

R-Dsys^{0,22}

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[[R]]
≡def case R of
  Rnone =>
    Rplus(left,right)=>rec1,rec2.rec1 ⊕ rec2
    Rinit(loc,T,x,v)=> @loc: x:T
      initially x = v
    Rframe(loc,T,x,L)=> @loc: only L affects x : T
    Rsframe(lnk,tag,L)=> @source(lnk): only L sends on (lnk with tag)
    Reflect(loc,ds,knd,T,x,f)=> @loc: with declarations
    ds:ds
    da:knd : T

effect of knd(v) is x := f s v
Rsends(ds,knd,T,l,dt,g)=> @source(l): with declarations
ds:ds
da:knd : T ⊕ lnk-decl(l;dt)
  knd(v) sends g s v on link l
Rpre(loc,ds,a,T,P)=> @loc (with ds: ds
  action a:T
  precondition a(v) is
  P s v)
Raframe(loc,k,L)=> @loc: k affects only members of L
Rbframe(loc,k,L)=> @loc: k sends only links in L
Rrframe(loc,x,L)=> @loc: only members of L read x

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clarification:

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[[R]]
≡def case R of
  Rnone =>
    Rplus(left,right)=>rec1,rec2.rec1 ⊕ rec2
    Rinit(loc,T,x,v)=> @loc: x:T
      initially x = v
    Rframe(loc,T,x,L)=> @loc: only L affects x : T
    Rsframe(lnk,tag,L)=> @source(lnk): only L sends on (lnk with tag)
    Reflect(loc,ds,knd,T,x,f)=> @loc: with declarations
    ds:ds
    da:knd : T

effect of knd(v) is x := f s v
Rsends(ds,knd,T,l,dt,g)=> @source(l): with declarations
ds:ds

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da:fpf-join(KindDeq;knd : T;lnk-decl(l;dt))
knd(v) sends *g s v* on link *l*
 Rpre(*loc,ds,a,T,P*)=> @*loc* (with ds: *ds*
 action *a:T*
 precondition *a(v)* is
 P s v)
 Raframe(*loc,k,L*)=> @*loc*: *k* affects only members of *L*
 Rbframe(*loc,k,L*)=> @*loc*: *k* sends only links in *L*
 Rrframe(*loc,x,L*)=> @*loc*: only members of *L* read *x*