

AIHA Tech Topic #12: Working With USENET Newsgroups

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Introduction

Usenet, as well as e-mail and WWW, is one of the most popular Internet services. Same as WWW, Usenet newsgroups include a lot of useful information. They allow you not only to search for the desired data but also to take part in discussions about the selected topics. You can put there a question and a few days or even hours later receive a qualified answer of an expert. It is obvious that we cannot ignore such an opportunity.

To use the Usenet effectively, it is essential to be aware of the structure of this data space and of the ways to access it.

The main objective of this document is to help the users that are already familiar with e-mail and WWW to learn how to use Usenet; to give them helpful references to data sources on Usenet in WWW and in Usenet itself; and to present a brief overview of various programs that enable using newsgroups.

References to sources directly used in the document are made in the text itself or at the end of the appropriate section. References to the additional sources are included in the special section at the end of the document.

While preparing this document, the author checked most of the WWW and Usenet addresses (URL) mentioned in the text (see the date of the last revision at the beginning). However, WWW and Usenet are highly dynamic. Thus, if your WWW browser does not find the document at the indicated URL, cut the right part of address leaving only the server name and try to find the document using the internal links.

The document does not cover all the issues of the subject discussed and represents only the personal experience of the author. The latter will be grateful for any additions, amendments, and comments.

Usenet Structure and Main Concepts

How Usenet Works

One of the shortest definitions of Usenet the author found at <http://www.dejanews.com> is the following:

While you use e-mail to send a message to one or several persons, Usenet allows you to send the same message to everybody. To do this, you should send this message to a special news server instead of sending it to a personal e-mail address. This server will deliver your message to other such servers spread all over the world.

Newsgroups are designed to support group discussions. Their basic concept is openness. This means that everyone (who has access to the Internet) can initialize a new discussion and join the existing one as a passive reader or as an active participant.

Newsgroups has multilevel (hierarchical) structure. Each topic is associated with a short word. A newsgroup name can be composed of several words separated by periods. For instance, news.newusers.questions is dedicated to the new users' questions (and answers to these questions). The first word is called *top level hierarchy*.

Given the list of the existing newsgroups, you can choose the one that interests you most. Then you can:

- read the articles published there (Read Articles);
- send a personal message to the author of an article (Mail Reply, Reply);
- post your followup to the newsgroup (Post Reply, Follow-up);
- post a new article (Post New Article, Send, Publish, Post, Write).

To send a personal message, you use the familiar e-mail service. While if you post your article or followup, your message is sent to the newsgroup and is available (for a few hours or days) to every news server on the Internet.

Additional references

Brief Usenet Overview <http://www.liszt.com/news/news-faq.html#define>

What is Usenet http://www.dejanews.com/help/help_index.shtml

Introduction for the Beginners <http://home.netscape.com/eng/mozilla/3.0/news/news1.html>

Concise and Useful Definition of Usenet
http://www.reference.com/pn/help_1.0/sources.html#usenet

Newsgroups Designed for Beginners <news:news.newusers.questions>,
<news:news.announce.newusers>

News Server (News Host, NNTP Server)

To use newsgroups, you should have access to one of the news servers (same as you should have access to an SMTP server to work with e-mail).

News servers on the Internet regularly exchange data.

Every news server is managed by its administrator. The administrator determines:

- list of groups supported by his server;
- life span of articles in different groups on the server(it varies from several days to several weeks). You cannot read an article after its expiration.

Access to a server could be either open or limited (by name and password). Normally user works with the server of his or her Internet Service Provider (ISP). To access this server, if the access is limited, user will use the attributes of his or her account registered with ISP: login and password.

You can search for open news servers' lists in WWW and Usenet using keywords: Free / Public / Open News Servers (see *Searching for information in Usenet* section). Listed below are some of such lists:

http://www.yahoo.com/News/Usenet/Public_Access_Usenet_Sites

<http://www.econ.hvu.nl/~pverweij/freenet.html>

<http://www.dracos.net/nomeans/FREESERV.HTM>

Threads

There is a special mechanism that allows you to follow discussions in newsgroups. This mechanism is called *threads* (meaning *relations* or *links*). These threads form an hierarchical structure of articles that resembles the PC file structure. First level is composed of the main articles, second is made up of the followups to these articles, then go followups for the followups and so on. To work with newsgroups effectively, an application should display threads and be able to navigate you through them.

Newsgroups

Group hierarchies can be global, local, and corporate. The first category is supported by servers all over the Internet, the second by servers in some countries, and the third could exist on a unique server.

Examples of global hierarchies: comp, news, misc, alt, rec.

Examples of regional hierarchies: relcom and fido7 in Russia, de in Germany.

Example of a corporate hierarchy: glas for ISP GlasNet in Moscow.

There is one Usenet group that surely deserves your attention. It is news:news.announce.newusers (on your server it may look as news:usenet.news.announce.newusers). It is included in the global hierarchy and should be supported by any news server. This newsgroup provides basic information on Usenet and on the rules for posting to Usenet. The *Welcome to Usenet!* article greets a new Usenet user and lists main documents regularly published in the group. The most important of them follow:

What is Usenet?

What is Usenet? A second opinion.

Rules for posting to Usenet

Hints on writing style for Usenet

Emily Postnews Answers Your Questions on Netiquette

How to find the right place to post (FAQ)

Introduction to news.announce

Introduction to the *.answers newsgroups
FAQs about FAQs
Answers to Frequently Asked Questions about Usenet

You can also find these documents on the following www pages:

<http://www.netannounce.org/news.announce.newusers>

You can send any questions in English to the **news:news.newusers.questions** group and read answers to the questions of the beginners in **news:news.newusers.answers** group.

At **www.cis.ohio-state.edu/hypertext/faq/usenet/FAQ-List.html** you will find a special database on frequently asked questions (FAQ) included in the news.answers group. Here you can search for information using key words.

You may want to look for newsgroups lists at **<http://www.liszt.com/news>**.

Moderated Newsgroups

Not all newsgroups are open for posting articles. Some newsgroups are "moderated"; in these newsgroups, the articles (or followups) are first sent to a moderator, that is, administrator or editor of the group, for approval before appearing in the newsgroup. Moderator will make the decision on whether to publish your message or not. Normally, moderated newsgroups are those that are devoted to highly specialized topics.

Rules for Posting to Usenet (Netiquette)

There are some general rules for posting to newsgroups. You will find a lot of useful advice in *Special Edition. Using the Internet* written by Mary Ann Pike.

Complete guides for general rules of conduct in Usenet are regularly published in **news:news.announce.newusers** in *Emily Postnews Answers Your Questions on Netiquette* article.

Some newsgroups have special purpose rules concerning, for instance, topics included or language of publications. Normally these rules are regularly posted in the group itself. For example, many regional groups allow you to publish messages only in the national language.

Some groups forbid to publish advertisements, others are designed specially for this purpose.

A beginner will naturally want to post a test message. How to find the right place for it? You should use one of the groups specially intended for such messages. Such groups exist in global and local hierarchies and usually include *test* in their names. For example, alt.test and misc.test groups are specially designed for testing.

Additional references

Quick Start. Read before posting.

home.netscape.com/eng/mozilla/3.0/news/news2.html#read

Format of Usenet Articles

Usenet article format is akin to e-mail message format.

Here is a basic sample of an article posted to Usenet:

Subject: Testing Usenet
From: sh@glas.apc.org
Date: 1997/06/19
Message-Id: 866706095.26022@dejanews.com
Newsgroups: alt.test

Posting this test message with DejaNews ...
Alexander Shumilov, AIHA, Moscow

As you can see from the sample, an article includes the header that is composed of several lines and the body of the message. Same as in an e-mail message, the header of an article can include some additional lines besides the obligatory ones.

Here we present the description of all obligatory and the commonly used additional header key words.

From	e-mail address of the sender (author)
Date	posting date of the article
Newsgroups	the name(s) of group(s) to which the article is posted
Subject	topic of the article
Message-ID	unique Usenet identifier of the article
Path	list of the servers (in the reverse order) that the article used to access this particular server. The server with which the article was posted is indicated last
Reply-To	e-mail address indicated by the author for replying (can be different from the address shown in the <i>From</i> field)
Followup-To	list of groups where follow-up articles should be published
Expires	the supposed life span of the article
References	identifiers of the articles to which this article is a followup
Organization	brief description of the organization to which the author belongs
Approved	includes the e-mail address of the moderator (for moderated groups)
Cancel	identifiers of the previously posted to Usenet articles now to be deleted. The cancel and the canceled articles should be sent from the same e-mail address.

The body of an article includes only ASCII characters (7 or 8 bits), as does the body of an e-mail message.

To post binary files, you should use text coding, same as when sending them with e-mail. To do this, use for instance, the standard Uuencode/decode application. Same as for e-mail, coded file could be split into parts and placed in several articles.

For the complete description of Usenet article format, refer to the official document at <http://ds.internic.net/rfc/rfc1036.txt>

How to Access Usenet

There are several ways to access Usenet, that is, several ways to access news servers.

E-mail Access

First of all, you can get access to Usenet via e-mail.

In this case, you receive a list of groups, subscribe to some of them, receive all new articles (or part of them according to the filter you have chosen) and post your own articles - all by means of e-mail service. Thus, you do not require any additional software. All you need is the e-mail address of the news server and the requisite message format.

We will not discuss this mode in detail because it is neither the quickest nor convenient way to access Usenet.

The description of e-mail access to the Internet services can be found at <http://www.landfield.com/faqs/usenet/faq/part1/section-47.html>

Terminal Access to News Server

As you already know, using a terminal access software you can work with the Internet host computer (usually it is the computer of your ISP) in terminal mode.

Working in Windows 95 with dial-up access to ISP, you can use Hyper Terminal (from Windows Accessories Group) for connection to ISP computer or use Telnet Windows 95, if you have already connected by Dial-up Networking using TSP/IP (SLIP/PPP) protocol. However, the latter possibility is of no practical importance, for the availability of TCP/IP allows you to use a more up-to-date and convenient access method (see below).

In both cases, you are prompted to enter *login* and *password* to work with host. This allows you to work with Usenet in command-line mode. In fact, at this moment you start an application (rn, trn, nn, tin or alike) on the host, and this application will access the news server. Both the application and the server are located on the host.

The advantage of this solution is its almost total availability as most ISP provide access from your PC to a news server as well as to news software.

However, the method has the following drawbacks:

- rather crude user interface as you can only work in command-line mode;
- on-line mode.

The last drawback can be partly eliminated by downloading the articles you are interested in to your PC, then reading those articles and preparing your own ones off-line, and finally uploading your messages to the ISP host. The so-called *off-line news readers* (see below) use the same concept that allows you to reduce waste of time and money connected with dial-up (that greatly increases in case of the bad quality phone line).

IP Access to the News Server

It is most probable that you already use IP connection to ISP (either direct or, more likely, dial-up, using PPP or SLIP protocol). In this case, you have TCP/IP protocol available on your PC under

Windows 95 that allows you to use the appropriate software. For instance, Eudora in case of e-mail or Netscape browser for WWW.

There are also several Usenet applications oriented to IP access. The feature that distinguishes this solution from the previous one is that you start the application on your local PC. Using such software, you have to indicate then what news server (NNTP) you are going to use.

In this case, you can choose any news server, not necessarily the one located on the computer of your ISP.

This sort of applications is typified by Netscape News software (which is, in fact, a part of the same Netscape Navigator Gold 3.01).

Among a wide range of such applications (they are called news readers, and there currently exist dozens of them) we would like to distinguish those that are specially designed to save your money, time and nerves in case of dial-up connections. These applications are called *off-line news readers*.

WWW Access

This is the newest, the easiest and the most convenient solution that offers access to newsgroups.

This solution is based on the interface provided by the developers of the specific WWW server that allows this server to connect to one or more news servers. Thus, you require neither direct access to a news server nor a special news application (to say nothing of the skill to use such application!). All you need is a WWW browser.

Some servers support only news reading (see Medlux below), others - reading and posting (see Dejanews and Reference.com below).

The major disadvantages of these solutions are the following:

- on-line access;
- restriction to work only with the selected news server. Although the two systems described below provide rather representative lists of groups.

Searching for Information in Usenet

The following two questions appear to represent the main problems of a Usenet beginner:

1. How to find Usenet publications that interest me?
2. How to find the right place to post my article or question?

Fortunately, the younger but more rapidly progressing WWW service is able to help its elder brother - Usenet. There are universal Search Engines (SE), where you can specify Usenet as a search space. Listed below are some of such SE along with their URL and brief comments on how to configure these applications for searching Usenet:

AltaVista	http://altavista.digital.com	Search: Usenet
Hotbot	http://www.hotbot.com	Also Search: Usenet

The last two SE from the table above use the specialized Search Engine in the Usenet DejaNews space <http://www.dejanews.com/> that was developed in 1995. Due to the highest effectiveness and convenience of this Usenet SE, we devote the next section to its overview.

DejaNews

DejaNews <http://www.dejanews.com> is a very convenient and comprehensive tool for work with Usenet, or, to put it in other words, a WWW interface for Usenet. The system allows you:

- to get access to practically all required information on the structure and rules for using Usenet, including the list of global and regional groups (more than 15,000 entries). You will find in DejaNews an excellent glossary of the general Internet concepts and Usenet terms in particular;
- to investigate Usenet. DejaNews (as opposed to a standard news server) provides the database of its own that includes practically ALL the articles posted to Usenet since 1995;
- to accomplish all operations with newsgroups you suspect: read and post articles as well as followups; subscribe to a group (using the necessary filter) and receive new messages published there.

For the beginners, DejaNews provides a useful *New Users!* tutorial.

DejaNews allows you to find articles using selected key words and read these articles. You also can:

- sort the results of search by groups. Thus, you can find out in which groups the topic is discussed more frequently;
- navigate along threads and read all messages connected with the selected article;
- view the information concerning the author of an article: his or her e-mail address, total number of the articles published by this author, groups where they were published;

You can configure the Search Engine according to posting dates, context, etc. It is also possible to configure search filters.

It is very convenient that DejaNews checks your article format before publishing the article and provides a lot of advice concerning posting rules and writing style. To be able to post your articles, you have to register with DejaNews. However, the registration is free.

Working with DejaNews you need not take care of getting access to a news server as DejaNews has its own news server, one of the most comprehensive in the Internet (more than 15,000 entries).

The drawbacks of DejaNews used as a news application are the following:

- DejaNews is an on-line application; it is better to choose off-line applications when using dial-up connection to ISP, especially if the phone line quality is bad;
- DejaNews does not yet provide the full functionality of attached files;
- DejaNews only works with its own news server. Thus, the application does not allow you to work with corporate newsgroups supported only by the news server of your ISP.

However, these drawbacks of DejaNews are, obviously, natural consequences of its advantages. DejaNews would be appropriate for use in conjunction with another, off-line news reader (for example, Free Agent).

Reference.com

Reference.COM <http://www.reference.com> is another convenient WWW interface for working with newsgroups.

Most of the statements that we made about Dejanews are also true for this system. The main difference is that Reference.COM is designed not only for Usenet, but also for two other tools that support group discussions: Mailing Lists and Web Forums.

To post articles with Reference.COM (same as with DejaNews), free registration is required.

News readers

Why should we need special Usenet applications if there are such WWW interfaces as Dejanews and Reference.com (see the previous sections)? There are three main reasons: unavailability of the off-line mode, lack of access to other news servers and limited usage of binary files.

This section includes a list of news readers for Windows 95. Most of these applications are freely distributed via the Internet. You can install one of them on your PC. The author has listed those applications that are most often referred to in WWW and especially in Usenet and those that are highly appreciated by users and computer editions. All of the applications are intended for use on a local PC running Windows 95 with TCP/IP installed. The list follows:

- Free Agent
- MicroPlanet Gravity
- Netscape News (included in Netscape Navigator Gold v.3.01)
- Microsoft Internet News
- Virtual Access <http://www.ashmount.com/down.htm>
- NewsXpress
- WinVN
- Intel Smart News Reader <http://www.intel.com/iaweb/newsrdr/index.htm>

The first two applications are detailed later in special sections.

For additional information, refer to the following newsgroups:

- general discussions on news readers in news:news.software.readers or <http://www.liszt.com/news/news/software>
- off-line news readers review in news:alt.usenet.offline-reader

Choosing the application, you should pay attention to the following features:

- convenience of interface;
- availability and effectiveness of on-line and off-line modes;
- ability to work with one server or with several NTTP servers simultaneously;
- convenience of threads usage;
- convenience of access to the desired newsgroup;
- convenience and effectiveness of binary file (attachments) usage. On-fly decoding of an article;
- ability of the application to fulfill several tasks simultaneously (multitasking).

Free Agent

If you make a request to DejaNews about an application best suited for work with newsgroups (request "best news reader"), many Usenet users will answer you that it is Free Agent (or AGENT) by Forte.

Free Agent was also recently awarded by *PC Computing Magazine* as *Best 1,001 Free Downloads From the Web*, and *Windows Magazine* named it as one of the top 100 Windows applications of the year.

Free Agent is freeware, and Forte Agent is its commercial (and more advanced) version.

Main features of Free Agent and Forte Agent are described at <http://www.forteinc.com/agent/freagent.htm> :

- flexible configuration of the on-line/off-line modes. You can customize the settings so as to choose the appropriate balance between convenience and reduction of the connection costs. In off-line mode, the application connects to news server only to download article titles and then to download the selected articles. You analyze the information without connection to the server. In on-line mode, you can investigate the groups thoroughly navigating along threads;
- ability to simultaneously fulfill several tasks on-line e.g. read one article and download another;
- easy-to-use and flexible interface;
- full support for receipt and posting of binary (attached) files;
- long files are automatically split into parts and then merged back;
- ability to view image files and play sound files without exiting the application;
- full support of links between articles and of thread navigation;
- ability to rapidly receive new articles in order to analyze the group contents;
- easy installation and flexible configuration;
- support for all the standard functions used to work with newsgroups.

You can download the current 32-bit version of Free Agent for Windows 95 (1.11) from <http://www.forteinc.com/getfa/download.htm> or after reading ftp://ftp.forteinc.com/pub/free_agent/readme.txt from <ftp://ftp.channell.com/pub/winsock-1/Windows95/News/fa32-111.exe>

<news:alt.usenet.offline-reader.forte-agent> group is specially designed for discussing these applications.

For technical assistance on the program, refer to <http://www.forteinc.com/agsup> .

Gravity

MicroPlanet Gravity is another news application highly appreciated by the users. At <http://www.microplanet.com> you will find the following characterization of the product: "MicroPlanet Gravity 1.0 is the best implementation of a news reader available today for your Windows 95 PC. PC Magazine, October 8, 1996"

You will find the complete software description and its current version at <http://www.iglou.com/entropy/shareware/net/gravity/> or http://interactive.apcmag.com/apcmag.cd/apc23/ikit_w95.htm

Additional references

The list of medical newsgroups <http://views.vcu.edu/napcrg/ng.html>

Special Edition. Using the Internet. Mary Ann Pike. Que Inc., 1995