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## Network News Transfer Protocol (NNTP) Additions to LIST Command

### Abstract

This document defines a set of enhancements to the Network News Transfer Protocol (NNTP) that allow a client to request extended information from NNTP servers regarding server status, policy, and other aspects of local configuration. These enhancements are made as new keywords to the existing LIST capability described in RFC 3977.

This memo updates and formalizes the LIST DISTRIBUTIONS and LIST SUBSCRIPTIONS commands defined in RFC 2980. It also adds the LIST COUNTS, LIST MODERATORS, and LIST MOTD commands, and specifies additional values returned by the existing LIST ACTIVE command for the status of a newsgroup.

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## 1. Introduction

The NNTP specification [RFC3977] defines the LIST capability and a few keywords that can be used with that command: ACTIVE, ACTIVE.TIMES, DISTRIB.PATS, HEADERS, NEWSGROUPS, and OVERVIEW.FMT. Other variants of the LIST command are in use, but with limited or absent documentation. These variants are formalized in this document.

The DISTRIBUTIONS and SUBSCRIPTIONS variants were originally documented in [RFC2980]. The LIST DISTRIBUTIONS command is sent by a news client to obtain a list of relevant distributions known by a news server along with their descriptions. The LIST SUBSCRIPTIONS command is sent by a news client when first connecting to a news server so as to obtain a list of recommended newsgroups available on it. Both of these commands are intended to be used in place of hard-coding news clients to use specific distributions or look for specific default newsgroups.

The MOTD variant was originally documented in [NNTP\_LIST] (which also describes the SUBSCRIPTIONS variant). The LIST MOTD command is sent by a news client to obtain a "message of the day" from the server administrator regarding the current state of a news server.

The COUNTS and MODERATORS variants have not been documented before. The LIST COUNTS command is similar to LIST ACTIVE, except that it also returns an estimated number of articles in each newsgroup. The LIST MODERATORS command is sent by a news client to obtain a list of associations between a moderated newsgroup and its submission address template.

The ACTIVE variant was formalized in [RFC3977], but the meanings of only three status field values in LIST ACTIVE responses have been specified: "y", "n", and "m". These statuses are particularly useful for readers, since they describe local posting rights. However, several other statuses are in use that are primarily useful for peers as they mainly describe how remote articles coming from peers are locally handled by a given news server. This memo defines three other values for the status field in LIST ACTIVE responses: "x", "j", and "=" followed by the name of a newsgroup.

This specification should be read in conjunction with the NNTP base specification [RFC3977]. In the case of a conflict between these two documents, [RFC3977] takes precedence.

## 1.1. Conventions Used in This Document

The notational conventions used in this document are the same as those in [RFC3977], and any term not defined in this document has the same meaning as it does in that one.

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 [RFC2119].

When a hexadecimal correspondence is given to an octet in this document, the value is in US-ASCII [ASCII] (for instance, ".", noted %x2E).

In the examples, commands from the client are indicated with [C], and responses from the server are indicated with [S]. The client is the initiator of the NNTP connection; the server is the other endpoint.

## 1.2. Author's Note

Please write the first letter of "Elie" with an acute accent wherever possible -- it is U+00C9, that is to say "&#201;" in XML.

## 2. New LIST Variants

The LIST capability is defined in Section 7.6 of [RFC3977]. It allows the server to provide useful information to the client in multi-line blocks.

This document provides five new keywords to the LIST capability: COUNTS, DISTRIBUTIONS, MODERATORS, MOTD, and SUBSCRIPTIONS.

Each keyword is OPTIONAL and corresponds to the same-named variant of the LIST command.

### 2.1. Advertising the New LIST Variants

When a news server implements a variant of the LIST command as described in this specification, it advertises the corresponding feature in the LIST capability. Where one of these new LIST keywords is advertised, it MUST have the meaning given in this specification.

For instance, if a news server implements the SUBSCRIPTIONS variant, it will add the SUBSCRIPTIONS keyword to the LIST capability in response to the CAPABILITIES command (see Section 5.2 of [RFC3977]):

```
[C] CAPABILITIES
[S] 101 Capability list:
[S] VERSION 2
[S] READER
[S] LIST ACTIVE NEWSGROUPS SUBSCRIPTIONS
[S] .
[C] LIST SUBSCRIPTIONS
[S] 215 List of recommended newsgroups follows
[S] local.welcome
[S] local.test
[S] news.newusers.questions
[S] news.announce.newusers
[S] .
```

For each of the new LIST variants described in this specification, an empty response can be sent to the client:

```
[C] LIST SUBSCRIPTIONS
[S] 215 List of recommended newsgroups follows
[S] .
```

This means that the information is maintained by the news server but that it is voluntarily empty. Frequently, the news server maintains the information in a configuration file. This file can be empty or contain only commented or blank lines, indicating a voluntary absence of information.

When the news server software implements one of these LIST variants but a particular server does not maintain the information (for instance, when the configuration file does not exist), the 503 response code MUST be returned:

```
[C] LIST SUBSCRIPTIONS
[S] 503 No list of recommended newsgroups available
```

## 2.2. LIST COUNTS

### 2.2.1. Usage

#### Syntax

LIST COUNTS [wildmat]

#### Responses

215 List of newsgroups follows (multi-line)

#### Parameters

wildmat Groups of interest

### 2.2.2. Description

See Section 7.6.1 of [RFC3977] for general requirements of the LIST command.

The LIST COUNTS command returns a list of valid newsgroups carried by the news server along with associated information, the "counts list", and is similar to LIST ACTIVE.

The information is returned as a multi-line data block following the 215 response code and contains one line per newsgroup. Each line of this list MUST consist of five fields separated from each other by one or more spaces (the usual practice is a single space) in the following order:

- o The name of the newsgroup.
- o The reported high water mark for the group.
- o The reported low water mark for the group.
- o The estimated number of articles in the group.
- o The current status of the group on this server.

The reported high and low water marks, and the estimated number of articles, are as described in the GROUP command (see Section 6.1.1 of [RFC3977]), but note that they are in the opposite order to the 211 response (that is, number low high group) to the GROUP command. The current status of the group is as described in the LIST ACTIVE command (see Section 7.6.3 of [RFC3977], as well as Section 3 of this document). Also note that, similarly to the LIST ACTIVE command, TAB characters are not valid separators for the LIST COUNTS command.

The order of newsgroups in the counts list is not significant. The server need not consistently return the same order or the same results if this command is used more than once in a session.

The same newsgroup SHOULD NOT appear twice in the output of this command.

The counts list is newsgroup-based, and a wildmat MAY be specified, in which case the response is limited to only the groups, if any, whose names match the wildmat. If no wildmat is specified, the server MUST include every newsgroup that the client is permitted to select with the GROUP command (see Section 6.1.1 of [RFC3977]).

The counts list MAY be empty. If the server does not maintain the information, a 503 response code MUST be returned. (However, note that a news server that supports this command usually maintains the information.)

The client MAY use LIST COUNTS in order to obtain an estimate of the number of articles in every newsgroup the server carries, which enables it to provide the end user with this information. This provides a simpler mechanism for a client to obtain the estimated number of articles in newsgroups, compared with a sequence of individual GROUP commands.

### 2.2.3. Examples

Example of output with no argument:

```
[C] CAPABILITIES
[S] 101 Capability list:
[S] VERSION 2
[S] READER
[S] LIST ACTIVE COUNTS NEWSGROUPS
[S] .
[C] LIST COUNTS
[S] 215 List of newsgroups follows
[S] misc.test 3002322 3000234 1234 y
[S] comp.risks 442001 441099 742 m
[S] rec.food.drink.tea 100 51 3 y
[S] local.empty 7 8 0 y
[S] local.tea 2004 1504 301 y
[S] .
```

Example of output with a wildmat:

```
[C] LIST COUNTS *.tea,misc.*,!local.*
[S] 215 List of newsgroups follows
[S] misc.test 3002322 3000234 1234 y
[S] rec.food.drink.tea 100 51 3 y
[S] .
```

Example of output on an implementation that includes leading zeroes:

```
[C] LIST COUNTS
[S] 215 List of newsgroups follows
[S] misc.test 0003002322 0003000234 1234 y
[S] comp.risks 0000442001 0000441099 742 m
[S] rec.food.drink.tea 00000000100 00000000051 3 y
[S] local.empty 00000000007 00000000008 0 y
[S] local.tea 0000002004 0000001504 301 y
[S] .
```

The estimated number of articles usually does not start with leading zeroes, but MAY start with such zeroes.

## 2.3. LIST DISTRIBUTIONS

### 2.3.1. Usage

Syntax  
LIST DISTRIBUTIONS

Responses  
215 Distributions list follows (multi-line)

### 2.3.2. Description

See Section 7.6.1 of [RFC3977] for general requirements of the LIST command.

A "distributions list" is maintained by some NNTP servers to contain the name of each distribution that is known by the news server and a short description about the meaning of the distribution. Distributions are used by clients as potential values for the Distribution header field body of a news article being posted (see Section 3.2.4 of [RFC5536] for the definition of this header field).

The information is returned as a multi-line data block following the 215 response code and contains one line per distribution. Each line of this list MUST consist of two fields separated from each other by one or more space or TAB characters (the usual practice is a single TAB). The first field is the name of the distribution, and the second field is a short description of the distribution. There are no leading or trailing whitespaces in a line. The description MAY contain whitespaces.



The order of distributions in the distributions list is not significant; the server need not consistently return the same order or the same results if this command is used more than once in a session.

The same distribution SHOULD NOT appear twice in the output of this command.

The description MUST be in UTF-8 [RFC3629].

The distributions list is not newsgroup-based, and an argument MUST NOT be specified. Otherwise, a 501 response code MUST be returned.

The distributions list MAY be empty. If the server does not maintain the information, a 503 response code MUST be returned.

The client MAY use this information to generate or supplement a list of known distributions provided to the user. If the news server implements the LIST DISTRIBUTIONS command, it SHOULD also implement the LIST DISTRIB.PATS command (defined in Section 7.6.5 of [RFC3977]) and describe in the distributions list all the distributions present in the distrib.pats list so that the client can use both of these commands jointly (naturally, the distributions list can also describe distributions that are not present in the distrib.pats list). Note that the two commands need not return distributions in the same order.

### 2.3.3. Example

Example of a joint use of LIST DISTRIB.PATS and LIST DISTRIBUTIONS:

```
[C] CAPABILITIES
[S] 101 Capability list:
[S] VERSION 2
[S] READER
[S] LIST ACTIVE DISTRIB.PATS DISTRIBUTIONS NEWSGROUPS
[S] .
[C] LIST DISTRIB.PATS
[S] 215 Information follows
[S] 10:local.*:local
[S] 5:france.*:fr
[S] 20:local.here.*:thissite
[S] .
[C] LIST DISTRIBUTIONS
[S] 215 List of distributions follows
[S] fr Local to France.
[S] local Local to this news server.
[S] thissite Local to this site.
[S] usa Local to the United States of America.
[S] .
```

## 2.4. LIST MODERATORS

### 2.4.1. Usage

Syntax

LIST MODERATORS

Responses

215 Moderators list follows (multi-line)

### 2.4.2. Description

See Section 7.6.1 of [RFC3977] for general requirements of the LIST command.

The "moderators list" is maintained by some NNTP servers to make clients aware of how the news server will generate a submission e-mail address when an article is locally posted to a moderated newsgroup.

The information is returned as a multi-line data block following the 215 response code. Each line of this list MUST consist of two fields separated from each other by a colon (":" or %x3A). The first field is a wildmat (which may be a simple newsgroup name), and the second

field is the submission address template for newsgroups matching that wildmat. There are no leading or trailing whitespaces in a line. The submission template MAY contain colons (":").

The submission template is essentially an e-mail address (see the definition of "addr-spec" in Section 3.4.1 of [RFC5322]), except with certain modifications. The case-sensitive string "%s" (%x25.73) MUST occur either zero or one time in the template. If there is to be a literal "%" in the submission address, it MUST be written as "%%" in the template, even if not followed by an "s". The character "%" MUST NOT occur in the submission template, except as part of "%s" or "%%".

The order of lines in the moderators list is significant: the first matching line is used. Consequently, specific patterns should be listed before general patterns. Every moderated newsgroup name SHOULD be matched by at least one line in the list; often this is achieved by having a default pattern at the bottom, but other approaches are acceptable, and news server software MAY leave this up to the server administrator rather than enforcing it programmatically.

When an article without an Approved header field is locally posted to a moderated newsgroup, the server generates a submission address from the corresponding submission template (that is, the second field of the first matching line in the moderators list) by replacing the "%s", if present, with the name of the matching newsgroup after each period ( "." or %x2E) in the name has been changed to a dash ("- " or %x2D). In addition, any "%%" is changed back to "%". The server then forwards the submitted article to the moderator at the resulting submission address (see Section 3.5.1 of [RFC5537]).

NOTE: The creation and maintenance of submission addresses is outside the scope of this specification.

The moderators list is not newsgroup-based, and an argument MUST NOT be specified. Otherwise, a 501 response code MUST be returned.

The moderators list MAY be empty. If the server does not maintain the information, a 503 response code MUST be returned, although these situations should not occur if the news server is an injecting agent that carries moderated newsgroups.

### 2.4.3. Example

Example of output:

```
[C] CAPABILITIES
[S] 101 Capability list:
[S] VERSION 2
[S] READER
[S] POST
[S] LIST ACTIVE MODERATORS NEWSGROUPS
[S] .
[C] LIST MODERATORS
[S] 215 List of submission address templates follows
[S] foo.bar:announce@example.com
[S] local.*:%s@localhost
[S] *:%s@moderators.example.com
[S] .
```

The following table describes a few examples associating a moderated newsgroup and its submission address on a news server whose moderators list is the one in the previous example:

Name of the moderated newsgroup	Submission address
foo.bar	announce@example.com
local.test	local-test@localhost
alt.dev.null	alt-dev-null@moderators.example.com
alt.test-me	alt-test-me@moderators.example.com

NOTE: When "%s" is used, periods are changed to dashes, and dashes are left alone. This implies that two moderated newsgroups whose names differ only by changing a period to a dash would have the same submission address. Therefore, if a server carries such moderated newsgroup pairs but posts should go to different submission addresses, a "%s" pattern template cannot be used for the moderation submission addresses for those groups, and explicit entries without a pattern will be required.

Similarly, it is not recommended to use a "%s" pattern rule for the moderation submission template for two moderated newsgroups whose names differ only by the case of their characters, because e-mail systems frequently treat the left-hand side of e-mail addresses as case-sensitive. See also Section 3.1.4 of [RFC5536] and Section 7.2 of [USAGE] for the syntax of a newsgroup name.

## 2.5. LIST MOTD

### 2.5.1. Usage

Syntax  
LIST MOTD

Responses  
215 Information follows (multi-line)

### 2.5.2. Description

See Section 7.6.1 of [RFC3977] for general requirements of the LIST command.

The "motd" contains a "message of the day" relevant to the news server. It is intended to provide notification and communication between the news administrator and the news user. For instance, notification of upcoming downtime or information about new facilities available on the news server can be communicated via the LIST MOTD command.

The information is returned as a multi-line data block following the 215 response code. This text is not guaranteed to be in any particular format although, like all multi-line data blocks, it is "dot-stuffed".

The server need not return the same information if this command is used more than once in a session. It MAY indeed send a different message of the day depending on the state of the session. For instance, on a mode-switching news server, the information can be different between its transit mode and its reader mode, or between an authenticated session and an unauthenticated session.

The information MUST be in UTF-8 [RFC3629].

The motd is not newsgroup-based, and an argument MUST NOT be specified. Otherwise, a 501 response code MUST be returned.

The motd MAY be empty. If the server does not maintain the information, a 503 response code MUST be returned.

It is up to the client to decide when and how to display this message to the user. No timestamp or date of last modification is provided programmatically, although the news administrator may include one in the text of the motd. The client MAY cache a local copy or fingerprint of the motd so that it can display the message to the user only upon modification. If the client caches the information,

it MAY take into account only the motd obtained after reaching the intended state of the session. Nonetheless, in case a privacy extension is used, the client MUST NOT cache any motd obtained before that extension took effect.

NOTE: Though the client MAY cache the results of this command, it MUST NOT rely on the correctness of any cached results, whether from earlier in the session or from a previous session. If the motd is cached, the client SHOULD provide a way to force the cached information to be refreshed.

### 2.5.3. Example

Example of output:

```
[C] CAPABILITIES
[S] 101 Capability list:
[S] VERSION 2
[S] READER
[S] LIST ACTIVE MOTD NEWSGROUPS
[S] .
[C] LIST MOTD
[S] 215 Message of the day follows
[S] Attention all users,
[S]
[S] This server will be down for scheduled upgrades on February 1st.
[S] It should be back up by 8:00 a.m. February 2nd.
[S] Any questions should be e-mailed to <newsmaster@example.com>.
[S]
[S] Apologies for the disturbance.
[S] .
```

## 2.6. LIST SUBSCRIPTIONS

### 2.6.1. Usage

Syntax

LIST SUBSCRIPTIONS [wildmat]

Responses

215 Subscriptions list follows (multi-line)

Parameters

wildmat Groups of interest

### 2.6.2. Description

See Section 7.6.1 of [RFC3977] for general requirements of the LIST command.

The "subscriptions list" is maintained by some NNTP servers to provide the client with a list of recommended newsgroups.

The information is returned as a multi-line data block following the 215 response code. Each line of this list **MUST** consist of a newsgroup name. There are no leading or trailing whitespaces in a line.

The order of newsgroups in the subscriptions list is significant: they are listed by order of importance, the first newsgroup being the most important to subscribe to.

The same newsgroup name **SHOULD NOT** appear twice in the output of this command. The subscriptions list **SHOULD** contain only newsgroups the news server carries.

The subscriptions list is newsgroup-based, and a wildmat **MAY** be specified, in which case the response is limited to only the groups, if any, whose names match the wildmat. Note that the wildmat argument is a new feature in this specification, and servers that do not support CAPABILITIES or do not advertise the SUBSCRIPTIONS keyword in the LIST capability (and therefore do not conform to this specification) are unlikely to support it.

The subscriptions list **MAY** be empty. If the server does not maintain the information, a 503 response code **MUST** be returned.

The client **MAY** use this information the first time it connects to the news server so as to initialize the list of default subscribed newsgroups. This list should therefore contain groups intended for new users on the news server or Usenet in general (for instance, newsgroups dedicated to testing, support, announcement, or FAQs). The client **MAY** present the groups in the order of appearance in the list to the user. When the subscriptions list is maintained and non-empty, the news client **SHOULD** use it, instead of a hard-coded default list, if any.

### 2.6.3. Examples

Example of output with no argument:

```
[C] CAPABILITIES
[S] 101 Capability list:
[S] VERSION 2
[S] READER
[S] LIST ACTIVE NEWSGROUPS SUBSCRIPTIONS
[S] .
[C] LIST SUBSCRIPTIONS
[S] 215 List of recommended newsgroups follows
[S] local.welcome
[S] local.test
[S] news.newusers.questions
[S] news.announce.newusers
[S] .
```

Example of output with a wildmat:

```
[C] LIST SUBSCRIPTIONS local.*
[S] 215 List of recommended newsgroups follows
[S] local.welcome
[S] local.test
[S] .
```

## 3. Additions to LIST ACTIVE

This document specifies three new status field values that can be used in the answers to LIST ACTIVE: "x", "j", and "=" followed by the name of a newsgroup.

### 3.1. New Status Field Values

The LIST ACTIVE command is defined in Section 7.6.3 of [RFC3977]. The fourth field of each line of this list indicates the current status of the newsgroup whose name is specified in the first field. Three status field values are defined in [RFC3977]:

"y" Posting is permitted.

"n" Posting is not permitted.

"m" Postings will be forwarded to the newsgroup moderator.



This document defines three other case-sensitive status field values that can also be used:

"x" Postings and articles from peers are not permitted.

"j" Only articles from peers are permitted; no articles are locally filed.

"=other.group" Only articles from peers are permitted, and are filed under the newsgroup named "other.group".

The server **SHOULD** use these values when these meanings are required and **MUST NOT** use them with any other meaning.

A newsgroup with status "x" is a newsgroup with status "n", except that articles from peers are not accepted. A newsgroup with status "x" is considered as closed: no new articles will arrive in such a group. On the contrary, articles from peers will arrive in a newsgroup with status "n". Local postings are not allowed in a newsgroup with either of these two status field values.

A newsgroup with status "j" is a newsgroup with status "y", except that (1) local postings are not accepted, (2) articles received from a peer that are crossposted to one or more valid groups are filed only into those valid groups, and (3) articles received from a peer that are not crossposted to any valid groups are not filed into any newsgroup, but are still propagated to other peers, if appropriate.

NOTE: Instead of not filing at all an article posted to a newsgroup with status "j", a news server **MAY** file it under a catch-all group if no valid group is applicable. When a news server uses a catch-all group to file the articles posted to newsgroups with status "j", this catch-all group **SHOULD** be named "junk". (The first letter of the "junk" newsgroup explains why this status has been called "j".)

Consequently, when a news server carries the "junk" newsgroup and uses it for the purpose of the "j" status, the "junk" newsgroup contains all postings not filed under another newsgroup, regardless of the status of the "junk" newsgroup. (However, an article posted explicitly to "junk" is treated according to the status of the "junk" newsgroup.)

The "junk" newsgroup may be available to news readers and is often used by a news server as a way to locally store an article that will be transmitted to peers (which may carry some of the newsgroups the article was posted to even if the local server does not). In addition, instead of rejecting an article that contains

an invalid Newsgroups header field or that is posted to newsgroups it does not carry, a news server may accept such an article and file it under the catch-all newsgroup.

Depending on the configuration of the news server, mentioning a newsgroup with status "j" is different than simply not listing the group, since articles arriving for unknown newsgroups may be rejected.

When the status field value begins with an equal sign ("=" or %x3D), a newsgroup name on the news server **MUST** immediately follow the sign. If the status of "foo.bar" is "=other.group", it means that "foo.bar" is an alias for "other.group". These two newsgroups are distinct; they do not share their articles or their article numbers. Local postings to "foo.bar" are not allowed, but articles from peers are accepted for "foo.bar" and filed into "other.group", regardless of the status of "other.group". The contents of their Newsgroups header fields **MUST NOT** be altered.

Alias groups are typically used during a transition between two newsgroups, including but not limited to a renaming of a group, or a correction of a misspelled group name.

The status of the newsgroup an alias points to **MUST NOT** be taken into account when an article arrives in an alias newsgroup. In particular, it means that unapproved articles arriving from peers in an alias pointing to a moderated newsgroup are accepted and filed into this moderated newsgroup. Therefore, an alias **SHOULD NOT** point to a moderated newsgroup, since it allows bypassing of the moderation.

An alias **SHOULD NOT** point to itself or another alias group. The newsgroup an alias points to **SHOULD** exist on the news server, and be visible to any client that can see the original group. However, when a client issues a LIST ACTIVE command with a wildmat including the original group, the newsgroup it points to is not listed in the response (unless of course the second newsgroup also matches the wildmat).

NOTE: If a server files newsgroups with status "j" into "junk", a newsgroup with status "j" and a newsgroup with status "=junk" are different. An article fed by a peer, and crossposted to a group with status "j", will result in the article being filed only in "junk" if there are no other groups with which to file it, or otherwise only in other valid newsgroups it is crossposted to. On the other hand, an article fed by a peer, and crossposted to a group with status "=junk", will result in the article being filed in "junk" and in other valid newsgroups it is crossposted to.

The following table summarizes what usually happens to an article posted to only the newsgroup "foo.bar", depending on its status field value on the news server:

Status field value of "foo.bar"	Accepted if local posting?	Accepted from peers?	Moderation needed?	Destination if accepted
y	Yes	Yes	No	foo.bar
n	No	Yes	No	foo.bar
m	Yes	Yes	Yes	foo.bar
x	No	No	No	
j	No	Yes	No	junk (if filed)
=other.group	No	Yes	No	other.group

The following table summarizes what usually happens to an article crossposted to the newsgroup "foo.bar" and a valid newsgroup "misc.test" (whose status field is "y") known by the news server, depending on the status field value of "foo.bar" on the news server:

Status field value of "foo.bar"	Accepted if local posting?	Accepted from peers?	Moderation needed?	Destination if accepted
y	Yes	Yes	No	foo.bar, misc.test
n	No	Yes	No	foo.bar, misc.test
m	Yes	Yes	Yes	foo.bar, misc.test
x	No	Yes	No	misc.test
j	No	Yes	No	misc.test
=other.group	No	Yes	No	other.group, misc.test

NOTE: The status of a newsgroup only indicates how articles arriving for that newsgroup are normally processed; news servers MAY provide clients with special privileges to allow or disallow some rights in these newsgroups. This specification defines neither these rights nor whether or not articles posted to these groups should be propagated to other peers.

### 3.2. Examples

Example of an article posted to an alias group by a peer:

```
[C] LIST ACTIVE
[S] 215 List of newsgroups follows
[S] foo.bar 21 12 y
[S] misc.test 3002322 3000234 =foo.bar
[S] .
[C] IHAVE <for.misc.test@example.com>
[S] 335 Send it; end with <CR-LF>.<CR-LF>
[C] Path: demo!.POSTED.somewhere!not-for-mail
[C] From: "Demo User" <nobody@example.com>
[C] Newsgroups: misc.test
[C] Subject: I am just a test article
[C] Date: 18 Oct 2008 16:02:45 +0200
[C] Organization: An example, Paris, FR.
[C] Message-ID: <for.misc.test@example.com>
[C] MIME-Version: 1.0
[C]
[C] This is just a test article.
[C] .
[S] 235 Article transferred OK
[C] LIST ACTIVE
[S] 215 List of newsgroups follows
[S] foo.bar 22 12 y
[S] misc.test 3002322 3000234 =foo.bar
[S] .
[C] HDR Xref <for.misc.test@example.com>
[S] 225 Header information follows
[S] 0 news.example.com foo.bar:22
[S] .
[C] HDR Newsgroups <for.misc.test@example.com>
[S] 225 Header information follows
[S] 0 misc.test
[S] .
```

The Newsgroups header field of this article is kept untouched. This article is filed under "foo.bar" even though it has originally been posted to the newsgroup "misc.test". Yet, it still propagates to peers that have been configured to receive articles posted to "misc.test".

Example of an article locally posted to an alias group:

```
[C] LIST ACTIVE
[S] 215 List of newsgroups follows
[S] foo.bar 22 12 y
[S] misc.test 3002322 3000234 =foo.bar
[S] .
[C] POST
[S] 340 Input article; end with <CR-LF>.<CR-LF>
[C] From: "Demo User" <nobody@example.com>
[C] Newsgroups: misc.test
[C] Subject: I am just a test article
[C] MIME-Version: 1.0
[C]
[C] This is just a test article.
[C] .
[S] 441 Newsgroup "misc.test" has been renamed to "foo.bar"
```

The article is rejected, with a detailed error.

#### 4. Augmented BNF Syntax for These Additions to the LIST Command

This section describes the formal syntax of the new LIST variants defined in this document using [RFC5234]. It extends the syntax in Section 9 of [RFC3977], and non-terminals not defined in this document are defined there. The [RFC3977] ABNF should be imported first, before attempting to validate these rules.

##### 4.1. Commands

This syntax extends the non-terminal <list-arguments>, which represents the variants of the LIST command.

```
; counts
list-arguments =/ "COUNTS" [WS wildmat]

; distributions, moderators, motd
list-arguments =/ "DISTRIBUTIONS" / "MODERATORS" / "MOTD"

; subscriptions
list-arguments =/ "SUBSCRIPTIONS" [WS wildmat]
```

##### 4.2. Responses

This syntax extends the non-terminals <newsgroup-status> and <list-content>, which represent the status field value returned by the LIST ACTIVE command and the response contents for the LIST command, respectively.

```
; active
newsgroup-status =/ newsgroup-alias /
    %x78 / %x6a ; case-sensitive "x" and "j"
newsgroup-alias = "=" newsgroup-name

; counts
list-content =/ list-counts-content
list-counts-content =
    *(newsgroup-name 3(SPA article-number)
    SPA newsgroup-status CRLF)

; distributions
list-content =/ list-distributions-content
list-distributions-content =
    *(distribution WS distribution-description CRLF)
distribution-description = U-TEXT

; moderators
list-content =/ list-moderators-content
list-moderators-content =
    *(wildmat ":" moderators-address CRLF)
moderators-address = S-TEXT

; motd
list-content =/ list-motd-content
list-motd-content = *(*U-CHAR CRLF)

; subscriptions
list-content =/ list-subscriptions-content
list-subscriptions-content = *(newsgroup-name CRLF)
```

## 5. Internationalization Considerations

No new internationalization considerations are introduced by this extension, beyond those already described in the core specification [RFC3977].

In particular, newsgroup names **SHOULD** be restricted to US-ASCII [ASCII] until a successor to [RFC5536] standardizes another approach.

Distribution descriptions and the message of the day **MUST** be in UTF-8 [RFC3629].

## 6. Security Considerations

No new security considerations are introduced by this extension, beyond those already described in the core specification [RFC3977] and the Netnews Architecture and Protocols specification [RFC5537] (especially distribution leakage and e-mail Denial of Service during the moderation process).

## 7. IANA Considerations

This section gives a formal definition of this extension as required by Section 3.3.3 of [RFC3977] for the IANA registry. It extends the LIST capability label defined in Section 7.6 of [RFC3977].

- o This extension provides additional keywords to the pre-existing LIST capability defined in Section 7.6 of [RFC3977]. New status field values are also added to the ACTIVE variant of the LIST command.
- o The capability label that this extension extends is "LIST".
- o This extension adds five optional arguments to the "LIST" capability label: "COUNTS", "DISTRIBUTIONS", "MODERATORS", "MOTD", and "SUBSCRIPTIONS", indicating which new variants of the LIST command are supported. Consequently, this extension associates these new arguments with the pre-existing "LIST" NNTP command.
- o This extension defines five new commands, LIST COUNTS, LIST DISTRIBUTIONS, LIST MODERATORS, LIST MOTD, and LIST SUBSCRIPTIONS, whose behavior, arguments, and responses are defined in Sections 2.2, 2.3, 2.4, 2.5, and 2.6, respectively.
- o This extension does not associate any new responses with pre-existing NNTP commands.
- o This extension does not affect the maximum length of commands or initial response lines.
- o This extension does not alter pipelining. The LIST COUNTS, LIST DISTRIBUTIONS, LIST MODERATORS, LIST MOTD, and LIST SUBSCRIPTIONS commands can be pipelined.
- o Use of this extension does not alter the capabilities list.
- o This extension does not cause any pre-existing command to produce a 401, 480, or 483 response.

- o This extension is unaffected by any use of the MODE READER command.
- o This extension does not affect the overall behavior of a server or client other than via the new commands.
- o Published Specification: This document.
- o Contact for Further Information: Author of this document.
- o Change Controller: IESG <iesg@ietf.org>.

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## 9. References

### 9.1. Normative References

- [RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, March 1997.
- [RFC3629] Yergeau, F., "UTF-8, a transformation format of ISO 10646", STD 63, RFC 3629, November 2003.



- [RFC3977] Feather, C., "Network News Transfer Protocol (NNTP)", RFC 3977, October 2006.
- [RFC5234] Crocker, D. and P. Overell, "Augmented BNF for Syntax Specifications: ABNF", STD 68, RFC 5234, January 2008.
- [RFC5322] Resnick, P., Ed., "Internet Message Format", RFC 5322, October 2008.

## 9.2. Informative References

- [ASCII] American National Standards Institute, "Coded Character Sets - 7-Bit American Standard Code for Information Interchange (7-Bit ASCII), ANSI X3.4", 1986.
- [NNTP\_LIST] Hernacki, B., "NNTP LIST Additions", Work in Progress, July 1997.
- [RFC2980] Barber, S., "Common NNTP Extensions", RFC 2980, October 2000.
- [RFC5536] Murchison, K., Lindsey, C., and D. Kohn, "Netnews Article Format", RFC 5536, November 2009.
- [RFC5537] Allbery, R. and C. Lindsey, "Netnews Architecture and Protocols", RFC 5537, November 2009.
- [USEAGE] Lindsey, C., "Usenet Best Practice", Work in Progress, March 2005.

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