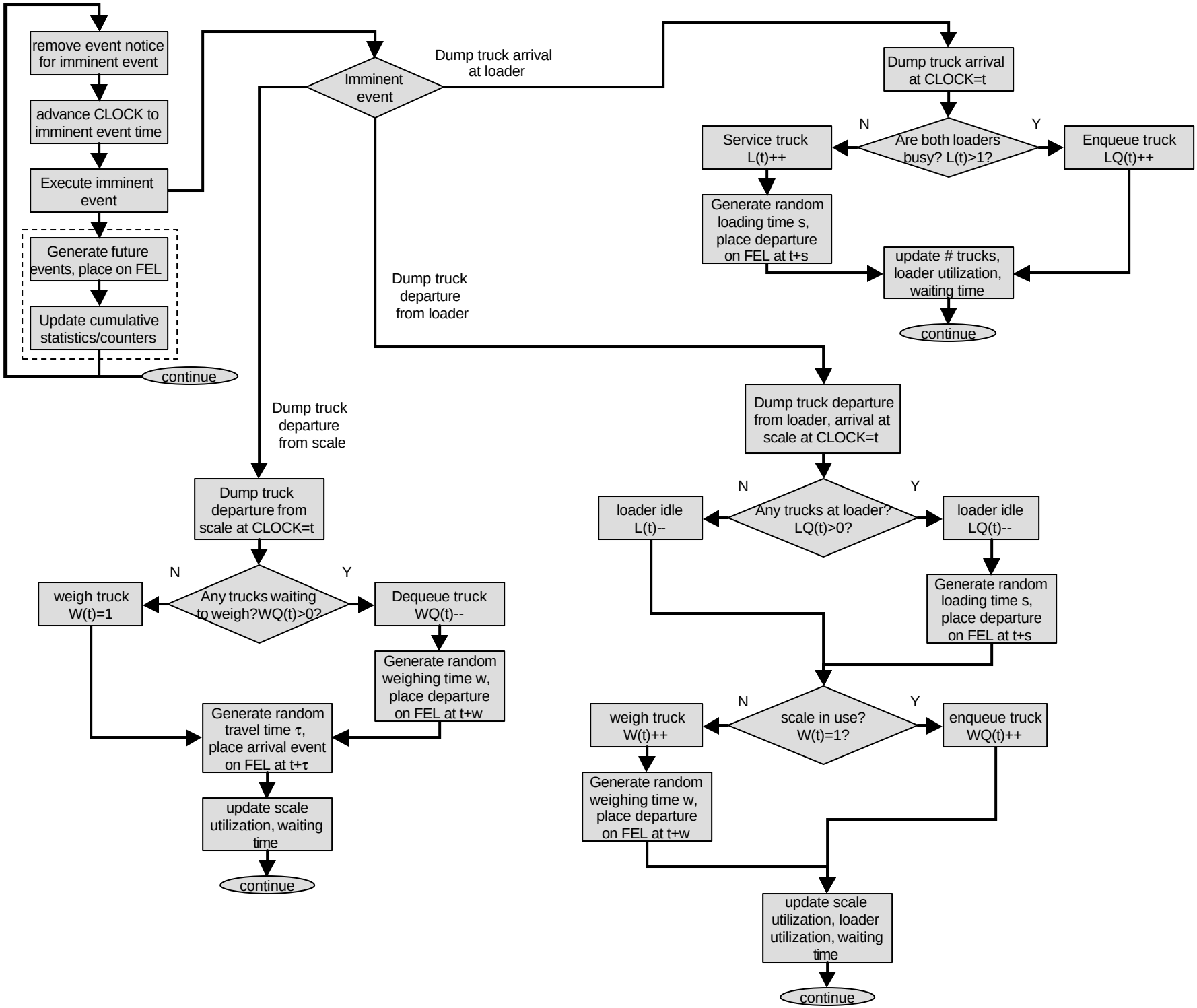
remove event notice for imminent event
advance CLOCK to imminent event time
Execute imminent event
Generate future events, place on FEL
Update cumulative statistics/counters
continue
Imminent event
Dump truck arrival at loader
Dump truck departure from loader
Dump truck departure from scale
Dump truck arrival at CLOCK=t
Are both loaders busy? L(t)>1?
N
Y
Service truck L(t)++
Enqueue truck LQ(t)++
Generate random loading time s, place departure on FEL at t+s
update # trucks, loader utilization, waiting time
continue
Dump truck departure from loader, arrival at scale at CLOCK=t
Any trucks at loader? LQ(t)>0?
N
Y
loader idle L(t)--
loader idle LQ(t)--
Generate random loading time s, place departure on FEL at t+s
scale in use? W(t)=1?
N
Y
weigh truck W(t)++
enqueue truck WQ(t)++
Generate random weighing time w, place departure on FEL at t+w
update scale utilization, loader utilization, waiting time
continue
Dump truck departure from scale at CLOCK=t
Any trucks waiting to weigh?WQ(t)>0?
N
Y
weigh truck W(t)=1
Dequeue truck WQ(t)--
Generate random weighing time w, place departure on FEL at t+w
Generate random travel time τ, place arrival event on FEL at t+τ
update scale utilization, waiting time
continue