

How to use the image transfer program „img2bnew“ with different VC Smart Cameras as a *background task* (without own image acquisition and prints)

1. Start „img2bnew“ as shown in the TeraTerm Screenshot attached.

Start from Shell with parameter „&“ – this starts the program as a background task – priority 9.

2. Start the ATX Client – note that the ATX requires an entry in the registry, calling „regsvr32.exe atxcontrol.ocx“ from the command line (refer to the ATX Client readme file for details).

- Provide the correct IP Address and fill in other parameters as required (port is already selected).
- Tick „live mode“ and then click the button „Get Image“
- The program now transfers the logical image page (default at power up is the physical page = capture and display page). The image is black for the line scan camera, since this camera (and most other cameras without Video output) start in still mode – not in live mode!

3. Hit Return on the Telnet Port, so the standard interface **returns to the shell** (\$ prompts displayed again). This can also be done prior to starting the ATX Client. It is now possible to focus the camera or to start any other program from the shell (a program started from shell without the parameter „&“ receives a slightly higher priority: 8). The program started should take images and include waiting times (time_delay() or wait() functions). Otherwise the background program „img2bnew“ does only transfer the same memory content or does not get execution time.

Since img2bnew transfers the logical image, a different image page can be displayed simply by changing the logical page in the main program.

4. Switch the linescan camera to live mode, using the shell command „\$vd -l“ (this of course also works with any other camera, note however that the gain values differ)

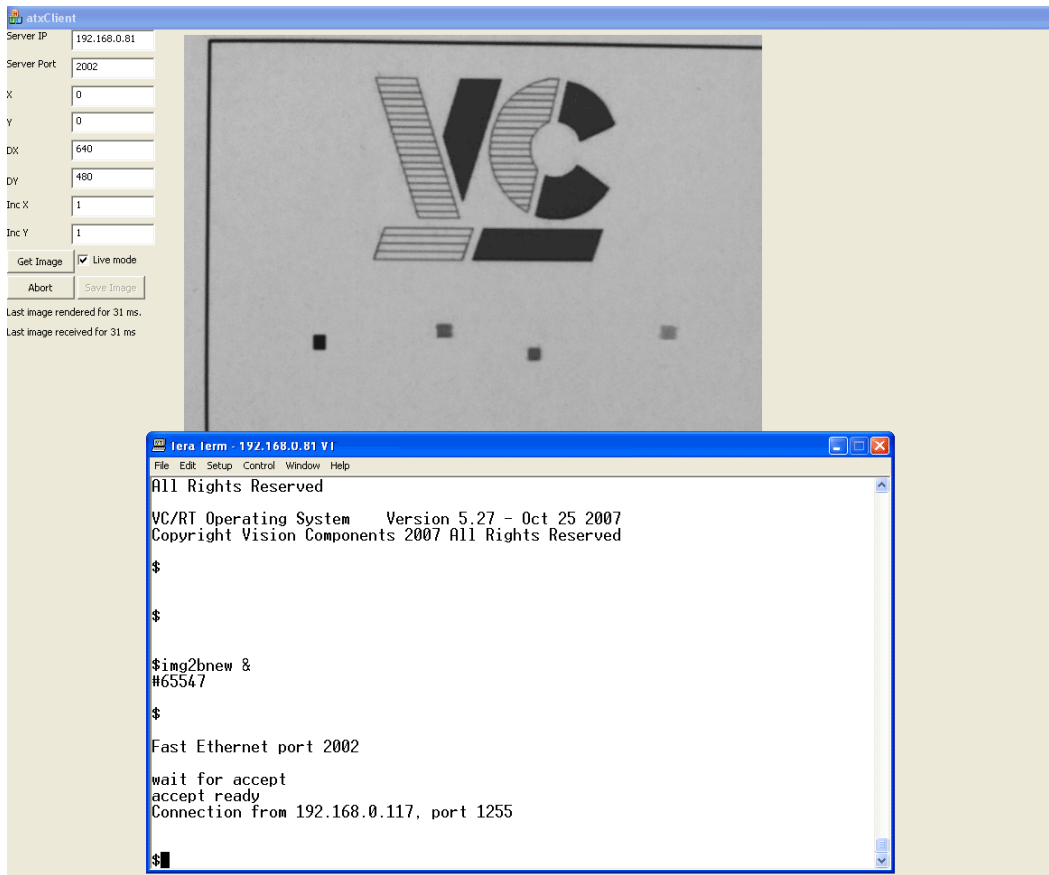
- It may be a good idea to reduce the shutter first to 1 ms (shell command „\$sh 1000“), or the image acquisition takes (default line exposure time) x (default image height = 512 lines) 0.5, 12 seconds!
- In case the image is too dark, it is possible to increase the gain using the shell commands „\$vd -g 1“ or for further increase „\$vd -g 2“ – this of course also increases the image noise (default gain value is 0).

5. Caution:

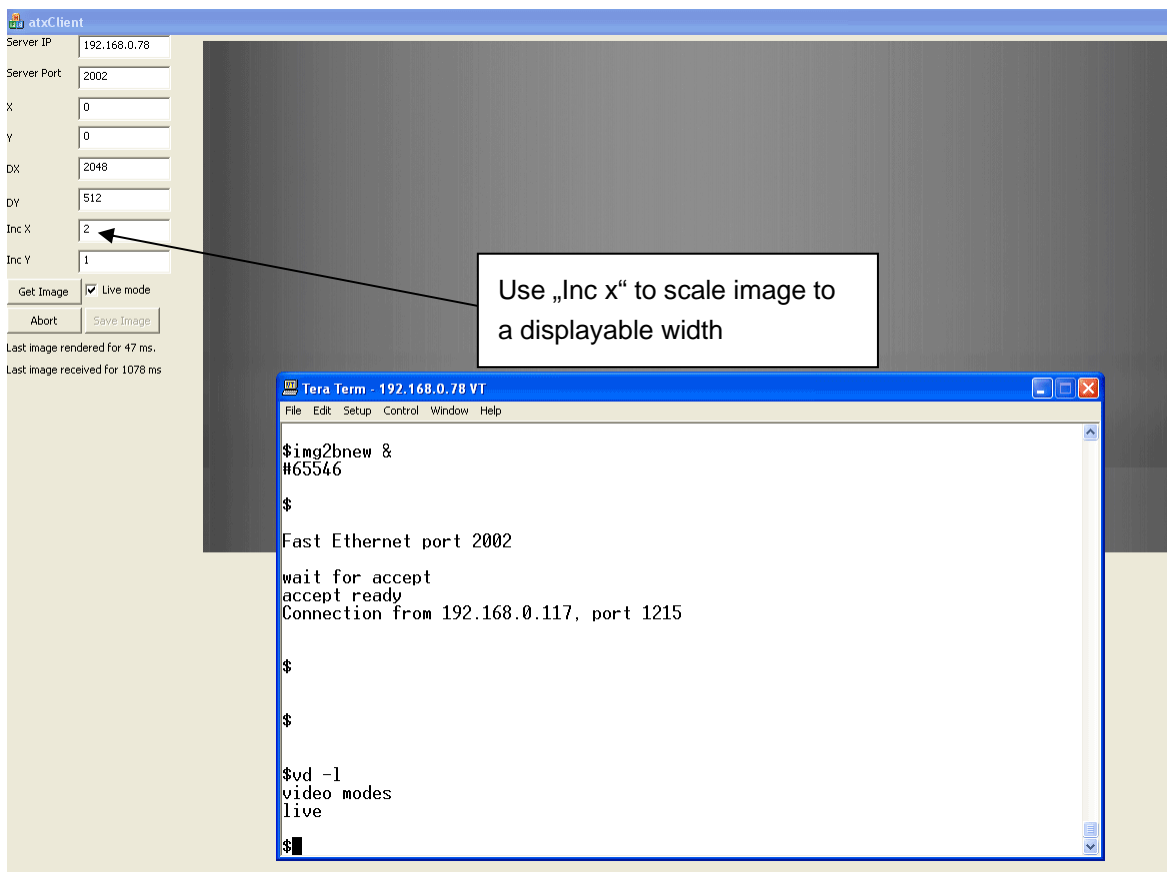
- Although started as a background task all image transfer programs may slow down your main tasks occasionally (see section 6.3 of the „Programming Tutorial Basics“).
- This is due to the higher priority of the TCP/IP task referenced during image transfer. This can only be avoided by starting the main program with priority 5. However if doing so, extreme caution is advised not to block any other system tasks!

6. Note regarding „img2bnew“:

This program allocates 0.5 million words (2 million bytes) image memory (see memory define), which is sufficient for all VC cameras and linescan images up to about 970 lines. Adjust this value if needed (add 10 extra lines of memory for the VC4002L).



Starting „img2bnew“ as a background task on a standard area CCD camera



Starting „img2bnew“ on the linescan camera VC4002L