HORTICOPIA®

Professional

Networking

User Guide

Table of Contents

Networking with HORTICOPIA® Professional

> There is an **Installation Checklist** at the end of this document which will help you avoid overlooking important steps

The networking version of HORTICOPIA**®** Professional provides access to the software from any Windows workstation on a network. The number of concurrent users is determined by the number of full access user licenses that have been purchased and by the type of networking license that has been purchased. In the simplest case, a single user license with networking would allow only one user at a time to run the program. However, any workstation on the local area network may run the program. This is commonly called a *floating* license, in that any workstation on the network could access the software as opposed to a *per seat* license which licenses specific workstations. An example of *per seat* licensing would be Windows 2012 Server clients.

Horticopia also offers a networking plus version. This version allows at least one full access user and additional *read-only* users. The *read-only* users are not allowed to make changes to data, copy information, or print information. They may search the database, view all available information, and create **MyList** plant lists.

Horticopia recommends that all clients be on the same local area network (LAN) as the server. Although there are no technical limitations to running over a wide area network (WAN), the performance is most likely to be very unsatisfactory. Database queries as well as transferring picture files over a network slower than a LAN will have severe performance impacts. A thin client solution such as Microsoft Remote Desktop Services (Windows Terminal Server) would be a better approach for this type of environment.

I. Quick Start

If you use all the recommended settings and installation defaults you can skip reading this entire user guide and follow these steps:

- Download and install *Microsoft SQL Server 2014 Express.* Search the Microsoft website to locate this free software.

- Download and install *Microsoft SQL Server Management Studio.* Again, search the Microsoft website to locate this free software.

- Change *Windows Firewall* permissions for the SQL Server -- see <u>Section V.2. Windows Firewalls</u>

- Change *SQL Server Protocols and Services* -- see <u>Section V.3. Protocols and Services</u>

- Set *SQL Server access privileges* as described in the first two paragraphs of <u>Section V.1.b) User Accounts</u>

- Install *HORTICOPIA® Professional* with the **Server** option

- Share the Horticopia folder -- see the first two paragraphs of <u>Section IV.1.a) Establishing Shared Folders</u>

- Run *HORTICOPIA® Professional* on the Server

- If there are any client workstation that are earlier than Windows 10, share the HorticopiaPDF printer -- see <u>Section IV.1.b) Sharing the HorticopiaPDF printer</u>

- Get the Server authorized by Horticopia -- either by using the Internet/email option or by calling Horticopia Customer Service

- After the **Configure for Network Clients** is complete, follow the displayed instructions for client workstation installations.

II. System Requirements

HORTICOPIA® Professional with networking may be installed on any Windows (Windows 7, Windows 8, Windows 10, Windows Server 2008, Windows Server 2012, or Windows Server 2016) system. The *Server* does not have to be a Windows server system such as Windows 2016. It can be run on Windows 7/8/10 (Business, Professional, Ultimate, Enterprise). *Home* editions cannot be used as a server, but they may be used as workstation clients for HORTICOPIA® Professional. HORTICOPIA® Version 5.3 and later does not support earlier Windows systems. Please note that Windows imposes a limit of 10 concurrent users accessing a computer unless it is a Windows server (2008, 2012, or 2016) system.

It is highly recommended that the latest service packs be installed for the *host* system.

You may regard the *Server* as the system that acts as the *host* for HORTICOPIA® Professional. The basic hardware requirements for the host are no different than for a standalone system.

HORTICOPIA® Professional uses Microsoft SQL Server 2012 or later (i.e., SQL Server 2012, SQL Server 2014, or SQL Server 2016; If you are installing on a Windows 7 system, you can only install SQL Server 2014 or earlier. The HORTICOPIA® Professional software may be installed on a network file server or NAS (attached storage). To access HORTICOPIA® Professional from a workstation on the network, the *host* computer need not be running unless it provides the SQL services and/or acts as the file server for HORTICOPIA® Professional.

Administrative tasks for HORTICOPIA® Professional, including licensing and network configuration, must be done on the *host* computer system.

III. Installing HORTICOPIA® Professional

The installation of HORTICOPIA® Professional requires installing the software and one or more picture libraries. Normally, picture libraries are installed on the same *host* system as the software. It is possible to install the software and picture libraries on different drives or entirely different network locations. The system on which the software is installed is considered the *host* system. Picture libraries must be accessible by all network users, but otherwise, they may be located anywhere on the network.

For ease of configuration, Horticopia recommends that the software, picture libraries, and the SQL Server all reside on the same *host* computer.

1. Host Installation

After some initialization, the setup program will start and you will be prompted for a **Standalone** or **Server** installation. Be sure to select the **Server** installation so that the installation properly sets up for communicating with an SQL Server and subsequent installation of the software on client workstations.

a) Choosing an installation folder

The default installation folder for a **Server** installation is **C:\Horticopia\Software**. You may change this to any other location that will be accessible to your network users. If the target location is not local to the computer used for the installation, it's best to use a mapped drive to specify the target since the installation program may not support browsing for network paths. After installation is complete, the mapped drive may be disconnected. You may, however, type or paste a network path (UNC) into the installation program's directory box.

If you are upgrading to a network installation from a standalone installation, please refer to **5. Upgrading from a Standalone Installation** later in this chapter.

Using the default installation path will simplify subsequent network configuration, although you may change the destination path to something other than **C:** as long as the folders **\Horticopia\Software** are at the end of the path. For example, **J:\Applications\Horticopia\Software**, would be acceptable for a "simplified" approach. We <u>do not</u> recommend installing under **Program Files** because sharing of folders within **Program Files** is not considered good Windows practice.

The installation path that you choose must be shareable or be in a path that's already shared.

b) SQL Server options

Before HORTICOPIA® Professional can be executed, you must have an SQL Server installed and running.

The default SQL Server instances for HORTICOPIA® Professional are **SQLEXPRESS** and **HORTPROSQL**. HORTICOPIA® Professional also accepts alternate instance names. If you manually configure the SQL access for Microsoft SQL Server 2008, 2012, 2014 or 2016 Express, then you may use any instance you wish. However, we recommend that a separate instance be used with HORTICOPIA® Professional to prevent potential security conflicts with other applications.

We recommend that you <u>do not use</u> the SQL Server instances that are installed with Microsoft Business Server or other specialized applications (such as Timeclock) due to difficulty in configuring around security issues You should install a separate instance if there is no default SQLEXPRESS instance available.

Any manual SQL Server access configuration will be performed after installation is complete and after HORTICOPIA® Professional has performed its initialization.

c) Concurrent Users

Windows 7/8/10 limit the number of users that may access files from other computers to 10 at a time. If you have the need for more users, you will have to upgrade to a Windows Server system or use a third party file server that supports more users.

The network version of HORTICOPIA® Professional determines the number of users currently running when someone tries to launch the program. If less than the maximum number of concurrent users that are allowed are running, the launch succeeds. Otherwise it fails with an appropriate notification message and the user must wait until someone else signs off.

d) Non Windows Servers

Past versions of HORTICOPIA® Professional have been installed and run successfully with file and terminal servers that are not Windows based. In particular, Novell and Citrix systems have been found to be compatible. Please note that Horticopia cannot provide any support that's specific to non-Windows environments.

HORTICOPIA® Professional has been tested with Microsoft SQL 2012, 2014 and 2016 Servers. Compatibility with other servers has not been verified and Horticopia cannot provide support for interfacing with other SQL Servers.

2.   Picture Library Installation

The picture libraries are included on the flash drive that is used for installation. A considerable amount of disk space is required for the picture libraries: typically from 6 to 16 gigabytes.

We recommend that the picture libraries be installed **from** the same computer as the software installation, i.e., the *host* system. You may use another computer to perform the installation of the picture libraries, but initial configuration will be greatly simplified if the *host* system is used, even if the installation is to a drive that's on a different computer.

The installation location for the picture libraries must be in a path that's accessible to all HORTICOPIA® Professional network users. The picture library installation path that you choose must be shareable or be in a path that's already shared. The picture libraries are *read-only* so you may install them in a location which provides more limited access rights to the network users. Keep in mind that picture files are fairly large. You should choose an installation location that provides adequate bandwidth to your network users.

Since the default installation location for the picture libraries is **C:\Horticopia\HortProfPix,** the picture libraries will be installed in the same parent folder (the **Horticopia** folder) as the software. Again, this simplifies sharing and other network configuration tasks, so it's best to adjust the installation path to match any changes made previously, as described in **Choosing an Installation Folder**.

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3.   Client Installation

The *client* installation has a small footprint. The clients access the software on the *host* and the picture libraries at the location where they were installed. The *client* software provides connectivity to the *host*.

The client software may be installed from the installation flash drive by running **SetupClientV.exe** in the root folder of the flash drive.. However, we recommend that you install the *host* first and configure it for network access. The client installation is then done by accessing the installation folder on the *host* and the configuration of the client then takes place automatically.

4. Upgrading from a Standalone Installation

The default installation folder for a standalone installation of HORTICOPIA® Professional is in the **Program Files** folder. Additionally, the data folder (called **Horticopia Data**) is normally stored in the **Public Documents** folder.

Before installing/upgrading to the networking version, you should save a copy of the existing **Horticopia Data** folder and then delete it. Both of these tasks can be accomplished with the *Horticopia Control Panel* (Setup tab).

You can now either share the existing Horticopia installation folder or uninstall HORTICOPIA® Professional and then reinstall as a Server installation. We recommend the uninstall/reinstall approach.

If you have authored plants, user notes entered into plant information fields, or *Garden Studio* templates, then:

- Once the Server version has been installed and is running with your SQL Server installation, you can import the old **Horticopia Data** folder using the *Horticopia Control Panel* (Setup tab).

- Once the import is complete, go back to the *Horticopia Control Panel* (General tab) and select the *Refresh Database* option.

IV. Configuring the Installation

1.   On the Server

HORTICOPIA® Professional must be run on the *host* computer after installation in order to initialize folders and files. This is usually the Server. If you have no default instances (SQLEXPRESS OR HORTPROSQL) of *Microsoft SQL Server* running on the Server, you will be prompted to specify the SQL connection the first time you run the program:

Here, you can select from available instances running on the host computer, if any, or enter the SQL Server computer name. If you wish to connect to an SQL Server that is located on a different computer on your network, check the box beginning with "If you want..."

If you do have an instance called SQLEXPRESS or HORTPROSQL, this dialog box will not appear. However, after initial setup you can configure SQL access to communicate with a remote server, use SQL logon authentication, etc.

Dealing with more complex scenarios is described under **Editing SQL Server Connection Parameters**.

Before any clients can run HORTICOPIA® Professional, the clients must have access rights within the SQL Server. The specific actions to be taken depend on user rights, Active Directory authorization or peer to peer authorizations. See **SQL Server Considerations** for details on how this is accomplished.

a) Establishing Shared Folders

To provide access to the host system by client workstations, you should establish the parent folder of the folder where the HORTICOPIA® Professional software was installed as a shared folder. By default, this is a folder named **Horticopia.** The HORTICOPIA® Professional software is installed in a subfolder named **Software**. The most straightforward approach is to share this folder with the default share name of **Horticopia**.

You should provide full read/write access for all users on this folder on the **Sharing** permissions. Once the software has been initialized, it's possible to limit access to read only on the **Security** settings for the subfolders in the **Horticopia** folder.

It is also possible to run the software in a networking environment without sharing the **Horticopia** folder itself, as long as it is accessible through a shared folder or mapped drive. However, this requires additional configuration steps whereas using the recommended approach greatly speeds up the set-up process and eliminates potential configuration problems.

If the folder where the HORTICOPIA® Picture Libraries are installed, usually **HortProfPix**, is not installed in the same folder as the Software folder, it must also be shared or be in a shared path (or mapped drive) accessible to all workstations accessing HORTICOPIA® Professional. We strongly recommend using the default share name of **HortProfPix**, again to simplify configuration. This folder needs to be shared only for read access. See **Running "Configure Network Clients"** for configuration with non-default naming conventions, including mapped drives.

It is highly recommended that UNC paths be used instead of mapped drives. That way, the software is not dependent on a specific drive mapping which could change in the future or not be available to all workstations accessing HORTICOPIA® Professional.

If the **Horticopia** folder contains both the **HortProfPix** folder and the **Horticopia Data** folder, then only the **Horticopia** folder needs to be shared. This is the default installation configuration.

b) Sharing the HorticopiaPDF Printer

If all client computers are running Windows 10, then this step is not needed.

HORTICOPIA® Professional incorporates saving reports as Adobe Acrobat PDF files. In order for the clients to use this feature, it is important to share the HorticopiaPDF printer.

Open the **Printers** (**Devices and** Printers or similar) Windows control panel and locate the HorticopiaPDF printer. Share this printer as **HorticopiaPDF**.

On each non-Windows 10 client computer that will be running HORTICOPIA® Professional, add the network printer **\\YourServerName\HorticopiaPDF** to the list of available printers.

c) Access Privileges

Proper access privileges need to be provided for all clients that will be running HORTICOPIA® Professional.

On a new server installation, the default installation folder is called **Horticopia.** After the software has been run to initialize it, a new folder, **Horticopia Data,** will have been created in the **Horticopia** folder. If you see the **Horticopia** folder and the **Horticopia Data** folders at the same level (i.e., the **Horticopia Data** folder is <u>not</u> inside the **Horticopia** folder or inside the **Software** folder), then proceed as follows:

- Share the **Horticopia** folder for read only. Be sure to add all the client users under **Permissions**. You should also add these users under the **Security** tab settings.

- Share the **Horticopia Data** folder for full access. <u>Read/write is insufficient</u>. It must have <u>full access</u> for all client users. Again, you should also add these users for full access under the **Security** tab settings.

If the **Horticopia Data** folder is not inside the **Horticopia** folder (this will usually be the case with upgrades from a non-networked version of HORTICOPIA® Professional), then we recommend that you use the **Horticopia Control Panel** to move the **Horticopia Data** folder into the **Horticopia** folder. Initially, you should provide full read/write access for all users on the **Horticopia** folder. Once the software has been initialized, it's possible to change access to read only. See **Relocating the Horticopia Data Folder** for instructions on completing this change. After that's complete, proceed in the same manner as described above.

You can leave the **Horticopia Data** folder inside the **Horticopia** folder if you share the **Horticopia** folder for <u>full</u> access. Read/write is insufficient. It must have full access for all client users. You should also add these users for full access under the **Security** tab settings. Alternatively, you could first share the **Horticopia** folder for read only access and then share the **Horticopia Data** folder, located inside the **Horticopia** folder, for full access. Be sure to first set the **Horticopia** folder access and then the **Horticopia Data** folder access.

The picture library folder, usually **HortProfPix** is normally shared for read only. Be sure to add all the client users under **Permissions**. You should also add these users under the **Security** tab settings.
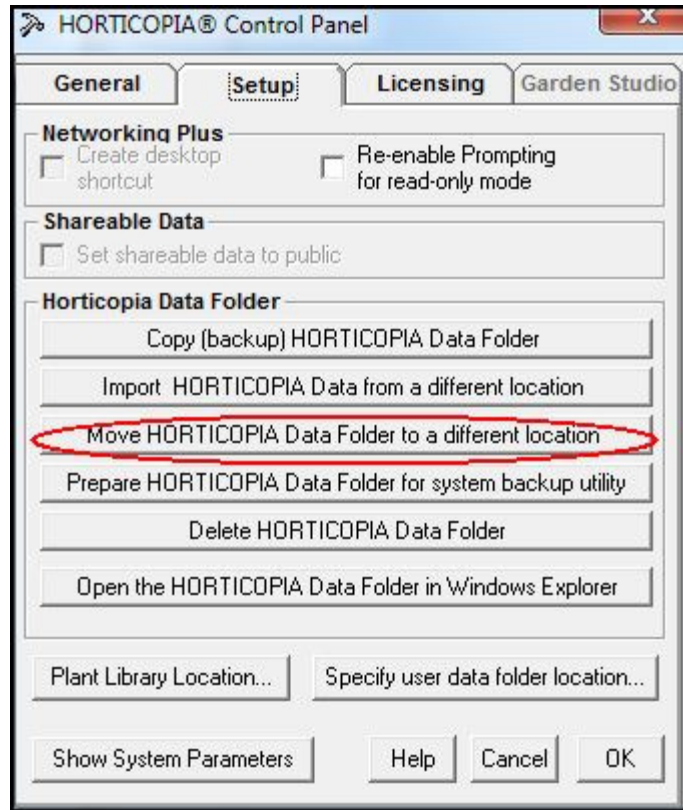
HORTICOPIA® Professional clients do not normally require access to the registry. However, it is recommended that HORTICOPIA® Professional be run once on each client workstation in Administrative mode with write privileges to the HKEYLOCALMACHINE registry so that the location of the *host* system can be recorded. Otherwise, every user with limited rights will have to enter the path to the *host* system the first time they log on. In this case, the *host* system path is recorded in HKEYCURRENTUSER.

d) Relocating the Horticopia Data Folder

Relocation of the **Horticopia Data Folder** is usually performed only when upgrading from a previous version or when adding networking to a standalone installation.
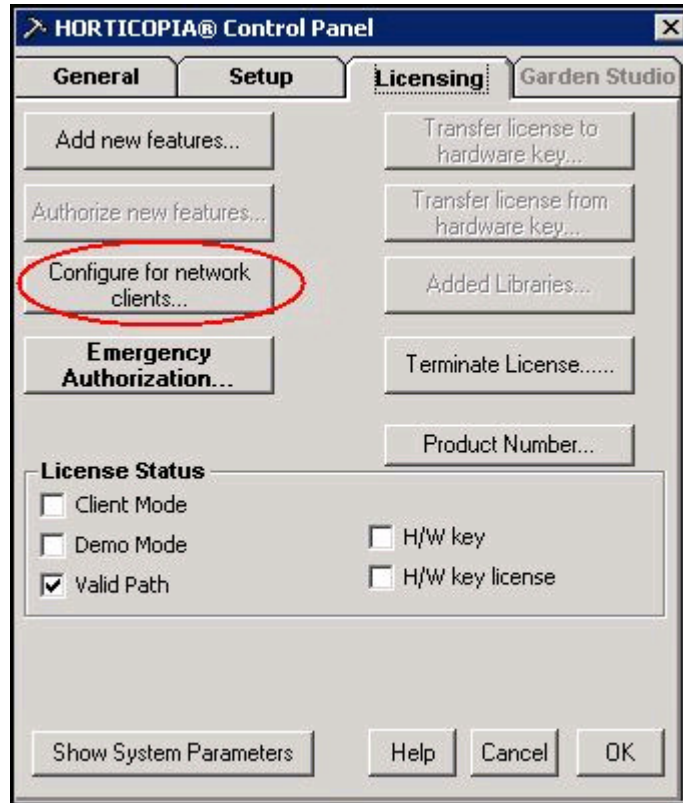
Once the **Horticopia Data** folder exists, it can be relocated by using the **Horticopia Control Panel**. From the **Start** menu, select **Programs** (or **All Programs)**, find the **Horticopia Pro V** folder, and then click on **Horticopia Control Panel V**. Click on the **Setup** tab, then click on **Move HORTICOPIA Data Folder to a different location**.

Although you can locate the **Horticopia Data** folder anywhere on the network, it is recommended that you locate it on the *host* system, preferably on the same drive as the **Horticopia** folder.

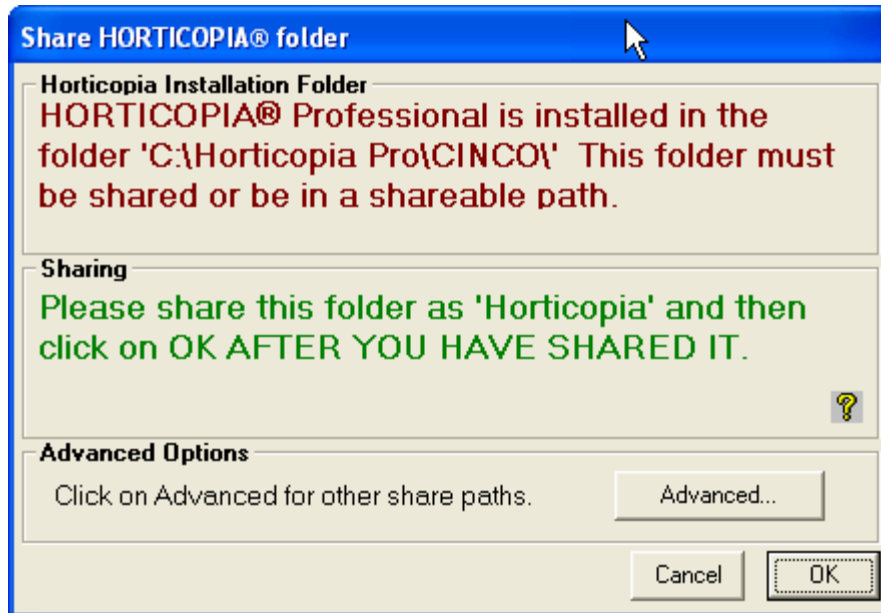### e) Running "Configure Network Clients"

Once the sharing and access tasks described previously have been completed, you must run **Configure Network for Clients**. When you first enter the authorization codes for a networked installation, the **Configure for Network Clients** wizard will start automatically, unless it's been previously run. If the **Configure Network Clients** wizard does not start automatically, open the **Horticopia Control Panel**. (From the **Start** menu, select **Programs** (or **All Programs)**, find the **Horticopia Pro V** folder, and then click on **Horticopia Control Panel V**.) Click on the **Licensing** tab, then click on the **Configure for network clients…** button.
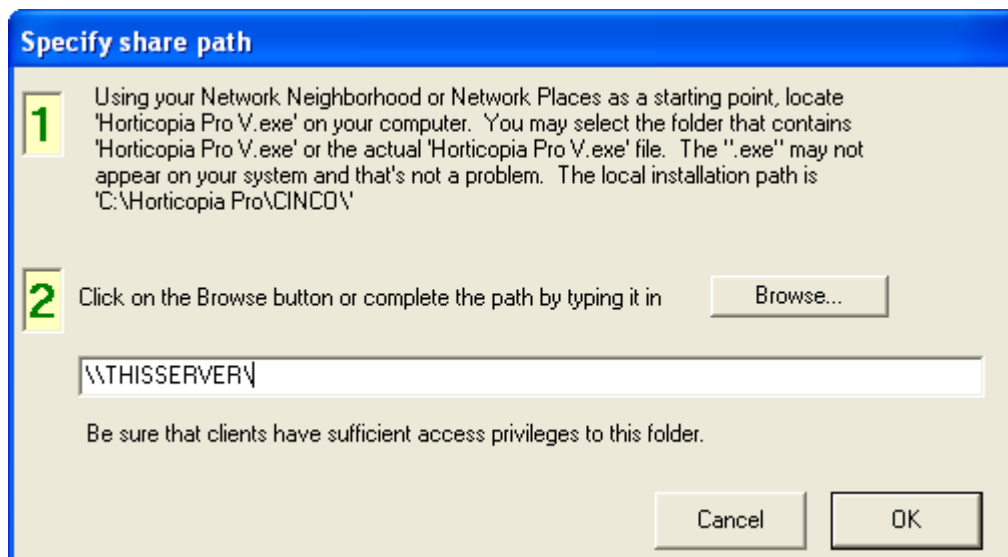
Depending on the installation configuration, the **Configure Network Clients** wizard may ask you to share folders or locate folders. For an installation that used the defaults and where the sharing and access steps outlined above have been completed, the **Configure Network Clients** wizard will simply display a **Notepad** file that describes what needs to be done to install the client workstation portion of HORTICOPIA® Professional.

(1) Sharing the Installation Folder

For non-standard configurations or if the sharing tasks described previously have not been completed, the **Configure Network Clients** wizard may display one or more of the following dialog screens:
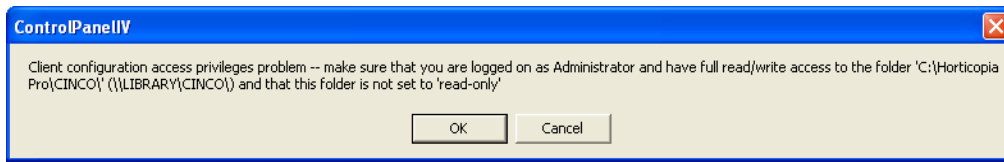
The **Configure Network Clients** wizard searches for a shared folder, **Horticopia,** on the *host* system (the system that the wizard is running on). This folder would normally be called **\\Server\Horticopia**. You may either share the *Horticopia Installation Folder* as **Horticopia** or click on the **Advanced** button to select a different share path. This would be the case if, for example, you had a shared folder called **Applications** that contains the **Horticopia** folder and you don't want to create an additional share name.
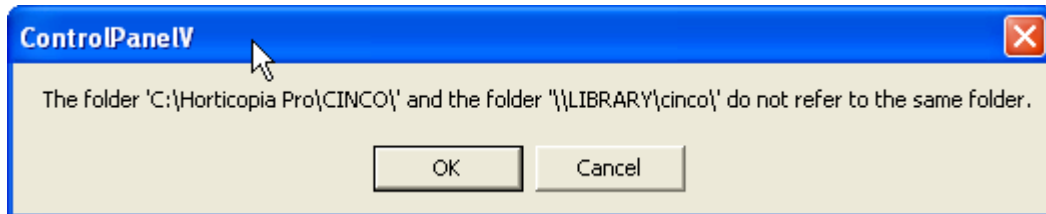

The path is preset with the server name for the *host* system. You can then enter the actual path (for example, \\THISSERVER\Applications\Horticopia) or click on **Browse** to locate the path. Be sure to go through you Network Places and <u>not</u> your local drives. The purpose is to get the network path (UNC path) to HORTICOPIA® Professional. If you select **Browse…**, you will get a dialog as described under **Plant Library Locator**.

If you get the following message dialog, then you do not have sufficient local system privileges for the installation path. Read-only access privileges to the installation folder via the network (UNC) path are sufficient for this step.
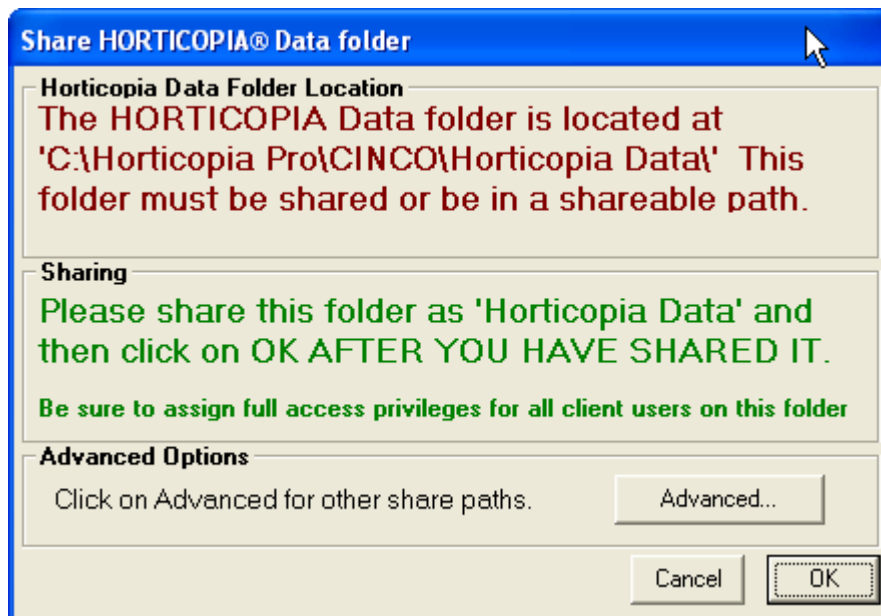

The following message dialog indicates that the network path does not refer to the same location as the local host installation path. You may have had a previous instance of HORTICOPIA® Professional installed at a different location. You should first delete any previous instances and then redo the sharing for the proper location.

(a) Horticopia Data Folder

If the **Horticopia Data** folder is in the same folder as the HORTICOPIA® Professional executable program or in the parent folder of the folder that contains the executable program, the **Configure for Network Clients** discovers the **Horticopia Data Folder** itself. For other locations, the following dialog will be displayed:

Be sure to specify a UNC path for the location of the **Horticopia Data** folder.
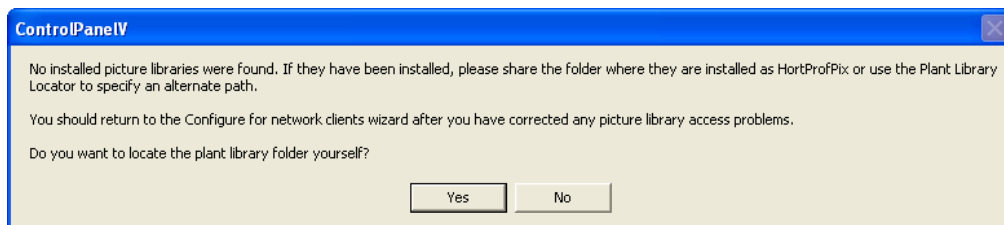
If the specified location does not meet any of these requirements, the following will be displayed:
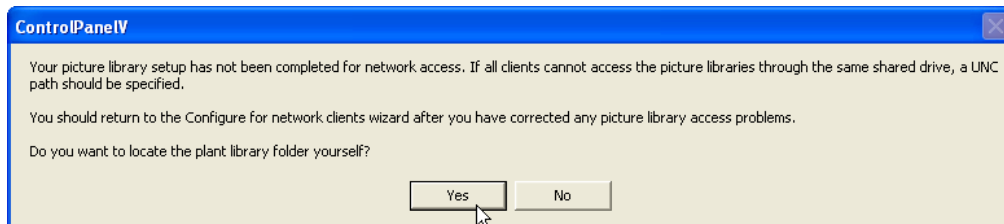

Configure for Network Clients will then terminate.
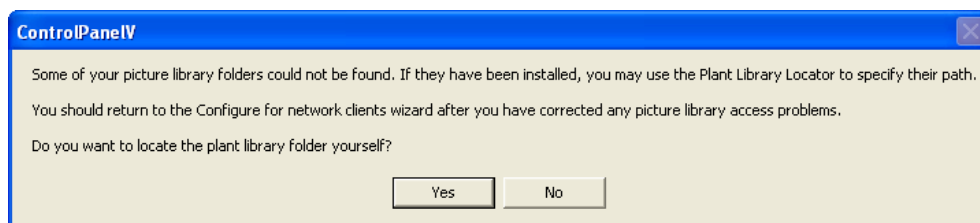
(b) Sharing Picture Libraries

If there are picture library problems detected by the **Configure Network Clients** wizard then one of the following message dialogs will be displayed.

This message indicates that no picture libraries could be found. You may have installed them on a different drive or moved them manually. If they have not been installed, you should first install them. Then use the Plant Library Locator to establish the location of the shared path where the picture libraries may be found.

This message display indicates that one or more picture library locations do not specify a network (UNC) path. We recommend using a UNC path, although it's possible to use a common mapped drive, provided all client workstations use the same mapped drive letter. If you wish to use a mapped rive letter, then you may ignore this message.
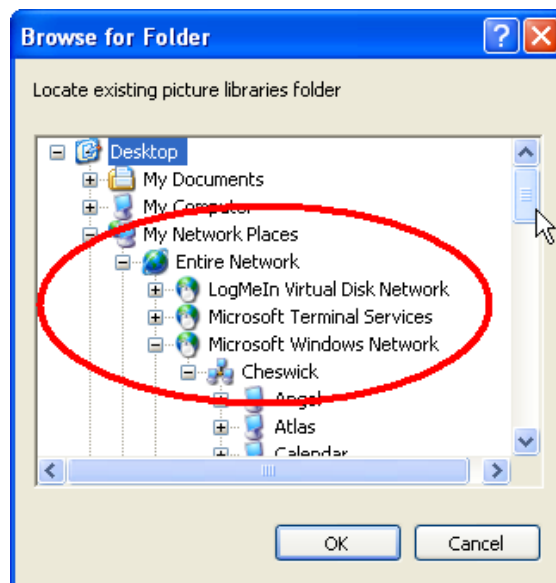

This message display indicates that one or more picture libraries could not be located. It's possible to have more than one location with picture libraries. If that's the case, use the Plant Library Locator to add any missing picture library locations. If duplicate libraries are found, the Plant Library Locator will use the location of the last one found.

(c) Plant Library Locator

When the Plant Library Locator is started, it will prompt for the location of the picture libraries. This is usually a folder called **HortProfPix**, although the name may be changed during picture library installation.

When browsing for a network (UNC) path, find your workgroup or domain and then the host computer as shown in the following example:

After the shared picture folder has been located, click on the folder name to highlight it, and then click on **OK**.

When the **Configure Network Clients** wizard completes successfully, it will display a notepad window providing information on how to proceed on your client workstations. Following is an example:
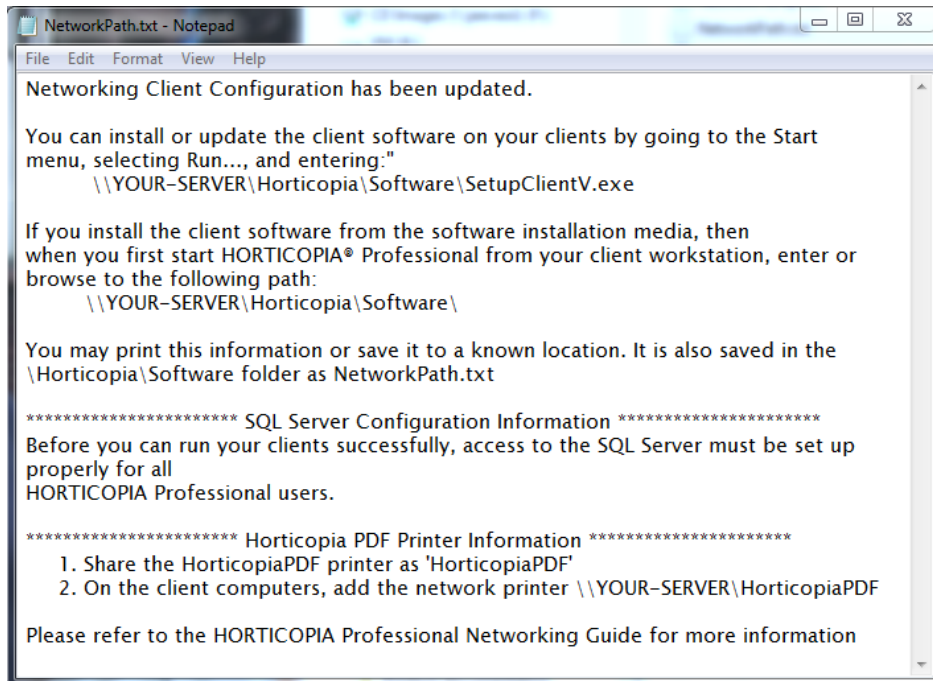

2. On the Client

The **Configure Network Clients** wizard finishes by displaying your options for installing the client software. If available, it is recommended that you install through the network **SetupClientV.exe**

If you have changed the host (Server) name or if you have installed (moved) the software on a new Server, the client will point to the old HORTICOPIA® Professional location on the network. To provide the correct location information on the client:

- Go to **Start**, **All Programs**, **Horticopia Pro V**, **Reset Horticopia Path**

- Enter the network path for HORTICOPIA® Professional. This is the path displayed in the **Configure for network clients** procedure following the *Installation from Software Media* section.

- The client installation has minimal disk space requirements because all of the data and the software reside on the host system. Once the installation is complete, you can start the client software by double-clicking on the **HORTICOPIA® Pro** icon on the client desktop. If you installed from software media instead of over the network, you will be prompted for the path to the host installation. Enter the path that was provided in the Notepad file at the end of the **Configure Network Clients** wizard, following the *Installation from Software Media* section.

Unless User Account Control (UAC) is turned off on the client (Windows Vista, Windows 7, and later), you **must** run as an Administrator the first time by right-clicking on the HORTICOPIA® Professional desktop icon and selecting **Run as Administrator**. Note that this is not the same as being logged on as an Administrator.

One of the most common client access problems is granting sufficient privileges to the client user on the host system. If you get error messages such as **Access denied** or **Error 70** or **Error 75**, insufficient privileges have been provided. Review the access privileges that have been granted in the shared folders and subfolders.

It is also very common to experience SQL connectivity problems. Be sure to read the section **SQL Server Considerations** section. The most common causes of SQL connection problems include:

- The **Configure for Network clients** task in the HORTICOPIA® Professional Control Panel has not been completed on the host computer.

- Windows firewalls are enabled on the SQL Server computer (usually the host computer) and exceptions for the SQL Server have not been added to the firewall.

- The TCP/IP protocols for the SQL Server networking configuration have not been enabled.

- The SQL Browser service is not running.

- The user has not been given logon rights to the SQL Server.

If a client workstation will have more than one user account accessing HORTICOPIA® Professional, it is recommended that you run once as an Administrator so that HORTICOPIA® Professional can establish the path to the software in the registry for other users on the client workstation.

V. SQL Server Considerations

1. Installation and Basic Configuration

This guide describes a generic SQL Server Express installation and configuration for a networked system using Active Directory.

In order to keep current with various SQL installations and configurations, we are addressing most SQL topics on our website, *www.horticopia.com*. Refer to the *Knowledgebase's SQL Server* section for help.

a) Download and Install SQL Server Express

On the Microsoft website, search for **SQL Server Express**. You will probably find a number of matches. In general, you'll want the newest version, but be sure to verify that your system meets the requirements of the newest version. SQL Server 2014 Express will work with Microsoft Windows Servers 2012 and 2016 as well as with Windows 7, 8 and 10. To provide access to other users on the network, you should have the *Professional* edition if you're not using a *Server* software edition.
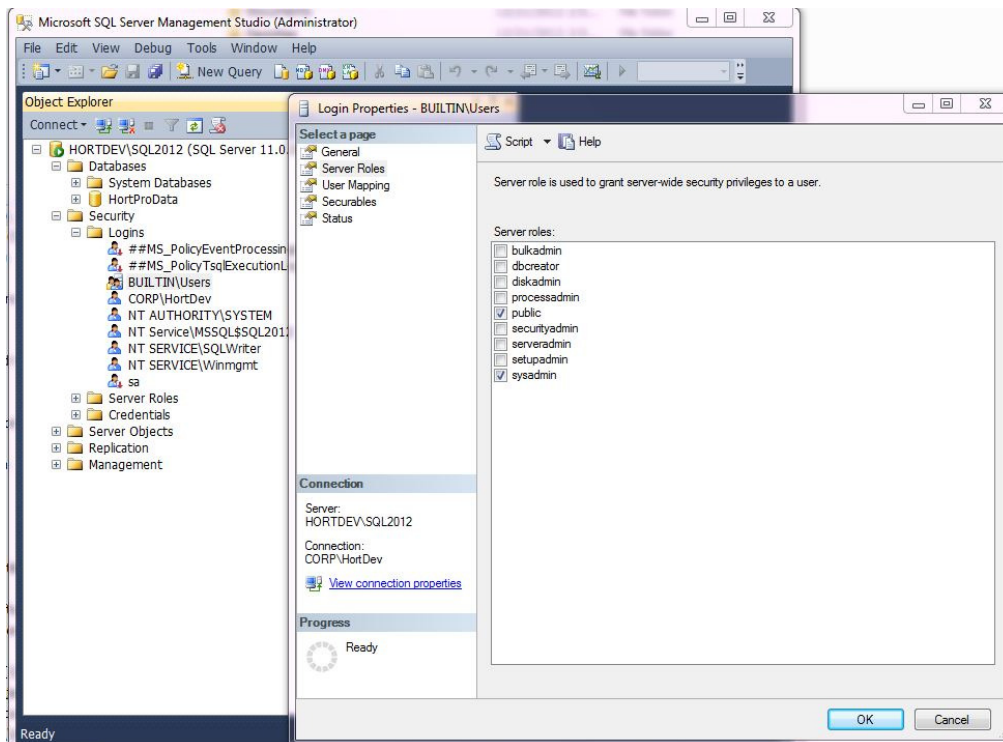
Before downloading *SQL Server Express*, verify that you're getting the latest service pack.

In order to do any security configuration beyond the defaults that SQL Server sets up during installation for the SQL Server, you should download the *Microsoft SQL Server Management Studio Express* on your Server computer. Familiarizing yourself with *Microsoft SQL Server Management Studio Express* is essential to doing custom configurations. There are many possible security settings depending on the particular settings and requirements for your system environment, so we can offer only some basic approaches. The *Microsoft SQL Server Management Studio Express* offers extensive on-line help.

b) User Accounts

The default SQL Server installation assumes that you will be using *Windows Authentication* for users to access the SQL Server. You should be able to run HORTICOPIA Professional on your server without additional security settings. To provide client access, you will have to take additional steps as described in the remainder of this section.

In the *Microsoft SQL Server Management Studio Express*, connect to the instance of the SQL Server you have installed. Expand the connection and locate the *Security\Logins* items. Open the BUILTIN\Users and then the *Server Roles*. Check *public* and *sysadmin*. Everything else should be unchecked.

For peer to peer networking you may use SQL Server authentication. See our website for more information where we provide a detailed step-by-step procedure.

For peer to peer networking, you can also use the *Guest* account. First, make sure the *Guest* account is enabled in your *Windows Users and Groups*. In the *Microsoft SQL Server Management Studio Express*, connect to the instance of the SQL Server you have installed. Expand the connection and locate the *Security\Logins* items. Right-click on *Logins* and the select *New Login…* Click on *Search…* and then enter *Guest*. Click on *OK*. Then, modify *Server Roles* as described above for *Builtin\Users*.

Once the user accounts have been added, the new user accounts will not take effect until:

- You restart the SQL Server (you can use the SQL Server Configuration Manager to do a Restart) and,

- Log off and back into any accounts that were logged on for these changes to take effect.

2.   Windows Firewalls

By default, the *Microsoft SQL Server* installation **does not** create an exception for the Windows Firewall. This must be done manually. If any of your client workstations cannot access the SQL Server, check the Windows firewall settings on the computer that hosts the SQL Server. If you are using a non-Windows firewall, please consult the documentation for that firewall.

Since the *firewall* settings change from time to time and vary among the different SQL Servers, go to Microsoft's website and search for **SQL Server Firewalls**.

The following approach will normally work with Windows firewalls:
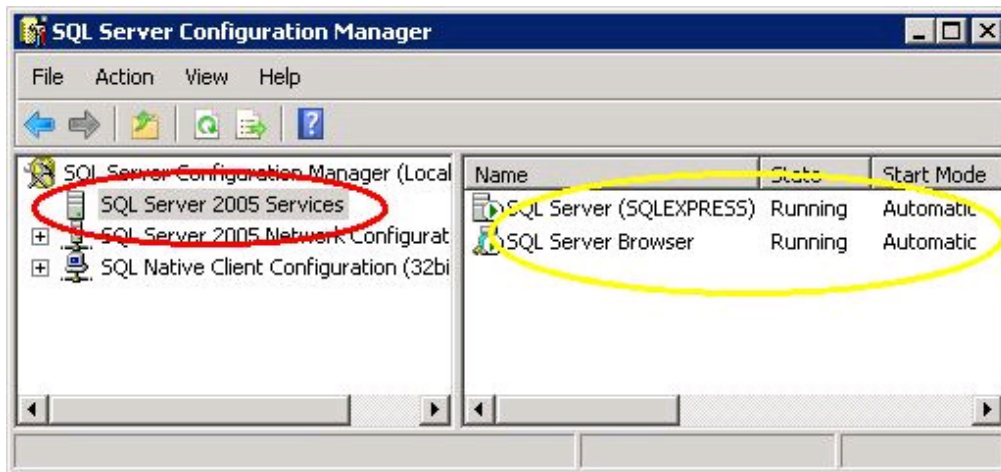
1. In the **SQL Server Configuration Manager'**s *SQL Services*, get the *Properties* for the *SQL Server*. Click on the Services tab and note the *Binary Path*. This is the program for which you will need to create an exception in the firewall.

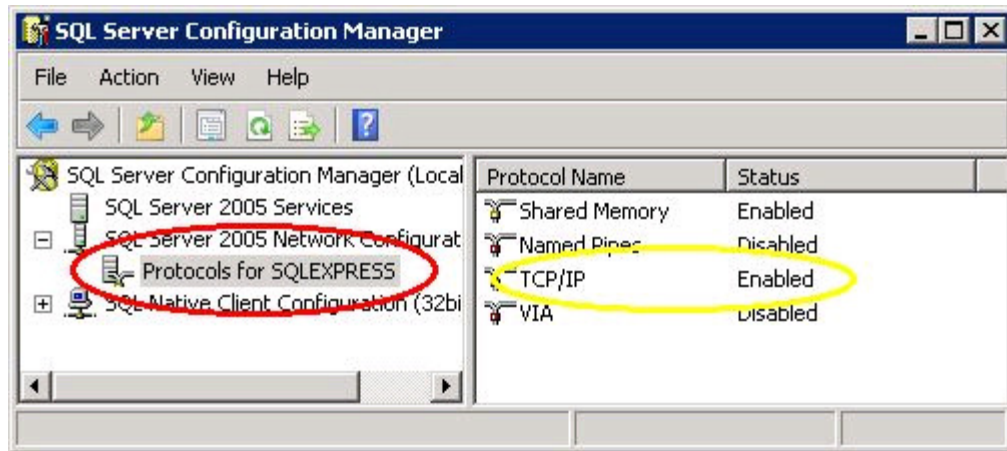2. Repeat the previous step for the *SQL Server Browser*

3. Protocols and Services

The SQL Server Configuration Manager provides the necessary tools to perform basic configuration of the SQL Server. The default protocols **do not** enable TCP/IP. This must be done manually.

Open the *SQL Server Configuration Manager* from Start, **All Programs**, **Microsoft SQL Server XXXX**, **Configuration Tools**, **SQL Server Configuration Manager**.

1. Click on **SQL Server XXX Services**. In the right window pane, the *SQL Server (Instance Name)* should be running. If it is not, right-click on *SQL Server (Instance Name)* and from the **Action** menu, select **Start**. You should also make sure the **Properties** for the service show that it starts automatically. To get to the **Properties**, right-click on server name, select **Properties**, then click on the **Services** tab.

2. In the right window pane, the *SQL Server Browser* should also be running. The default is for it to not be running. You must change this behavior manually. If it is not, right-click on *SQL Server Browser* and from the **Action** menu, select **Start**. You may need to enable the service first by selecting the proper *Start Mode* in the **Properties**. You should also make sure the **Properties** for the service show that it starts automatically.

3. Expand the *SQL Server XXX Network Configuration* and then click on *Protocols for SQLEXPRESS (or the proper instance name)*. In the right window pane, make sure that the *TCP/IP* protocol is enabled. If it is not, right-click on *TCP/IP* and select **Enable**.

4. Restart the SQL Server. You can follow the procedure in Step 1.

4. Editing SQL Server Connection Parameters.

The **Horticopia Data** folder is created when HORTICOPIA® Professional is run the first time. The default location of the **Horticopia Data** folder is in the **Horticopia** folder. You may use the HORTICOPIA® Control Panel to locate the **Horticopia Data** folder. In the Control Panel, click on the **Setup** tab, and then on **Open the HORTICOPIA Data Folder in Windows Explorer**.

In the **Horticopia Data** folder, there is a configuration settings file named **Horticopia.ini**.

In the **[SQL]** section of the configuration settings file, there are several *key names* which may have values assigned depending on the original configuration. However, the *key names* will always be generated when the **Horticopia Data** folder is first initialized.

You can set/modify the values after the *key names* to customize the SQL connection for your specific requirements. The definition of the *key names* is as follows:

> **SQLConnect**
>
> > The normal value will be **SQLConnect=INITIALIZED**
> >
> > Change this to **SQLConnect=OVERRIDE** so that the values you supply for the *key names* will override the default HORTICOPIA® Professional parameters.
>
> **dbServer**
>
> > This should be set to the SQL Server and instance name as
> >
> > **dbServer=SQLServer\Instance**
> >
> > *Instance* may be omitted to use the default SQL Server on server computer SQLServer
>
> **dbPath**
>
> > The *dbPath* specifies the folder that contains the database, **HortData.mdf**. For example,
> >
> > **dbPath=C:\Horticopia\Horticopia Data\Data**
> >
> > You can change this to the location of the folder containing the database on the SQLServer. Typically, if the SQL Server is on another computer, the database should be in a folder local to that computer. The **dbPath** must specify the path to the folder relative to the system running the SQL Server.

dbLogPath

The *dbLogPath* specifies the folder that contains the database log, **HortData_log.ldf.** Normally, the log file is in the same folder as the database, i.e., the folder specified in **dbPath**. The dbLogPath lets you specify a different folder. For example,

dbLogPath=F:\Database Logs

dbUserID

The *dbUserID* is specified for **SQL Server Authentication** instead of the default **Windows Authentication**. The user ID will have been added to the SQL Server's connection logins. For example,

dbUserID=HortProUser

dbPassword is used in conjunction with *dbUserId* to effect **SQL Server Authentication** logons.

dbProvider

The *dbProvider* is normally determined by HORTICOPIA® Professional. However, you may specify

a specific provider. Example:

dbProvider=SQLNCLI11

dbSecurity value is used for **Windows Authentication**. The default is **dbSecurity=SSPI**

dbTimeout

The *dbTimeout* value specifies the **connection** timeout value in seconds. The default is **dbTimeout=60**

SQLVersion

The *SQLVersion* value is used to check if a newer SQL Server has accessed the database. Do not modify this value.

5. Troubleshooting SQL Issues

On our website at http://www.horticopia.com/support ,
There is additional information in the Knowledgebase to help you troubleshoot SQL connection issues.

For more complete installation support and testing, you should download and install the latest version of the *Microsoft SQL Server Management Studio Express*.

The *Microsoft SQL Server Management Studio Express* can be installed on *both* host and *client* systems. For client connectivity issues, it should be installed on the client.

VI. Maintaining the Installation

1.   Periodic Updates

If the host computer has an Internet connection, then updates can be accessed on Horticopia's website by going to **Start**, **All Programs**, **Horticopia Pro**, **Horticopia Pro V**, **Horticopia Update**.

If there are any client updates, they will be installed on the host computer. The next time the client runs, it will check for any updates required. The client workstations do not need an Internet connection. However, if they have an Internet connection, the client update can also be performed by going to **Start**, **All Programs**, **Horticopia Pro**, **Horticopia Pro V**, **Horticopia Update**

The clients require sufficient privileges to install the software update on their system. In most cases, this includes access rights to the Windows\System32 folder as well as to the Program Files\Horticopia folder.

If the host computer does not have an Internet connection, you can download the update on another computer, then transfer the downloaded file to the host computer (via the network, CD ROM, flash drive, etc.) To download the update in this fashion, go to

http://www.horticopia.com/updates and locate the current HORTICOPIA® Professional Server update.

2.   HORTICOPIA® Control Panel

The HORTICOPIA® Control Panel is used for configuring and maintaining the HORTICOPIA® Professional installation. Some of the features important for network installation are discussed in this section.

a) Relocating and Splitting Picture Libraries

On the **Setup** tab, there's a **Plant Library Locator**. If your plant libraries are not all located in the same folder (typically, **HortProfPix), Plant library Locator** can be used to specify the library locations.

Picture libraries are folders with two character names such as R1, R2, R3, A1, A2, etc. Each of these folders contains two subfolders – Previews and Standard. The folders **Geografy** and **HortTalk** are also in the picture libraries folder. The contents of the picture libraries folders should not be rearranged.

Once the picture libraries have been loaded as desired, use the **Plant library Locator** to specify their locations. If the same library appears in more than one location, the **last** location specified will be used.

It is highly recommended that you use **UNC** names for specifying library locations. You may use mapped drives provided that all client workstations are assigned the same mapping to the same drive letters. A strictly local path specification will cause the clients to report **pictures unavailable**.

b) Backup issues (stop server for backup)

The database contains user preferences and plant specific user entered information. For users with authoring, the database also contains all descriptive, attribute, and nomenclature information entered for authored plants.

If your backup server does not support backing up of open SQL database files, you have to either stop the SQL Server or, in the Horticopia Control Panel, on the **Setup** tab, select **Prepare HORTICOPIA Data Folder for system backup utility**. You may also compress the data during the preparation process.

You should repeat **Prepare HORTICOPIA Data Folder for system backup utility** before every backup when HORTICOPIA® Professional has been run since the previous backup. HORTICOPIA® Professional will detach the database upon exiting, but if other users are signed on or if the program does not terminate normally, the database may still be attached and cannot be backed up with standard backup software.

Alternatively, you can use **Copy (backup) HORTICOPIA Data Folder** and place the copy in a location where your backup procedure backs it up.

c) Transfer and Termination

If you are terminating the license when you are moving to a new computer, go to the **Licensing** tab and then terminate the license. You should record the termination code, so it's available when you contact us for authorization on your new computer.

d) Adding new Features

On the **Licensing** tab, the **Add new features** is used to generate the request codes for adding additional picture libraries or adding additional software features. Horticopia will supply the authorization codes, which are entered after clicking on **Authorize new features**.

VII. *Installation Checklist*

SQL Server

☐ Installed recommended SQL Server 2012, SQL Server 2014 or SQL Server 2016

☐ Installed Microsoft SQL Server Management Studio

☐ Enabled *SQL Server* and *SQL Server Browser* through the Windows firewall

☐ Enabled TCP/IP protocol for the SQL Server

☐ Restarted the SQL Server

☐ Using SQL Server Management Studio, modified the security settings for login users

HORTICOPIA Professional

☐ Installed with Server option

☐ Shared the *Horticopia* folder

☐ Executed successfully on the Server

☐ Authorized Server (optional at this point, but simplifies some configuration)

☐ Shared the *HorticopiaPDF* printer (if running non-Windows 10 client workstations)

☐ Run the *Configure for Network Clients*