Bundle Protocol Version 7 Administrative Record Types Registry

Abstract

   This document clarifies that a Bundle Protocol Version 7 agent is
   intended to use an IANA sub-registry for Administrative Record
   types. It also makes a code point reservation for private or
   experimental use.

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1. Introduction

The earlier Bundle Protocol (BP) Version 6 (BPv6) defined an IANA sub-registry for Administrative Record type code points under [IANA-BP]. When Bundle Protocol Version 7 (BPv7) was published in [I-D.ietf-dtn-bpbis] it included an explicit table of Administrative Record types but made no mention of an IANA registry nor a requirement for BPv7 agents to be extensible in how they handle Administrative Record types. The BPv7 specification also did not discriminate between code point reservations and unassigned ranges for Administrative Record types.

This document updates BPv7 to explicitly use the IANA Administrative Record type registry in Section 2. This document also makes a reservation of high-valued code points for private or experimental use to avoid collisions with assigned code points.

1.1. Scope

This document describes updates to the IANA Administrative Record type sub-registry and how a BPv7 agent is supposed to use that registry for identifying Administrative Record types.

This document does not specify how BPv6 and BPv7 can interoperate for overlapping code points or how a specific code point is to be interpreted either similarly or differently between Bundle Protocol versions. It is up to each individual Administrative Record type specification to define how it relates to each BP version.

1.2. Terminology

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "NOT RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in

BCP 14 [RFC2119] [RFC8174] when, and only when, they appear in all capitals, as shown here.

2. Administrative Record Types Registry

This document updates the requirements in Section 6.1 of [I-D.ietf-dtn-bpbis] to use an existing IANA registry and updates that sub-registry in Section 4.1.

Instead of using the explicit list of types in Table 3 of [I-D.ietf-dtn-bpbis], a BPv7 Agent **SHALL** interpret Administrative Record type code values in accordance with the IANA "Bundle Administrative Record Types" sub-registry under [IANA-BP] for entries having a "Bundle Protocol Version" of 7.

3. Security Considerations

This document does not define any requirements or structures which introduce new security considerations.

The existing security considerations of [I-D.ietf-dtn-bpbis] still apply when using the IANA Administrative Record Types sub-registry.

4. IANA Considerations

This specification modifies a BPv6 sub-registry to extend BPv7.

4.1. Bundle Administrative Record Types

Within the "Bundle Protocol" registry [IANA-BP], the "Bundle Administrative Record Types" sub-registry has been updated to include a leftmost "Bundle Protocol Version" column. The existing sub-registry entries have been updated to have BP versions as in the following table.

Bundle Protocol Version	Value	Description	Reference
6,7	0	Reserved	[RFC7116]
6,7	1	Bundle status report	[RFC5050] [I-D.ietf-dtn-bpbis]
6	2	Custody signal	[RFC5050]
6,7	3-15	Unassigned	

Table 1

Within the "Bundle Protocol" registry [IANA-BP], the following entries have been added to the "Bundle Administrative Record Types" sub-registry.

Bundle Protocol Version	Value	Description	Reference
7	16-65535	Unassigned	
7	greater than 65535	Reserved for Private or Experimental Use	This specification

Table 2

5. Acknowledgments

6. References

6.1. Normative References

[IANA-BP]   IANA, "Bundle Protocol", <https://www.iana.org/
            assignments/bundle/>.

[RFC2119]   Bradner, S., "Key words for use in RFCs to Indicate
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[RFC8174]   Leiba, B., "Ambiguity of Uppercase vs Lowercase in RFC
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[I-D.ietf-dtn-bpbis] Burleigh, S., Fall, K., and E. J. Birrane,
            "Bundle Protocol Version 7", Work in Progress, Internet-
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6.2. Informative References

[RFC5050]   Scott, K. and S. Burleigh, "Bundle Protocol
            Specification", RFC 5050, DOI 10.17487/RFC5050, November
            2007, <https://www.rfc-editor.org/info/rfc5050>.

[RFC7116]   Scott, K. and M. Blanchet, "Licklider Transmission
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