Stanford Linear Accelerator Center

# New SNL Features

SNS Epics Meeting

November, 2000

# New Features

Manual: http://pipeline.keck.hawaii.edu:3636/realpublic/epics/seq/

- Runs on Unix

  (re)Implemented by William Lupton (KECK)

- Entry clause
- Exit clause
- Timer reset control

  Implemented by Greg White (SLAC)

# State Structure

```
State state_set_name {
   option option_list;


   entry { statement ...       }
   when (expression) { statement ...  } new_state_name
   exit { statement ...    }
}
```

# State Options

- -e
  perform entry actions even if coming from the same state
- -x
  perform exit actions even if going to the same state
- -t
  do not reset the time for delays when re-entering the same state

# Real-life Example with Entry and Exit

```
state inj_ready
{
 option -x; /* Execute exit clause every time */
 entry
 {
                qs(3);
                NEW_STATE(Quiescent);
                MPG_SAFE
 }
 when (bbr_status < BBR_INJSAFE)
 {
                PUBLISH("BaBar went UNSAFE")
                SET_PUT(req_status_inject,0);
 } state inj_deny
 when(req_status_stop)
 {
                PUBLISH("Already stopped")
 }  state inj_ready
 exit
 {
                taskDelay(1);
                CLEAR_REQS
 }
}
```