

DNSOP  
Internet-Draft  
Updates: 6603, 6890 (if approved)  
Intended status: Best Current Practice  
Expires: 19 November 2026

T. Wicinski, Ed.  
18 May 2026

Updates to Locally Served DNS Zones and IP Special-Purpose Address Space  
Registries  
draft-dnsop-rfc6303-bis-02

Abstract

RFC 6063, "Locally Served DNS Zones", defines two IANA registries called "IPv4 Locally-Served DNS Zone" and "IPv6 Locally-Served DNS Zone" registries. This document changes the registration policy for that registry from "IETF Review" to "Expert Review".

Also, this document updates IP Special-Purpose Address Space registries to indicate whether an IP address block is eligible to be in Locally-Served DNS Zones. Eligible entries will be automatically added to the Locally-Served DNS Zones.

This document updates RFC 6063 and RFC 6890.

Status of This Memo

This Internet-Draft is submitted in full conformance with the provisions of BCP 78 and BCP 79.

Internet-Drafts are working documents of the Internet Engineering Task Force (IETF). Note that other groups may also distribute working documents as Internet-Drafts. The list of current Internet-Drafts is at <https://datatracker.ietf.org/drafts/current/>.

Internet-Drafts are draft documents valid for a maximum of six months and may be updated, replaced, or obsoleted by other documents at any time. It is inappropriate to use Internet-Drafts as reference material or to cite them other than as "work in progress."

This Internet-Draft will expire on 19 November 2026.

Copyright Notice

Copyright (c) 2026 IETF Trust and the persons identified as the document authors. All rights reserved.

This document is subject to BCP 78 and the IETF Trust's Legal Provisions Relating to IETF Documents (<https://trustee.ietf.org/license-info>) in effect on the date of publication of this document. Please review these documents carefully, as they describe your rights and restrictions with respect to this document. Code Components extracted from this document must include Revised BSD License text as described in Section 4.e of the Trust Legal Provisions and are provided without warranty as described in the Revised BSD License.

## Table of Contents

1. Introduction . . . . .	2
2. Terminology . . . . .	3
3. Updates to RFC 6063 . . . . .	3
3.1. Guidance for Designated Experts . . . . .	3
3.2. Changes to the IPv6 Locally-Served DNS Zones Registry . .	4
4. Changes to the IP Special-Purpose Space Registries . . . . .	4
4.1. Eligible to Locally-Served DNS Zones New Column . . . . .	4
4.2. Eligible to Locally-Served DNS Zones Note . . . . .	4
4.3. IPv6 Locally-Served DNS Zone Registry Note . . . . .	4
4.4. IPv4 Locally-Served DNS Zone Registry Note . . . . .	4
4.5. Initial IPv6 Locally-Served DNS Zone Registry . . . . .	4
4.6. Initial IPv4 Locally-Served DNS Zone Registry . . . . .	5
5. Operational Considerations . . . . .	5
6. Security Considerations . . . . .	5
7. IANA Considerations . . . . .	5
8. References . . . . .	5
8.1. Normative References . . . . .	5
8.2. Informative References . . . . .	6
Acknowledgements . . . . .	6
Author's Address . . . . .	6

## 1. Introduction

[RFC6303] "Locally Served DNS Zones", it defines two IANA registries called "IPv4 Locally-Served DNS Zone" and "IPv6 Locally-Served DNS Zone" registries. This document changes the registration policy for that registry from "IETF Review" to "Expert Review".

Also, this document updates IP Special-Purpose Address Space registries [RFC6890] to indicate whether an IP address block is eligible to be in Locally-Served DNS Zones. This change is meant to ensure consistent registrations between the above registries and future failures to make appropriate registrations in "IPv6 Locally-Served DNS Zone" such as in [RFC9637].

PLEASE REMOVE THE FOLLOWING PARAGRAPH BEFORE PUBLISHING: The source for this draft is maintained on GitHub at:  
<https://github.com/moonshiner/draft-dnsop-rfc6303-bis>  
(<https://github.com/moonshiner/draft-dnsop-rfc6303-bis>)

## 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. DNS terminology is as described in [RFC9499].

## 3. Updates to RFC 6063

Please update Section 8 of [RFC6303] "IANA Considerations" as follows:

OLD:

```
| This registry can be amended through "IETF Review" as per
| [RFC5226]. As part of this review process, it should be noted
| that once a zone is added it is effectively added permanently;
| once an address range starts being configured as a local zone in
| systems on the Internet, it will be impossible to reverse those
| changes.
```

NEW:

```
| This registry can be amended through "Expert Review" policy
| (Section 4.5 of [RFC8126]). As part of this review process, it
| should be noted that once a zone is added it is effectively added
| permanently; once an address range starts being configured as a
| local zone in systems on the Internet, it will be impossible to
| reverse those changes. More guidance for Designated Experts is
| provided in guidance (#guidance) of THIS_DOCUMENT.
```

### 3.1. Guidance for Designated Experts

In changing the approval to "Expert Review", there should be some additional guidance. Here are some examples (not all mandatory) on what the Reviewer should look for:

1. Should have at least an internet-draft written which can explain the usage.
2. The various Working Groups in the IETF should have

### 3.2. Changes to the IPv6 Locally-Served DNS Zones Registry

IANA is requested to add the zones listed below to the "IPv6 Locally-Served DNS Zone" registry:

TBC with [RFC9637] entries.

## 4. Changes to the IP Special-Purpose Space Registries

### 4.1. Eligible to Locally-Served DNS Zones New Column

IANA is requested to add a new column, Eligible to Locally-Served DNS Zones, to the "IPv6 Special-Purpose Address Space" and "IPv4 Special-Purpose Address Space" registries.

### 4.2. Eligible to Locally-Served DNS Zones Note

IANA is requested to add the following note to the "IPv6 Special-Purpose Address Space" and "IPv4 Special-Purpose Address Space" registries:

Eligible to Locally-Served DNS Zones: A boolean value indicating whether the IP address block is to be added to the Locally-Served DNS Zones IANA registry.

### 4.3. IPv6 Locally-Served DNS Zone Registry Note

IANA is requested to add the following note to the "IPv6 Special-Purpose Address Space" registry:

Note: IANA has to add relevant entries for "Eligible to Locally-Served DNS Zones" set to "True" in the IPv6 Locally-Served DNS Zone Registry.

### 4.4. IPv4 Locally-Served DNS Zone Registry Note

IANA is requested to add the following note to the "IPv4 Special-Purpose Address Space" registry:

Note: IANA has to add relevant entries for "Eligible to Locally-Served DNS Zones" set to "True" in the IPv4 Locally-Served DNS Zone Registry.

### 4.5. Initial IPv6 Locally-Served DNS Zone Registry

TBC.

#### 4.6. Initial IPv4 Locally-Served DNS Zone Registry

TBC.

#### 5. Operational Considerations

TBC.

#### 6. Security Considerations

This document does not add new security risks other than those already discussed in [[RFC6303], [RFC6890], and [RFC9637]].

#### 7. IANA Considerations

Sections 6063 Updates (#updates-6063) and 6890 Updates (#updates-6890) include actions for IANA. These actions are not repeated here.

#### 8. References

##### 8.1. Normative References

- [RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, DOI 10.17487/RFC2119, March 1997, <<https://www.rfc-editor.org/info/rfc2119>>.
- [RFC5226] Narten, T. and H. Alvestrand, "Guidelines for Writing an IANA Considerations Section in RFCs", RFC 5226, DOI 10.17487/RFC5226, May 2008, <<https://www.rfc-editor.org/info/rfc5226>>.
- [RFC6303] Andrews, M., "Locally Served DNS Zones", BCP 163, RFC 6303, DOI 10.17487/RFC6303, July 2011, <<https://www.rfc-editor.org/info/rfc6303>>.
- [RFC6890] Cotton, M., Vegoda, L., Bonica, R., Ed., and B. Haberman, "Special-Purpose IP Address Registries", BCP 153, RFC 6890, DOI 10.17487/RFC6890, April 2013, <<https://www.rfc-editor.org/info/rfc6890>>.
- [RFC8126] Cotton, M., Leiba, B., and T. Narten, "Guidelines for Writing an IANA Considerations Section in RFCs", BCP 26, RFC 8126, DOI 10.17487/RFC8126, June 2017, <<https://www.rfc-editor.org/info/rfc8126>>.

- [RFC9637] Huston, G. and N. Buraglio, "Expanding the IPv6 Documentation Space", RFC 9637, DOI 10.17487/RFC9637, August 2024, <<https://www.rfc-editor.org/info/rfc9637>>.

## 8.2. Informative References

- [RFC8174] Leiba, B., "Ambiguity of Uppercase vs Lowercase in RFC 2119 Key Words", BCP 14, RFC 8174, DOI 10.17487/RFC8174, May 2017, <<https://www.rfc-editor.org/info/rfc8174>>.
- [RFC9499] Hoffman, P. and K. Fujiwara, "DNS Terminology", BCP 219, RFC 9499, DOI 10.17487/RFC9499, March 2024, <<https://www.rfc-editor.org/info/rfc9499>>.

## Acknowledgements

## Author's Address

Tim Wicinski (editor)  
Elkins, WV 26241  
United States of America  
Email: [tjw.ietf@gmail.com](mailto:tjw.ietf@gmail.com)