ns-3 briefing for DTNRG

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ns-3 project (University of Washington) July 24, 2007



ns-3 Program Details

- Open source project (licensing and development model)
- Initial funding from NSF and INRIA for students and staff programmers
 - NSF PIs: Tom Henderson, George Riley, Sumit Roy, Sally Floyd
 - INRIA Planete' research group (Mathieu Lacage)
- Software developed using freely available tools on commodity hardware
- Intended to eventually replace ns-2



ns-3 goals

- Long-term architectural integrity: high modularity
- Easy integration of real-world code
- Easy integration of network testbeds
- Large scale simulation via parallelization and other proven techniques
- Updated models (detailed 802.11/wimax models, peer-to-peer, etc.)
- Flexible, powerful tracing and statistics
- Focus on research use
 - with frameworks for educational use



ns-3 high-level view

- C++-only core with python wrappers
- Basic IP model close to real-world networks
 - e.g. nodes designed for multiple interfaces
- Every facility is designed with extensibility and flexibility in mind
 - MAC+PHY layers
 - command line arguments and default values
 - COM-like query interface and component manager
 - application layer and APIs
 - packets
 - tracing
 - simulation time



Questions for DTNRG

What are your requirements for simulation of DTNs?

Any interest in the RG in exploring DTN simulations over ns-3?

For more information:

Web site:

http://www.nsnam.org

Mailing list:

http://mailman.isi.edu/mailman/listinfo/ns-developers

