Model Controls

This is the example vignette for function: **snw_mp_control** from the **PrjOptiSNW Package.** This function sets and gets different control parameters.

Test SNW_MP_CONTROLS Defaults

Call the function with defaults.

```
mp_controls = snw_mp_control('default_base', true);
```

```
pos = 35 ; key = options
  fmincon options:

   Options used by current Algorithm ('interior-point'):
   (Other available algorithms: 'active-set', 'sqp', 'sqp-legacy', 'trust-region-reflective')

   Set properties:
                     Display: 'off'

   Default properties:
                   Algorithm: 'interior-point'
              CheckGradients: 0
          ConstraintTolerance: 1.0000e-06
    FiniteDifferenceStepSize: 'sqrt(eps)'
        FiniteDifferenceType: 'forward'
        HessianApproximation: 'bfgs'
                  HessianFcn: []
           HessianMultiplyFcn: []
                 HonorBounds: 1
      MaxFunctionEvaluations: 3000
              MaxIterations: 1000
             ObjectiveLimit: -1.0000e+20
         OptimalityTolerance: 1.0000e-06
                   OutputFcn: []
                     PlotFcn: []
                ScaleProblem: 0
   SpecifyConstraintGradient: 0
    SpecifyObjectiveGradient: 0
             StepTolerance: 1.0000e-10
          SubproblemAlgorithm: 'factorization'
                    TypicalX: 'ones(numberOfVariables,1)'
                 UseParallel: 0

   Show options not used by current Algorithm ('interior-point')

pos = 36 ; key = options2
  fsolve options:

   Options used by current Algorithm ('trust-region-dogleg'):
   (Other available algorithms: 'levenberg-marquardt', 'trust-region')

   Set properties:
                     Display: 'off'

   Default properties:
                   Algorithm: 'trust-region-dogleg'
              CheckGradients: 0
    FiniteDifferenceStepSize: 'sqrt(eps)'
        FiniteDifferenceType: 'forward'
           FunctionTolerance: 1.0000e-06
      MaxFunctionEvaluations: '100*numberOfVariables'
```

```
              MaxIterations: 400
          OptimalityTolerance: 1.0000e-06
                    OutputFcn: []
                      PlotFcn: []
    SpecifyObjectiveGradient: 0
                StepTolerance: 1.0000e-06
                     TypicalX: 'ones(numberOfVariables,1)'
                  UseParallel: 0

   Show options not used by current Algorithm ('trust-region-dogleg')

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CONTAINER NAME: mp_controls Scalars
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

	i	idx	value
A_aux	1	1	NaN
Aeq	2	2	NaN
B_aux	3	3	NaN
Beq	4	4	NaN
bl_compute_drv_stats	5	5	1
bl_print_a4chk	6	6	1
bl_print_a4chk_verbose	7	7	0
bl_print_ds	8	8	1
bl_print_ds_verbose	9	9	0
bl_print_evuvw19_jaeemk	10	10	1
bl_print_evuvw19_jaeemk_verbose	11	11	0
bl_print_evuvw19_jmky	12	12	1
bl_print_evuvw19_jmky_allchecks	13	13	1
bl_print_evuvw19_jmky_allchecks_verbose	14	14	0
bl_print_evuvw19_jmky_mass	15	15	1
bl_print_evuvw19_jmky_mass_verbose	16	16	0
bl_print_evuvw19_jmky_verbose	17	17	0
bl_print_evuvw20_jaeemk	18	18	1
bl_print_evuvw20_jaeemk_verbose	19	19	0
bl_print_find_tax_rate	20	20	1
bl_print_find_tax_rate_verbose	21	21	0
bl_print_precompute	22	22	1
bl_print_precompute_verbose	23	23	0
bl_print_v_planner	24	24	1
bl_print_v_planner_verbose	25	25	0
bl_print_vfi	26	26	1
bl_print_vfi_verbose	27	27	0
bl_print_vu_vw	28	28	1
bl_print_vu_vw_verbose	29	29	0
bl_timer	30	30	1
err	31	31	1
fl_max_trchk_perc_increase	32	32	1.5
nonlcon	33	34	NaN
tol	34	37	0.005

```
----------------------------------------
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CONTAINER NAME: mp_controls String
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
```

	i	idx	string
mp_params_name	"1"	"33"	"default_base"