

Integrating new architectures

- Broadly speaking, there are two options:
 - Load different banks+maps at the same time
 - As is done in C version of ss-shifted ftksim
 - Requires heavy modification of code
 - Needs a lot of memory to load the banks
 - Independently process different banks
 - Much cleaner – a lot fewer changes
 - Roadfinder only needs memory for 1 bank
 - Easily extensible
- Next page shows the detailed plan
 - Legend:
 - no change, minor change, major change

SS-shifted architecture

- Run roadfinder with default bank
- Run roadfinder with ss-shifted bank
- Merge 4 subregions in default bank
- Merge 4 subregions in ss-shifted bank
- Run a new executable (road+hit filter)
 - Produces a final list of roads+hits
 - Easy to add 1/4-shifted banks in the future
- Run standard track fitter

SCT-first architecture

- Run full chain in SCT-only configuration
 - Road finder + subregion merger + track fitter
- Run modified roadfinder job on pix+tracks
 - With small changes to handle SCT tracks
- Merge subregions
- Run standard track fitter

Additional notes:

- Can easily combine with ss-shifted approach
- Multiple runs will be transparent to end user
 - `./ftk.py -q threaded_4 -n10000 -a fullchain`