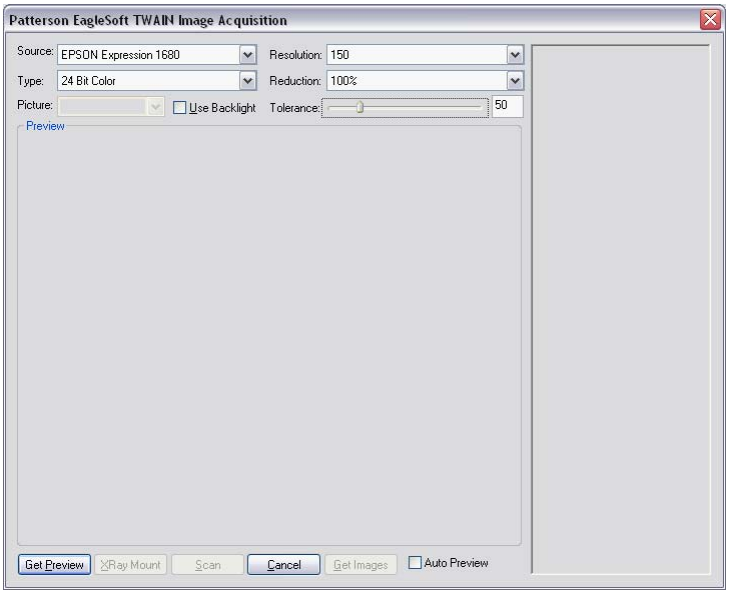
How important is the scan resolution you choose?

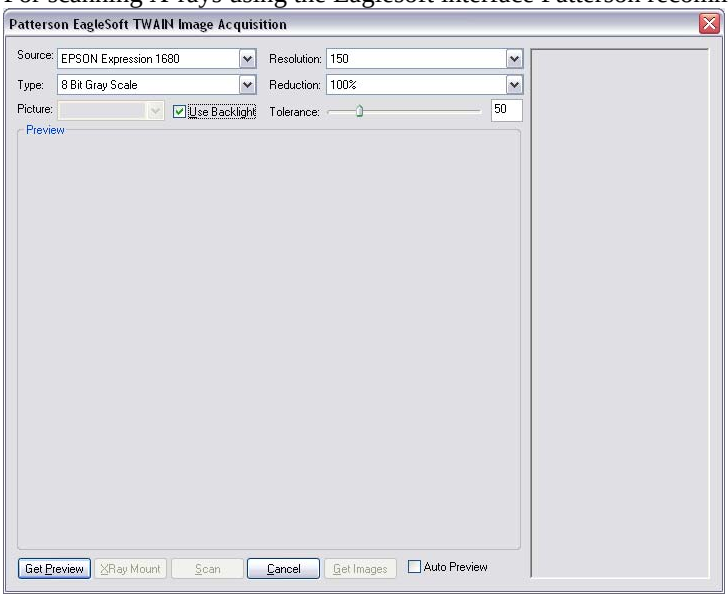
First of all, what is resolution?
Printers and scanners use a unit called DPI (dots per inch, the number of dots that fit horizontally and vertically into a one-inch measure) to measure resolution. Generally, the more dots per inch, the more detail is captured, and the sharper the resulting image. Higher resolution comes with a price, and that price is hard drive space on your fileserver. Simply put, the higher the resolution, the larger the file that is saved.

Using the Eaglesoft Scan Interface
When you scan using the Eaglesoft interface, you will have an opportunity to set the scan resolution. Patterson recommends the following settings for document scanning although a lower resolution setting such as 75 or 100 dpi may produce acceptable images:



******Note: Patterson does not recommend scanning documents using above 300 dpi resolution as this can result in extremely large file sizes!**
You might have to raise the resolution for certain things such as driver's licenses and HIPPA documents, just be sure to lower the resolution before scanning documents again.

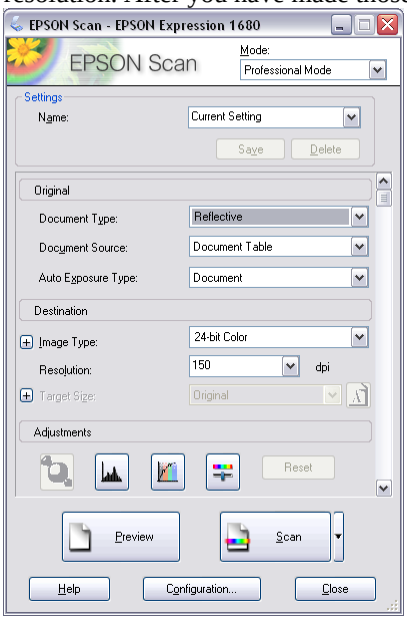
For scanning X-rays using the Eaglesoft interface Patterson recommends the following settings:



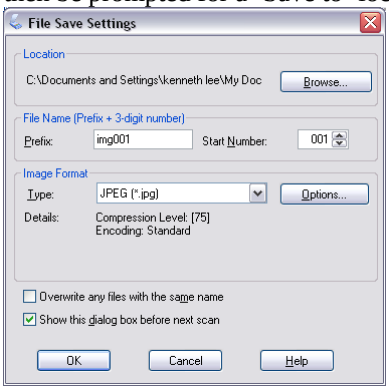
Using these settings should produce acceptable images. If more clarity is desired, a higher setting may be used with 300 dpi considered the maximum resolution that should be used for any type of film scanning.

Using the Epson Scan Interface

When you first prepare to scan a document using the Epson software, you must set the mode (Professional), the document type (reflective) and the auto exposure (document). As with the Eaglesoft interface, Patterson recommends using a 150 dpi resolution. After you have made those adjustments, click the preview button:



When you click the preview button you will get a preview image and if that looks acceptable, click scan to continue. You will then be prompted for a 'Save to' location along with a file format.



*****Note: You <u>must</u> change the image format to JPEG. The Epson Scan software by default saves files in the BITMAP format, which results in extremely large files.**

The following table provides a comparison of different resolutions and the corresponding file sizes, scanning items such as patient history or insurance forms.

Scanning Method	File Size in MB	Images per Day	Space Required Per Year in GB
Eaglesoft interface – 75 DPI	1	30	7.8
Eaglesoft interface – 100 DPI	2	30	15.6
Eaglesoft interface – 150 DPI	4.5	30	35
Eaglesoft interface – 300 DPI	7.2	30	56
Epson Scan interface – 300 DPI	10	30	78

What does this mean? Using the estimates shown above, a practice scanning 30 pages per day at high resolution could fill up all the disk storage in a Patterson midserver with 160GB capacity in 2 years. On older midservers and high end servers, the drive capacity is lower therefore storage could be consumed in the same 2 years while scanning only 15 documents per day. These estimates are for scanned images only, and do not include space used saving Schick digital x-rays, panoramic x-rays or intraoral/extraoral images.

****Please Note: All the figures used here are estimates and actual image sizes will vary based on acquisition resolution. If you have questions regarding image scanning, or any other issue, please call the Patterson Technology Center at 800-475-5036 for professional assistance from one of our specialists.**