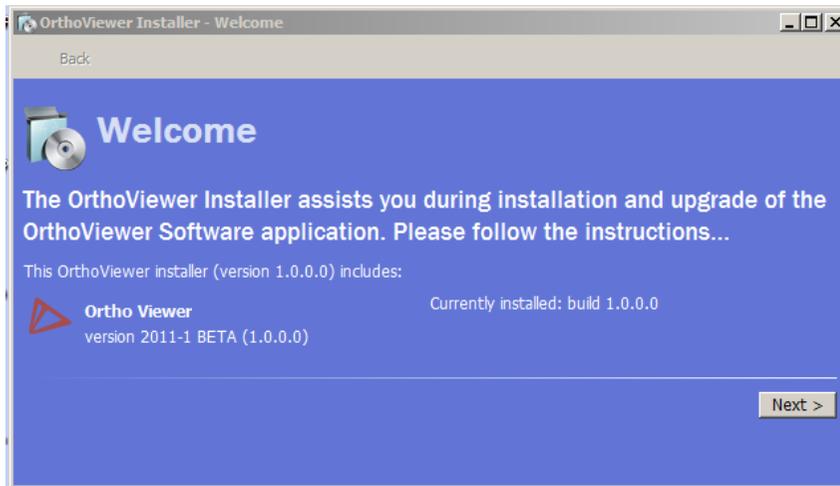**Introduction**

The program 'OrthoViewer' is an unlicensed viewer which is intended to allow users of 3Shape orthodontic scanners to view and share their digital orthodontic models. This customer training manual gives the user an overview of the installation process and the functionality of the various icons within the program.

It is possible to install the software on several PCs on a network and it is recommended that the models are stored in a central location which can be easily accessed from each of the network computers.
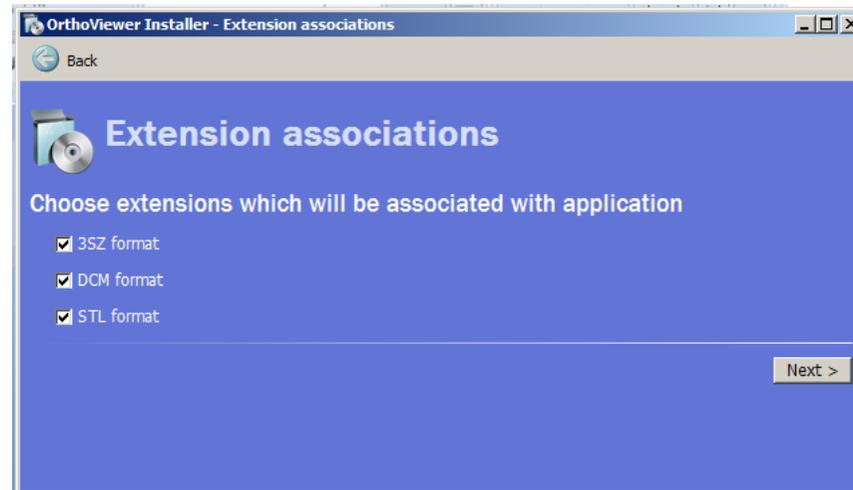
When opening models, the models can be located through windows explorer and opened by double clicking either the upper or lower models. The software will automatically identify the presence of the opposing model and it will open also.

If a model set or patient suite of records are provided in a compressed '.3SZ' format, the models may be opened by double-clicking this icon. Alternatively, any model may be opened by selecting the 'open models' icon at the top left hand side of the screen and then locating the models through the appropriate windows path.
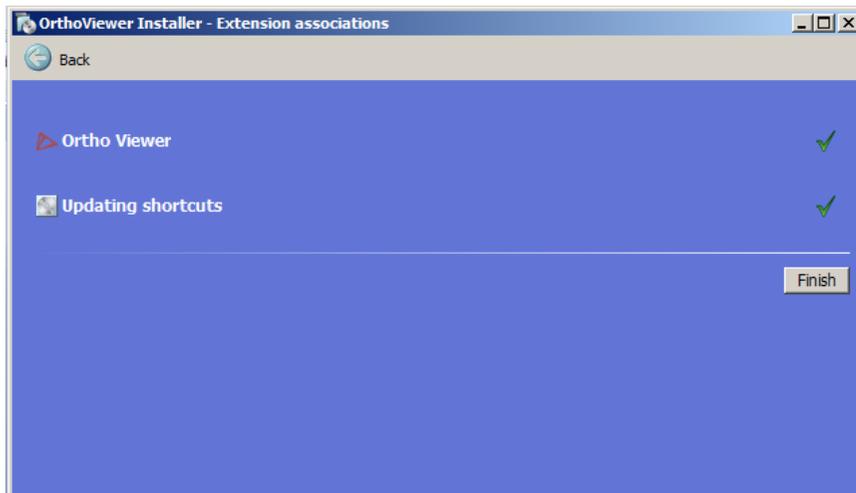
Installation of 3Shape OrthoViewer – When the installation file is run, you will be guided through the installation process.
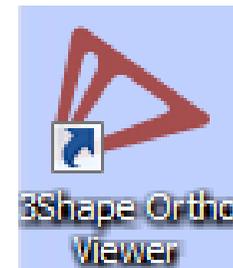

OrthoViewer Installer - Welcome

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Welcome

The OrthoViewer Installer assists you during installation and upgrade of the OrthoViewer Software application. Please follow the instructions...

This OrthoViewer installer (version 1.0.0.0) includes:

▷ **Ortho Viewer**
version 2011-1 BETA (1.0.0.0)

Currently installed: build 1.0.0.0

Next >

Step 1: Welcome Screen, select 'Next'

OrthoViewer Installer - Extension associations

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Extension associations

Choose extensions which will be associated with application

☑ 3SZ format

☑ DCM format

☑ STL format

Next >

Step 2: Check each box to establish file associations. 3SZ is a 3Shape zip format for zipping full model and patient sets. DCM is a 3Shape compressed proprietary format for individual model files. STL is an open file format for individual models.
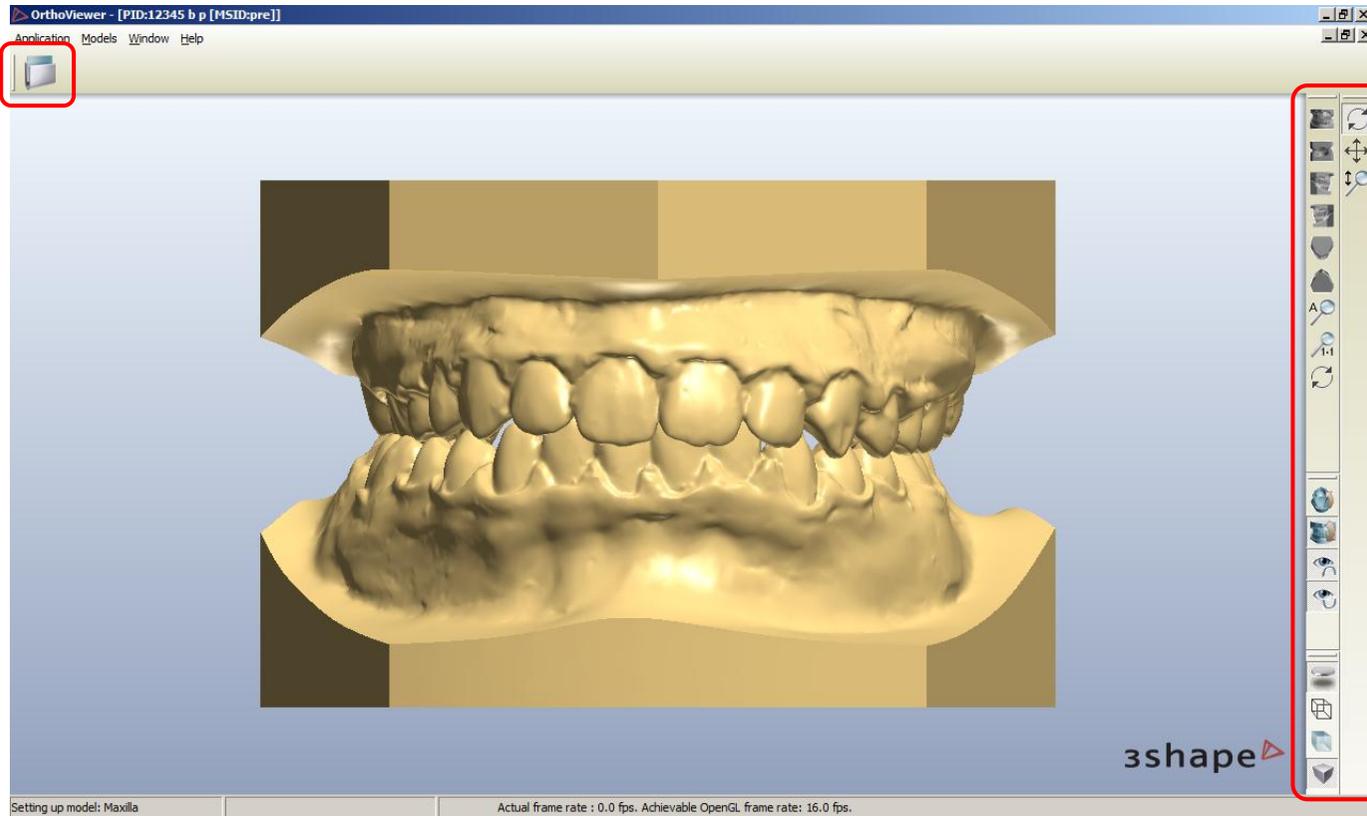

OrthoViewer Installer - Extension associations

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▷ Ortho Viewer   ✓

🖼 Updating shortcuts   ✓

Finish

Step 3: Confirmation of a successful installation!

3Shape Ortho Viewer

When the installation has been complete, the '3Shape OrthoViewer' icon will appear on your desktop. The program will also appear in the windows program list.

Help! In some situations, the installer program may not run as expected. If this is the case, run the installation as 'administrator'. To do this, right click the installation file and select the option 'Run as Administrator'. The installation should now complete as normal.
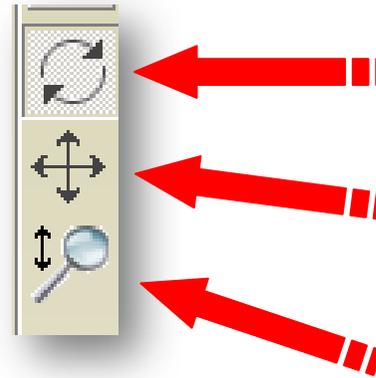
Homescreen

Model Open Icon

Functional Icons
(see following pages)

Rotate, Pan, Zoom

Models can be manipulated in three ways.
- **Rotate**
- **Pan**
- **Zoom**

These three icons determine the function of the right mouse button. Select the required manipulation function and press and hold the right mouse button. By moving the cursor slowly around the screen, you will **Rotate**, **Pan** or **Zoom** the model depending on the function selected. When using a 3-button mouse with a wheelie centre button, rolling the wheel will always allow the user to **Zoom** in and out. By pressing and holding the wheelie button, the user can **Pan** the models across the screen. Too allow full manipulation of the models using the mouse, it is preferable to leave the **Rotate** icon activated so that the right button will only be used for rotation.

In summary:
- roll wheelie button: **Zoom**
- press and hold wheelie button: **Pan**
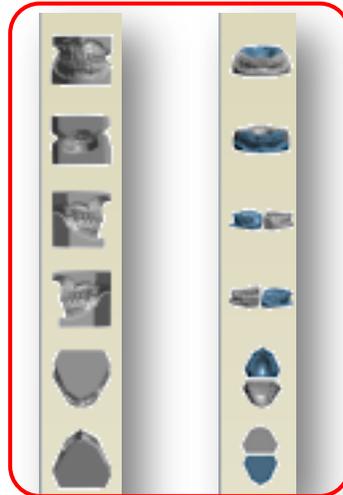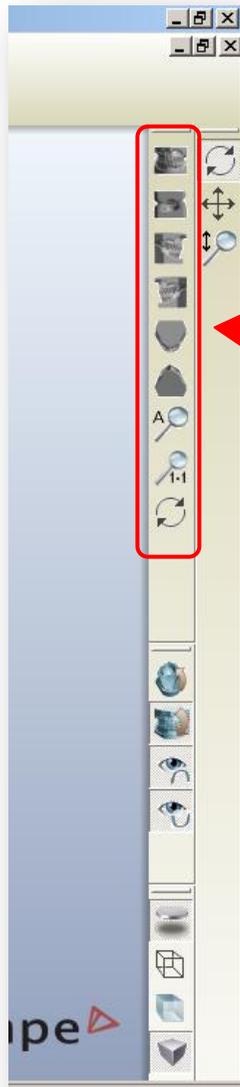- press and hold right button: **Rotate**

An alternative technique for model manipulation is:
Zoom – hold the 'Shift' key and right mouse button simultaneously and move the cursor up and down.
Pan - hold the 'Alt' key and right mouse button simultaneously and move the cursor around the screen.

Tip: *When rotating a model, it will rotate around an axis which is perpendicular to the direction of movement of the cursor. For example, move the cursor across the screen and the models will rotate around a vertical axis.*

Standard Views, Real Scale View etc.

By selecting any of these icons, the models can be viewed in any of six standard orientations. (in order of icons): **Front**, **Rear, Right, Left, Top and Bottom**. If the models are in open mouth view, the icons will change to represent the models in an open view (as shown in toolbar on right hand side).
When positioned in a standard view, the models will be scaled to fit neatly on the screen.
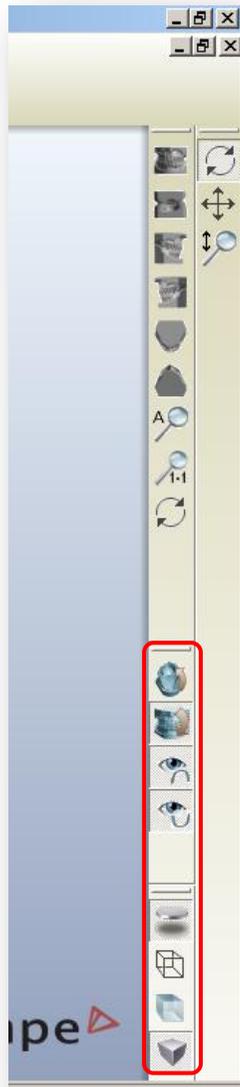
This icon will '**Zoom All**'. The level of zoom will be adjusted automatically so that the full model will fit neatly in the viewing area irrespective of the rotated orientation of the model.

Real Scale View – This will allow the user to view the models on screen at a 1:1 scale. This is useful for 'eyeballing' the models or sizing an arch wire by laying an arch wire template on screen. The user must calibrate the screen by adjusting the 'ruler' bar to a length of 50mm, using a physical callipers or ruler for comparison.

Axis Locked Rotation – This gives the user the option to lock axes such that the models will only rotate around a single axis during rotation irrespective of the actual movement of the mouse.

Open/Close, Transparency etc.

By selecting either of these two icons, the models can be viewed in **Open** Mouth view or **Closed** Mouth view.

These icons can be used to **Hide** or **Show** the upper and lower models. Each time the icon is selected, the model will appear or disappear.

These viewing icons are used to allow the user to view the models in different way.
Materials and Shadows: This icon turns the defined material surface properties on and off. This feature is only applicable if a suitable graphics card is installed in the computer. If no graphics card is installed, the models will appear to be black when the icon is selected.
Wireframe allows all the scanned points from which the surfaces are generated to be viewed.
Transparent allows the models to be viewed with a slightly transparent quality.
Perspective allows the model to be viewed in a realistic three-dimensional view. Parts of the model which are closer to the user appear larger than the rest of the model. This function is very useful when comparing digital model images to photographs.