

```

0001 function [sim, y]=limited_int(sim, ev, u, min__, max__, Ta)
0002 // Implements a time discrete integrator with saturation
0003 // of the output between min__ and max__
0004 //
0005 // u * - input
0006 // y * - output
0007 //
0008 // y(k+1) = sat( y(k) + Ta*u , min__ , max__ )
0009
0010 [sim, u__] = ld_gain(sim, ev, u, Ta);
0011
0012 // create z_fb, because it is not available by now
0013 [sim, z_fb] = libdyn_new_feedback(sim);
0014
0015 // do something with z_fb
0016 [sim, sum_] = ld_sum(sim, ev, list(u__, z_fb), 1, 1);
0017 [sim, tmp] = ld_ztf(sim, ev, sum_, 1/z);
0018
0019 // Now y becomes available
0020 [sim, y] = ld_sat(sim, ev, tmp, min__, max__);
0021
0022 // assign z_fb = y
0023 [sim] = libdyn_close_loop(sim, y, z_fb);
0024 endfunction

```

