The EFSM is the tuple S = (Q, Σ1, Σ2, q0, V, Λ),

where

Q = {dormant, init, idle, monitoring, safe_shutdown, error_diagnosis, final}

Σ1 = {kill, start, init_ok, begin_monitoring, moni_crash, init_crash, idle_crash, retry_init, idle_rescue, moni_rescue, shutdown, sleep}

Σ2 = {retry++, moni_err_msg, idle_err_msg, init_err_msg, retry=0}

q0 : dormant

V : retry = {0, 1,2,3}

Λ: Transition specifications

1. → dormant
2. dormant $\xrightarrow{kill}$ final
3. dormant $\xrightarrow{start}$ init
4. init $\xrightarrow{init\_ok}$ idle
5. init $\xrightarrow{init_{crash}/\ init\_err\_msg}$ error_diagnosis
6. init $\xrightarrow{kill}$ final
7. idle $\xrightarrow{begin\_monitoring}$ monitoring
8. idle $\xrightarrow{idle\_crash/\ idle\_err\_msg}$ error_diagnosis
9. idle $\xrightarrow{kill}$ final

10. monitoring $\xrightarrow{kill}$ final
11. monitoring $\xrightarrow{moni\_crash/\ moni\_err\_msg}$ error_diagnosis
12. error_diagnosis $\xrightarrow{kill}$ final
13. error_diagnosis $\xrightarrow{moni\_rescue}$ monitoring
14. error_diagnosis $\xrightarrow{retry\_init[retry\leq 3]/retry++}$ init
15. error_diagnosis $\xrightarrow{idle\_rescue}$ idle
16. error_diagnosis $\xrightarrow{shutdown[retry>3]/retry=0}$ safe_shutdown
17. safe_shutdown $\xrightarrow{kill}$ final
18. safe_shutdown $\xrightarrow{sleep}$ $dormant$