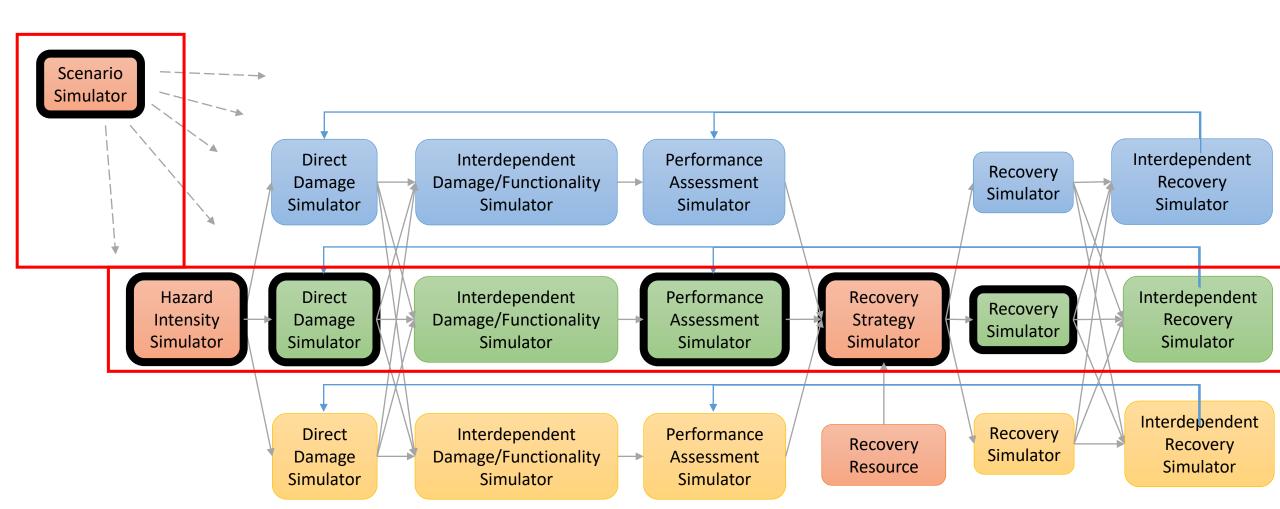
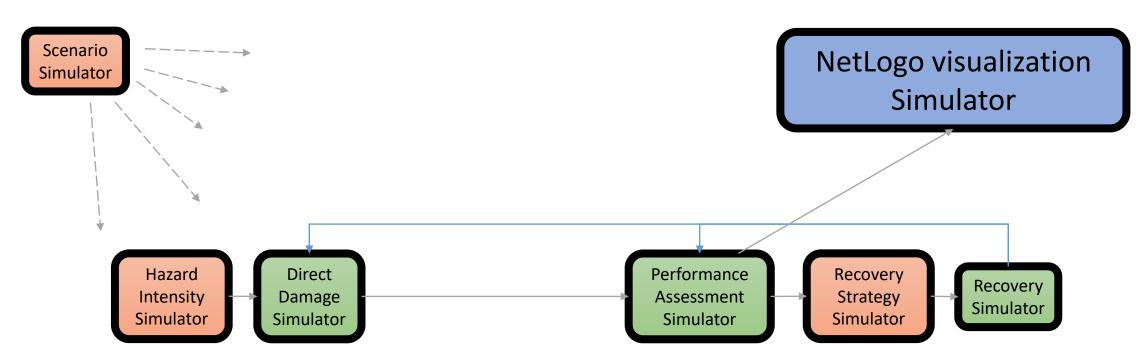
- Please read the user manual and the other documentations of the SRTI
- The files of the SRTI Server, wrapper, GUI, etc... may not be up-to-date. Please refer to the SRTI GitHub site.

Szu-Yun Lin, April 2020

## Choose one system to simplify problem



## Choose one system to simplify problem and add a NetLogo visualization simulator



Simulator	Message
Scenario_Sim	Scenario
Hazard_Sim	GroundMotion
DirectDamagePN_Sim	DDamagePN
PerformancePN_Sim	PerformancePN
Strategy_Sim	Strategy
PhysRecoveryPN_Sim	PhysRecoveryPN

Scenario	
nodePN	Double(numNodePN,3)
connectivityPN	Double(numLinkPN,2)
GroundMotion	
gaPN	Double(numNodePN, 1)
gvPN	Double(numNodePN, 1)
DDamagePN	
nodeDSPN	Double(numNodePN, 1)
linkDSPN	Double(numLinkPN, maxNumSegmentPN)
nodeFcnPN	Double(numNodePN, 1)
linkFcnPN	Double(numLinkPN, 1)

PerformancePN	
CLPN	Double
SRPN_ppl	Double
SRPN_hhd	Double
SRPN_area	Double
nodeDSPN	Double(numNodePN, 1)
linkDSPN	Double(numLinkPN,
	maxNumSegmentPN)
nodeFcnPN	Double(numNodePN, 1)
linkFcnPN	Double(numLinkPN, 1)
Strategy	
Strategy	
resoursePN	Double
resoursePN	
resoursePN  PhysRecoveryPN	J
resoursePN  PhysRecoveryPN  nodeDSPN	Double(numNodePN, 1)
resoursePN  PhysRecoveryPN  nodeDSPN	Double(numNodePN, 1) Double(numLinkPN,
resoursePN  PhysRecoveryPN  nodeDSPN  linkDSPN	Double(numNodePN, 1) Double(numLinkPN, maxNumSegmentPN)
resoursePN  PhysRecoveryPN  nodeDSPN  linkDSPN  nodeFcnPN	Double(numNodePN, 1)  Double(numLinkPN, maxNumSegmentPN)  Double(numNodePN, 1)
resoursePN  PhysRecoveryPN  nodeDSPN  linkDSPN  nodeFcnPN  linkFcnPN	Double(numNodePN, 1)  Double(numLinkPN, maxNumSegmentPN)  Double(numNodePN, 1)  Double(numLinkPN, 1)

Stage 0: 1<sup>st</sup> shock Stage 1: short-term recovery

Scenario	-
GroundMotion	Scenario
DDamagePN	Scenario, GroundMotion, PhysRecoveryPN
PerformancePN	Scenario, DDamagePN, PhysRecoveryPN
Strategy	PerformancePN
PhysRecoveryPN	Scenario, DDamagePN, Strategy
	GroundMotion DDamagePN PerformancePN Strategy

Stage 0: 1<sup>st</sup> shock Stage 1: short-term recovery

Simulator Name	Published Message Name	Subscribed Message Name
Scenario_Sim	Scenario	
Hazard_Sim	GroundMotion	Scenario
DirectDamagePN_Sim	3 DDamagePN	Scenario, GroundMotion, PhysRecoveryPN
PerformancePN_Sim	• PerformancePN	Scenario, DDamagePN, PhysRecoveryPN
Strategy_Sim	1 Strategy	PerformancePN
PhysRecoveryPN_Sim	2 PhysRecoveryPN	Scenario, DDamagePN, Strategy