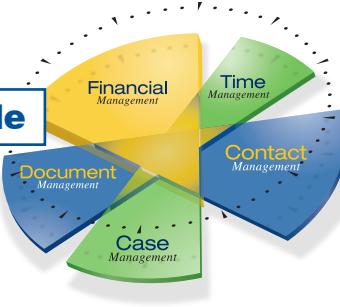




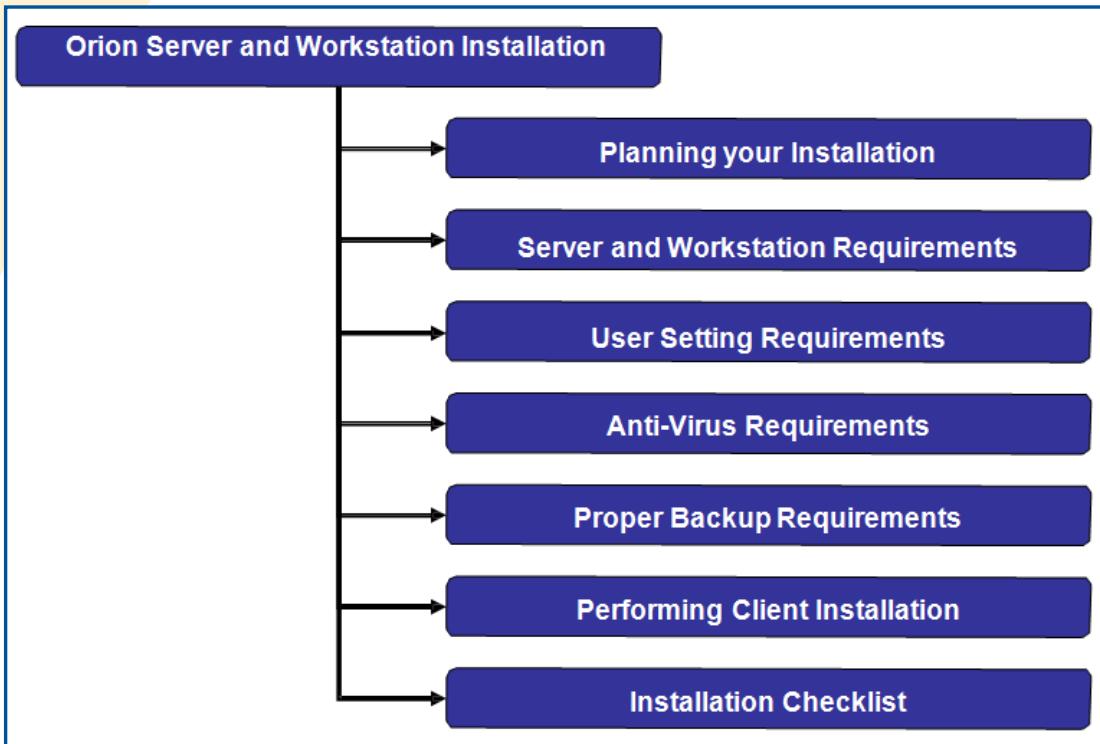
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Server Planning & Workstation Installation Guide



Congratulations for choosing Orion as your firm's software provider. As one of the leaders in law firm software for North America we want to thank you for allowing us the opportunity to meet your financial and practice management needs. This document serves as an overview for preparing and installing Orion at your firm and is designed for the firm's technology supervisor. We are committed to assisting you in a smooth deployment. For additional support including technical assistance, please do not hesitate to call us at 800-305-5867.

The following chart shows the general components for the system installation.



Orion likes to ensure that everything is installed and ready to go at least two weeks prior to the scheduled kick-off meeting. The kick-off meeting is the scheduled date between the firm's administrator and the assigned project manager from Orion and is typically 90 days before the go live date with the Orion software. By ensuring that the software is installed prior to this date, it allows for critical users to evaluate and test certain parameters assigned during the kick-off meeting. This is critical assuming a conversion is being completed for the firm.



Planning Your Installation

Orion will assign a technician whose primary responsibility will be to install all the necessary server components. It will be the firm's responsibility to install and perform any client workstations.

This technician will also serve as the point of contact for any installation questions or other needs that the firm may require. At the end of this document is an Installation Checklist. This item will assist you in preparing for the server installation and in providing Orion with the necessary information to install and support your firm. Please review this item and return it to your support technician.

Remote Support

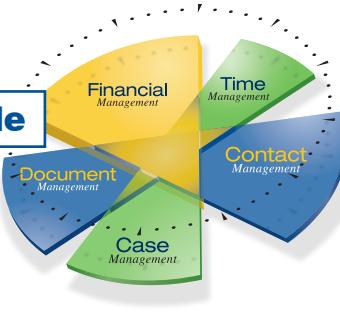
Because Orion will be performing the server installation, we will need remote access including a user account with the necessary rights. This account must remain active after the server installation, and is required by the support agreement. This allows for support technicians to respond and provide support at significantly faster levels than otherwise available. The majority of support related questions is client specific and requires us to review and evaluate each request individually. Orion prefers RDC for remote connection, although Citrix is also acceptable. Other third party software will require prior approval. Should you require IP addresses to lock down the connections between firewalls, it can be provided.

The following is required,

- Server IP address. If the Orion server is not internet facing, it is acceptable to remote into a terminal server and then connect to the Orion server. Orion prefers Remote Desktop Connection.
- If the connection is Citrix, we require the exact Citrix client required for connection. Due to the number of different Citrix clients and connection methods available, please provide us with exact directions on how to connect to the Orion server, such as one that you would provide an end user.
- The Domain and username (Orion prefers Orion for user name).
- The Orion account must have appropriate rights and privileges to install and maintain software. Orion prefers belonging to the Domain Administrator account. Often, a local user or administrator is NOT sufficient due to the nature of communications across the network. Especially in firms where group policy is extensively configured.

Pervasive PSQL

Orion requires a third party SQL product to operate. For this we use Pervasive PSQL. Pervasive PSQL is one of the most widely used and dependable SQL database software in the marketplace. It offers some of the best relational and transactional database speeds in industry. Pervasive offers full ODBC database connection and can be accessed using third party tools. Orion will install Pervasive on the server and provide the firm with the necessary client installers to install the Pervasive client at the workstation.



Virtualization

Orion can be installed in a virtualization environment. However, care and planning should be used before deploying this scenario. Orion, like most database products requires proper I/O throughput for acceptable speed. Since any I/O request inside a VM has to pass through a translation layer and then get passed to the physical hardware, it takes longer to perform each operation. This can be compounded by multiple VM's running on the same host using the same physical drives. The same is true for network transmissions. As the database receives and responds to requests, all network traffic must pass through the hypervisor layer which can increase latency.

Troubleshooting can be much more difficult in a VM environment, as the interplay or problems from one VM to another running on the same physical machine get much more complicated.

Orion is fully supported in a virtual server with respect to functionality. This means that Orion will help you troubleshoot any issues due to crashing or other problems on virtual servers. However, we do NOT guarantee performance in these environments. We can only guarantee performance using our recommended requirements of a separate stand- alone server. If you choose to virtualize, please ensure that your hardware resources will meet or exceed the performance as listed in our recommended server requirements. At a minimum Orion should be configured with its own dedicated NIC card and disk drives, we continue to recommend RAID 10 even in a virtual environment. Many firms continue to prefer that Orion is installed in a virtual environment, which is fine, just be aware we do NOT recommend it for the best possible performance.

Server and Workstation Requirements

There are many factors to include when preparing for the hardware that will house the Orion database software. The most notable is the size of the firm, and which modules they have installed. The following is provided as a general reference for planning purposes. You are encouraged to communicate your server hardware planning with your assigned technician. This ensures that the server will be appropriate to your unique firm in terms of speed and performance of the Orion application.

Generally speaking, Orion recommends installing and running Orion on its own dedicated server. This eliminates potential conflicts and ensures resources dedicated to the processing of Orion. Below are the recommended guidelines and does NOT take into account any other applications or operating system overhead required for daily computing.



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Server & Workstation Requirements



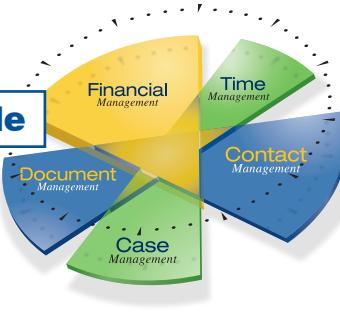
Server Computer

Operating System	Supported Windows 2008 R2 with latest Service Pack	Recommended Windows Server 2012 64-Bit
Processor and Memory Specifications: Type and Frequency, Cores, Bus Speed & Memory Size	Minimum (Up to 25 Users) XEON 2.4 GHz, 1 Core, 800 MHz, 2 GB Minimum (25 to 75 Users) Dual XEON 2.4 GHz, 2 Core, 800 MHz, 4 GB Minimum (More Than 75 Users) Dual XEON 2.4 GHz, 4 Core, 1066 MHz, 8 GB	Recommended (Up to 25 Users) XEON 2.4 GHz, 4 Core, 1066 MHz, 8 GB Recommended (25 to 75 Users) Dual XEON 2.8 GHz, 8 Core, 1066 MHz, 16 GB Recommended (More Than 75 Users) Dual XEON 3.0 Hz, 8 Core, 1333 MHz, 24 GB
Hard Drive	Minimum 50-100 GB - SAS/SATA Drive RAID 5	Recommended (Up to 25 Users) 50-100 GB - 15k SAS RAID 5 Recommended (25 to 75 Users) 100-200 GB - SSD RAID 5 Recommended (More Than 75 Users) 256 GB - SSD RAID 5 or RAID 10
Network	Minimum 1000 Base-T Ethernet (Gigabit), 1 Port	Recommended 1000 Base-T Ethernet (Gigabit), 2 Ports with LAG enabled
Screen Resolution	Minimum 1024 x 768 at 16 bit	Recommended 1280 x 1024 at 16 bit or better
Database Server	Minimum Pervasive.SQL v11 Server	

Note: Orion performs better with more speed (GHz) than more cores.

Workstation Computer

Operating System	Supported Windows XP Pro with SP3 or later Windows Vista Pro with SP1 or later	Recommended Windows 7 Pro 64 bit
Processor	Minimum Pentium i3, 2.0 Ghz	Recommended Pentium i5, 2.8 GHz, 800 MHz
RAM	Minimum 1 GB (XP) 2 GB (Vista/7)	Recommended 3 GB (XP) 6 GB (Vista/7)
Hard Drive	Minimum 300 MB available disk space	
Network	Minimum 100 Base-T Ethernet	Recommended 1000 Base-T Ethernet
Screen Resolution	Minimum 1024 x 768 at 16 bit	Recommended 1280 x 1024 or higher at 16 bit or better



Orion Practice Management integrates with other applications. The following is a list of compatible programs with version 4.4.

Application	Supported Version
Pervasive Database Software	Pervasive.SQL v11.3 Client/Server Database Software
Adobe Acrobat Reader	Acrobat Reader 9 or higher
MS Outlook	Outlook 2007, 2010 or 2013 32 bit - No 64 bit
MS Word	Word 2007, 2010 or 2013 32 bit - No 64 bit
WORLDOX	WORLDOX GX2 or higher
ORION's Smart Dialer Using TAPI	TAPI 1.4 or higher

User Setting Requirements

Users will be required to have a mapped network drive using the same letter pointed towards towards an Orion Share. They will need full rights (read/write) to the entire folder. This share is typically called OLMS and will be determined during your server install. The preferred drive letter mapping is O. The following is an example of how to create a share at the workstation level, including in a login script. In the example, drive letter of O is used and the name of the server is ACCT.

net use O: \\acct\olms

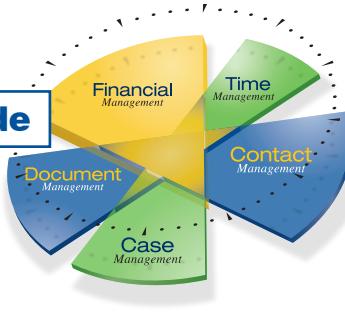
Users will need full rights to the HKEY_Current_User and read rights to HKEY_Users registry.

Anti-Virus Requirements

Anti-virus and anti-spyware programs can cause reduced performance, unexplained read-only or file-lock conditions. While performance problems can be related to other conditions, this article discusses how to optimize the anti-virus software package configuration for best performance with Orion.

Orion, like any other Financial and Practice Management applications, is a database program. It opens, reads, and writes to a large number of files during normal operation. Likewise, anti-virus software is designed to constantly monitor all your data and application files in-use. Note that many of the files (both data and application files) can be large in size and are being accessed across the network, not locally. Therefore, when combining an active anti-virus scan operation with network access to files that may exceed 2 GB in size, performance can be affected.

Optimal configuration of your anti-virus software is essential for efficient operation of Orion's Financial and Practice Management software.



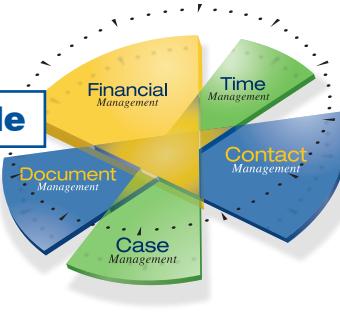
Anti-Virus software is often set to maximum protection by default. Such a setup may be excessive and may degrade the performance of Orion and often other software on your system. With a balanced approach, performance can be increased while still providing exceptional protection. This can be accomplished by enabling directory-based and/or file type (based on file extensions) exceptions. This does not mean that Orion should be completely overlooked in the search for viruses. You can set your anti-virus software to scan any and all files on a regular basis, at times of the day or night when traffic on your network is very light. There are two different configurations that will need to be made, first is the for Orion server, and second is the workstation.

Server Computer Folder Exclusion OR File Type Exclusion		
Folder	C:\Olms\Orion\Orwin ¹	Application Files
Folder	C:\Olms\Orion\Dat ¹	Database Files
File Type	*.mad	Application Files
File Type	*.mkd	Database Files
File Type	*.btr	Database Files
File Type	*.ddf	Database Files
File Type	C:\olms\Orion\Orwin\Oriondesktop.exe ¹	Application Files
File Type	C:\Orion\Orwin\Orionadmin.exe ¹	Application Files

¹ Where c:\ is the local drive letter of your installation

Workstation Folder Exclusion OR File Type Exclusion		
Folder	O:\Orion\Orwin ¹	Application Files
Folder	O:\Orion\Dat ¹	Database Files
File Type	*.mad	Application Files
File Type	*.mkd	Database Files
File Type	*.btr	Database Files
File Type	*.bin	Database Files
File Type	O:\Orion\Orwin\Oriondesktop.exe ¹	Application Files
File Type	O:\Orion\Orwin\Orionadmin.exe ¹	Application Files

¹ Where o:\ is the drive letter of your installation



Proper Backup Requirements

The brand and version of your chosen backup software is rarely a factor in backing up Orion. Orion is compatible with virtually any backup product that supports conventional backup technologies.

The exclusion to this is any product that solution that provides for backing up files while they are in use. This type of solution cannot ensure database integrity or consistency and is not supported. Pervasive's Backup Agent is the only product designed to facilitate backups in this mode.

Method and Procedures

The recommended method to perform a safe and reliable backup of Orion data files is to provide the backup software exclusive access during its operation. This is done simply by disabling connections and isolating the files.

- Disconnect Access to Orion Files and Resources –

All client apps and network connections to Orion resources on the server should be terminated. Keep in mind that Windows workstations will automatically attempt to reconnect disconnected sessions. You can ensure disconnection by disabling the network share of using policies to forcibly log-off and disconnect users

- Stop and Disable Orion Pervasive Services –

Stop and disable Orion services or scheduled tasks for the backup duration. Stop Pervasive Transactional and Relational Database engines. Stop any other third party software that uses Pervasive.

Often these steps can be scripted and scheduled to run prior to backup or executed by the backup software itself.

An example script is as follows,

A typical pre-backup script would be,

1. net share OLMS /delete
2. net stop Pervasive.SQL (relational)
3. net stop Pervasive.SQL (transactional)

A typical post-backup script would be,

1. net share OLMS
2. net start Pervasive.SQL (relational)
3. net start Pervasive.SQL (transactional)

Alternative Backup Solutions

Orion can be installed in a virtualization environment. However, care and planning should be used before



Alternative Backup Solutions

The need for mission critical applications to be available at all times is becoming increasingly important to many organizations. This requires the ability to backup files while they are still open and in use by Orion users. The only solution that can safely do this is Pervasive's Backup Agent running in conjunction with your chosen backup software. Be cautious of any other solution that claims to have this capability unless it is certified and endorsed by Pervasive Software Inc.

Pervasive's Backup Agent works closely with the database server engine utilizing a feature called "Continuous Operations" mode. Please consider the following implications before deciding on this type of solution.

- Disk Space - Changes during backup are written to replicas of the data and therefore it is prudent to have enough disk space for at least 2 copies of each file. It's not uncommon for the combined file sizes of an Orion database to exceed 2-4 Gb. In other words, the minimum available disk space must equal twice the combined file size of the Orion database.
- Performance - Backup Agent merges replica data with the live data in increments and only after access to data has resumed. The result is a potentially serious performance hit to the Orion server. The severity of performance degradation depends on the size and number of replicas maintained by the database engine.
- Reliability – The potential for database integrity and consistency problems is much greater when "Continuous Operations" mode is enabled.

Performing Client Installation

Orion Desktop software can be pushed out through group policy or via other software products widely available in the open market. However, Orion does not directly assist firms in creating and implementing this type of setup. If you have direct questions that we can answer, we will be happy to assist, but please be aware that services spent assisting firms with automated installations packages could be billable.

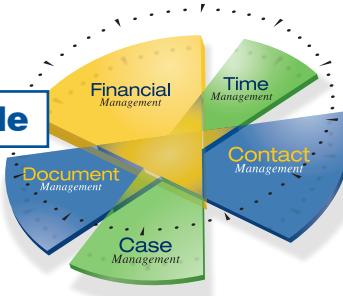
User Rights

Orion must be installed with Domain Administration Rights. In many circumstances, especially in a 2008 R2 domain, local administrator rights are not sufficient. Once Orion is installed, the local user running Orion will also need specific rights to operate Orion. Users must have access rights to both the Current User Registry, and the windows\system32 directory. Users will also need full access to the O: drive specified below.



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Drive Mapping

All workstations must have the correct drive mapping to the server share that Orion is located on. The default drive letter that Orion prefers is O. In most scenarios, the drive mapping can be pushed through a network login script. Below is an example of what can be used in most situations where SERVER equals the name of the server, and SHARE equals the name of the network share.

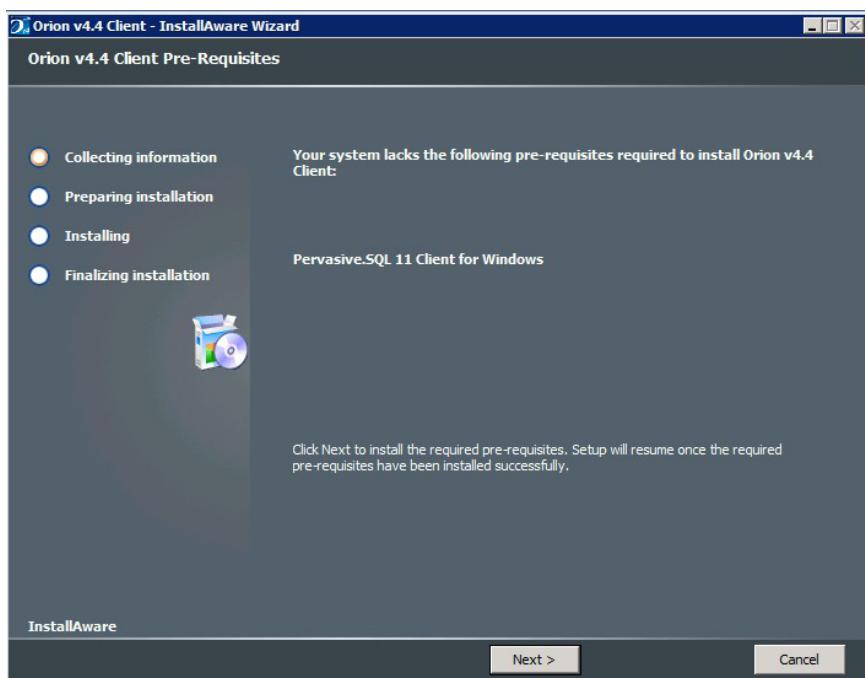
Net Use O: \\SERVER\SHARE

Pervasive

Pervasive is the database software that Orion uses to connect and access the data from the server. A Pervasive client is required on each workstation that access Orion. If Pervasive is not detected on the workstation, the Orion installer will install it automatically for you.

Installation

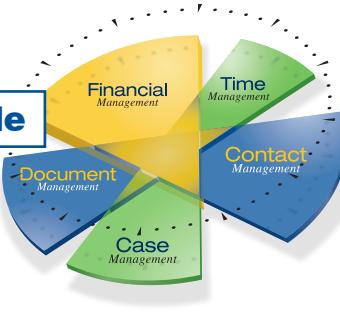
To start the installation, browse to the client installer file called Setup.exe. This file is typically located in the client's directory, under O:\Orion\Clients where O is your mapped network drive. Make certain you are running with Domain Administrator Rights. Orion will first detect if Pervasive is installed on the workstation. If this is the first time installing Orion, or if Pervasive does not exist, it will prompt you. Select Next to install Pervasive.



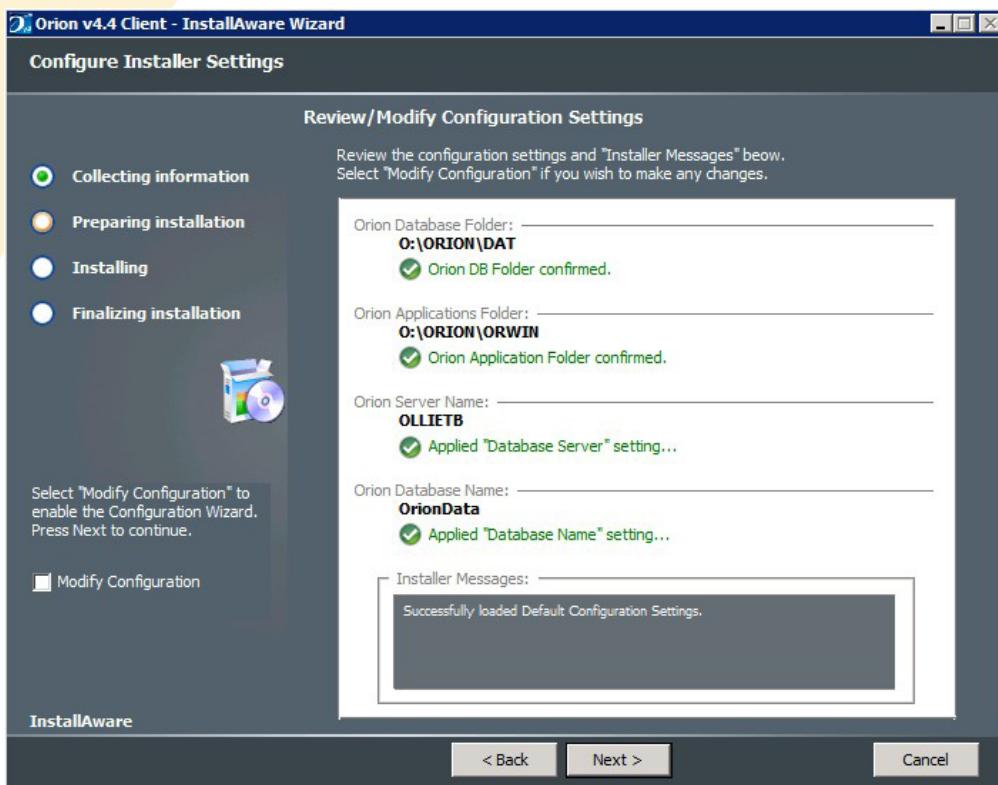


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After the installation of Pervasive, Orion will detect the location of both the Application Files and the Database files on the server. A dialog screen will specify if it found the correct locations as indicated in the next screen shot. If it fails to locate these directories, it will give you an opportunity to specify the location. The Application files are located in the ORWIN directory, and the Database is in the DAT directory; both of which are in the O:\Orion directory.



After specifying the correct directory paths, you will be prompted to install Orion Desktop, Orion Administration or Both. Orion Administration should only be installed on workstations for individuals who will be responsible for maintaining certain Administration-level functions (e.g. managing security group access rights). It's important to note that just because Orion Administration is installed on a workstation, the user must be granted privileges to Orion Administration in order to launch and operate it.

After finalizing the install wizard, icons will be located on both the Desktop and under the Start Menu for users to access. You may launch the software to ensure connectivity.



Installation Checklist

Please complete the following and return to Sender. You may also use this form to assist you in the implementation of Orion at your firm.

Section 1 - General Information

What is the projected server ready date?	
Is this a dedicated Orion server?	
Is this a virtual server?	
Is Orion user account created? (Y/N)	
What is the username and password? Include the domain name.	
Does the Orion account have domain admin rights?	
Who will be completing the client installation?	
Have you made adjustments to the Anti-Virus software?	
Does your firm upload cost change (copies, faxes)? If so, which company do you use?	
Does your firm use a document management service (Imanage, WORLDOX)?	
Does the firm have any other applications that use Pervasive (data-base engine)?	
Are backups done nightly, or continuously throughout the day?	
Remote Instructions to Server (please be specific).	

Section 4 - Workstation Hardware Configuration

OS	SP	How Many?	NIC Speed	32/64 Bit	Processor	Cores	CPU (MHz)	RAM (MB)
XP/Vista								
Win 7 - 32								
Win 7 - 64								

Section 4 - Server Hardware Configuration

OS	SP	Bit Version	NIC Speed	32/64 Bit	Processor	Cores	CPU (MHz)	RAM (MB)
2003								
SBS								
2008								