

## Netnews Administration System (NAS)

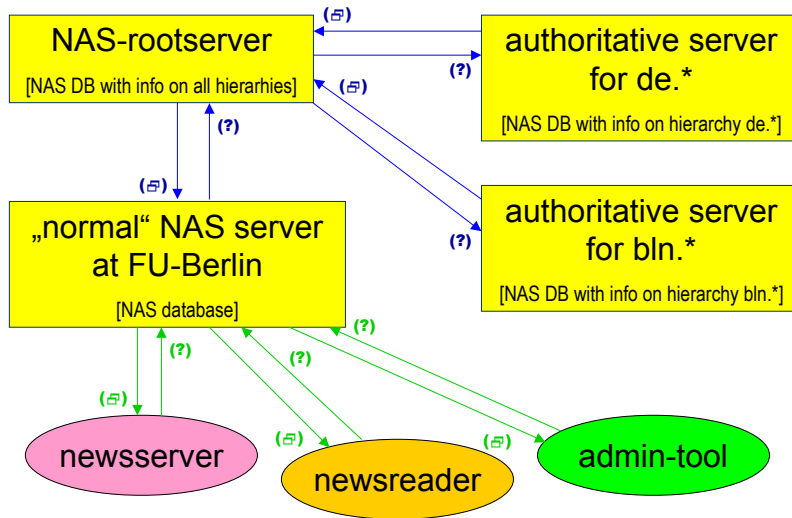
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## NAS – Highlights

- NAS = Netnews Administration System
  - framework to simplify administration and usage of Netnews
  - data for the administration of newsgroups and hierarchies are kept in a distributed hierarchical database
  - NAS data are available through a client-server-protocol
  - NAS database is accessible by news-servers and news-administrators as well as by news-readers
  - NAS is usable in co-existence with other methods of news administration
  - NAS attempts to provide:
    - as much information as possible and necessary
    - reliable and up-to-date information

## NAS – Overview



## NAS – Data for Hierarchies

- description
- status ( complete, incomplete, obsolete, unknown )
- netiquette URL
- rules URL
- preferred language
- preferred charset
- admin e-mail and PGP-key
- ...

## NAS – Data for Newsgroups

- status ( (un-)moderated, readonly, removed, unknown )
- moderator's address
- creation date
- newsgroup charter URL
- short description
- type ( discussion, binary, sources, announce, test, ... )
- netiquette URL
- FAQ URL
- ...

## NAS – General Commands (1 / 3)

- HELP [**command**]  
lists available NAS commands [or gives a short description of **command**]
- INFO  
information on NAS server and connection
- DATE  
server date in Universal Time Coordinated
- VERS [**protocol\_level**]  
returns current protocol level [or negotiates a new level]
- QUIT  
closes connection

## NAS – Client-Server Commands (2 / 3)

- **LIST hierarchy**  
lists all newsgroups and sub-hierarchies
- **LSTR hierarchy**  
recursive list of newsgroups and hierarchies (use of a wildcard is possible)
- **HIER hierarchy**  
lists all available information on given hierarchy (specifying a selection of fields is possible)
- **DATA newsgroup**  
lists all available information on given newsgroup (specifying a selection of fields is possible)

## NAS – Server-Server Commands (3 / 3)

- **GETP user passwd timestamp hierarchy**  
used for communication with regular NAS servers; retrieves all data for the specified hierarchy from the server; the “timestamp” makes sure that only newer data is transferred
- **GETA user passwd timestamp hierarchy**  
used for communication with authoritative servers; retrieves all data for the specified hierarchy from an authoritative server; the “timestamp” makes sure that only newer data is transferred

## NAS – Sample NAS Session

- *200 welcome!  
nas.fu-berlin.de ready*
- *.*
- **VERS 2**
- *302 2 My max protocol level is 10*
- *.*
- **HIER de**
- *611 Data coming  
Name: de  
Status: Complete  
Description: Internationale deutschsprachige Newsguppen  
Netiquette: <http://www.dana.de/de/netiquette.html>  
Faq: <http://www.dana.de/de/neue-de-gruppe.html>  
Language: DE  
Charset: ISO-8859-1  
Newsgroup-Type: Discussion  
Date-Created: 19920106000000*
- *.*
- **QUIT**
- *201 Closing connection. Bye.*

## NAS – Software Development (nasd)

- NAS server software (nasd) is running on nas2.cis.fu-berlin.de port 991 (nas)
- tested on Irix 6.5, Free BSD 4.5 and Linux (SuSE and Debian)
- needs libxml2.2.x for successful installation
- nasd-distribution is developed using autoconf
- nasd can be started from inetd or manually
- nasd uses XML data files to store information on newsgroups and hierarchies

## NAS – XML Datafiles

- nasd stores the information for its database in XML files
- public DTD for these files is available at <http://nas.fu-berlin.de/dtd/nas.dtd>
- validity of XML files can be checked using nasd or external tools (xmllint)
- other nasd data (such as username / password combinations for server-server communication) are also stored in XML files
- ASCII2XML script available to aid hierarchy-administrators to convert their data files

## NAS – Sample XML Data

```

<?xml version="1.0" encoding="iso-8859-1" ?>
<!DOCTYPE hierarchy SYSTEM "http://nas.cis.fu-berlin.de/dtd/nas.dtd">
<!-- do not edit, generated by ascii2xml.pl -->
<hierarchy status="complete">
<name>bln</name>
<description>Belange Berlins</description>
< charter>ftp://ftp.fu-berlin.de/doc/news/bln</ charter>
< rules>ftp://ftp.fu-berlin.de/doc/news/bln/bln</ rules>
<ctlSendAdr>news@fu-berlin.de</ctlSendAdr>
<ctlNewsgroup>bln.net.news</ctlNewsgroup>
<modWildcard>%s@fu-berlin.de</modWildcard>
< language preferred="yes" value="de"/>
< language preferred="no" value="en"/>
< charset value="ISO-8859-1"/>
< encoding value="text/plain"/>
(...)
<!-- all newsgroups -->
<newsgroup status="deleted">
< name>bln.jobs</ name>
< description>Arbeit in Berlin.</ description>
< dateDelete value="19960606220659"/>
< replacement>bln.markt.arbeit</ replacement>
</ newsgroup>
<newsgroup status="unmoderated">
< name>bln.termin</ name>
< description>Veranstaltungstermine - Wissenschaft, Kultur usw.</ description>
</ newsgroup>
<newsgroup status="unmoderated">
< name>bln.verkehr</ name>
< description>Verkehrswesen in Berlin und im Umland.</ description>
< dateCreate value="19971018040916"/>
</ newsgroup>
</ hierarchy>

```

## NAS – Software Development (clients)

- NAS server can be queried simply by:  
telnet nas2.cis.fu-berlin.de 991
- nasclient – simple NAS client (Perl)
- nasquery – allows passing of NAS commands directly on the command line (Perl)
- webinterface – easy „click-and-type“ access for testing via browser ( <http://nas.fu-berlin.de/webinterface> )
- client-library – C-library to help developers add NAS functionality to news-servers, news-clients and NAS specific software

## NAS – Software Development (slrn)

- NAS integration in existing newsreaders must be made as easy as possible
- example: slrn goes NAS

```

Inn 0.9.7.d ** Press '?' for help, 'q' to quit. ** Server: News.FU-Berlin.DE
1 bIn.announce.fub.zedat      Mitteilungen des Rechenzentrums der Freien U
2 bIn.announce.fub           Mitteilungen betreffend Freie Universitaet.
2 bIn.announce.fub.cs        Ankuendigungen des FB Informatik der TU. (Mo
1 bIn.announce.fub.zrz      Mitteilungen betreffend die ZRZ der TU. (Mo
3 bIn.markt                  Mitteilungen betreffend die ZRZ der TU. (Mo
27 bIn.test                  Testgruppe - Richtung: Reflektoren.
11 [NRS Information for bIn.announce.fub]
9 Name: bIn.announce.fub
2 Status: moderated
24 Followup: bIn.announce.fub.d
406 Description: Mitteilungen betreffend Freie Universitaet. (Moderated)
117 Netiquette: http://rifa.wit.edu/pub/usenet/news/announce/newusers/R_Primer_o
10 How_to_Work_With_the_Usernet_Community
Language: de
43 Language: (en)
805 Charset: ISO-8859-1
106 Encoding: text/plain
619 Newsgroup: fuser.announce
Article-Length: 50000
300 [R11]
7 comp.unix.large           UNIX on mainframes and in large networks.
8 de.adem.infos            Infotexte zum Netz, <de-adem-infos@nafu.de
11301 de.adem.in.net-abuse.wail E-Mail-Missbrauch.
-- News Groups: News.FU-Berlin.DE -- 12/111 (284)
    
```

## NAS goes RFC...

- [...]
- May 2001: 5th version of NAS draft published
- November 2001: 5th version of NAS draft handed in to the RFC Editor
- January 2002: NAS draft passed on to IESG by RFC Editor ( <http://www.rfc-editor.org/queue.html> )
- April 2002: AD asks nntp-ext mailing-list to review and comment on the draft
- September 2002: an updated „working version“ of the draft addresses issues from discussion on nntp-ext
- September 2002: NAS presentation at RIPE 43 ☺

## NAS – Further information

- website: <http://NAS.FU-Berlin.DE/>
- e-mail: [NAS@FU-Berlin.DE](mailto:NAS@FU-Berlin.DE)
- internet draft: available from NAS website or <http://www.ietf.org/internet-drafts/draft-dfncis-netnews-admin-sys-04.txt>
- mailing list  
( [nas-l@majordomo.zedat.fu-berlin.de](mailto:nas-l@majordomo.zedat.fu-berlin.de) ):
  - To: [majordomo@majordomo.zedat.fu-berlin.de](mailto:majordomo@majordomo.zedat.fu-berlin.de)
  - subscribe nas-l (in message body)
- NAS software available upon request