# %gall Agent Structure

### %gall Agent (app/example-agent-action.hoon)

```
graph-store, example-agent-name
/+ default-agent, dbug
+$ versioned-state
  $% state-0
+$ state-0
  $: [%0 internal-value=@ud]
+$ card card:agent:gall
%-
    agent:dbug
=|
    state-0
=* state -
^_
    agent:gall
=<
    =bowl:gall
    this
              ~(. (default-agent this %|) bowl)
    default
    main
              ~(. +> bowl)
                                      define initial state & starting values
++ on-init
  ^- (quip card _this)
  `this(internal-value 1)
               on-save:default
                                  :: expose state for saving
++ on-save
++ on-load on-load:default
++ on-peek on-peek:default
++ on-watch on-watch:default
                                  :: load old state, upgrade if necessary
                                  :: expose scry namespace
                                  :: respond to poke
               on-watch:default
                                  :: handle new subscription
++ on-leave on-leave:default
                                  :: handle unsubscribe request
               on-agent:default
                                  :: handle sign from agent
++ on-agent
                                  :: handle Arvo signs
++ on-arvo
               on-arvo:default
               on-fail:default
                                  :: handle errors
++ on-fail
:: Helper core
    =bowl:gall
++ do-thing ~
```

# %gall Agent Structure

### Mark (mar/example-agent-action/action.hoon)

### Structure (sur/example-agent-action.hoon)

```
|%
+$ example-agent-action
   $%
     :: All actions are examples here.
     [%view who=@p]
     [%stop-view who=@p]
     [%increment-internal-value-remote who=@p]
     [%increment-internal-value ~]
==
```

#### **Bowl Definition**

```
++ bowl
                    :: standard app state
 $: $: our=ship
                    :: host
         src=ship
                    :: guest
         dap=term
                    :: agent
                    ::
     ==
                        outgoing subscriptions
     $:
        wex=boat
                    ::
                        incoming subscriptions
         sup=bitt
                    ::
     $:
         act=@ud
                    :: change number
                    :: entropy
         env=@uvJ
                  :: current time
         now=@da
                    :: load source
         byk=beak
```