

## Протоколы маршрутизации

### Pro-active Routing (Table-driven)

| Протокол   | Ссылка на стандарт   | Комментарий   |
|--|--|---|
| AWDS (Ad-hoc Wireless Distribution Service)                                      | <a href="http://awds.berlios.de">awds.berlios.de</a>   | Layer 2 wireless mesh routing protocol, LGPL implementation available   |
| Babel  |  | inspired by DSDV, free implementation available   |
| CGSR (Clusterhead Gateway Switch Routing protocol)                               | <a href="http://Cluster-Head+Gateway+Switch+Routing+Protocol.html">Cluster-Head+Gateway+Switch+Routing+Protocol.html</a>                                 | IEEE  |
| DFR ("Direction" Forward Routing)  |  |   |
| DBF (Distributed Bellman-Ford Routing Protocol)                                  |  | ISBN 0-13-196825-4  |
| DSDV (Highly Dynamic Destination-Sequenced Distance Vector routing protocol)     | <a href="http://Highly+Dynamic+Destination-Sequenced+Distance-Vector+Routing.html">Highly+Dynamic+Destination-Sequenced+Distance-Vector+Routing.html</a> |   |
| Guesswork  | <a href="http://guesswork.pdf">guesswork.pdf</a>   |   |
| HSR (Hierarchical State Routing protocol)  | <a href="http://draft-oneill-li-hsr-00.txt">draft-oneill-li-hsr-00.txt</a>   | Distance Source Distance Vector routing protocol (DSDV)   |
| IARP (Intrazone Routing Protocol/pro-active part of the ZRP)                     | <a href="http://draft-ietf-manet-zone-iarp-02.txt">draft-ietf-manet-zone-iarp-02.txt</a>   |   |
| LCA (Linked Cluster Architecture)  |  |   |
| MMRP (Mobile Mesh Routing Protocol)  | <a href="http://mobilemesh">mobilemesh</a>   | Realization <a href="http://mobilemesh">mobilemesh</a>  |
| OLSR (Optimized Link State Routing Protocol)                                     | <a href="http://rfc3626">rfc3626</a> , <a href="http://www.olsr.net">www.olsr.net</a> , <a href="http://www.olsr.org">www.olsr.org</a>                   | Realizations: olsrd (Unik-OLSR) <a href="http://www.olsr.org">www.olsr.org</a> ; qolyester <a href="http://qolsr.lri.fr">qolsr.lri.fr</a> ; INRIA <a href="http://olsr">olsr</a> , <a href="http://OOLSR">OOLSR</a> and <a href="http://SMOLSR-MOLSR">SMOLSR-MOLSR</a> ; UPV for Windows NT/CE <a href="http://olsr.htm">olsr.htm</a> |
| TBRPF (Topology Dissemination based on Reverse-Path Forwarding routing protocol) | <a href="http://rfc3684">rfc3684</a>   |   |
| WAR (Witness Aided Routing)  |  |   |
| WRP (Wireless Routing Protocol)  | <a href="http://murthy95routing.html">murthy95routing.html</a>   |   |

| Протокол                                     | Ссылка на стандарт   | Комментарий |
|--|--|-------------|
| STAR (Source-Tree Adaptive Routing Protocol) | <a href="#">Source-Tree+Adaptive+Routing+Protocol.html</a> |             |

### Reactive Routing (On-demand)

| Протокол   | Ссылка на стандарт  | Комментарий   |
|--|---|---|
| Multirate Ad-hoc On-demand Distance Vector Routing Protocol                | <a href="#">mr-aodv.pdf</a>   |   |
| Reliable Ad-hoc On-demand Distance Vector Routing Protocol                 |   |   |
| MEPA in MANET (Minimum Exposed Path to the Attack in Mobile Adhoc Network) | <a href="#">04196209.pdf</a>  |   |
| ARA for MANET (Ant-based Routing Algorithm for Mobile Ad-Hoc Networks)     | <a href="#">www.adhoc-nets.de</a>   |   |
| ACOR (Admission Control enabled On demand Routing)                         |   | July 2006 - work in progress?   |
| Ariadne  | <a href="#">ariadne.pdf</a>   |   |
| ABR (Associativity-Based Routing)  | <a href="#">draft-ietf-manet-longlived-adhoc-routing-00.txt, 5987011.html</a> |   |
| SSA (Signal Stability-based Adaptive Routing Protocol)                     | <a href="#">Signal+Stability-based+Adaptive+Routing+Protocol.html</a>         |   |
| AODV (Ad-hoc On-demand Distance Vector)                                    | <a href="#">rfc3561</a>   | Realizations: Ad-hoc Support Library and AODV-UIUC <a href="#">aslib.sourceforge.net</a> ; Embedded AODV & TORA <a href="#">www.novaroam.com</a> ; AODV-UCSB <a href="#">aodv.html</a> ; AODV-UU <a href="#">Main_Page</a> ; AODV for IPv6 (Based on AODV-UU) <a href="#">www.crl.se</a> ; AODV Kernel <a href="#">aodv_kernel</a> ; AODV Spanning Tree <a href="#">www.cs.ucsb.edu</a> ; UoB-JAdhoc <a href="#">www.aodv.org</a> ; UoBWinAODV <a href="#">www.aodv.org</a> |

| Протокол  | Ссылка на стандарт   | Комментарий   |
|---|--|---|
| Ad-hoc On-demand Multipath Distance Vector              |  |   |
| OSPF (Open Shortest Path First)                         | <a href="#">rfc2328</a>                                      | Realizations: Boeing's implementation of OSPF MANET <a href="#">ospf</a> and <a href="#">gitweb.cgi</a> ; Overlapping Relays implementation <a href="#">index.php</a> |
| BSR (Backup Source Routing)                             |  |   |
| CHAMP (Caching And MultiPath routing)                   | <a href="#">Infocom2003-CHAMP.pdf</a>                        |   |
| DSR (Dynamic Source Routing)                            | <a href="#">rfc4728</a>                                      | Realizations: DSR-UU <a href="#">Main_Page</a> ; picoNet <a href="#">piconet.sourceforge.net</a> ; Monarch implementation <a href="#">dsr-impl.html</a>               |
| RABR (Route-Lifetime Assessment-Based Routing)          | <a href="#">Route-Lifetime+Assessment-Based+Routing.html</a> |   |
| DSRFLOW (Flow State in the Dynamic Source Routing)      |  |   |
| Dynamic Nix-Vector Routing                              |  |   |
| DYMO (DYnamic Manet On-demand Routing)                  | <a href="#">draft-ietf-manet-dymo-14.txt</a>                 | Realization <a href="#">dymoum</a>  |
| MAODDP (Mobile Ad-hoc On-Demand Data Delivery Protocol) | <a href="#">MAODDP1.html</a>                                 | Realization <a href="#">annualcon.pdf</a>   |
| ARAN (Authenticated Routing for Ad-Hoc Networks)        | <a href="#">arand</a>  |   |

### Flow Oriented Routing

| Протокол   | Ссылка на стандарт                                | Комментарий                                     |
|--|---|---|
| <a href="#">GB (Gafni-Bertsekas)</a>                                       | <a href="#">Gafni-Bertsekas.html</a>              | The first Link Reversal Routing (LRR) algorithm |
| <a href="#">IERP (Interzone Routing Protocol/reactive part of the ZRP)</a> | <a href="#">draft-ietf-manet-zone-ierp-02.txt</a> |   |
| <a href="#">LBR (Link life Based routing)</a>                              | <a href="#">Link+Life+Based+Routing.html</a>      |   |

| Протокол  | Ссылка на стандарт   | Комментарий  |
|---|--|--|
| LMR (Lightweight Mobile Routing protocol)                         | <a href="#">Lightweight+Mobile+Routing.html</a>            |  |
| LQSR (Link Quality Source Routing)                                | <a href="#">mesh</a>                                       | Version of DSR with Link Quality Metrics. Realization <a href="#">mesh</a>   |
| LUNAR (Lightweight Underlay Network Ad hoc Routing)               | <a href="#">LUNAR, 2003-021-nc.pdf</a>                     |  |
| MOR (Multipath On-demand Routing Protocol)                        | <a href="#">205690300.pdf</a>                              |  |
| MPRDV (Multipoint Relay Distance Vector protocol)                 | <a href="#">algotel2003ajv.pdf</a>                         |  |
| QuaSAR (QoS aware source initiated ad-hoc routing)                | <a href="#">quasar_secon04.pdf</a>                         | both reactive and proactive mechanisms that aim to diminish the communication disruption time experienced in highly mobile ad-hoc networks |
| RDMAR (Relative-Distance Micro-discovery Ad hoc Routing protocol) |  | Internet Draft, draft-ietf-manet-rdmar-00.txt  |
| SrcRR   | <a href="#">srcrr-draft.pdf</a>                            | DSR and ETX based, optimized for performance   |
| SSR (Signal Stability Routing protocol)                           |  |  |
| PLBR (Preferred link based routing)                               | <a href="#">Preferred+Link-Based+Routing+Protocol.html</a> |  |
| FORP (Flow-Oriented Routing Protocol)                             | <a href="#">Flow-Oriented+Routing+Protocol.html</a>        |  |

### Adaptive Routing (Situation-Aware)

| Протокол   | Ссылка на стандарт                            | Комментарий  |
|--|---|--|
| TORA (Temporally-Ordered Routing Algorithm routing protocol) | <a href="#">draft-ietf-manet-tora-spec-04</a> | A Link Reversal Routing (LRR) algorithm. Realization <a href="#">Temporally-Ordered+Routing+Algorithm.html</a> |

### Hybrid (Pro-Active/Reactive)

| Протокол   | Ссылка на стандарт                                | Комментарий  |
|--|---|--|
| ARPAM  |   | for aeronautical MANETs                                  |
| HRPLS (Hybrid Routing Protocol for Large Scale Mobile Ad Hoc Networks with Mobile Backbones) |   |  |
| HSLs (Hazy Sighted Link State routing protocol)  | <a href="#">hsls, progress_report, TM1301.pdf</a> | CUWiN implementation for NetBSD <a href="#">download</a> |
| OORP (OrderOne Routing Protocol)   | <a href="#">www.orderonenetworks.com</a>          | Patented   |

| Протокол                               | Ссылка на стандарт   | Комментарий  |
|--|--|--|
| TORA                                   |  | See before   |
| ZRP (Zone Routing Protocol)            | <a href="#">draft-ietf-manet-zone-zrp-04.txt</a>                 | uses IARP as pro-active and IERP as reactive component. Realization <a href="http://www.zrp.be">www.zrp.be</a> |
| BRP (Broadcast Resolution Protocol)    | <a href="#">Broadcast+Resolution+Protocol.html</a>               | Made from ZRP  |
| SBMP (SBoX Management Protocol)        | <a href="#">comnet127.ps</a> , <a href="#">S1389128600002085</a> | Smart box architecture: a hybrid solution for IP QoS provisioning  |
| ADV (Adaptive Distance Vector Routing) | <a href="#">Adaptive+Distance+Vector+Routing.html</a>            |  |
| TLR/TRR/AGPF Terminode Routing         | <a href="#">TUM-I0311.pdf</a>                                    |  |

### Hierarchical Routing Protocols

| Протокол   | Ссылка на стандарт   | Комментарий  |
|--|--|--|
| CBRP (Cluster Based Routing Protocol)              | <a href="#">Cluster+Based+Routing+Protocol.html</a>                      |  |
| CEDAR (Core Extraction Distributed Ad hoc Routing) | <a href="#">Core+Extraction+Distributed+Ad+Hoc+Routing+Protocol.html</a> | <a href="#">draft-ietf-manet-cedar-spec-00.txt</a> |
| DART (Dynamic Address Routing)                     | <a href="http://dart.cs.ucr.edu">dart.cs.ucr.edu</a>                     |  |
| DDR (Distributed Dynamic Routing Algorithm)        | <a href="#">ddr.ps</a>   |  |
| FSR (Fisheye State Routing protocol)               | <a href="#">Fisheye+State+Routing.html</a>                               | <a href="#">draft-ietf-manet-fsr-00.txt</a>        |
| GSR (Global State Routing protocol)                | <a href="#">60636.html</a> , <a href="#">jsac99.ps.gz</a>                |  |
| HARP (Hybrid Ad Hoc Routing Protocol)              | <a href="#">harp.ps</a>  |  |
| HSR (Host Specific Routing protocols)              |  |  |

| Протокол  | Ссылка на стандарт        | Комментарий                     |
|---|---------------------------|---------------------------------|
| HSR (Hierarchical State Routing)                            |                           | See pro-active routing          |
| LANMAR (Landmark Routing Protocol for Large Scale Networks) |                           | draft-ietf-manet- lanmar-01.txt |
| ATR (Augmented Tree-based Routing)                          | <a href="#">0711.3099</a> |                                 |

### Geographical Routing Protocols

| Протокол  | Ссылка на стандарт                                      | Комментарий   |
|---|---|---|
| ALARM (Adaptive Location Aided Routing Protocol - Mines)                            | <a href="#">Boleng-PhD.pdf</a>                          |   |
| BGR (Blind Geographic Routing)  |   |   |
| DREAM (Distance Routing Effect Algorithm for Mobility)                              |   | ACM/IEEE Mobicom, pages 76-84, October 1998   |
| GLS(Grid) (Geographic Location Service)   |   |   |
| LAR (Location-Aided Routing protocol)   | <a href="#">Location-Aided+Routing+Protocol.html</a>    | ACM/IEEE Mobicom, pages 66-75, October 1998   |
| GPSAL (GPS Ant-Like Routing Algorithm)  |   | Baltzer Journal of Telecommunications Systems, 18:1-3, 85-100, Kluwer Academic Publishers, 2001 |
| ZHLS-GF (Zone-Based Hierarchical Link State Routing Protocol with Gateway Flooding) | <a href="#">ZHLS-GF</a>                                 |   |
| GPSR (Greedy Perimeter Stateless Routing)   | <a href="#">Greedy+Perimeter+Stateless+Routing.html</a> |   |
| Greedy Face Greedy (GFG)  | <a href="#">1581131747, 313239.313282</a>               |   |
| SiFT (Simple Forwarding over Trajectory)  |   |   |
| FACE  |   | see GFG   |
| GEDIR (Geographic Distance Routing)   |   |   |

### Power Aware Routing Protocols

| Протокол  | Ссылка на стандарт | Комментарий |
|---|--------------------|-------------|
| ISAIHA (Infra-Structure Aodv for Infrastructured Ad Hoc networks) |                    |             |

| Протокол   | Ссылка на стандарт                               | Комментарий |
|--|--|-------------|
| PAR (Power-Aware Routing Metrics)  | <a href="#">Power-Aware+Routing+Metrics.html</a> |             |
| PARO (Power-Aware Routing Optimization Protocol)                               | <a href="#">draft-gomez-paro-manet-00.txt</a>    |             |
| EADSR (Energy Aware Dynamic Source Routing Protocol)                           |  |             |
| PAMAS (PAMAS-Power Aware Multi Access Protocol with Signaling Ad Hoc Networks) |  |             |
| DSRPA (Dynamic Source Routing Power-Aware)                                     |  |             |

## Multicast Routing

| Протокол  | Ссылка на стандарт   | Комментарий |
|---|--|-------------|
| ABAM (On-Demand Associativity-Based Multicast)                            | <a href="#">On-Demand+Associativity-Based+Multicast.html</a>           |             |
| ADMR (Adaptive Demand-Driven Multicast Routing)                           | <a href="#">Adaptive+Demand-Driven+Multicast+Routing.html</a>          |             |
| AMRIS (Ad hoc Multicast Routing protocol utilizing Increasing id-numberS) | <a href="#">A+Multicast+Protocol+for+Ad+Hoc+Wireless+Networks.html</a> |             |
| AMRoute (Adhoc Multicast Routing Protocol)                                |  |             |
| AQM (Ad Hoc QoS Multicast)  |  |             |
| BEMRP (Bandwidth-Efficient Multicast Routing Protocol)                    |  |             |
| CAMP (Core-Assisted Mesh Protocol)  |  |             |
| CBM (Content Based Multicast)   |  |             |
| DCMP (Dynamic Core Based Multicast Routing Protocol)                      |  |             |
| DDM (Differential Destination Multicast)                                  |  |             |
| DSR-MB (Simple Protocol for Multicast and Broadcast using DSR)            |  |             |
| ExOR (Extremely Opportunistic Routing)                                    | <a href="#">ExOR_%28wireless_network_protocol%29</a>                   |             |
| FGMP (Forwarding Group Multicast Protocol)                                |  |             |
| LAM (Lightweight Adaptive Multicast)                                      |  |             |

| Протокол   | Ссылка на стандарт                          | Комментарий                                |
|--|---|--|
| MAODV (Multicast Ad-hoc On-Demand Distance Vector routing)     |   |  |
| MOLSR (Multicast Optimized Link State Routing)                 | <a href="#">rr-4721.html</a>                |  |
| MCEDAR (Multicast Core-Extraction Distributed Ad hoc Routing)  |   |  |
| MZR (Multicast Zone Routing)                                   |   |  |
| ODMRP (On-Demand Multicast Routing Protocol)                   | <a href="#">odmrp-wcnc99.ps.gz</a>          |  |
| PUMA (Protocol for Unified Multicasting Through Announcements) | <a href="#">Puma</a>                        | Log in!<br><a href="#">freeabs_all.jsp</a> |
| SMF (Simplified Multicast Forwarding)                          | <a href="#">draft-ietf-manet-smf-07.txt</a> |  |
| SPBM (Scalable Position-Based Multicast)                       | <a href="#">Transier2004c.pdf</a>           |  |
| SRMP (Source Routing-based Multicast Protocol)                 |   |  |
| EraMobile (Epidemic-based Reliable and Adaptive Multicast)     |   | Log in!<br><a href="#">abs_all.jsp</a>     |
| OBAMP (Overlay, Boruvka-based, Ad-hoc multicast Protocol)      |   |  |

### Geographical Multicast Protocols (Geocasting)

| Протокол  | Ссылка на стандарт | Комментарий |
|---|--------------------|-------------|
| LBM (Location Based Multicast)                            |                    |             |
| GeoGRID (Geographical GRID)                               |                    | see GLS     |
| GeoTORA (Geographical TORA)                               |                    |             |
| MRGR (Mesh-Based Geocast Routing)                         |                    |             |
| MOBICAST (Mobile Just-in-time Multicasting)               |                    |             |
| Abiding Geocast / Stored Geocast (Time Stable Geocasting) |                    |             |

### Other Protocol Classes

| Протокол                            | Ссылка на стандарт                     | Комментарий |
|-------------------------------------|--|-------------|
| FQMM (Flexible QoS Model for MANET) | <a href="#">VTC2000Spring-FQMM.pdf</a> |             |



| Протокол   | Ссылка на стандарт                                      | Комментарий                            |
|--|---|--|
| SMP (Skewed Map Forwarding)  | <a href="#">MedHocNet2006-Skewed-Map-Forwarding.pdf</a> |  |
| INSIGNIA (In-band signaling support for QoS in Mobile Ad hoc Networks) | <a href="#">insignia</a>                                |  |
| IMEP (Internet Manet Encapsulation Protocol)                           |   |  |
| ANMP (Adhoc Network Management Protocol)                               | <a href="#">anmp.html</a>                               |  |
| Terminode Routing  |   |  |
| B.A.T.M.A.N. (Better approach to mobile adhoc networking)              |   |  |
| W2LAN (Wireless to LAN Protocol)                                       | <a href="#">0889864454</a>                              |  |
| ODLW (On-Demand Link-Weight routing protocol for Ad Hoc Networks)      |   | Search here <a href="#">adhoc</a>      |
| STP (Spanning Tree Protocol)   | <a href="#">Spanning_tree_protocol</a>                  |  |
| DST (Distibuted Spanning Tree Protocol)                                |   | Search here <a href="#">getdoc.cfm</a> |
| FSLs (Fuzzy Sighted Link State Algorithms)                             |   |  |

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Last update: **2008/12/02 13:40**

