Mobile Ad hoc Networks

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# IANA Allocations for MANET Protocols draft-ietf-manet-iana-07.txt

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## Abstract

This document enumerates several common IANA allocations for use by MANET protocols. The following well-known numbers are required: a UDP port number, an IP protocol number, and a link-local multicast group address.

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#### 1. Introduction

This document enumerates several common IANA allocations for use by one or more protocols that conform to [I-D.ietf-manet-packetbb]. The following well-known numbers are required: a UDP port number, an IP protocol number, and a link-local multicast group address. All interoperable protocols running on these well-known IANA allocations MUST conform to [I-D.ietf-manet-packetbb]. [I-D.ietf-manet-packetbb] provides a common format that enables one or more protocols to share the IANA allocations defined in this document unambiguously.

#### 2. Conventions Used in This Document

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in <a href="RFC 2119">RFC 2119</a> [RFC2119].

#### 3. UDP Port Number

MANET routers require a well-known UDP port number [IANAPort] to send and receive MANET routing protocol packets. The title of this UDP port is "manet". The value of this UDP port is TBD1.

#### 4. IP Protocol Number

MANET routers require a well-known IP protocol number [IANAProtocol] to send and receive MANET routing protocol packets. The title of this IP protocol number is "manet". The value of this IP protocol number is TBD2.

### 5. Link-local Multicast Group for MANET Routers

MANET routers require a well-known link-local multicast address [RFC4291] to send and receive MANET routing protocol packets. The name of the multicast address to reach link-local (LL) MANET routers is "LL-MANET-Routers".

For IPv4, a well-known, link-local scope multicast address is required. The address for LL-MANET-Routers is 224.0.0.TBD3 to appear in the [IANAv4Multicast] registry.

For IPv6, a well-known, link-local scope multicast address is required. The address for LL-MANET-Routers is FF02:0:0:0:0:0:0:TBD4 to appear in the [IANAv6Multicast] registry.

#### 6. IANA Considerations

This document enumerates several common IANA allocations for use by one or more protocols that conform to  $[\underline{I-D.ietf-manet-packetbb}]$ . Specifically, the following well-known numbers have been assigned: a UDP port ( $\underline{Section\ 3}$ ), an IP protocol number ( $\underline{Section\ 4}$ ), and a link-local multicast group address ( $\underline{Section\ 5}$ ).

#### Action 1:

Action 2:

Upon approval of this document, the IANA will make the following assignments in the "PORT NUMBERS" registry located at <a href="http://www.iana.org/assignments/port-numbers">http://www.iana.org/assignments/port-numbers</a>

sub-registry "WELL KNOWN PORT NUMBERS"

Keyword Decimal Description References

.....

manet TBD1/udp MANET Protocols [ietf-manet-iana]

Upon approval of this document, the IANA will make the following assignments in the "PROTOCOL NUMBERS" registry located at <a href="http://www.iana.org/assignments/protocol-numbers">http://www.iana.org/assignments/protocol-numbers</a>

sub-registry "WELL KNOWN PORT NUMBERS"

Keyword Decimal Description References

......

manet TBD2 MANET Protocols [ietf-manet-iana]

Action 3:

Upon approval of this document, the IANA will make the following assignments in the "Internet Multicast Addresses" registry located at

http://www.iana.org/assignments/multicast-addresses

sub-registry 224.0.0.0 - 224.0.0.255 (224.0.0/24)

Local Network Control Block Date registered"

224.0.0.TBD3 LL-MANET-Routers [ietf-manet-iana]

#### Action 4:

Upon approval of this document, the IANA will make the following assignments in the "INTERNET PROTOCOL VERSION 6 MULTICAST ADDRESSES" registry located at

http://www.iana.org/assignments/ipv6-multicast-addresses

sub-registry "Fixed Scope Multicast Addresses"

sub-sub-registry "Link-Local Scope"

FF02:0:0:0:0:0:0:TBD4 LL-MANET-Routers [ietf-manet-iana]

## 7. Security Considerations

This document specifies only well-known number for protocols that conform to [I-D.ietf-manet-packetbb], and it not does not specify the protocols that carry the information across the network. Each protocol using these well-known numbers may have its own set of security issues, but those issues are not affected by using the IANA allocations specified herein.

The security issues associated with possibly operating multiple cooperating protocols using the same IANA assignments (e.g. UDP port) MUST be addressed in each protocols' specification.

## 8. Acknowledgements

Fred Templin, Bill Fenner, Alexandru Petrescu, Sam Weiler, Ross Callon, and Lars Eggert provided valuable input to this document.

#### 9. References

## 9.1. Normative References

[I-D.ietf-manet-packetbb]

Clausen, T., "Generalized MANET Packet/Message Format", <a href="mainto:draft-ietf-manet-packetbb-11">draft-ietf-manet-packetbb-11</a> (work in progress), November 2007.

[RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", <u>BCP 14</u>, <u>RFC 2119</u>, March 1997.

[RFC4291] Hinden, R. and S. Deering, "IP Version 6 Addressing

Architecture", RFC 4291, February 2006.

## 9.2. Informative References

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