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# Additional Link Relations and the urn:social Namespace draft-snell-more-link-relations-00

# Abstract

This specification defines a number of additional Link Relation Types that can used for a variety of purposes..

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# 1. Introduction

This specification defines and adds the following additional link relation types to the IANA Registry of Link Relations established by [<u>RFC5988</u>]: to, bto, cc, bcc, from, bfrom, source, generator, provider, location, alias and mentionedBy. Further, this specification proposes a new 'social' URN namespace.

Note that this document is a work-in-progress draft specification that does not yet represent a "standard". It is the intention of this specification to propose a few new ideas and openly solicit feedback on their definition and use. While this document might eventually evolve into an RFC the ideas described herein have not yet been broadly implemented and have definitions that may evolve through successive iterations of this draft.

# 2. The 'social' URN Namespace

This specification defines the 'social' URN namespace having the following structure:

urn:social:{NSS}

The Namespace Specific String (NSS) MUST be one of:

- o everyone
- o direct

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- o extended
- o peer
- o subordinate
- o superior
- o common
- o interested
- o self

Within any given social networking system, there is an available population of entities. Each NSS term represent specific subsets of this population and are defined in terms of these subsets relative to a fixed context. For example, if the fixed content is a person, the "urn:social:direct" URN identifies the subset of the total population that is directly connected to the context person within the social graph, while the "urn:social:extended" URN identifies the subset that is directly or indirectly connected to the context person.

The 'social' URN namespace is defined to be intentionally ambiguous and contextually dependent. The specific interpretation of each NSS depends entirely on how and where the NSS is being used.

#### <u>2.1</u>. urn:social:everyone

The "urn:social:everyone" URN identifies the subset of the total population that is visible to the context.

# 2.2. urn:social:direct

The "urn:social:direct" URN identifies the subset of the total population that is both visible to and directly connection to the context.

### 2.3. urn:social:extended

The "urn:social:extended" URN identifies the subset of the total population that is visible to and connected either directly or indirectly to the context.

### 2.4. urn:social:peer

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The "urn:social:peer" URN identifies the subset of the total population that is both visible to the context and considered to be a "peer".

Peer relationships exist only within social networking populations in which there exist hierarchical divisions and relationships between members of the population. An example of such a network would be a company or similarly structured organization. Peers may or may not be directly or indirectly connected to the target resource but are considered, instead, to share the same hierarchical position within the social network.

#### <u>2.5</u>. urn:social:subordinate

The "urn:social:subordinate" URN identifies the subset of the total population that is both visible to the context and considered to be "subordinate" to the context.

Subordinate relationships exist only within social networking populations in which there exist hierarchical divisions and relationships between members of the population. An example of such a network would be a company or similarly structured organization. Subordinates may or may not be directly or indirectly connected to the target resource but are considered, instead, to share a lower hierarchical position within the social network.

### 2.6. urn:social:superior

The "urn:social:superior" URN identifies the subset of the total population that is both visible to the context and considered to be "superior" to the context.

Superior relationships exist only within social networking populations in which there exist hierarchical divisions and relationships between members of the population. An example of such a network would be a company or similarly structured organization. Superiors may or may not be directly or indirectly connected to the target resource but are considered, instead, to share a higher hierarchical position within the social network.

### 2.7. urn:social:common

The "urn:social:common" URN identifies the subset of the total population that is both visible to the context and is determined to share the same common interests as the context.

Determination of "shared interest" is dependent entirely on the application.

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### <u>2.8</u>. urn:social:interested

The "urn:social:interested" URN identifies the subset of the total population that is both visible to the context and has an express interest in the context. Examples of members of the "interested" subset are those who have elected to "follow" the activity of the context resource.

### 2.9. urn:social:self

The "urn:social:self" URN identifies the context resource itself as a member of the total population.

### **3**. IANA Considerations

The following Link Relations are added to the IANA Registry of Link Relations.

+	-++
Name +	Description
to   	Refers to a resource that is considered to be     part of the public primary audience of the link's     context.
bto   	Refers to a resource that is considered to be part of the private primary audience of the link's context.
cc   	<pre>  Refers to a resource that is considered to be     part of the public secondary audience of the     link's context.</pre>
bcc   	<pre>  Refers to a resource that is considered to be     part of the private secondary audience of the     link's context.</pre>
from 	Refers to a resource that is publicly considered     to be the originator of the link's context.
bfrom	Refers to a resource that is privately considered     to be the orignator of the link's context.
source	Refers to the original source of information   contained by the context resource.
provider   	<pre>  Refers to the resource that provided the context     resource. Typically, this would be used to     identify the entity publishing the resource.  </pre>
generator     	<pre>  Refers to the resource that generated the context     resource. Typically, this would be used to     identify the software application that created     the context resource.</pre>
mentionedBy 	Refers to a resource that mentions the context     resource in some fashion. This, for example,

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	would be used when an article mentions another   article, or a social status update mentions a   particular user, etc.	   
location   	References a URI/IRI that represents a physical   or logical location with which the context   resource is associated.	   

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# 4. Security Considerations

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+ -

There are no additional security concerns introduced by this document.

# 5. Informative References

[RFC5988] Nottingham, M., "Web Linking", <u>RFC 5988</u>, October 2010.

# Appendix A. Examples

Using targeting link relations and the urn:social namespace:

```
POST /alerts HTTP/1.1
Host: example.org
Content-Type: text/plain
Authorization: Basic {Base64 Credentials}
Link: <urn:social:everyone>; rel="to"
Link: <urn:social:extended>; rel="cc"
Link: <urn:social:self>; rel="bfrom"
```

Test message

Using publication link relations:

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```
<html>
  <head>
    . . .
    <link
      rel="source"
      href="http://example.net/post/1" />
    <link
      rel="provider"
      href="http://example.org" />
    <link
      rel="generator"
      href="http://example.com/software/app/1.1" />
    . . .
  </head>
  <body>...</body>
</html>
```

```
Using the alias and location relations:
```

```
Link: <geo:37.786971,-122.399677>; rel="location"
```

Using the mentionedBy relation:

```
LINK /articles/1 HTTP/1.1
Host: example.org
Link: <articles/2>; rel="mentionedBy"
```

```
Author's Address
```

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