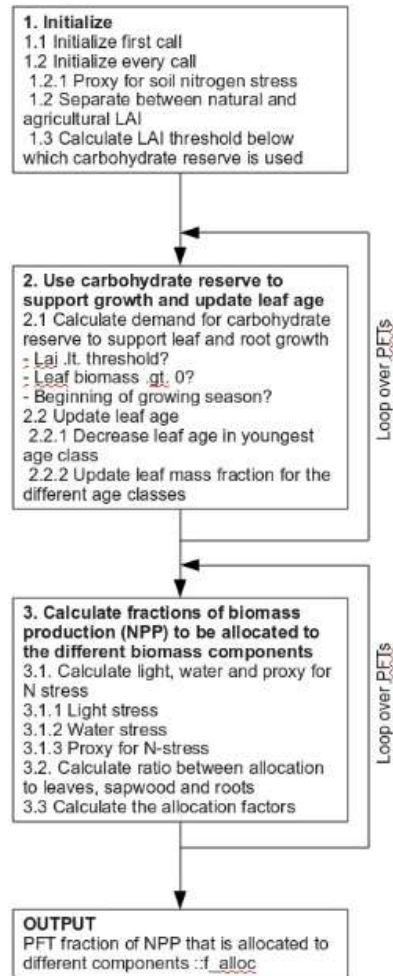- Sharpe, P.J.H., and Rykiel, E.J. (1991), Modelling integrated response of plants to multiple stresses. In: Response of Plants to Multiple Stresses (eds Mooney, H.A., Winner, W.E., Pell, E.J.), pp. 205-224, Academic Press, San Diego, CA.

FLOWCHART :

1. Initialize
1.1 Initialize first call
1.2 Initialize every call
 1.2.1 Proxy for soil nitrogen stress
 1.2 Separate between natural and agricultural LAI
 1.3 Calculate LAI threshold below which carbohydrate reserve is used

2. Use carbohydrate reserve to support growth and update leaf age
2.1 Calculate demand for carbohydrate reserve to support leaf and root growth
- Lai .lt. threshold?
- Leaf biomass .gt. 0?
- Beginning of growing season?
2.2 Update leaf age
 2.2.1 Decrease leaf age in youngest age class
 2.2.2 Update leaf mass fraction for the different age classes

Loop over PFTs

3. Calculate fractions of biomass production (NPP) to be allocated to the different biomass components
3.1. Calculate light, water and proxy for N stress
3.1.1 Light stress
3.1.2 Water stress
3.1.3 Proxy for N-stress
3.2. Calculate ratio between allocation to leaves, sapwood and roots
3.3 Calculate the allocation factors

Loop over PFTs

OUTPUT
PFT fraction of NPP that is allocated to different components ::f_alloc

A lot is described here:

http://forge.ipsl.jussieu.fr/orchidee/wiki/OrchideeDocumentation

1. Add path to the doxygen binary (1.6.2)

```
setenv PATH /home/users/mmancip/PROG/bin:$PATH
if ! ($?LD_LIBRARY_PATH) then
        setenv LD_LIBRARY_PATH /home/users/mmancip/PROG/lib
else
        setenv LD_LIBRARY_PATH /home/users/mmancip/PROG/lib:${LD_LIBRARY_PATH}
endif
```

2. Get some scripts

```
alias recup_TOOLS 'svn co svn://forge.ipsl.jussieu.fr/orchidee/trunk/TOOLS'
recup_TOOLS
```

3. Get standard architecture

```
alias svn_ano 'svn co http://forge.ipsl.jussieu.fr/igcmg/svn/modipsl/trunk'
svn_ano
```

4. Get Martial's personal branch

```
cd util
../TOOLS/recup_my_ORCHIDEE login_svn perso/martial.mancip my_email
```
Enter your password when asked for (several times).

5. Create makefiles

./ins_make -v

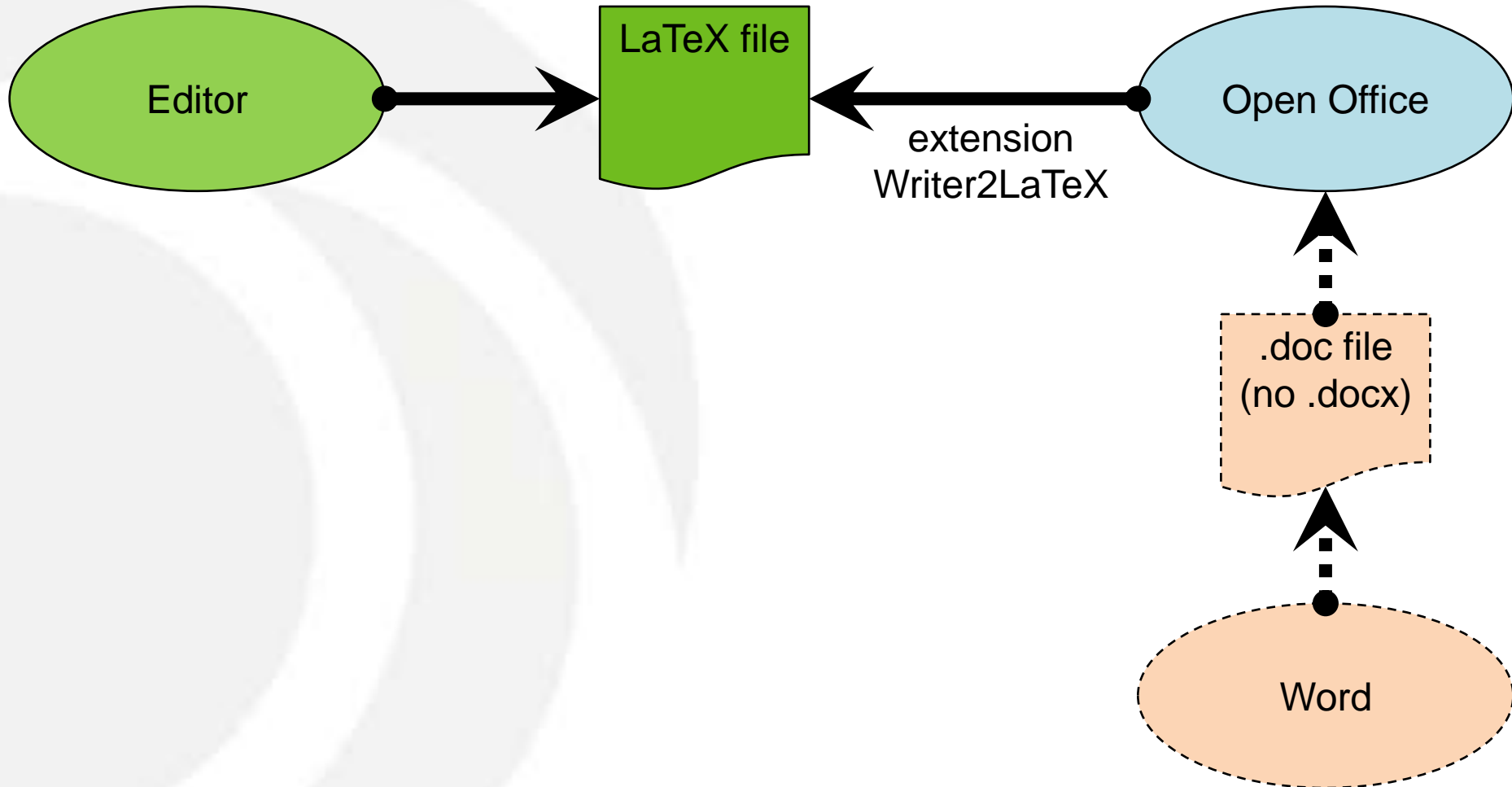## 6. Compile documentation

cd ../modeles/ORCHIDEE
./makeorchidee_fcm -rmdoc -doc

➥Creation of modeles/ORCHIDEE/docs/

latex/refman.pdf
html/index.html

- Start working on the content as soon as possible.

- Meet regularly with your binomial/trinomial.

- You can send files to the Documentation group for testing.