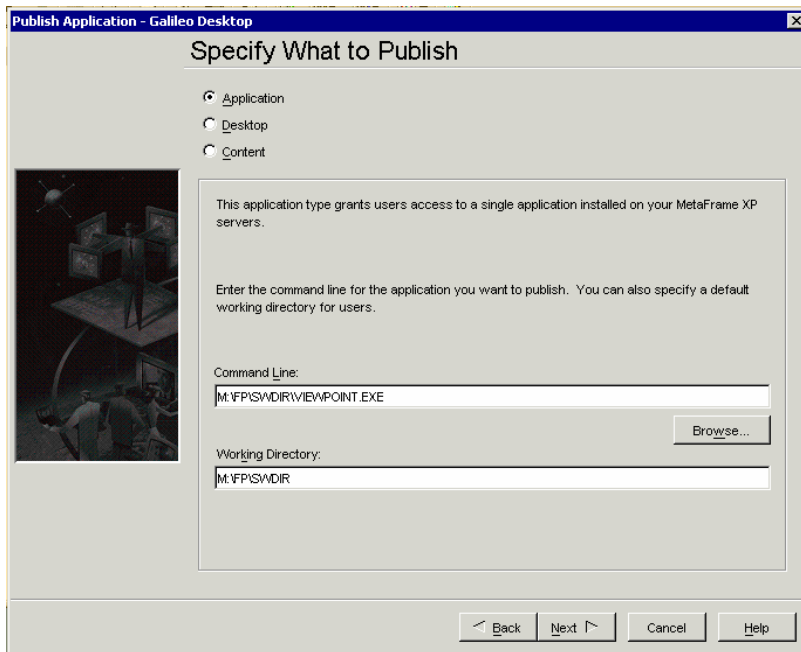
1. Log on to the Citrix Farm using Citrix Management Console.
2. Under current the farm, right-click **Applications**, and select **Publish Application**.



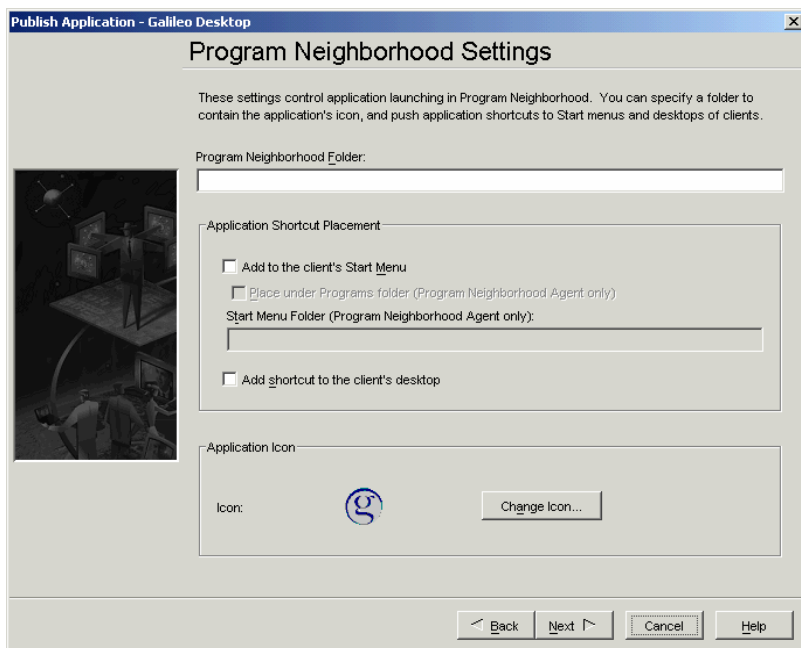
The Application Publishing Wizard displays .



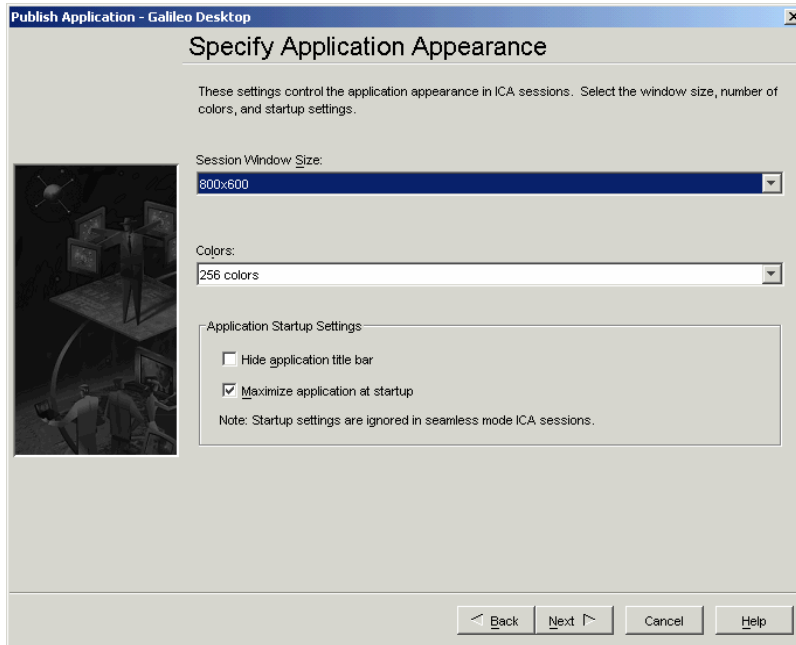
3. In **Display Name** and **Application Description**, enter the desired name and description for Galileo Desktop.
4. Click **Next** to display the Specify What to Publish dialog box.



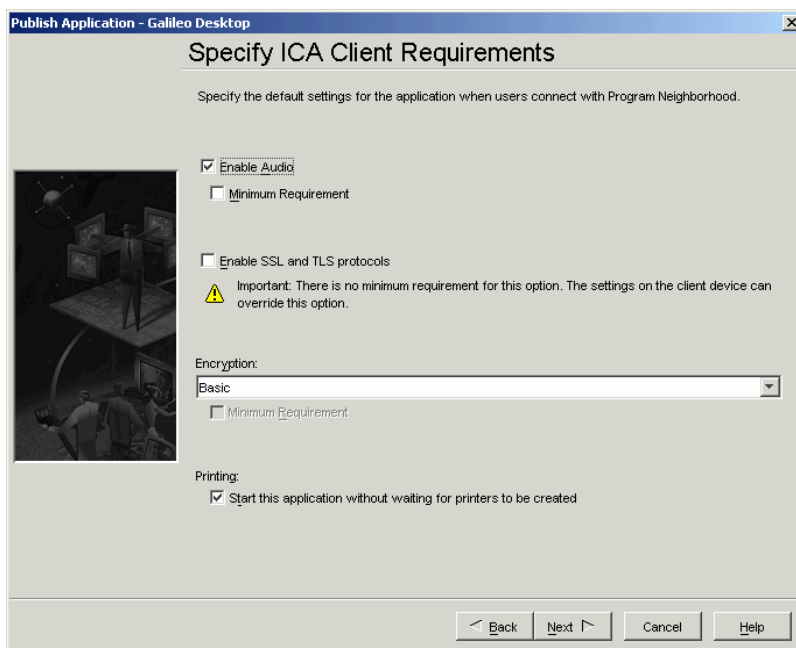
5. Select **Application**.
6. In **Command Line** , enter the path for Viewpoint.exe, or click **Browse** to locate the executable . In this example, the executable is located in:
N: \FP \SWDIR \VIEWPOINT . EXE.
 The **Working Directory** field automatically displays as **N: \FP \SWDIR.**
7. Click **Next** to display the Program Neighborhood Settings dialog box.



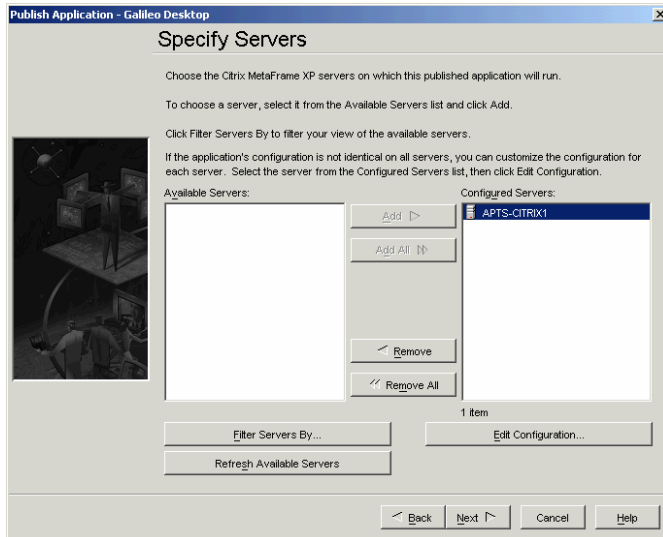
8. Specify a neighborhood folder or Start Menu and shortcut options, as desired
9. Click **Next** to display the Specify Appearance dialog box.



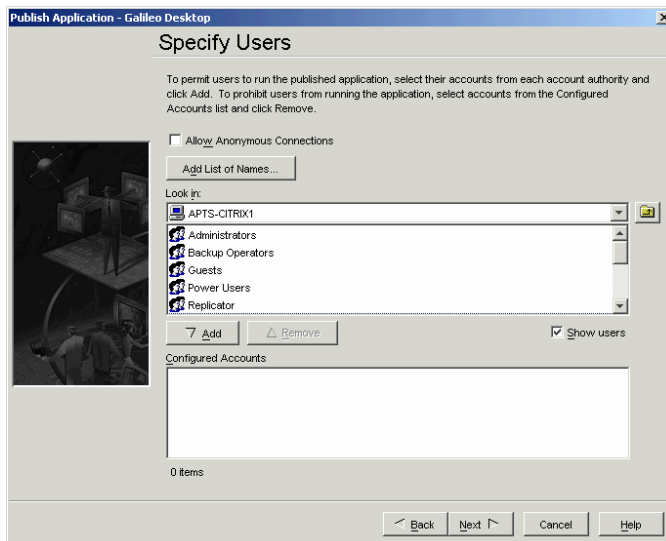
10. Click the **Session Window Size** arrow, and select *800x600* select or greater.
11. Modify **Colors** and **Application Startup Settings** , as desired.
12. Click **Next** to display the ICS Requirements dialog box.



13. Unless modified settings are preferred, do not modify this dialog box.
14. Click **Next** to display the Specify Servers dialog box.

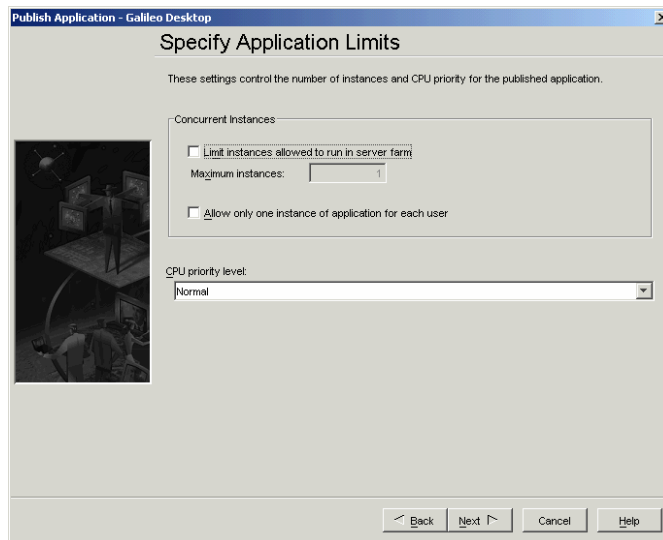


15. From the list of **Available Servers** , select the servers to be run for Galileo Desktop.
16. Click **Add** to move the selected servers to the **Configured Servers** column.
17. Click **Next** to display the Specify Users dialog box.



18. Click the **Look in** arrow to select the desired domain or server.
19. Select the users for that domain or server, and click **Add** to display the users in the **Configured Accounts** list. These users now have permission to access Galileo Desktop.

-
20. Repeat Steps 18–19, as necessary, for all servers or domains associated with Galileo Desktop.
 21. Click **Next** to display the Specify Application Limits dialog box.



22. Unless different settings for concurrent instances or the CPU priority level are desired, do not change the default settings.
23. Click **Next** to display the File Type Association dialog box.
24. Click **Finish** to complete publishing Galileo Desktop.

Confirming Galileo Desktop Connectivity

To confirm connectivity, open a Galileo Desktop session from the client workstation.

- If the connection was successful a *Download Successful* message displays to confirm that the HCM has connected to the IPC.
- If the connection was not successful, check the Client Identifier (GTID) and network connections from the Galileo Desktop session configuration.
 - To check the Client Identifier:
Enter **END ITEM+J**.
The identifier will display as `Terminal Identifier = C1FTFE`.
 - To check connectivity to the Citrix server:

Enter **END ITEM+H**:

The IP address of the Citrix server displays as 11.1.11.111.

- To check connectivity to the host

Enter **END ITEM+M**.

The following code displays:

00C2F7FE	29 CPU A	GIPC03
GTID	CPU	MIPIF GATEWAY

Notes:

- These identifiers and addresses are examples, and will vary according to the system.
- The End Item commands are only allowed if *Galileo Mapped Keyboard* was selected during the configuration of the Galileo Desktop.