# Cyber Physical System Wind Tunnel

William Xu

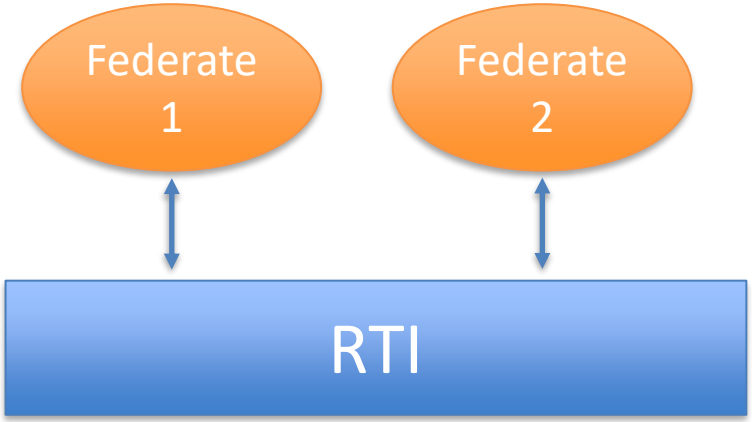
Instructors: Dr. Himanshu Neema, Dr. Harmon Nine

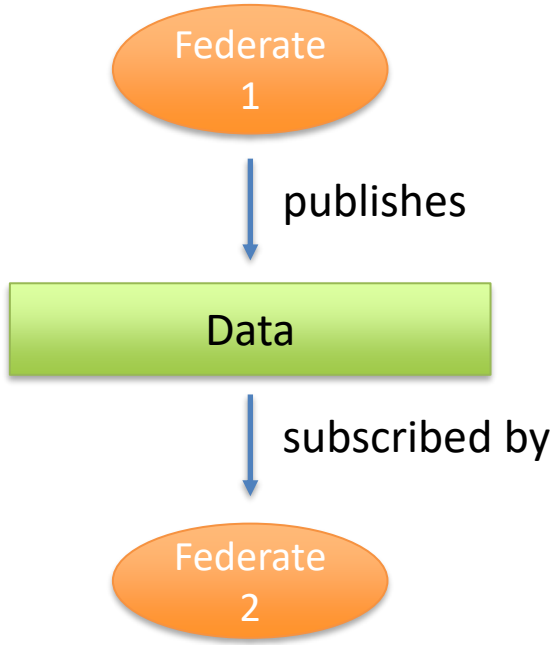
Tel (615) 343-7472 | Fax (615) 343-7440
1025 16th Avenue South Nashville, TN 37212
www.isis.vanderbilt.edu

VANDERBILT UNIVERSITY

# CPSWT

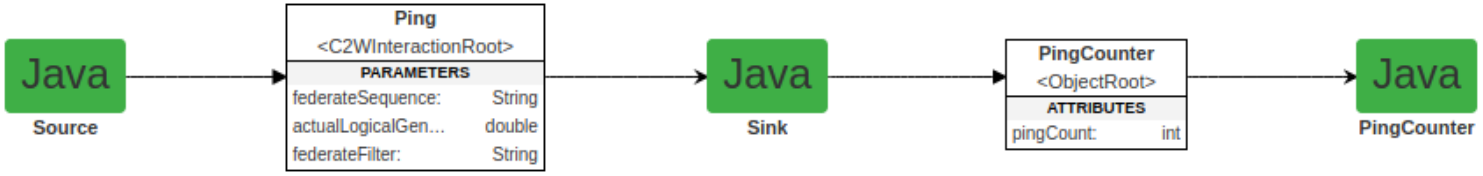
- A platform that facilitates the reuse and integration of simulation tools.
- Based on the High Level Architecture (HLA)
  - Components: Federate, Federation, Runtime Infrastructure
  - Actions: e.g. data sharing



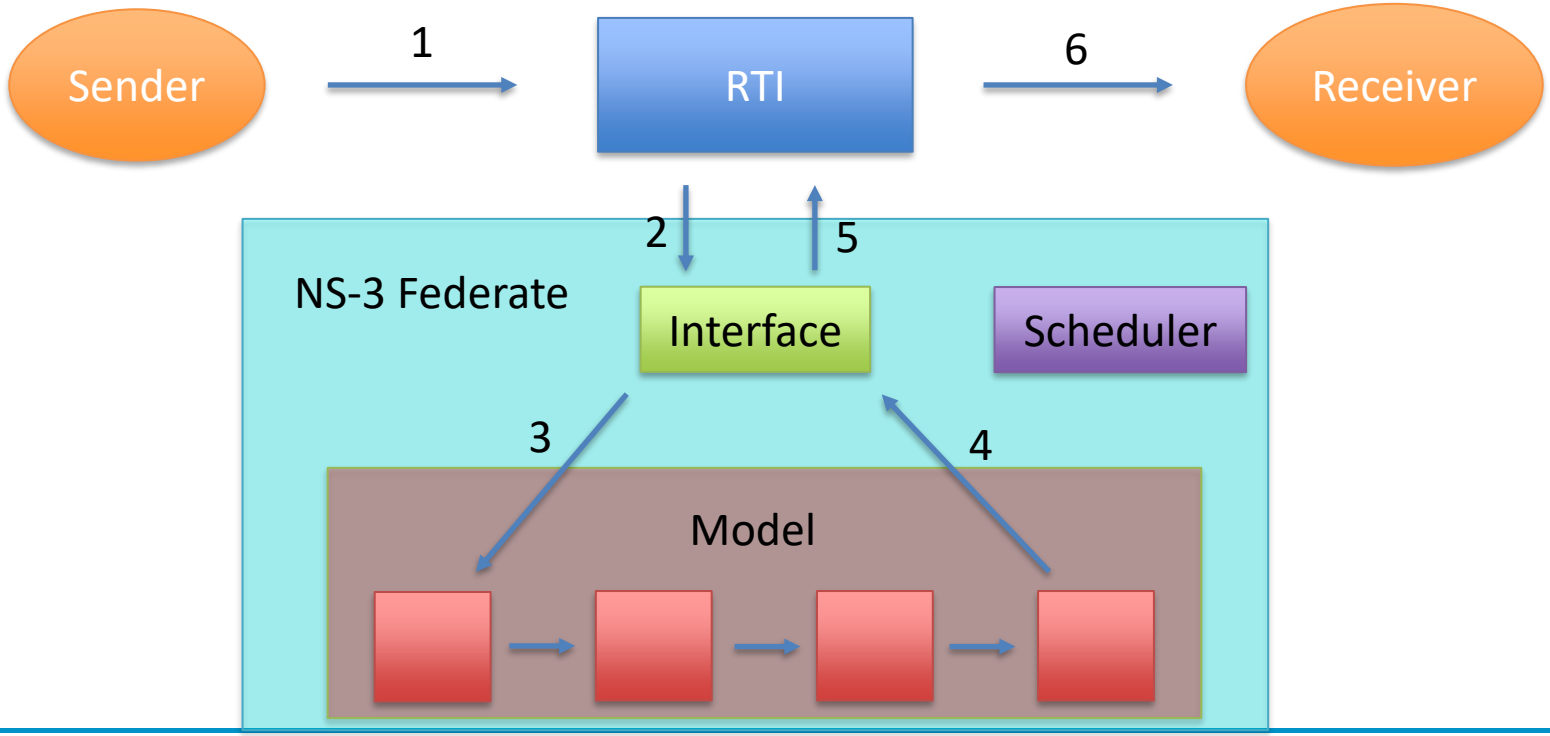
# CPSWT

- Makes the implementation of HLA much easier
- Prebuilt RTI / federates / infrastructures
- WebGME auto generates glue code according to the FOM



# My work

- Updated samples so that they use components that are in libraries
- Making NS-3 into a CPSWT federate



# Reflection

- Challenge:
  - Learning new stuff
  - Debugging
- Lessons learned:
  - Fully utilize online resources
  - Don’t get stuck for too long