

# Dynamic MANET On-demand Routing Protocol

IETF 64 DYMO-03 Ian Chakeres Elizabeth Belding-Royer Charlie Perkins



Ian Chakeres

## Changes DYMO 02->03



- Route updates
  - Current routing information
  - Sequence number
  - Hop count
- Path accumulation
  - SHOULD changed to MAY
  - Continued examination...
- RERR generation recommendation
- S-bit
  - Packet solicitation
  - Unidirectional link blacklisting



## DYMO-04-pre



- RERR dissemination decision
- 16-bit sequence numbers
- Remove UERR
- Common packet structure
  - Simple, extensible, compact
  - Perhaps provide commonality and/or compatibility between MANET protocols



#### **Short Term Work Items**



- Message structure
- Implementation experience
  - Tradeoffs
  - Default parameters
  - Path accumulation
  - Difficulties, ambiguities, etc.
- Extensions, improvements, optimizations please consider
- Please contact me if you are interested in reviewing, implementing, or testing DYMO ian.chakeres@gmail.com



## **DYMO** for 6lowpan

draft-montenegro-6lowpan-dymo-low-routing-00.txt



- Only destination replies to RREQ TargetSeqNum assumed to be zero
- No path accumulated information appended or propagated
- Link layer feedback for link break detection
- Ignore RE messages received with low signal strength using IEEE 802.15.4 LQI
- Long route timeout
- Remove unused routing table entries as needed
- Various packet format simplifications
- No change to basic DYMO protocol operation
- Please comment and bring up any issues for dymo or dymo-low on list, email me or other authors



#### **DYMO Discussion**



#### **Questions & Comments**

http://moment.cs.ucsb.edu/dymo

## Implementation Issues

https://lists.sourceforge.net/lists/listinfo/aodvimpl-public

