

NeSSi² Implementation task

Scenario

Several client applications located in different access networks request from a small set of servers some regular information update. This information is either the current time, a random number of messages of the day text; all information is encoded as a string. Each client records an event that counts how many requests he sent to a server and how many replies he received from a server. A server records the received requests and replies he sends out.

The access networks are connected to several distribution networks, which are connected to a core network.

Tasks

- 1) Write a information request client for:
 - a. Current time
 - b. Random number
 - c. Message of Day
- 2) Each client offers the following configuration options:
 - a. Start time (tick) for the requests
 - b. End time (tick) fort he requests
 - c. IP address for the server to be used
- 3) Write a server device that offers one of the following information's:
 - a. Current time
 - b. Random number
 - c. Message of Day
- 4) Write a server application the accesses the device for the information above
- 5) Create log events fort he event described in the scenario and add them to applications.
- 6) Create a network with about 30 standard client devices in three access networks; connect these through to distribution networks to a core network.
- 7) Create two access networks with a server device for each information type. Connect these access networks through a distribution network to the core network.
- 8) Create a scenario.
 - a. Create client and server profiles for each information type and distribute them to client and server devices.
 - b. Ensure that during profile creation you create profiles with different start/end times and server IP addresses
- 9) Create a session:
 - a. Ensure the duration is longer than your maximum end time used in the profiles.
 - b. Select the standard logging configuration.
- 10) Launch the session
- 11) After completion of the session, review the simulation in the simulation perspective.