

OR600-03

**OrthoTrac, a Sensei product**

**Technician's Installation Guide**

# Notice

© 2024 Carestream Dental LLC. No part of this publication may be reproduced, stored in a retrieval system, translated to another language, or transmitted in any form by any means, electronic, mechanical, photocopied, recorded, or otherwise, without prior written permission.

NEITHER CARESTREAM DENTAL LLC NOR ITS PARENTS, AFFILIATES, OR ANY OF ITS SUBSIDIARIES MAKE ANY WARRANTY OF ANY KIND WITH RESPECT TO THIS MATERIAL, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, NONINFRINGEMENT, AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED IN THEIR ENTIRETY.

The information in this document is subject to change. Neither Carestream Dental LLC nor its parents, affiliates, or any of its subsidiaries shall be liable for errors contained herein, omissions herefrom, or for indirect, incidental, consequential, or special damages (including, without limitation, lost profits or lost revenue) in conjunction with the furnishing, performance, or use of this material.

OrthoTrac is a trademark of Carestream Dental Technology Topco Limited.

All other trademarks and registered trademarks are the property of their respective owners.

Manual Name: OrthoTrac, a Sensei product: Technician's Installation Guide

Document Number: OR600-03

Revision Number: 03

Print Date: June 2024

The names of persons and the data reflected in this guide are fictitious and are not intended to represent any real individual, event, or condition. Any resemblance or similarity of the names of persons or data reflected in this guide to any actual person's name or any event or condition is purely coincidental and unintended.



## Table of Contents

Overview.....	1
Technician Acknowledgement.....	1
System Requirements, Installation Basics, and Configuration.....	2
OrthoTrac Installation Guide.....	2
Self-Installation Recommendations – Installer File for Locally Hosted Offices .....	2
Download the Installer Files .....	2
Basic Installation Steps .....	3
Office Configurations.....	3
Single Locations.....	3
Multiple Locations.....	3
Imaging in Multiple Locations .....	4
Installation and Migration .....	4
Installing OrthoTrac On a New Server.....	4
Migrating an Existing Version 11 or Higher Server to a New Server .....	4
Migrating an Existing Version 10 to a Version 11 or Higher Server .....	7
New Workstation Installations .....	7
Installation Across the Network .....	7
New Terminal Server Installation/Citrix Environments .....	8
Licensing and Registration.....	8
Installing the License File .....	8
Registering the Software .....	8
To Register via the Internet .....	8
To Register by Phone.....	9
Backup Recommendations .....	9
Backing Up the Server .....	9
Tape Backups and Backup Frequency.....	10
Recommended Files to Back Up .....	10
Updating .....	11
Server Updates .....	11
Workstation Updates .....	11
Upgrading Existing Terminal Servers/Citrix Environments.....	11
Permissions and Settings.....	12
Setting up the Server .....	12

Automatic Login .....	12
Non-Admin Settings .....	12
Global Permissions .....	12
Server Permissions .....	12
Workstation Permissions .....	13
Access to System Time .....	13
Features Requiring Registry Edits .....	13
Electronic Services .....	13
Carestream Dental Orthodontic Imaging .....	13
Third Party Products .....	13
Microsoft Word .....	13
Microsoft Word in a Terminal Server or Citrix Environment .....	14
Definitions for Microsoft Word in a Terminal Server/Citrix Environment .....	14
Changes to Be Made on a Data Server .....	14
Changes to Be Made on the Terminal Server .....	15
Changes to Be Made on All Local Workstations .....	15
Antivirus .....	16
Firewall .....	16
Uninstalling OrthoTrac .....	16
Uninstalling OrthoTrac on a Server .....	16
Uninstalling OrthoTrac on a Workstation .....	17
Frequently Asked Questions .....	17
Related Documentation and Resources .....	18
Troubleshooting Steps for Common Installation and Update Issues .....	18

## Overview

This **Technician's Installation Packet** (Tech Pack) outlines the responsibilities of the local technician, and how support can assist. This document covers recommended hardware, network, and software configurations. It also contains information on configuring OrthoTrac, a Sensei product, as well as migrating the data to a new server, and maintaining and backing up data and files for OrthoTrac.

OrthoTrac is a critical systems application that must be running every day with as little down time as possible. In addition to the application, the hardware is critical to ensuring the stability of an automated practice management system. Our hardware recommendations follow what has been tested. Carestream Dental is only able to test OrthoTrac in a limited number of environments. OrthoTrac support will work with you as best as we can if you are not following our recommendations, but we will be limited in modifications we can make to get OrthoTrac working in environments that do not meet the requirements listed in the current **Systems Requirements**.

Carefully read and follow the installation instructions in the **Installation Guide** and recommendations contained within this **Technician's Installation Guide**. If you have any questions, contact OrthoTrac support.

## Technician Acknowledgement

The local technician is fully responsible for the configuration, installation, and maintenance of the client's computer network. Our company does not support the installed network or its related issues, including printer installations or operations.

The local technician is fully responsible for making sure the hardware is configured and the client is trained to save and restore a backup of the OrthoTrac data and all necessary files for OrthoTrac. Since there are many types of backup programs, OrthoTrac support does not train offices on configuring the backup system or restoring a database. If an office must send data to OrthoTrac support for in-house analysis, send backups on external hard drives / flash media, or internet transfers. No other forms of backup media are accepted for data analysis. Addendums to installation documents will be made as necessary.

The local technician is fully responsible for the support and maintenance of the client's computer network system. Give your clients your contact information and specific instructions to contact you first for system-related problems. Any questions about optimizing the network environment for use with OrthoTrac products are welcome. It is recommended that you be familiar with the client's Windows operating system and carry an MCSE (Microsoft Certified Systems Engineer) certification or equivalent on staff.

OrthoTrac representatives are highly trained and capable of assisting you to ensure a smooth software/hardware installation and systems upgrade. When contacting support, be sure to have the client's account or phone number ready.

Questions can be emailed directly to [orthotracsupport@csdental.com](mailto:orthotracsupport@csdental.com) or call support at 866.722.2567.

# System Requirements, Installation Basics, and Configuration

Before installing OrthoTrac or migrating the data, review the following items in the [Resource Library \(gosensei.com\)](https://gosensei.com):

- **System Requirements** – Review before proceeding to ensure the hardware meets or exceeds the current requirements. For questions on versions of Windows, peripherals, third-party software versions, and other software requirements, reference the OrthoTrac system requirements.
  - [Locally Hosted or Shared Server System Requirements](#)
  - [OrthoTrac Cloud System Requirements](#)
- **Configuration Guide** – Review the current configuration recommendations.
- **Installation Guide** – Follow the steps to perform an upgrade or new installation.

## OrthoTrac Installation Guide

This guide is meant as a supplement to the **OrthoTrac Installation Guide**. The installation guide contains the most recent step-by-step instructions. In addition to the [Resource Library](#), a copy of the **OrthoTrac Installation Guide** is located in the following locations:

- Documentation\Manuals\OR200\_OrthoTrac\_InstallationGuide.pdf on the installation ISO
- OMS\OnlineDocs\OR200\_OrthoTrac\_InstallationGuide.pdf on an existing server installation

## Self-Installation Recommendations – Installer File for Locally Hosted Offices

Beginning with [version 15.1.3](#), the **OrthoTrac Installer** is available for download via the **Dental Practice Management Software Download Service**.

**Important:** The file on the **Dental Practice Management Download Service** is for your practice only and is unique to your login. The download will expire after 24 hours.

1. Save the **OrthoTrac Installer** file to the server.
2. Follow the procedures in this document to install or update OrthoTrac.

## Download the Installer Files

1. On the server, go to [softwaredownload.csdental.com](https://softwaredownload.csdental.com). The **Dental Practice Management Software Download Service** login window is displayed.
2. Enter the **Customer ID** and **Zip Code**. Your **Customer ID** is between 6 and 10 digits and is **located on the Support Schedules, Annual Contract Renewals, and any Invoice**.
3. Click **Submit**. The installer file download is displayed, along with instructions.
4. Click **Download** and save the file to the default download location.

**STOP!** Before you proceed, verify any 3<sup>rd</sup> party vendors used by the office are compatible with the version of the DPMS software downloaded. It is the office's responsibility to check with any 3<sup>rd</sup> party Application/Software companies to ensure that it is compatible with the new version of

DPMS/SQL software being installed. Carestream Dental is not responsible for incompatibility issues with 3<sup>rd</sup> party vendors.

### Basic Installation Steps

1. Install **OrthoTrac** on the server.
2. Share the parent folder of the installed **OMS** folder.
3. If the office is using **Carestream Dental Orthodontic Imaging**, install imaging on the server.
4. Restore any existing data.
5. Map workstations to the shared folder on the server.
6. Install **OrthoTrac** on the workstations.
7. If the office is using **Carestream Dental Orthodontic Imaging**, install imaging on the workstations.
8. Install OrthoTrac on any Remote Desktop Services servers.
9. If the office is using **Carestream Dental Orthodontic Imaging**, install Orthodontic Imaging on the **Remote Desktop Services** server.

### Office Configurations

There are several ways OrthoTrac can be configured. Generally speaking, an office, regardless of the number of locations, will want to keep all of their locations together in one data set. In cases where the client wants to house multiple data sets to further separate their offices, assistance may be required from a support representative for installation and support.

#### Single Locations

A single office location is typically configured with a server that houses the OrthoTrac data and multiple workstations that run OrthoTrac locally and connect to the OrthoTrac server over the network. The server runs an instance of Microsoft SQL Server; by default OrthoTrac v12 and v14 will install MS SQL 2008 Express. Version 15 will install MS SQL 2014 Express. We recommend allowing OrthoTrac to install the Express edition of SQL. If you will require the use of a full version of SQL during the installation process, you will be presented with an option to direct OrthoTrac to use an existing SQL instance during the server install. The server also houses a number of files that are accessed by the workstation.

If the practice will be using Carestream Dental Orthodontic Imaging, we recommend having a separate server to house the imaging data. This should be a separate physical server. It is preferable to have two individual servers house the data for both programs than to virtualize both the OrthoTrac and imaging servers and run them on the same host.

**Note: SQL Server Express Editions** are restrictive on database size and **RAM/CPU** usage. These restrictions could affect performance. Consult **Microsoft for SQL Server** version specifications to make sure that an **Express edition** is right for your practice.

#### Multiple Locations

Clients who have multiple locations and want to share a single data set between the locations will need to use remote access software to connect the locations. We recommend installing the OrthoTrac data server in the largest office, along with a Remote Desktop or Citrix server, and

have remote users connect to the server through Remote Desktop Services to run OrthoTrac. The remote office does not actually run OrthoTrac locally; the application is run in the main office on the Remote Desktop server. Carestream Dental has not tested running OrthoTrac between two offices using a VPN connection.

### Imaging in Multiple Locations

Adding Carestream Dental Orthodontic Imaging with multiple office locations increases the variables and methods of setting up the office. We recommend discussing the options with Carestream Dental Orthodontic Imaging support or implementations team prior to setting this up. Some questions to consider before contacting support are:

- Will images acquired in one office need to be accessible in all offices?
- What digital imaging equipment will be used in each office?
- What internet connections are available in each office and what is the bandwidth?

## Installation and Migration

Whether a client is a new or existing customer, before data can be applied for an office, the server that will house the data must have OrthoTrac installed in the proper location. OrthoTrac must be installed before Carestream Dental Orthodontic Imaging is installed. This enables the two programs to communicate properly.

It is also recommended to call support a few days before your planned update or install to schedule a representative to work with you during the transition. When migrating data, we also recommend decommissioning the old server if at all possible, or at least, stopping services for the SQL instance running OrthoTrac.

### Installing OrthoTrac On a New Server

All workstations must be able to access the **OMS** parent folder on the server. If you do not want to share the root of the **C:\** drive on the server, be sure to change the destination folder during the installation process. **Do not install to C:\OMS then move folders.** This **will break** the ability for a workstation to create a backup copy of the OrthoTrac data and will cause problems updating the server. For instance, if a client wants to install OrthoTrac on **D:\data**, you must install OrthoTrac to **D:\data\oms** and **D:\data\oms-spec**, sharing the **D:\data** folder on the network. Then map the network drive on the workstations (generally **U:\**) to the shared data folder on the server.

Before installing, OrthoTrac searches all local hard drives for an existing installation of OrthoTrac. With a new server install, it is recommended that you wait for this process to complete. There is a work around noted in the [Server Updates](#) section of this document.

If you are using Windows Firewall, be sure it is on when OrthoTrac is installed. There are exceptions that must be made for SQL. These exceptions are made automatically if the Windows Firewall is on during installation. If you are not using Windows Firewall, then you will need to manually add exceptions for SQL to the firewall.

### Migrating an Existing Version 11 or Higher Server to a New Server

1. Verify all users are logged out of OrthoTrac.



2. Start OrthoTrac on the server.
3. Have a staff member log into OrthoTrac.
4. Select **File > Prepare Backup**.
5. Wait for the **Prepare Backup** process to complete.
6. Select **Options > Environment**.
7. Note the **Server Path** (default is C:\OMS) and **Database Prefix** (default is *Main*).
8. Browse to the *server path\backup\Most\_Recent* folder.
9. Verify the backup files exist for each database.

The file name structure is **prefix\_dbname\_yyyymmdd\_xxx.bak**. The prefix is the database prefix from environment. There are five databases for OrthoTrac, named **Audit, CommCat, DelOMS, OMS**, and **TxCARD**. The xxx is the backup count; the first backup of the day is *001*. **For example:** Main\_OMS\_20130505\_001.bak

If the client is using Carestream Dental Orthodontic Imaging v10 or higher:

- Run **pwisetloc.exe**.

Note the SQL backup location.

- Browse to the SQL backup location.
- Verify there is a **Most\_Recent** folder that contains a *prefix\_PWImage\_yyyymmdd\_xxx.bak* file.

10. Close OrthoTrac.
11. Right-click on the key icon in the system tray.
12. Click **Exit PracticeWorks Server**.
13. Install OrthoTrac on the new server.
14. Copy the following files from the old server to the OMS folder on the new server:
  - \OMS\pwsrv\pwlf.dat
  - \OMS\\*.000, C:\OMS\\*.001, C:\OMS\\*.002, etc.
  - \OMS\filelist.nrl

**Note:** By default, files with filename extension, such as *.000*, *.001*, *.003* and *.nrl*, as listed above, are set to be hidden by Windows. You will need to set Windows to view all files including **hidden** or **system** files in order to see these files.

- \OMS\Fingerprint.mdb
- \OMS\roll\*.txt
- \OMS\AuditTx.dat

15. Copy the following folders from the old server to the **OMS** folder on the new server.  
Some of the folders listed may not exist on the old server:
  - \OMS\ACH
  - \OMS\Backup
  - \OMS\Daysheet
  - \OMS\Docs
  - \OMS\ECS
  - \OMS\Epayment
  - \OMS\ICCPs
  - \OMS\Snapshot
  - \OMS\ToothCht
  - \OMS\Orthometrics
16. If the new server will be the imaging server, copy the following folder from the old server to the **OMS** folder on the new server:
  - \OMS\image
17. On the new server, run the **URestore** utility located in the **c:\oms-spec\utility** folder.
  - Agree to the notification page.
  - Click **Next**.
  - Deselect the **Perform backup** option.
  - Click **Next**.
  - Select the **Most\_Recent** folder from the backup folder just copied.
  - Click **Next**.
  - Continue through the procedure to restore the most recent copy of the office's data to the new server.
18. Set the workstations to look to the new server.
  - Remap the network drive for OrthoTrac to the parent folder of the **OMS** folder on the server.
  - Verify all references to the old server are renamed in **c:\windows\OMS.ini**.
  - Select **Options** in **c:\windows\system32\pwclient.exe** (syswow64 for 64-bit installations).
  - Verify the path is set to the new server.
  - Run **c:\oms\pwisetloc.exe**.
  - Verify the proper data locations are selected.

## Migrating an Existing Version 10 to a Version 11 or Higher Server

We recommended that you work with support before migrating to a new server. OrthoTrac versions previous to version 10 must be updated incrementally. However, version 10 and later can be directly updated to the most recent version. Version 10 of OrthoTrac and previous releases did not run on modern Windows operating system releases, so support will have to manually update the datasets on the new server. The steps will be the same as the previous section; however, step 17 will require support assistance to update the MDB files from the old server's OMS folder to version 11 or higher data.

**Note:** Since the process is a transition between two different data structures, it may take several hours.

## New Workstation Installations

Prior to installing OrthoTrac on a workstation, log in as a user with the correct administrative access to the server machine, and confirm the machine has a logical drive **U:\** mapped to the appropriate share containing the **OMS** and **OMS-Spec** directories on the server. Do not map the U:\ drive directly to the OMS folder. It will prevent the workstation from updating correctly. If a drive other than **U:\** is used, adjustments to the **OMS.ini** file located in **C:\Windows** must be made, as by default the workstation installation of OrthoTrac creates an **OMS.ini** file that expects the use of the **U:\** drive designation.

### Notes:

- The OrthoTrac support center expects the mapped drive to be **U:\** and using anything other than **U:\** could increase the amount of troubleshooting and time spent working on any issues.
- In all installations, the **DataPath=** line in the **[Awps]** section of the **OMS.ini** file should always point to the local installation of OrthoTrac. **For example: DataPath=C:\OMS**

## Installation Across the Network

OrthoTrac can also be installed across the network. The advantage of installing OrthoTrac across the network is it will automatically set the locations in the **OMS.ini**.

This solution assumes the server is named Server and you are installing OrthoTrac on a workstation that is already connected to the network with proper permissions to access the server. This solution also assumes OrthoTrac is installed to the **c:** local disk drive on the server and that the **c:** drive on the server is mapped as the **U:** drive on the workstation. When installing on a system where these assumptions are incorrect changes must be made.

1. From the Windows desktop, click **Start > Run**.
2. Type **U:\OMS-SPEC\Workstation Setup**.
3. Click **OK**.
4. Double-click **wsetup.exe**. When the installation is complete, the system prompts for a reboot.
5. After the computer has rebooted, log into OrthoTrac to confirm the installation was successful.

## New Terminal Server Installation/Citrix Environments

Installation to a Terminal Server or Citrix environment is similar to a regular workstation installation. However, the Terminal Server **MUST** be in install mode, and must be installed from the administrator's console session. Windows install mode can be set simply by using the command **change user /install**, making sure once the installation is complete to return to **change user /execute**. An **OMS.ini** file is placed in each user's **%userprofile%\windows** folder instead of the local **C:\Windows** folder. See the [Microsoft Word in a Terminal Server/Citrix Environment](#) section for details on setting up the office to print letters in a Terminal Services environment if the office will be printing letters directly from their Terminal Server.

## Licensing and Registration

Before removing any software from the old server, copy the contents of the **PWSVR** folder which contains the license file.

### Notes:

- This **PWSVR** folder is normally installed within the **OrthoTrac** folder on the data server. This location may vary if the office is using Carestream Dental Orthodontic Imaging.
- Install the license file on the new server before installing the software on the workstations.
- If you do not have a current copy of the license file, contact support. The support team can either send a copy via email or connect to the server and upload a copy.

## Installing the License File

When a prompt to install the license file is displayed while installing or opening OrthoTrac, do the following:

1. Browse to the location of the saved **PWSVR** file.
2. Select the file.
3. Click **OK**.

## Registering the Software

When a prompt to register the software is displayed while installing or opening OrthoTrac, register the software using one of the following methods:

- Register online via the internet
- Contact support by phone

**Note:** If you are unable to register the software at this time, click **Cancel** to continue with the update. You have seven days to register the product.

### To Register via the Internet

1. Select **Automatically via the Internet**.
2. Click **OK**. The **Registration Code** window is displayed while the code is generated. After the registration code is obtained, the **Installation Complete** window is displayed.

3. Click **Finish**.

**Note:** If you have registered the software more than three times, you will be required to contact support to receive a registration code.

### To Register by Phone

1. Select **Contact support by telephone**.
2. Click **OK**.
3. Contact support using one of the following methods:
  - Call 866.722.2567.
  - Email [orthotracsupport@csdental.com](mailto:orthotracsupport@csdental.com).
4. Provide the **Customer ID** and **Hardware ID** information from the **Registration** window when contacting support. These numbers are used to generate the **Registration Code**.
5. Type the registration code in the **Registration Code** field.

**Note:** Use capital letters when typing the registration code.
6. Click **OK**. The **Installation Complete** window is displayed.
7. Click **Finish**.

## Backup Recommendations

This section covers recommendations for configuring a backup routine for OrthoTrac data and related files. When setting up the backup routine, review the following sections in the **OrthoTrac Configuration Guide** in the [Resource Library](#) for more information.

- Backing Up Data
- Using a Backup Checklist
- Establishing a Backup Routine
- Managing Files and Backup Media

**Note:** If the data was installed in a location other than the default directory, configure the backup system to back up the actual data location.

## Backing Up the Server

**IMPORTANT:** It is the client's responsibility to make sure they have a current backup of the OrthoTrac data.

We recommend making a backup during lunch and at the end of each working day.

The recommended methods for backing up data include online backup services and tape backup.

**Note:** Flash drives and CD-RWs have been found to be inconsistent in testing due to degradation. Whichever backup solution is used, it is best to ensure the media is removed from the office at the end of the day or kept in a fireproof safe.

Prior to running the system backup, the user should go to **File > Prepare Backup** from the main menu of OrthoTrac. This process creates **.bak** files of the OrthoTrac databases in the **\OMS\Backup\Most\_Recent** folder. These files can be used to easily restore OrthoTrac data.

Keep in mind these files are not the only ones that should be backed up and because this 'backup' is on the same hard drive as the original file, it is not a 'true' backup. The **Prepare Backup** process can also be automated by scheduling Windows to run the file **OMS\Orthobac.exe**. Because SQL runs using **.MDF** and **.LDF** files to store the physical data and SQL may hold these files with a system lock sometimes preventing backup, we recommend skipping these files in the daily system backup and ensuring the **\OMS\Backup** folder, instead, is copied in the actual backup process.

If a scheduled backup is used, be sure to schedule the **Prepare Backup** feature, or schedule the **Orthobac.exe** process, prior to the actual file backup. We also recommend reading over the backup log each morning to ensure consistency.

## Tape Backups and Backup Frequency

When using a tape backup, keep the following in mind:

Keep two lunch backup tapes, one tape for each working day and two weekly tapes. For example, if the office is open Monday through Thursday, you would have two lunch backups that are used every other day, four daily backups and two weekly backups that would be used every other week.

We also recommend you do an end of month backup. It is a good idea to keep two end of month backups at all times. For example, at the end of January, you should have a January end of month backup as well as a December end of month backup.

Because backup media can malfunction or go bad, it is also a good idea to keep a spare backup tape in the event that one of the daily, weekly, or end of month backup tapes are unusable.

We recommend taking physical backup devices off site when the office closes for the night in case of fires, flood, or other possibilities of system damage.

Be sure the client is trained to configure and use their backup system.

## Recommended Files to Back Up

Minimum recommended lunch backup files are:

- C:\OMS\Backup\Most\_Recent\\*.\*

Minimum recommended daily backup files and folders are:

- C:\OMS\Backup\Most\_Recent\\*.\*
- C:\OMS\Fingerprint.mdb
- C:\OMS\Daysheet
- C:\OMS\Docs
- C:\OMS\Snapshot
- C:\OMS\Toothcht
- C:\OMS\ECS
- C:\OMS\ICCPs
- C:\OMS\ACH

Minimum recommended weekly backup folders are:

- OMS folder location, generally: C:\OMS

Minimum recommended monthly backup folders are:

- C:\OMS
- C:\OMS-Spec

**Note:** These recommendations do not include backup information for Carestream Dental Orthodontic Imaging.

## Updating

Before updating OrthoTrac, you should back up the server. For more information, see the [Backing Up the Server](#) section of this document.

Most updates to OrthoTrac are quite simple. The install media should be inserted in the data server machine, which will take the user through the install process. After the data server is updated, OrthoTrac should be launched on all local workstations and the console session of the Terminal Server in install mode (when applicable).

## Server Updates

To update the server, download the installation files from the digital download website and mount the ISO on the server.

**Note:** **OSetup.exe** should always be run on the server. The update always begins by searching the local hard drive for installations of OrthoTrac.

If the server has a large hard drive, this search can take a while to complete. You can bypass the search for an existing installation by launching the **WSetup.exe** program with the **/PATH=<installdirectory>** switch.

**Note:** The switch is case-sensitive and must be all uppercase. For example: **D:\WSetup.exe /PATH=C:\OMS**

## Workstation Updates

Typically, updating the workstations only requires starting OrthoTrac after the server has been updated. If the installation does not begin upon launching OrthoTrac, it can be executed manually by running the file **U:\oms-spec\workstation setup\WSetup.exe**.

## Upgrading Existing Terminal Servers/Citrix Environments

We recommend disconnecting all users currently logged into the Terminal Server before updating OrthoTrac, since the software will not install properly if users are logged into OrthoTrac or any portion of the system. Set the console session of the Terminal Server to install mode by typing **change user /install** from a command prompt. Once this is done, launch OrthoTrac from the console session, and follow the prompts. If the installation does not begin upon launching OrthoTrac, it can be executed manually by running the file **U:\oms-spec\workstation setup\WSetup.exe**.

**Note:** After the update is complete, the Terminal Server must be set back to execute mode by running **change user /execute**.

# Permissions and Settings

## Setting up the Server

Extra steps may be required as far as configuration of the server. This section includes configuration for automatically logging into the server and backing up the server.

### Automatic Login

OrthoTrac requires the server be logged into the desktop for OrthoTrac to function on the workstations, even if OrthoTrac is not going to be used on the server. OrthoTrac licensing runs as an application on the console session of the server. While the session can be locked, it should never be completely logged out.

1. Double-click the **gold key** in the Windows system tray on the server.
2. Click **Options**.
3. Click Automatic Server Logon Configuration.
4. Type the user name in the **User Name** field.
5. Type the password in the **Password** field.
6. Click **OK** to save the changes.
7. Click **OK** to close the **PracticeWorks Server** window.
8. Verify the computer now logs in automatically when the server is turned on.

If control over this functionality of your system by OrthoTrac support is not desirable, it may be best to contact Microsoft support to find the best alternative to having an administrator automatically log into the console session of the server.

## Non-Admin Settings

OrthoTrac is optimized to run under an operating system user account with administrative privileges, as a member of the **Administrators** group. To run the software without making the user account a member of the **Administrators** group, some changes must be made to the restricted user's permissions. Some additional changes must be made to run specific features. This document describes these changes. Generally speaking, where appropriate, these changes should include read, write, and modify permissions.

## Global Permissions

### HKEY\_LOCAL\_MACHINE\Software\PWInc

Permission to **INI** files: **OMS.ini**, etc.

Permission should be granted to all INI files used by the application, including particularly the **OMS.ini**. This is a concern when the INI file is stored in the Windows folder, typical for standalone workstations. Under a Terminal Services environment, the INI is stored in the user profile, and this is usually not a concern.

## Server Permissions

### HKEY\_Local\_Machine\Software\Microsoft\Windows\CurrentVersion\Run



## Workstation Permissions

Workstations require full read, write and modify access to the **OMS** and **OMS-SPEC** folder and all of its files and subfolders housed on the server, and to the **c:\oms** folder (regardless of install settings).

## Access to System Time

Limited users cannot change the system time. OrthoTrac requires that computers are set to the correct time to ensure certain time-dependent features, such as the *Scheduling* and *Patient Flow* modules, work correctly. Administrators will have to ensure the time is correct in these cases. However, this is a case where limiting user access may be worth considering, as if the user accidentally sets an incorrect system time, this can have adverse effects on the *Patient Flow* and *Charting* modules.

## Features Requiring Registry Edits

Several features require access to different registry keys and locations.

### Electronic Services

If a user is using eServices, the user must be a full administrator on the machine.

#### HIPAA Auto-Logoff:

- HKCU\System\Microsoft\Windows\CurrentVersion\Policies\System

### Carestream Dental Orthodontic Imaging

Carestream Dental Orthodontic Imaging (CSOI) recommends users to be given full administrative privileges as this listing may not cover the full range, as multiple devices and alterations to unique imaging installs may cause further registry entries to be required. The **IMAGE** folder on the server will need full rights. Additionally, the following keys are required, though there may be more.

**Note:** The keys may be under *wow6432node* where appropriate.

- HKLM\Software\Practiceworks\Image
- HKCU\Software\Practiceworks\Image

## Third Party Products

OrthoTrac integrates with multiple third-party vendors. Some additional configuration for clients that use these products may be required.

**Note:** This listing is not a complete list of third-party integrated products used by the office. It is used to aid with the most common issues. For a more comprehensive list of third-party products integrated with the software, refer to the [System Requirements](#).

## Microsoft Word

**IMPORTANT:** OrthoTrac does NOT work with any *Office, Home, Student* or any *web-based versions of Word (Office 365)*.

We only support **Microsoft Word Professional** versions for printing letters for the office. For acceptable Word versions for your current version of OrthoTrac, see the [System Requirements](#). Because OrthoTrac uses extensive macros in these processes, make sure macros are allowed in the Word installation.

### Microsoft Word in a Terminal Server or Citrix Environment

OrthoTrac makes extensive use of macros when printing Word documents. These documents access files that must be unique to each user. In Terminal Service and Citrix environments, multiple users are simultaneously accessing the same word processing resources, so these environments require a unique database setup for use with Microsoft Word. By default, we use **W:\**. Though the drive location can be changed, we recommend continuing to go with defined standards for ease of troubleshooting. The drive location must be seen as a local drive on boot; a network drive will not suffice. This guide will also cover the use of the [AWPSUTILITY.EXE](#) which can automate several parts of this process. This utility is included in versions 12 or higher of OrthoTrac. It can be found in the **\OMS-Spec\Utility** folder on the server. Local word processing configuration is performed when launching the program. More in-depth commands can be found if needed, but require a *code of the day*, which can be generated by OrthoTrac support if needed.

### Definitions for Microsoft Word in a Terminal Server/Citrix Environment

**Terminal Server** – All references in this section to Terminal Server are referring to the server the users log in to remotely access their OrthoTrac system.

**Data Server** – Data server refers to where OrthoTrac stores Microsoft Word documents, and does not necessarily mean where the other data is stored. The data server and the Terminal Server may or may not be the same machine.

**Data Files** – The following files are used by OrthoTrac to export data from the database and to use Word as an intermediary:

- Envelope.txt
- Envelope.hdr
- Omsawps.txt
- Omsawps.hdr

Each user must have explicit, unique access to these files, because two users writing to the same files at the same time will cause a data mismatch. The files, by default, are stored in the **OMS** folder but for offices using Terminal Services, the files will be stored in a **TEMP** folder.

### Changes to Be Made on a Data Server

**IMPORTANT:** We strongly recommend making a backup of the **OMS\DOCS** folder BEFORE following these instructions.

We will need to change ALL documents to have **W:\TEMP** be the primary data location. Macro settings in each individual .doc file pulls data from the Word data files.

The first step towards this change is to modify the **OMS.ini** on the server. If the server is a Terminal Server/Data Server combo, the **OMS.ini** will be located in **%userprofile%\windows\OMS.ini** for the user currently logged in. Otherwise, it will be located

in **c:\windows\OMS.ini**. In the **[AWPS]** section of the **OMS.ini**, verify the following lines:  
**datapath=w:\temp** and **datasource=server**.

The program **AWPSUTILITY.EXE** can be used to set the data source automatically as long as the **OMS.ini** for the user logged in is set correctly. When launching the utility, you can select an individual file, and click **Repair Selected Doc(s)**. You can also **Repair All Documents** using the *Support Login* and a *code of the day*, which can be generated by OrthoTrac support if needed.

### Changes to Be Made on the Terminal Server

The file **rootdrv2.cmd** should be installed if OrthoTrac is installed on the Terminal Server using the installmode, but if it is not, it can be edited. This file can be edited using notepad. It should contain the following lines:

**Set RootDrive=W:**

**Subst /d %RootDrive% >NUL: 2>&1**

**Subst %RootDrive% "%userprofile%"**

Do not attempt to set up a **W:\** with net use. If a drive other than **W:\** is desired, it can be edited for use in **rootdrv2.cmd**.

ALL USERS must have a **Temp** folder with all OMS WORD DATA FILES required located in their user profile. ALL USER OMS.ini files located in **%userprofile%\windows\OMS.ini** must have **datapath=w:\temp** and **datasource=server** set. Adding these changes to the **default profile** will also ensure the settings are applied to all new users when they are added to the system. NO TWO USERS SHOULD EVER BE ACCESSING THE SAME DATA PATH OR SESSION, OR ERRORS WILL BE ENCOUNTERED.

Launching the utility **AWPSUTILITY.EXE** will attempt to automatically fix all users' profiles with the above information

### Changes to Be Made on All Local Workstations

**Note:** The following changes are necessary because even though the local PCs are not using WTS, they must still access the AWPS documents using the same path and data source that the WTS workstations use.

1. Create drive **C:\AWPSTEMP\TEMP**.
2. Copy all **OMS WORD DATA FILES** to this location.
3. Create file **wdrive.bat** using notepad with the following information:
  - **SUBST W: C:\AWPSTEMP**
4. Run the newly created **.bat** file.
5. Place the **.bat** file in the user's startup folder in their Windows start menu.
6. Edit the **OMS.ini** located in **c:\windows\OMS.ini**. In the **[AWPS]** section, verify the following lines: **datapath=w:\temp**, and **datasource=server**.

**Note:** Launching the utility **AWPSUTILITY.EXE** will attempt to automatically perform the above settings.

## Antivirus

If the client maintains a continuous connection to the internet, it is advised that antivirus software be installed. If antivirus software has been installed, it is suggested that both active scanning of macros and of **.doc** and **.dot** files be disabled, as such active intervention can disrupt the automation of letter printing using AWPS. We also recommend adding the **OMS** folder on both the workstation and the server, and the **OMS-SPEC** folder on the server to the exclusions list of your antivirus software. Even with these settings in place, support has noticed that several antivirus programs still find “false positives” and quarantine OrthoTrac files. While we cannot verify specific settings internally, several inconsistencies have been found with AVG.

## Firewall

If a hardware or software firewall has been installed, it must not interfere with internal network traffic and should only filter traffic between the internal network and the network of the upstream internet provider. Additionally, appropriate port mapping may be required by configuring the firewall insofar as it is necessary to allow for support to connect using remote administration software as discussed in the [System Requirements](#).

## Uninstalling OrthoTrac

**IMPORTANT:** Make a backup (see [Backing Up the Server](#)) and remove any data BEFORE following these instructions.

OrthoTrac does not come with uninstall media. As such, uninstalling the program involves several steps, including editing the registry. If you are not comfortable with this process, call OrthoTrac support so that a representative can aid in this process.

### Uninstalling OrthoTrac on a Server

1. Remove the **OMS** folder, generally C:\OMS.
2. Remove the **OMS-Spec** folder, generally C:\OMS-Spec.
3. Uninstall **SQL**.
  - This can be done through the **Add/Remove Programs** section of the **Control Panel**. You will be given options for removing SQL.
  - Be sure to uninstall the instance of **ORSQLEXP**.
4. Several registry entries must be removed. Within **regedit**, remove keys from the following locations:
  - HKCU\SOFTWARE\ORTHOTRAC
  - HKCU\SOFTWARE\PRACTICEWORKS\ORTHOTRAC
  - HKCU\SOFTWARE\PWINC\ORTHOTRAC
  - HKEY\_USERS\S-1-5-21-\*\Software\OrthoTrac
  - HKEY\_USERS\S-1-5-21-\*\Software\PracticeWorks\OrthoTrac
5. Remove the file **C:\WINDOWS\OMS.ini**.

## Uninstalling OrthoTrac on a Workstation

1. Remove the **C:\OMS** folder.
2. Several registry entries need to be removed. Within **regedit**, remove keys from the following locations:
  - HKCU\SOFTWARE\ORTHOTRAC
  - HKCU\SOFTWARE\PRACTICEWORKS\ORTHOTRAC
  - HKCU\SOFTWARE\PWINC\ORTHOTRAC
  - HKEY\_USERS\S-1-5-21-\*\Software\OrthoTrac
  - HKEY\_USERS\S-1-5-21-\*\Software\PracticeWorks\OrthoTrac
3. Remove the **C:\WINDOWS\OMS.ini** file.

## Frequently Asked Questions

### **Q: Can I run OrthoTrac on Windows 8.1 and 10/Mac/Linux/Unix/OS2 or some other operating system not listed in the system requirements?**

A: We only list the operating systems we have tested with OrthoTrac. OrthoTrac only runs in Microsoft Windows. We have tested on a Mac using a VM or dual boot, but not any other type of Windows emulator. In the past, we have not completed our testing of OrthoTrac on new Windows operating systems until the release of the first service pack for the operating system.

### **Q: Will OrthoTrac work running in a virtual server?**

A: While OrthoTrac will work running in a virtual environment, we have not tested in this environment, and we have encountered multiple clients who have run into severe data connectivity issues when running in a virtual environment. Finally, we have experienced several issues involving updating virtual environments. As such, OrthoTrac support's official policy is that virtual environments are unsupported. We would strongly recommend against using a virtual environment, and we cannot guarantee we will be able to assist if problems are encountered in a virtual environment.

### **Q: What about Small Business Servers?**

A: OrthoTrac will not work properly on a Small Business Server.

### **Q: What happens if I use hardware or software that support tells me is not supported?**

A: OrthoTrac support will attempt to remedy situations that may arise from using non-supported hardware and software; however, in situations where we cannot find a way to resolve the issue with the technology the client is using, we may recommend using supported systems to resolve the issue. In all cases where data is involved, we will work with the client to the best of our ability to ensure the stability and reliability of their data regardless of technology used.

### **Q: Can I get the user name and password for SQL?**

A: The data belongs to the client, and we will always work with the office to ensure access to their data; however, the structure of data is proprietary to Carestream Dental. As well, in cases where access to the office's data is given, we cannot verify in a court of law that the client's data has not been tampered in cases where an office's data is called into question. As such, we do not provide access to the database, as a precaution to the office.

**Q: Can I run the license server as a service?**

A: We have seen multiple offices who have found a way to encapsulate the license as a service; however, as we have done no testing in-house on this, we cannot support this setup, and will recommend changes to the office to run the license as a regular application on launch.

**Q: Can I use a wireless network?**

A: OrthoTrac requires stable and expedient networking. Multiple errors can occur without a consistent data throughput, not limited to but including SQL disconnects, and load flow array errors that may disrupt the office's work flow. As such, we do not recommend wireless networks for mission critical stations.

## Related Documentation and Resources

Additional information available in the [Resource Library \(gosensei.com\)](https://gosensei.com):

- Initial Training Workbook
- Online Help
- Release Notes
- Link to our virtual agent, Cassidy
  - [gosensei.com/pages/orthotrac-support](https://gosensei.com/pages/orthotrac-support)

Cassidy is Carestream Dental's AI-powered virtual agent offering 24/7/365 online customer support. When you need a quick step-by-step guide or question on product needs, information is instantly available via Cassidy.

- Link to the Carestream Dental Institute: [carestreamdental.com/cdi](https://carestreamdental.com/cdi)

## Troubleshooting Steps for Common Installation and Update Issues

### MSVCRT.DLL COULD NOT BE OPENED

**Note: This solution should only be used when installing ON A SERVER in a DOMAIN ENVIRONMENT.**

**Issue:** When installing OrthoTrac in a domain environment the following error is presented:

*Error – MSVCRT.DLL Could Not Be Opened*

**Cause:** Incorrect User/Group Permissions

**Solution:**

1. The local tech must create a local user with administrative privileges or disable the group policy and begin the install again.
2. It may also be necessary to change the ownership and permission on the **MSVCRT.dll**. The file is in **C:\Windows\SysWow64**.
  - If it is a domain controller the local technician must change ownership of the **MSVCRT.dll** from *TrustedInstaller* to the **Administrators** group and give the **Administrators** full control.

- Other **DLL** files may fail after that change. The local tech must also change **Administrators** control over those files.

### **CAN'T CONTINUE – MUST BE IN APP SERVER MODE**

**Issue:** When attempting to install or update OrthoTrac on a terminal server, the following error message is received:

*Can't continue because this computer is in a mode (Terminal Server Client) which is incorrect! Instead, it must be running in Application Server Mode.*

**Cause:** Terminal Server is not in **Install Mode**. Installing OrthoTrac on a Terminal Server requires a direct console session to the server and requires the server be in **Install Mode**.

**Solution:** Change the Terminal Server from Execute Mode to **Install Mode**.

1. Click **Start > Run**.
2. Type **cmd**.
3. Press **Enter**.
4. Type **change user /install**.
5. Press **Enter**. A prompt is displayed stating the Terminal Server is now in Install Mode.
6. Run the OrthoTrac install process again.

**Note:** After the install process completes, the Terminal Server must be set back to **Execute Mode**.

1. Click **Start > Run**.
2. Type **cmd**.
3. Press **Enter**.
4. Type **change user /execute**.
5. Press **Enter**. A prompt is displayed stating the Terminal Server is now in Execute Mode.

### **WINDOWS INSTALLER ERROR: PREPARING TO INSTALL POP-UP IN VARIOUS FUNCTIONS**

**Issue:** A **Windows Installer** message is displayed when accessing various OrthoTrac functions.

**Cause:** Possibly related to Windows permissions or Windows updates.

**Solution:**

1. Check for recent Windows updates. If there are updates that need to be downloaded or installed, download and install all of them.
2. If the issue is not resolved, exit OrthoTrac.
3. Right click the OrthoTrac shortcut and select **Run as administrator**.
  - If the issue is resolved, the local technician will need to ensure the user is set up as an administrator.

## TERMINAL SERVICES ERROR: INSTALL MODE DOESN'T APPLY TO RDP SESSION

**Issue:** When attempting to run the command **change user /install** to set a Terminal Server to **Install Mode** to install or update OrthoTrac, the following message is displayed:

*Install mode doesn't apply to a Remote Desktop Session Host server configured for remote administration.*

**Cause:** This indicates you are trying to run the OrthoTrac install from a remotely connected RDP session instead of a direct console session.

**Solution:** Installing OrthoTrac on a terminal server *requires* the server be in **Install Mode**. It will be necessary to obtain a direct console session to the Terminal Server itself.

1. Use a direct console session to the Terminal Server.
2. Turn off *Remote Administration* services.
3. Disconnect all remote users.
4. Proceed with the install.

## MORE THAN ONE INSTALLATION OF ORTHOTRAC WAS FOUND

**Issue:** When running an update for OrthoTrac, the following message is displayed:

*More than one installation of OrthoTrac was found.*

**Cause:** This issue is frequently the result of someone making a backup copy of the **IOMS** folder prior to running the update. The backup copy of the folder is on a local disk drive. When the update is started it scans all local drives to see where OrthoTrac is installed. Specifically, it is looking for the **Orthooff.exe** file. If more than one copy of **Orthooff.exe** is found the update stops and the message is displayed.

**Solution:**

1. Open OrthoTrac on the computer where the error message is displayed.
2. From the main menu of OrthoTrac, click **Options > Environment**.
3. Make a note of the information in the **Server Path** field.

**Note:** The information in step 3 is the active directory that should contain the **Orthooff.exe**. All other copies of the **Orthooff.exe** should be renamed or removed from the local hard drive.

4. Click **OK**.
5. Close OrthoTrac.
6. From the Windows Start menu, click **Start > Search**.
7. Select **For Files and Folders**.
8. Click **All files and folders**.
9. Type **Orthooff.exe**.
10. Click **Search**.
11. When the search results are displayed, rename or delete all copies of **Orthooff.exe**, except the one in the path noted in step 3.

**Note:** To display the file paths for the files, click **View > Details** from the main menu bar.



**Note:** If there are no results for the file search except the active directory found in step 3, there may be issues with file indexing being disabled for Windows Search. In these cases, obtain the location of the extra copies of the **Orthooff.exe** by checking the installation log found at **C:\Windows\oms1100setup.log**.

12. Close the **Windows Explorer Search** window.
13. Run the update again.
14. Verify the update installs without the error message.

## SEARCHING FOR INSTALLED COMPONENTS – DATA SERVER

**Issue:** The update hangs at the Searching for Installed Components phase of the installation.

**Cause:** If OrthoTrac is installed in a complex folder path or if the Data Server has many external drives, the update may take a long time to find the installed component path and will appear to be non-responsive.

**Solution:** Bypass the automatic search for Installed Components phase of the update by specifying the install path as part of the **Run** command.

**Note:** All users must be out of OrthoTrac.

1. Browse to the location of the OrthoTrac update files and note the drive.
  - o In the following example the drive is *D:\*.
2. Click **Start > Run** on the **Data Server**.
3. Type the following: **"D:\Osetup.exe" /PATH=C:\OMS**.
  - o Quotations marks must be used around the **Osetup.exe** path.

**Note:** The C:\OMS in the command represents a standard installation. Depending on the actual installation the command may have to be modified. If you are not certain of how to modify the command correctly, please seek assistance. The **/PATH=C:\OMS** must be in caps.

**WARNING! Do NOT run this command on a workstation. There is a separate instruction for workstations.**

4. Click **OK**. The **Installation Wizard** is displayed.
5. Follow the prompts to install the OrthoTrac update as a Server instance.

## SEARCHING FOR INSTALLED COMPONENTS – WORKSTATIONS

**Issue:** The update hangs at the Searching for Installed Components phase of the installation.

**Cause:** If OrthoTrac is installed in a complex folder path or if the Data Server has many external drives, the update may take a long time to find the installed component path and will appear to be non-responsive.

**Solution:** Bypass the automatic search for the *Installed Components* phase of the update by specifying the install path as part of the **Run** command.

1. Click **Start > Run** on the workstation.
2. Type the following: **"U:\OMS-SPEC\Workstation Setup\Wsetup.exe" /PATH= C:\OMS**.
  - o Quotations marks must be used around the **Wsetup.exe** path.

**Notes:** The paths in the command represent a standard installation. Depending on the actual installation the command may have to be modified. If you are not certain of how to modify the command correctly, please seek assistance. The **/PATH=C:\OMS** must be in caps.

**WARNING! Do NOT run this command on the Data Server. There is a separate instruction for the Data Server.**

3. Click **OK**. The **Installation Wizard** is displayed.
4. Follow prompts to install the OrthoTrac update as a Workstation instance.

### Update Hangs at the Searching for Installed Components Phase of the Installation

**Cause:** If OrthoTrac is installed in a complex folder path or if the Data Server has many external drives, the update may take a long time to find the installed component path and will appear to be non-responsive.

**Solution:** Bypass the automatic search for the Installed Components phase of the Update by specifying the install path as part of the **Run** command.

**Note:** All users must be out of OrthoTrac.

1. Browse to the location of the OrthoTrac update files and note the drive.
  - o In the following example the drive is *D:\*.
2. Click **Start > Run** on the **Data Server**.
3. Type the following: **"D:\Osetup.exe" /PATH=C:\OMS**.
  - o Quotations marks must be used around the Osetup.exe path.

**Notes:** The *C:\OMS* in the command represents a standard installation. Depending on the actual installation the command may have to be modified. If you are not certain of how to modify the command correctly, please seek assistance. The **/PATH=C:\OMS** must be in caps.

**WARNING! Do NOT run this command on a Workstation. There is a separate instruction for workstations.**

4. Click **OK**. The **Installation Wizard** is displayed.
5. Follow prompts to install the OrthoTrac update as a *Server* instance.

### WTS – ORTHOTRAC SOFTWARE IS IN USE

**Issue:** A message stating **OrthoTrac software is in use on another workstation** is displayed, while attempting to run the update on the terminal server. PWClient and Terminal Manager both show no users logged in.

**Cause:** The **Terminal Server** is not in **Install Mode**.

**Solution:** Change the **Terminal Server** from **Execute Mode** to **Install Mode**.

1. Click **Start > Run**.
2. Type **cmd**.
3. Press **Enter**.
4. Type **change user /install**.
5. Press **Enter**. A prompt is displayed stating the **Terminal Server is now in Install Mode**.

6. Run the OrthoTrac install or update process again.

**Note:** After the install process completes, the **Terminal Server** must be set back to **Execute Mode**.

1. Click **Start > Run**.
2. Type **cmd**.
3. Press **Enter**.
4. Type **change user /execute**.
5. Press **Enter**. A prompt is displayed stating the **Terminal Server is now in Execute Mode**.

## **CANNOT ESTABLISH A VALID CONNECTION TO... WHEN STARTING ORTHOTRAC ON ALL MACHINES INCLUDING SERVER**

**Issue:** When starting OrthoTrac the following error is displayed:

*This computer cannot establish a valid connection to:*

*Database: OMS*

*DataSet: Main*

*SQL Server Name:*

Or

*This computer cannot establish a valid connection to:*

*Database: OMS (Error-[DBNETLIB][ConnectionOpen(Connect()).]SQL Server does not exist or access denied.)*

*DataSet: Main*

*SQL Server Name:*

**Cause:** Multiple causes, see below.

**Solution:** Verify **PWSvr** is running on the data server. If it is not running, start it or if it is already running, stop and restart it.

1. Look for the gold **PWSvr** key in the system tray on the server.
  - If the key is not visible, skip to step 3.
  - If the key is present, proceed to the next step.
2. Right-click the gold key and select **Exit PracticeWorks Server**.
3. Browse to the folder where OrthoTrac is installed.
4. This is usually C:\OMS but may vary depending on the installation.
5. Double-click the **PWSvr** folder.
6. Double-click the **PWSvr.exe** file to restart the **PWSvr** process.
7. Try to launch OrthoTrac on the server.
  - If it launches, the problem is resolved. Try the workstations as well.

## **Check the Status of the SQL Service**

1. From the Windows taskbar, click **Start > Run**.

2. Type **services.msc**.
3. Click the **Standard** tab on the right-side.
  - This tab is displayed at the bottom of the right-side.
4. Locate **SQL Server (ORSQLEXP)**.
  - If the *SQL Server (ORSQLEXP)* does not show as **Started**, right-click on it and select **Start**.
  - If the *SQL Server (ORSQLEXP)* already shows as **Started**, right-click on it and select **Restart**.
  - If the *SQL Server (ORSQLEXP)* does not show as **Startup Type of Automatic**, right-click on it and select **Properties**. Select **Automatic** from the **Startup Type** drop-down list. Click **Apply** and **OK**.

### Verify Settings for SQL Server

Use the **SQL Server Configuration Manager** to set the start mode for **SQL Server** to **Automatic** and verify the network / protocols configuration is correct.

1. On the data server, click **Start > Microsoft SQL Server 2014 > Configuration Tools > SQL Server Configuration Manager**.
2. Right-click the **SQL Server (ORSQLEXP)** in the right pane, then click **Properties**.

**Note:** The SQL server version may vary, look for the version of SQL you have installed. If the **SQL Server (ORSQLEXP)** is not showing in the right pane of the window, click on **SQL Server Services** in the left pane of the window.

3. Select the **Service** tab.
4. Select **Automatic** from the drop-down list to the right of *Start Mode*.
5. Click **Apply**.
6. Click **OK**.

**Note:** If the *SQL Server (ORSQLEXP)* shows as **Stopped**, right-click on it, and select **Start**.

7. Repeat steps 02 through 06 for the SQL Server Browser lines.
8. Click on the plus sign next to *SQL Server 2014 Network Configuration* in the left pane of the *SQL Server Configuration Manager* window to expand the choices.
9. Click on **Protocols for ORSQLEXP**. The *Protocols (Pipes)* will be displayed in the right window. The *Shared Memory*, *Named Pipes*, and *TCP/IP* protocols must be set to **Enabled**.
10. Right-click on any of the disabled protocols and click **Enable**. A warning is displayed stating the following: **WARNING! Any changes made will be saved**; however, they will not take effect until the service is **stopped** and **restarted**.
11. Click **OK** to acknowledge the warning.
12. Repeat steps 10 and 11 for other protocols that should be enabled.
13. Close the *SQL Server Configuration Manager*.
14. From the Windows taskbar, click **Start > Run**.
15. Type **services.msc**.
16. Click the **Standard** tab on the right side.

- This tab is displayed at the bottom of the right-side.
- 17. Locate *SQL Server (ORSQLEXP)*.
- 18. Right-click on **SQL Server (ORSQLEXP)** and select **Restart**.
- 19. Locate the *SQL Server Browser* in the right pane of the Computer Management window. It will be a few lines below *SQL Server (ORSQLEXP)*. The *SQL Server (ORSQLEXP)* should be set to *Started* in the *Description* column.
- 20. If the *SQL Server (ORSQLEXP)* is stopped, right-click on it and click on **Restart**.

## **ERROR – CANNOT ESTABLISH A VALID CONNECTION TO... WHEN STARTING ORTHOTRAC ON SOME WORKSTATIONS OR TERMINAL SERVER USERS**

**Issue:** When starting OrthoTrac the following error is displayed.

*This computer cannot establish a valid connection to:*

*Database: OMS*

*DataSet: Main*

*SQL Server Name:*

Or

*This computer cannot establish a valid connection to:*

*Database: OMS (Error-[DBNETLIB][Connection Open(Connect()).]SQL Server does not exist or access denied.)*

*DataSet: Main*

*SQL Server Name:*

**Cause:** Multiple causes, see below.

**Solution:** If the problem occurs on a workstation or terminal server user but not the server, check the **OMS.ini** settings.

**Note:** If the issue is happening for just one or some WTS users, it indicates the **oms.ini** file in the profile associated with the specific terminal server user is missing the correct information. For terminal server user profiles, the **oms.ini** file resides under the user profile in a windows subfolder. For example: *C:\users\[username]\windows\oms.ini*

Below are several lines in the **OMS.ini** that can cause the error if the incorrect information is present.

ServerName=

DbName=

Usr=

Pwd=

The information can be copied from the **OMS.ini** of a working workstation.

1. From the Windows taskbar on a workstation where OrthoTrac is running correctly, click **Start > Run**.
2. Type **oms.ini**.
3. Click **OK**.

4. Copy the lines for **ServerName=**, **DbName=**, **Usr=**, and **Pwd=** into a text file and move it to the workstation having the problem.
  - **ServerName=** should be followed by the name of the SQL server used to log into **Microsoft SQL Server Management Studio Express**, i.e. ServerName=KDS001234\ORSQLEXP.
  - **DbName=** in most installations will be *Main*, i.e. DbName=Main.
  - **Usr=** in most installations will be *sa*, i.e. Usr=sa.
  - **Pwd=** contains an encrypted version of the database password.

**Note:** Because it is an ENCRYPTED version of the database password this should be copied from a working workstation and pasted into the **OMS.ini**. Manually typing the password, even if it looks exactly like the one from a working workstation, will usually not work.

5. Close the **oms.ini**.
6. From the Windows taskbar on the *workstation with the error*, click **Start > Run**.
7. Type **oms.ini**.
8. Click **OK**.
9. Insert the information from the text file in step 04.
10. Save and close the **oms.ini**.

The problem may be caused by an anti-virus program stopping some necessary OrthoTrac **.exe**, **.dll** or **.ocx** files to function. Temporarily turn off any anti-virus software and attempt connecting again. If the connection can be established with the anti-virus software off, the office technician should set exclusions for the **C:\oms** and **C:\oms-spec** files and folders.

If the problem occurs on a workstation but not the server, check the *Hosts file* at **C:\WINDOWS\system32\drivers\etc\hosts** file to make sure there are no extra lines in it.

1. From the Windows taskbar on the workstation having the problem, click **Start > Run**.
2. Type **C:\windows\system32\drivers\etc\**.
  - **C:\Windows\SysWOW64\drivers\etc** on 64-bit systems.
3. Click **OK**.
4. Open the **Hosts** file using **Notepad**.
5. Confirm there is nothing in the file beyond the **localhost** line. If there is, remove it.
6. Save and close the **Hosts** file.
7. Open OrthoTrac.

If the problem occurs on the workstation but not the Data Server, it may be due to **DNS** issues.

1. From the Windows taskbar on a workstation having the problem, click **Start > Run**.
2. Type **cmd**.
3. Click **OK**. A DOS command window will open.
4. Type **Ping <servername>**.

**Note:** Replace **<servername>** with the server's name. This can be found in the **OMS.ini**.

5. Press **Enter**.
  - If there is a normal response to the ping, make a note of the IP address of the server.
6. From the Windows taskbar on the data server, click **Start > Run**.

7. Type **cmd**.
8. Click **OK**. A DOS command window will open.
9. Type **ipconfig**.
10. Press **Enter**.
11. Make a note of the IP address of the server. The IP Address should match the one noted in step 5.
  - o If it does NOT, open the **OMS.ini** and replace the **ServerName=ServerORSQLEXP** line with **ServerName=<IPADDRESS>ORSQLEXP**.
    - i. Replace <IPADDRESS> with the IP address from step 5.
  - o This indicates a situation the local tech should resolve. Making this change in the **OMS.ini** will resolve the issue until the server is rebooted and possibly getting a new IP address. The local technician should be made aware the PING SERVER returned a different IP address on the workstation than it did on the server.
12. From Windows taskbar on the workstation getting the error, click **Start > Run**.
13. Type **cmd**.
14. Click **OK**. A DOS command window will open.
15. Type **ping -a <IPADDRESS>**.

**Note:** Replace the <IPADDRESS> with the server's IP address.

16. Press **Enter**.
  - o If there is a response to the ping using the IP address but there was no response to the ping using the server's name, OR if the machine name returned in step 15 is not the same as the server name in step 04, the problem is a DNS issue. Inform the local technician and make the following changes to the **Servename=** line of the **OMS.ini** file on the workstation having the problem.
    - i. Change from: **Servename=SERVER\ORSQLEXP**
    - ii. Change to: **Servename=<IPADDRESS>\ORSQLEXP**

**Note:** Replace the <IPADDRESS> with the IP address from step 11.

The SQL server browser (**SQLBrowser.exe**) may have stopped. Occasionally, after a windows update, the SQL server browser (SQLBrowser.exe) will be disabled. This can prevent access to the SQL database. Sometimes this will cause a problem on all computers, sometimes it will only be one workstation.

1. Open the **Task Manager** on the data server.
2. Select the **Processes** tab.
3. Locate the **SQLBrowser.exe**. If it is listed among the other processes, try the other possible causes of the problem. If it is not listed, continue to the next step.

**Note:** Clicking on the **Image Name** column header will put all of the processes in alphabetical order, making it easier to find the **SQLBrowser.exe**.

1. Close the **Task Manager**.
2. Right-click on **My Computer** and click on **Manage**.
3. Double-click **Services and Applications**.
4. Double-click **Services**.

5. Right-click on **SQL Server Browser** and click **Properties**.
6. Set *Startup Type* to **Automatic**.
7. Click the **Start** button under *Service status* to restart the service.
8. Click **OK** to close the SQL Server Browser Properties.
9. Close *Computer Management*.
10. Open the SQL Server Configuration Manager by clicking **Start > Programs > Microsoft SQL Server 2014 > Configuration Tools > SQL Server Configuration Manager**.
11. Select **SQL Server 2014 Services**.
12. Right-click **SQL Server Browser** and select **Restart**.
13. Right-click **SQL Server (ORSQLXP)** and select **Restart**.
14. Close the *SQL Server Configuration Manager*.

If this problem occurs every other time OrthoTrac is started, un-check **Compatibility** mode in the OrthoTrac icon properties.

15. Right click the OrthoTrac icon on the desktop then click **Properties**.
16. Select the **Compatibility** tab.
17. Remove the check mark from *Run this program in compatibility mode for* in the *Compatibility mode* section.
18. Click **Apply**.
19. Click **OK**.

**Note:** Windows firewall – SQL requires ports **1433** and **1434** open in order to work. If the Windows firewall is installed when OrthoTrac is installed these ports will be opened during the installation. Otherwise, the local technician will have to open these ports.

## **ERROR – ALL WORKSTATIONS: TIMEOUT ERROR OCCURRED WHILE CONNECTING**

**Issue:** When attempting to open OrthoTrac on any computer the following error is presented:

*A timeout error occurred while connecting to the server. Please verify the server is running.*

**Cause:** Multiple issues can cause this error.

- A valid **Administrator** user has not logged into the server either manually or automatically.
- The client is connected to the server remotely through Microsoft Remote Desktop (RDP).
- The **PWSvr.exe** is not an active process on the **License Server**.
- **PWSvr.exe** is an active process on multiple computers. This process should only be run on the **License Server**.
- The **Clientlist.dat** file is corrupt.
- **PWLF.dat** (license file) is corrupt or missing.
- In rare cases, the registry files on the Data Server have been removed or corrupted and OrthoTrac would need to be reinstalled on the License/Data Server.

**Solution:** The most common cause for this error is a valid **Administrator** user isn't logged into the server. A user must be logged into the server for the **Pwsvr.exe** to run. OrthoTrac has the capability to log an administrator onto the server then lock the server. This is very important for



practices with multiple locations. If the server is NOT configured to log in automatically it may be necessary to send someone to the main office if the server restarts for any reason. The steps below will turn on the automatic login.

### How to Set the Server to Automatically Login to Windows

1. From the Server, double-click the gold key on the Windows taskbar.
2. Click **Options**.
3. Click **Automatic Server Logon Configuration**.
4. Select the **Automatic Server Logon** option.
5. Type **Administrator** in the **User Name** field.
6. Type the *Administrator Password* in the **Password** field.
7. Click **OK**.
8. Click **Close** to close the **PracticeWorks Server** window.
9. **Restart** the server to verify it logs into Windows automatically.

If the steps above do not resolve the issue, then proceed to the following steps:

1. Verify **PWSvr.exe** is currently running. Check for the gold key icon in the system tray of the license server.
2. If it is not visible, check the **Task Manager** to see if **PWSvr.exe** is listed in the **Processes** tab.
3. If it is listed, click **End Process**.
4. If it is not listed, or if the process was manually ended in step 3, relaunch **PWSvr.exe** manually. Browse to the folder where the file is located on the **Data Server** (by default, *C:OMSPWSvr*) and double-click the **PWSvr.exe** file.
5. If the gold key icon reappears and remains visible in the system tray, try opening OrthoTrac. The problem may be resolved.

### Checking Remote Desktop Connections

Remote Desktop connections generally do not connect to a Console or ID0 session with the server, and the gold key **Will Not** start in this mode. This type of connection is generally referred to as Terminal Services. If using Windows Server 2008 a session of ID1 may be used.

To check if a user is connected via RDP:

1. Go to a **cmd** line prompt.
2. Type **query session**.
3. Press **Enter**. This will show if you are in an RDP session.

If the issue still persists, there may be multiple **PWSvr.exe** processes running on various computers. It is important the process is only run on the **License/Data Server**.

1. From each workstation, open **Task Manager** and search for the **PWSvr.exe** process.
2. Click the **End Process** button to manually end the process on all workstations.
3. Restart the workstations.
4. Verify **PWSvr.exe** is not automatically restarting on the workstations.

If the issue still persists, perform the following steps on the **License/Data Server**:

1. From the Windows Start menu, click **Start > Search**.
2. Type **PWClient.exe**.
3. Click **OK**.
4. Click **Options**.
5. Make note of the path shown in the **PracticeWorks Server Path** field.
6. Click **Cancel**.
7. Click **Close**.
8. From the Windows Start menu, click **Start > Search**.
9. Enter the path noted in step 5 and click **OK**.
10. Double-click the **msg** folder.
11. If there are files with a name starting with **000**, they must be deleted. You must exit from the **PWSVR** application, before deleting the files.
12. Right-click the gold key in the system tray.
13. Click **Exit PracticeWorks Server**.
14. **Delete** the files in the **OMS\PWSVR\Msg** folder that have a name starting with **000**.
15. **Delete** the **Clientlist.dat** file in the **OMS\PWSVR** folder.
16. Double-click **PWSvr.exe** in the **OMS\PWSVR** folder to restart it.

If this does not resolve the problem, the license file (**PWLF.dat**) may be corrupt and should be replaced by Carestream Dental Support.

## **TIMEOUT ERROR OCCURRED WHILE CONNECTING TO SERVER – ONE WORKSTATION ONLY**

**Issue:** When starting OrthoTrac on one workstation the following error is displayed:

*A timeout error occurred while connecting to the server. Please verify the server is running.*

**Cause:** There are several different things that can cause timeout errors. The different solutions below are arranged in order from the easiest things to check to the more difficult.

### **Solutions:**

#### **Verify Automatic Server Detection is selected**

A user must be logged onto the server in order for the **PWSVR.exe** to load. **PWSVR** can be configured to automatically log a user onto the server when it reboots then lock the server.

1. Double-click the gold key on the server's task bar.
2. Click **Options**.
3. Select **Automatic Server Detection**. When the **Automatic Server Detection** option is not selected, the workstations will not be able to automatically detect that **PWSVR.exe** is running on the server.
4. Select **File System Message Polling**.
5. Set the **Message Check Frequency** to **5 seconds**.
6. Click **OK**.
7. Click **Close**.

8. Verify OrthoTrac will open on the workstation.

### Checking Remote Desktop Connections

Remote Desktop connections generally do not connect to a Console or ID0 session with the server, and the gold key **Will Not** start in this mode. This type of connection is generally referred to as Terminal Services. If using Windows Server 2008 a session of ID1 may be used.

**To check if a user is connected via RDP:**

#### Windows 7 / Windows Server 2008:

1. Press **Ctrl-Alt-Delete**.
2. Select **Task Manager**.
3. Select the **Users** tab. If the **Session** for the logged in user displays **RDP-TCP** the user is logged in via **RDP**.

#### Windows 10/ Windows Server 2012 R2:

1. Go to a **cmd** prompt.
2. Type **query session**.
3. Press **Enter**. This will show if the user is logged in an RDP session.

### Verify the PracticeWorks Server Path, File System Message Timeout and Mailslot Message Timeout in PWClient.exe.

1. From the *Windows Start* menu, click **Start > Run**.
2. Type **PwClient.exe**.
3. Click **OK**.
4. Click **Options**.
5. Type the path to the **PWLF.dat** license file on the server in the **PracticeWorks Server Path** field. From most workstations the default mapped path would be **U:\oms\pwsvr**.
6. Set the **File System Message Timeout** to at least **15**.
7. Set the **Mailslot Message Timeout** to at least **4**.
8. Click **OK**.
9. Click **Close**.
10. Open OrthoTrac to verify the issue has been resolved.

**Note:** If the issue still occurs, see the [Verify the Workstation is able to Ping the Server by Name](#) section of this document. Try changing the path in **pwclient** to the path used for the mapped drive **U:\** but replace the **servername** in the share with the IP address.

### Verify the computer can access the OMS folder on the server

**IMPORTANT! The workstation must be on the same workgroup as the server when the office is not using a DHCP network.**

1. Double-click the **This PC** or **My Computer** icon on the Windows desktop.
  - The name of the function depends on the Microsoft operating system version installed on the machine. If the icons are not visible on the desktop, do the following to display the icons:

- i. Right-click anywhere on the desktop.
  - ii. Select **View**.
  - iii. Select **Show desktop icons**.
2. Double-click the *C-drive on the Server*.
  - o Typically mapped to **U:\**. This server path can be confirmed in the **OMS.ini** on the workstation.
3. Double-click the **OMS** folder to ensure the workstation can access the **OMS** folder.
4. Verify OrthoTrac will open on the workstation.

**Note:** If a message is displayed indicating the workstation does not have permission to access the server, or is prompting for a user name and password, the workstation does not have proper permissions to access the server. Change the permissions on the server so the user name, the workstation is currently using has **Administrator** permissions.

### **Disable and Re-enable the Network Connection on the Workstation**

1. Go to **Control Panel > Network and Sharing Center**.
2. Right-click the **Local Area Connection** link.
3. Click **Disable**.
4. When the **Status of the Local Area Connection** is changed to **Disabled**, right-click **Local Area Connection** again.
5. Click **Enable**.
6. When the **Status of the Local Area Connection** is changed to **Enabled**, close the **Control Panel** windows.
7. Verify OrthoTrac will open on the workstation.

### **Verify Computers are All on the Same Workgroup**

1. From the Windows Start menu, type **Control Panel**.
2. Press **Enter**.
3. Click **System and Security**.
4. Click **System**.
5. The **workgroup** is displayed in the **Computer name, domain, and workgroup settings** section.
6. To change the workgroup, click the **Change settings** link.

**Note:** If there is more than one workgroup listed, double-click the first network group in the list and look for the name of the computer you are logged into. Verify the server is located in the same workgroup. If the server is not listed in the workgroup, click the **Back** button and search the second workgroup for the server. When the server and the computer you are logged into are not on the same workgroup, change the workgroup from the **My Computer** icon by clicking on the **Change** button on the **General** tab.

### **Verify Workstations have Read, Write and Delete Permissions on the \OMS\PWSvr and \OMS\PWSvr\msg Folders on the Server**

1. Double-click the **This PC** or **My Computer** icon on the Windows desktop.
  - The name of the function depends on the Microsoft operating system version installed on the machine. If the icons are not visible on the desktop, do the following to display the icons:
    - i. Right-click anywhere on the desktop.
    - ii. Select **View**.
    - iii. Select **Show desktop icons**.
2. Double-click the *C-drive on the Server*.
  - Typically mapped to **U:\**. This server path can be confirmed in the **OMS.ini** on the workstation.
3. Double-click the **OMS** folder.
4. Double-click the **PWSvr** folder.
5. Right-click anywhere in the folder and select **New > Text Document**.
6. Type **test.txt** as the filename.
7. Press **Enter**.
8. Right-click the newly created file and select **Delete**.

**Note:** If any of the following happen, change the permissions on the server to grant the workstation user name **Administrator** permissions to the **\OMS\PWSvr** folder and subfolders on the server:

- Errors are displayed when trying to create or delete the test file.
  - A message is displayed indicating the workstation does not have permission to access the server.
  - A prompt is displayed for a user name and password when trying to access the server.
9. Repeat steps 1 through 8 for the **PWSvrmsg** folder.
  10. Verify OrthoTrac will now open on the workstation.

### **Verify the Workstation is able to Ping the Server by Name**

1. From the *Windows Start* menu, click **Start > Run**.
2. Type **oms.ini**.
3. Press **Enter**.
4. Make a note of the server's name in the **ServerName** path.
  - The server name is the information before **\ORSQLEXP**.
5. Close the **OMS.ini** file.
6. From the Windows Start menu, click **Start > Run**.
7. Type **cmd**.
8. Press **Enter**.
9. Type **ping <servername>**.

**Note:** Replace <servername> with the server's name from step 4.

10. Verify the time on the workstation and server are the same.