

Model Controls

This is the example vignette for function: [snw_mp_controls](#) 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 = 21 ; 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 = 22 ; 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')

```

-----
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
CONTAINER NAME: mp_controls Scalars
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

```

	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_ds_store_all	6	6	0
bl_print_a4chk	7	7	1
bl_print_a4chk_verbose	8	8	0
bl_print_ds	9	9	1
bl_print_ds_verbose	10	10	0
bl_print_vfi	11	11	1
bl_print_vfi_verbose	12	12	0
bl_print_vu_vw	13	13	1
bl_print_vu_vw_verbose	14	14	0
bl_timer	15	15	1
bl_vfi_store_all	16	16	0
err	17	17	1
fl_max_trchk_perc_increase	18	18	1.5
nonlcon	19	20	NaN
tol	20	23	0.005

```

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XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
CONTAINER NAME: mp_controls String
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

```

	i	idx	string
	—	—	—
mp_params_name	"1"	"19"	"default_base"