

This tutorial explains the process of creating a panoramic picture by stitching a series of single source pictures together. The recommended prerequisite is the SingleNode Panorama tutorial.

# Stitching With ToolServer/MPW

## Preparation:

Install the Apple **ToolServer/MPW** and either version of the **stitch** tool. Create a new folder for this project, and identify the stitcher pictures for the tutorial in the folder: **Stitcher PICTS**. Move the folder containing the stitcher pictures to the desktop; the Apple **stitch** tool has a limit of 63 characters for the path to the pictures.

Launch PanoMAGIC and create a new project (**File Menu:New Project**). Save the project immediately to the newly created project folder, changing the suggested project name to **Stitching Project**, to give PanoMAGIC a home base for storing temporary files and panoramas for the project.

## Set Up For Stitching:

Open the application preferences (**Edit Menu:Preferences...**) and select either **ToolServer** or **MPW** as the stitcher application. In the application options (**More** button), enable the stitch tab (**Enable Stitch Tab**).

## Import the Stitcher Pictures:

Select the **Stitch** tab and use the **Import PICT...** button to import the 12 stitcher pictures.

## Set the Picture Rotation:

The pictures need to be rotated by 270 degrees. Turn the **Rotation** checkbox **on** and enter 270 into the edit field.

## FOV Wizard:

The **FOV Wizard** is a graphical interface for preparing the stitch tool.

Drag picture **03** from the table of pictures onto the **FOV Wizard** button; pictures **03** and **04** will be used to calculate the stitch overlap and field of view parameters. Press the **FOV Wizard** button.

Drag the horizontal slider to set the best visual horizontal overlap (about 100 pixels).

Set **18mm Portrait** with the **Lens...** button. The **FOV** value will be to **89**. Set the **FOV** search range to **±6**.

Use the **StitchApp** button to launch **ToolServer** (or **MPW**).

Use the **Best FOV Stitch** button to run the **stitch** tool in **ToolServer** to calculate an initial **FOV**.

When **ToolServer** has finished the **Best FOV** results will appear (for **MPW**, use the **MPW Done** button).

Use the **Apply Result** button to use the FOV results.

Use the **Run Interactive** button to run the **stitch** tool interactively to tune the overlap.

Use the **Apply Result** button to use the overlap results. Repeat **Best FOV** to obtain the best stitch.

Use the **OK** button to set the stitcher to use the values determined in the **FOV Wizard**.

## Stitching:

Drag picture **04** onto the **Stitcher** button; pictures will be stitched in the order: **04-12,01-03**.

Use the **Stitcher** button and start the stitch with the **Stitch** button (use the recommended values). When the stitch has finished, close the **ToolServer Log** window, and shut down **ToolServer** (**<busy>** button)

## Post Process the Panoramic Picture:

Use the **PictEditor** button and then the **Retouch Pano** button. Resize the panoramic picture proportionally by changing the height from 1342 (approx) to exactly 1344. This is calculated as follows: we will create a panorama with 1x24 tiles. The tile height must be divisible by 4.  $1342 / (24 \times 4) = 13.9792$ . Using the closest integer 14, the new height is  $1344 = 14 \times 24 \times 4$ . Crop the width (**Canvas Size**) to 384 (an even multiple of 4) to remove the garbage pixels at either side. Apply an **Unsharp Mask (80% @ 1 pixel)**. Save the picture, quit the PICT editor and create a Panorama movie (**CinePak 256 Grays Lossless**).