Deltavision/softWoRx Deconvolution - Border Rolloff

For deconvolution, the softWoRx suite by default sets a border rolloff (voxels at the edges, which are not deconvolved because of missing information from adjacent areas). The microscope version (Linux) by default crops the deconvolved area after processing, resulting in images which are smaller than the original (typically 960 x 960 pixels with an input image of 1024 x 1024 pixels). In the offline version on the 'Deconvolution' image processing computer (Windows 7), the 'crop' function is not implemented. The images remain at the original size and have blurred edges (of the size of the border rolloff).

To crop the blurred edges manually, you can use ImageJ. Open your image and the ROI Manager (in the menu bar, click 'Analyze' → 'Tools' → 'ROI Manager'). In the ROI Manager, click 'More >>' and select 'Specify...'. In the window popping up, enter the size of the image minus two times the rolloff (960 x 960 if the image was 1024 x 1024 with a 32-voxel border rolloff). Specify the upper left corner of the ROI ('X Coordinate' = 32, 'Y Coordinate' = 32) and click 'OK'. In the menu bar, click 'Image' -> 'Crop'.

Upon request we can provide an ImageJ macro doing this job.
1) 'Analyze' → 'Tools' → 'ROI Manager'

2) 'More >>' → 'Specify...'

3) Enter ROI coordinates, click 'OK'

4) Crop the ROI