How to build APS<u>#</u>

1. first build the kernel <u>#</u>

Use the build instructions here

In January 2008, the standard kernel **make** will also automatically build the aps binary: libmod_aps.a.

Untill then, download and install the <u>APS TKD</u> from the <u>download area</u>. You can start using APS by following the instructions in the TDK package.

But If you're building your own kernels. Get libmod_aps.a, which is the APS scheduler binary, from the target \qnx6\<cpu>\boot\sys directory where you unpacked the APS TDK. (CPU is one of x86, ppc, sh, mips or arm. Pick the one corresponding to the cpu of your target machine.) Then copy the libmod_aps.a into your kernel build directory. That will be something like my_svn_checkout/services/system/proc/<cpu>/o/.

No need to recompile the kernel.

(Note that there are no -smp or -instr variants for libmod_aps.a. A libmod_aps.a made for your processor architecture will work in instrumented and smp images.)

2. Modify build file. <u>#</u>

APS is inserted into an bootable image by tweaking the build file.

In your build file, on the PATH statement add the prefix [module=aps]. So for example your path statement may look like:

```
[module=aps] PATH=/proc/boot:/bin:/usr/bin:/opt/bin LD_LIBRARY_PATH=/proc/boot:/lib:/usr/lib:/lib/dll:/opt/lib ./procnto
```

Note that the libmod_aps.a file must be in the same directory as the one your are getting the procnto binary from. so "./procnto" is the safest way to writ the PATH statement -- it makes sure procnto and libmod_aps.a are comming from the same build directory.

This line in the build file causes mkifs to create a procnto binary containing libmod_aps.a

3. Include the aps command in your image. <u>#</u>

Either configure your build file for a disk based operating system, which contains the aps command executable somewhere on disk, or compile the aps command and list the aps binary in your build file, so the aps command appears in /proc/boot/.

Not only will you want the aps command to configure the APS schedulerl, but ">aps" is the quickest way to check that your build properly included aps.

4. mkifs as normal <u>#</u>

(link to building images with mkifs coming soon)