国立遺伝学研究所

DNA Data Bank of Japan

共同利用電子計算機

利用の手引

(1987年 11月 11日)

DDBJ

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はじめに

遺伝情報分析研究室　宮澤三造

遺伝研共同利用電子計算機システムは主にUNIXをオペレーションシステムを用いる複数計算機からなる。　　計算機の利用に関する情報は、その殆どがメインシステムにおいて"getinfo"コマンドを使用することによりオンラインで得ることができる。この利用の手引は、その一部をまとめたものである。最新のより詳しい情報は、"getinfo"コマンドを使用して得て欲しい。

オンラインヘルプは、英字端末を考慮しそのほとんどが英語で書かれているので、この利用の手引もまた英語中心となった。下手な英語をお許し願いたい。

またこの利用の手引は未だ未完成である。システムが稼働してから間もない。システム整備はほぼ一段落したが、DDBJための計算機としての本来の目的であるDNA,蛋白質配列解析用ソフトウエアの開発はこれからである。勿論副システムのMicroVAX II/VMSでは、これまでVAX/VMS下で開発されたソフトウエアの主なものは稼働させている。そのマニュアルはオンラインで手に入る。印刷物としても個々に準備していきたい。この利用の手引はあくまで計算機を利用するに当たって必要とされる一般情報を集めたものである。御承知願いたい。

御意見、質問等は、可能な限りメールの形でお寄せ下さい。対処致します。

Contents

Login by "ddbjnews"

"ddbjnews" is a special account by which one may login the NIG main host (niguts) for limited purposes such as geting information of the DDBJ activity, DNA/protein data bases, and submiting DNA data to data banks.

An example of login by "ddbjnews" is shown in the following. In the following, NEC PC-9801 is assumed to be used with the kermit terminal emulation program.

```
> kermit
NEC PC-9801 Kermit-MS V2.27
Type ? for help

Kermit-MS> connect

[Connecting to host, type Control-] C to return to PC]


Connecting to host at 2400 baud on port 1
(Type Control-] to return to PC)

atdt0559756036          (Hayes command makes a modem call 0559-75-6036)
CONNECT 2400
(Type Control-] B to send BREAK.)

niguts
        Welcome to the NIG FACOM-M380Q/UTS V10L30 (system V release 2.0)

login: ddbjnews
Terminal type (pc98msdos):

New users should read a welcome message by using "getinfo" command.
Electronic mail and bulletin board (JUNET-USENET) are running.

news: usenet junet_mails Try_getinfo

                        DDBJ online news
                        ----------------

Mailing address: (...@niguts.nig.junet)
  ddbj                  General inquiries to DDBJ
  ddbjsub               Data submissions to DDBJ
  nig                   General inquiries to the system manager
  genbank               General inquiries to EMBL
  gbsub                 Data submission to GenBank
  embl                  General inquiries to EMBL
  emblsub               Data submissions to EMBL

(EOF):

        available commands

menu            # get a menu list
getinfo         # get information
man             # get the manual of commands
mailx           # send a mail; "ddbj" for ddbj; "nig" for system management
ls              # list contents of directory
cat             # catenate and type files
cp              # copy files
rm              # remove files
vi              # vi editor
kermit          # file transfer program
exit            # exit

DDBJnews%
```

Getinfo command

```
DDBJnews% getinfo

Type the name of item in which you are interested. The item will be output
to stdout. If you type
        'q', "getinfo" will quit at that point.
        '?', "getinfo" will output item list.

Meta characters for file names in SHELL may be used to specify items;
        ex. "ddbj*", "*LAN"

Pager "jpg" is used to print files; to get help, type ": h" or "(page .): h".

(EOF):
DDBJ_news->       Info_as_file      Learn_unix        Learn_vms
Welcome_msg       bugs/             bulletin_board/   emacs/
file_transfer/    graphics_lib/     imsl_stat_math/   ingres->
inquiries         junet/            local_commands/   mails/
manuals->         nig_system/       printing_man      tex
troff             tty-emulator/     work_directory

Item or 'q'? Info*
```

How to get "info" as files

```
Page "jpg" is used to print files in "getinfo". So you can use "s savefile"
command for the jpg to get "info" as a file; type ": h" to get help in pager.

Type "% man jpg" for more detail.

Example to get "info" as a file,

        % getinfo
        .
        .
        .
        (page  ):s savefile

or

        % getinfo >info-file
        .
        .
        item or 'q'? application
        .
        .
        item or 'q'? kermit
        .
        .
        item or 'q'? q


Item or 'q'? q
```

Welcome to
the National Institute of Genetics (NIG) Computer System
specifically for the DNA Data Bank of Japan (DDBJ)

Beginners to the UNIX system may use following commands first.

```
% getinfo              #To get informations
% man man              #To know how to use the "man" command for online manuals
% learn                #To learn the UNIX operation system
% jlearn               #Kanji version of learn
% man news             #To know "news" for getting news
% man mailx            #To know "mailx" for getting/sending mails
% findman keyword      #To search manual entries by the keyword
```

The NIG computer system consists of a few highly powerful machines,

niguts: FACOM M380Q/UTS (system V release 2.0 with BSD extensions)
nigvms: Micro Vax II/VMS
nigsun: Sun 3/260C Release 3.3 (4.2 BSD with system V extensions)
nigiris: Iris 3020 3D graphic WS (BSD-like system V)

Because these computers are networked by using the ethernet TCP/IP protocol, you can login any computer through other ones, and transfer files between them. Also, remote command executions are possible between unix machines; know about "telnet", "ftp" ,"rlogin", "rcp", and "remsh" commands.

Disk space is limited. So please check frequently whether there are unnecessary files or not and if there are such files, please delete them. In the case of vax, old versions of file are always kept when new files are created.
So it is very important to delete unnecessary old versions.

In the uts, work disk area may be used to temporarily keep large files.
The your work directory is stored in the symbol, WK; try "echo $WK". Files in $WK directory will not be backed up at all.

To know the NIG computer system further, please use the "getinfo" command.

If you have any trouble or need help, please don't hesitate to send mails to the system manager, "nig"; we will reply by mails, too. Please avoid to phone the system manager except urgent cases. Mailing addresses for inquiries are obtained by using the 'getinfo'; type the item, 'inquiries'.

Good luck with the NIG computer system!

1987/04/11
Sanzo Miyazawa
(a system manager)
Lab. of Genetic Information Analyses
Center for Genetic Information Research
NIG
(0559) 75-0771, ext. (649) in working time.
(0559) 75-0772 at night

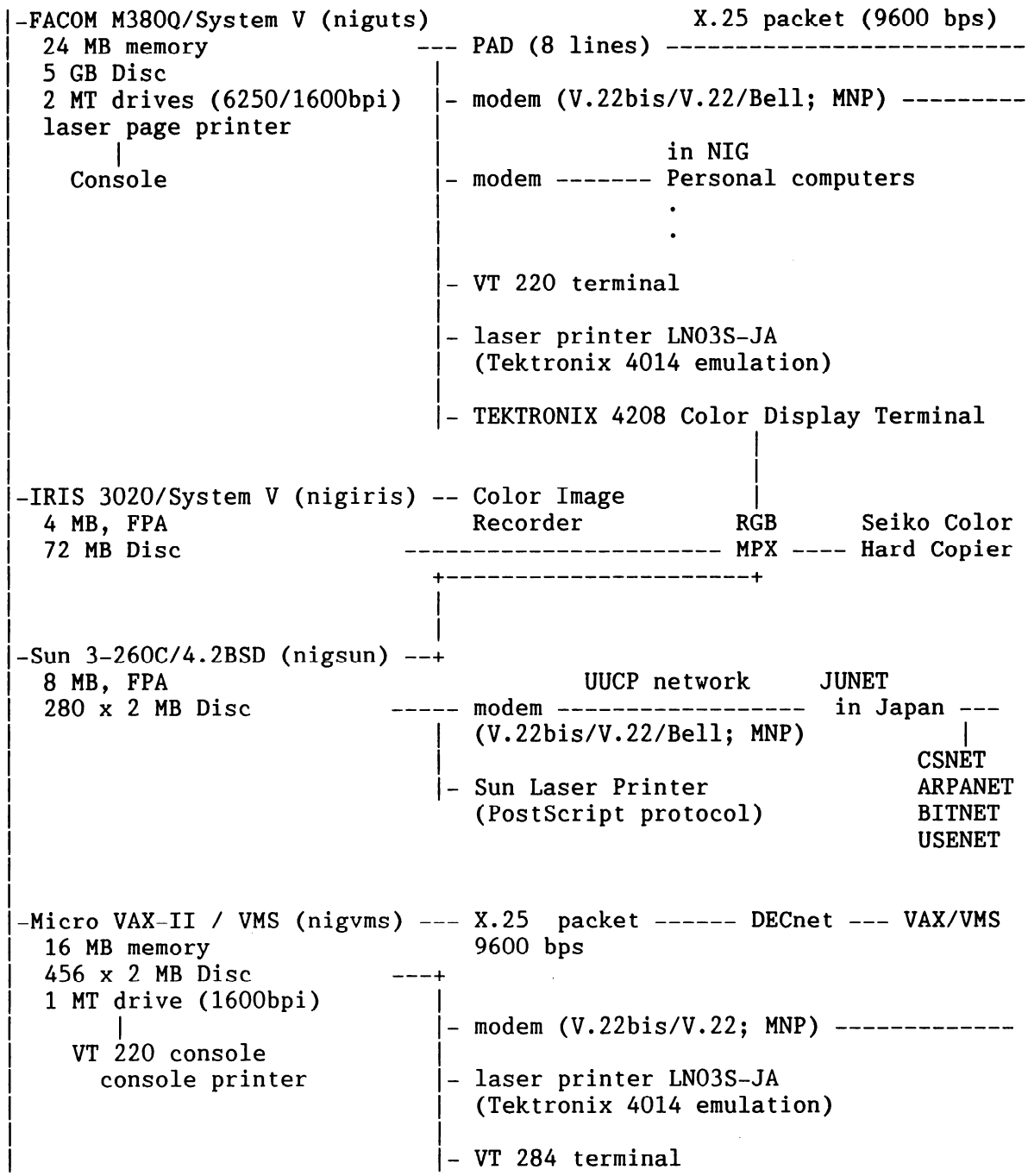
The NIG computer system

The NIG computer system consists of a few highly powerful machines,

(host-name) (machine descriptions)
niguts: FACOM M380Q/UTS (system V release 2.0 with some BSD extentions)
nigvms: Micro VAX II/VMS
nigsun: Sun 3/260C Release 3.2 (4.2 BSD with System V full extentions)
nigiris: Iris 3020 3D graphic WS (BSD-like System V)

Because these computers are networked by using the ethernet TCP/IP protocol, you can login any computer through other ones, and transfer files between them. Also, remote command executions are possible between unix machines.

Ethernet TCP-IP LAN (10Mb/s) in the NIG



How to login other systems

Type "hostname" for remote systems networked by Ethernet TCP/IP in NIG.

```
        Ex.
        % nigvms        # telnet is used.
        % nigsun        # rlogin or rsh is used.
        % nigiris       # rlogin or rsh is used.
```

Username "guest" whose password is "guest" is an common account for everyone in the systems above.

Example:

```
niguts% telnet vax      # enter telnet to login vax
        or              # Username GUEST (password, GUEST) may be used.
        % nigvms
        .
        .
        .
nigvms$ logout          # logout vax
telnet> quit            # to quit telnet
niguts%                 # uts prompt
```

Note: To call nigsun on the vax/vms , specify "open sun/crmod=(input=on)".

Ethernet-TCP/IP protocol

	BSD	DARPA protocol
remote-login	rlogin	telnet
file-transfer	rcp	ftp
remote-command exec.	rsh	
other commonds	rwho talk	
protocol	TCP IP (driver)	
Interface	Ethernet	

Restrictions:

In UTS, rsh is named as remsh; system V has rsh as a restricted shell.
rwho and talk are not implemented in UTS.
To call other UNIX machines by rlogin, use switch "-8";
Ex. % rlogin sun -l guest -8

On VAX/VMS, BSD commands can't be used; it supports the DARPA protocol only.
To call nigsun, specify "open sun/crmod=(input=on)".

Wide Area Network

All cmputers of nigsun, niguts, nigiris, and nigvms that are locally networked by the Ethernet-TCP/IP are members of JUNET (Japan Unix Network).

NOTE: Uucp is not installed on the nigiris, yet.

JUNET-UUCP network

Our system is a member of a uucp network called JUNET; electronic mail and bulletin boad network. Our domain name is 'nig'. The 'niguts', which is the uucp host name of m380q/uts, and linked to the 'nigsun' that is the domain master of the 'nig', and linked to the ccut at the Computer Center of the Tokyo Univ.; refer to mails/route_map. Mails and news are sent and received through the route.

If you have a unix machine, you can join this network. Examples of unix machines are

pc9800 with pc/ux,
sony news workstations
sun workstations, and so on.

If you want to join the junet network, please don't hesitate to send a mail to "postmaster"; please put your phone number in it.

We are pleased to arrange for you.

See also
mails bulletin_board

guide-admin/ guide-general/ guide-newusers/ mails->
usenet->

Item or 'q'? q

How to login other systems through DDX-P or phone line

Use the kermit program or "call" that is a front-end interface for kermit.

Ex.

```
% kermit          # man kermit to see a manual

% call            # call a remote system
 or
% call-login      # call and then login a remote system
```

"call" or "call-login" without argument outputs available system names.

If you want to call computers that are not in the list, please send mails to "nig", in order to explain why you want to access that computer; this restriction comes from budget problem.

Please keep in your mind that expenses of DDX-P, phone lines, and also the use of the remote computer are payed in the DDBJ budget at present.

Please save money.

Telephone/DDX-P lines to access the NIG computer system

Initial setting of communication:
Full duplex, Remote echo, No parity, 8 bit code,
1 start bit, 1 stop bit, Xon/Xoff

Baud rate can be changed for UTS by sending "break signal; 2400->1200->...
For VAX/VMS, send <CR> a few times to set baud rate correct.

In: phone or DDX-P lines available to users
outside lines:

uts	0559-75-6036	2400/1200 bauds, MNP modem, Hayes compatible
	0559-75-6037	2400/1200 bauds, MNP modem, Hayes compatible
	DDX-P 522-5127	5 ports
vms	0559-75-6038	2400/1200 bauds, MNP modem, Hayes compatible This line may be unavailable.

extensions:

uts	0559-75-0771	x676	2400/1200 bauds, Hayes compatible
		x677	2400/1200 bauds, Hayes compatible
		x678	2400/1200 bauds, MNP modem, Hayes compatible
		x679	2400/1200 bauds, MNP modem, Hayes compatible

Out: phone line available to get outside through uts.

uts	?	2400/1200 bauds, MNP modem, Hayes compatible unavailable now
	?	DDX-P

Network: unavailable to users

out: sun	?	2400/1200 bauds, Hayes compatible
in: sun	0559-75-6040	2400/1200 bauds, Hayes compatible unavailable now

?: Please send mails to "nig", explaining why you want to access
the outside world; this restriction comes from budget problem.

Modem setting

Here is an example of a command sequence to set Hayes modem to communicate with the NIG computer system.

```
ate1                    # echo back
atq0                    # output result code
atb0                    # CCITT mode
at&c1                   # carrier detection
at&d3                   # initialize parameters when DTR is lost.
ats14=138               # for tone dialing; ats14=170 for pulse dialing
at&w                    # write the values of parameters in nonvolatile memory.
```

Modem setting for CTS 2424AMH

Here is an example of a command sequence to set CTS 2424AMH modem in the MNP mode.

```
at\n3                   # MNP or non-MNP
at\q0                   # Xon/Xoff flow control
at\x1                   # Xon/Xoff is used to control a modem and also sent.
at\j0                   # Baud rate is the same over communication line.
at\t6                   # timeout if no communication during 30 min.
at&w                    # write the values of parameters in nonvolatile memory.
```

Terminal type

1. For UNIX system

One nice feature in UNIX operating system is that it can support many types of terminals. Terminal characteristics such as screen size, line length and escape sequences to control terminal are described every terminal as an entry in the file of /etc/termcap in BSD system or in a file whose name is the same as the terminal type and resides in the directory of /usr/lib/terminfo in System V; type "man termcap" or "man terminfo" to get information of them.

Users specify the type of terminal by defining the environmental variable "TERM" as a terminal type that must be found in the termcap or terminfo.

In the niguts whose OS is System V, "TERMINFO" is defined as $NIG/lib/terminfo. That is, $NIG/lib/terminfo is searched first and then /usr/lib/terminfo to find your terminal type. So, you may see $NIG/lib/terminfo and /usr/lib/terminfo to find a terminal type name for a specific type of terminal. If there is no such a terminal type in those directories, you must make a terminfo file for your terminal or may write a termcap file and convert it to a terminfo file by using "captoinfo" command. "Tic" command is used to install a terminfo file in the $TERMINFO directory. Terminfo source files reside in $NIG/lib/terminfo/src, and "$NIG/etc/termcap.*" are termcap files that correspond to them.

Examples of terminal types available at the niguts:

pc98msdos	for NEC PC-9801 MS-DOS
smsdos	for MS-DOS of any PC; standard MS-DOS
vt100	for VT100 terminal
fm16	for FM-16
dumb	for any dumb terminal; screen editors do not work.

2. For VAX/VMS system

VAX/VMS system supports only DEC terminals except dumb terminal. If terminal is not one of DEC terminals, only "dumb" can be specified as terminal type.

Popular terminal types:

vt100	for VT100 terminal
dumb	for any dumb terminal; screen editors do not work.

How to learn UNIX

One of best ways to learn UNIX is

1) Read a famous book written by Kernigan et al. and follow instructions in the book.
   "The Unix Programming Environment", Kernigan, B. W. and Pike, R., Prentice-Hall, Inc., New Jersey, 1984. (ISBN 0-13-937699, 0-13-937681-X for Paper Back)

2) Learn file structure and a screen editor 'vi' by using 'learn' or 'jlearn' command.

How to learn VMS system

On-line help which is almost sufficient is available in VMS system.
So, users may utilize it to learn VMS system; type "$ help".

JUNET maling network

Our system is a member of the JUNET network. You can send/receive mails to/from outside.

Your electronic mail address is

'your_user_name'@niguts.nig.junet

To handle mails, 'mailx' command may be used; 'man mailx' to know how to use it. I will recommend to insert

```
alias mail mailx        # in .cshrc in your $HOME directory
```

A simple example of sendig a mail by 'mailx' is

```
% mailx -F -s "Subject..." destination-address < mail-file

% mailx                 # To read mails
```

How to specify address

1) uucp style

```
host-a!host-b!host-c!....!host-x!username
```

Mails wil be sent to username at host-x via host-a, host-b, host-c...
note: ! must be escaped by \! in csh.

2) Internet style

```
user@host.domain.network
or
host.domain.network!user  in the uucp style
```

The latter representation can be used even if the host does not support the sendmail utility: usually, in the form of host-a!host.domain.network!user

'user' must be understandable by 'host.domain.network'.
'user' may be the network address rather than user name.

Examples:

host-a!host.domain.network!user
: The mail will be sent to host-a that supports .
The local host probably does not support the sendmail utility.
Host-a will send the mail to 'user@host.domain.network'.
The host-a must be an internet node.

host-b!user@host.domain.network
: The mail will be sent to host.domain.network.
Then, host will send it to 'host-b!user'. In this case,
the host-b is probably not an internet node.

user%host-b.domain-b.network-b@host-a.domain-a.network-a
: The mail will be sent to host-a.domain-a.network-a.
Then, host-a will send it to 'user@host-b.domain-b.network-b'.
The host-a and host-b both must be internet nodes.

See also

route_map

Examples of address specification

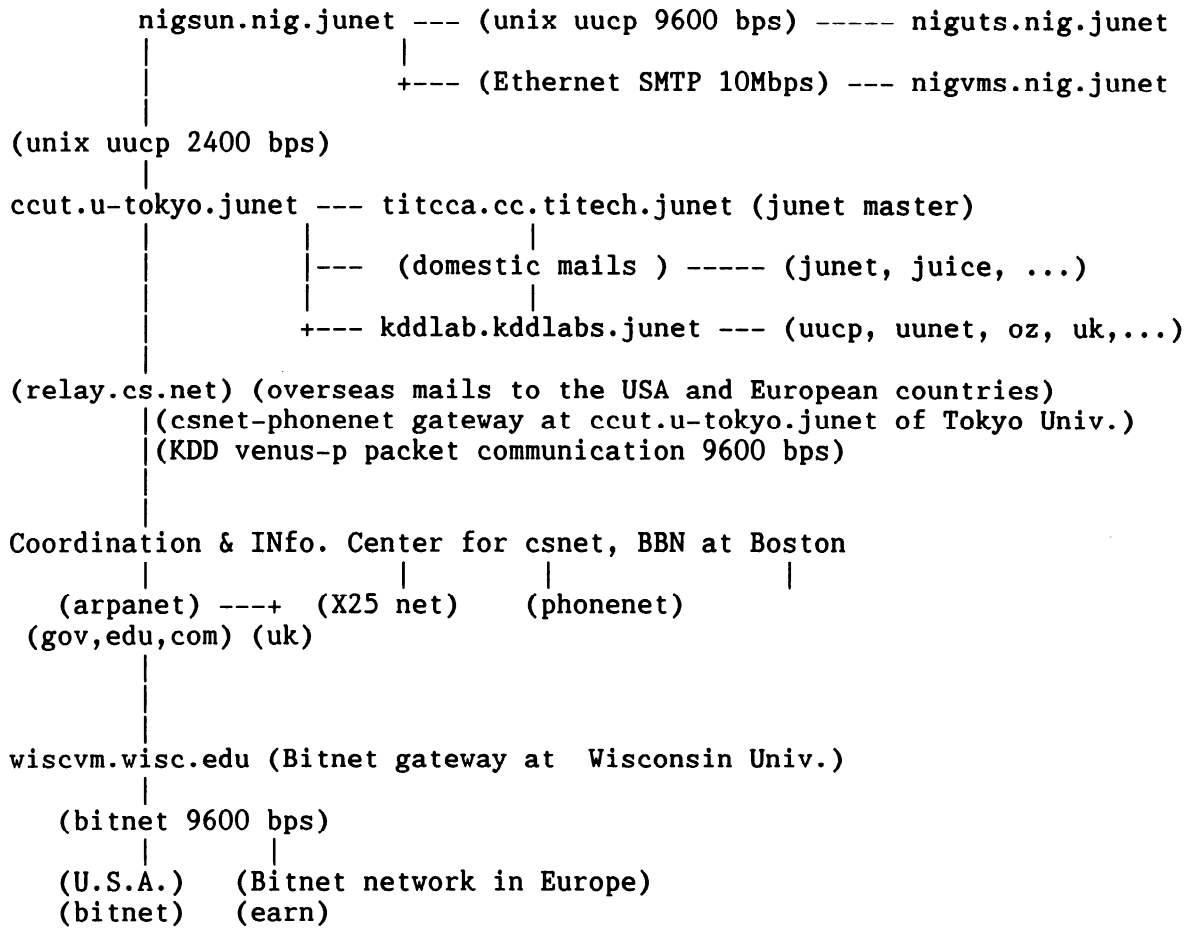
Full address is often lengthy, so it is convenient to define aliases in the $HOME/.mail-aliases file as follows.

NOTE: Mails to the following addresses will be routed via CSNET, because of mail configurations at the niguts and nigsun.
If you want to send mails through uunet, the following addresses must be postfixed by '@uunet.uu.net' after '@' in the address is replaced by '%'.

```
        aliases         full addresses
ARPANET
alias   bob     maizel.jernigan@bionet-20.arpa
alias   burks   cb@lanl.gov
alias   joe     uw-entropy!uw-evolution!joe@uw-beaver.arpa
alias   midas   pett@cgl.ucsf.edu

BITNET
alias   iwasa   IKW@NIHCU.BITNET

EARN
alias   cameron CAMERON@EMBL.BITNET
alias   kahn    KAHN@EMBL.BITNET

JUNET
alias   fjnews  fjnews@junet
alias   info    info@junet
alias   junet-admin     junet-admin@junet
alias   member  member@kddlab.kddlabs.junet
alias   netdir  netdir@kddlab.kddlabs.junet
alias   source-request  source-request@titech.junet
```

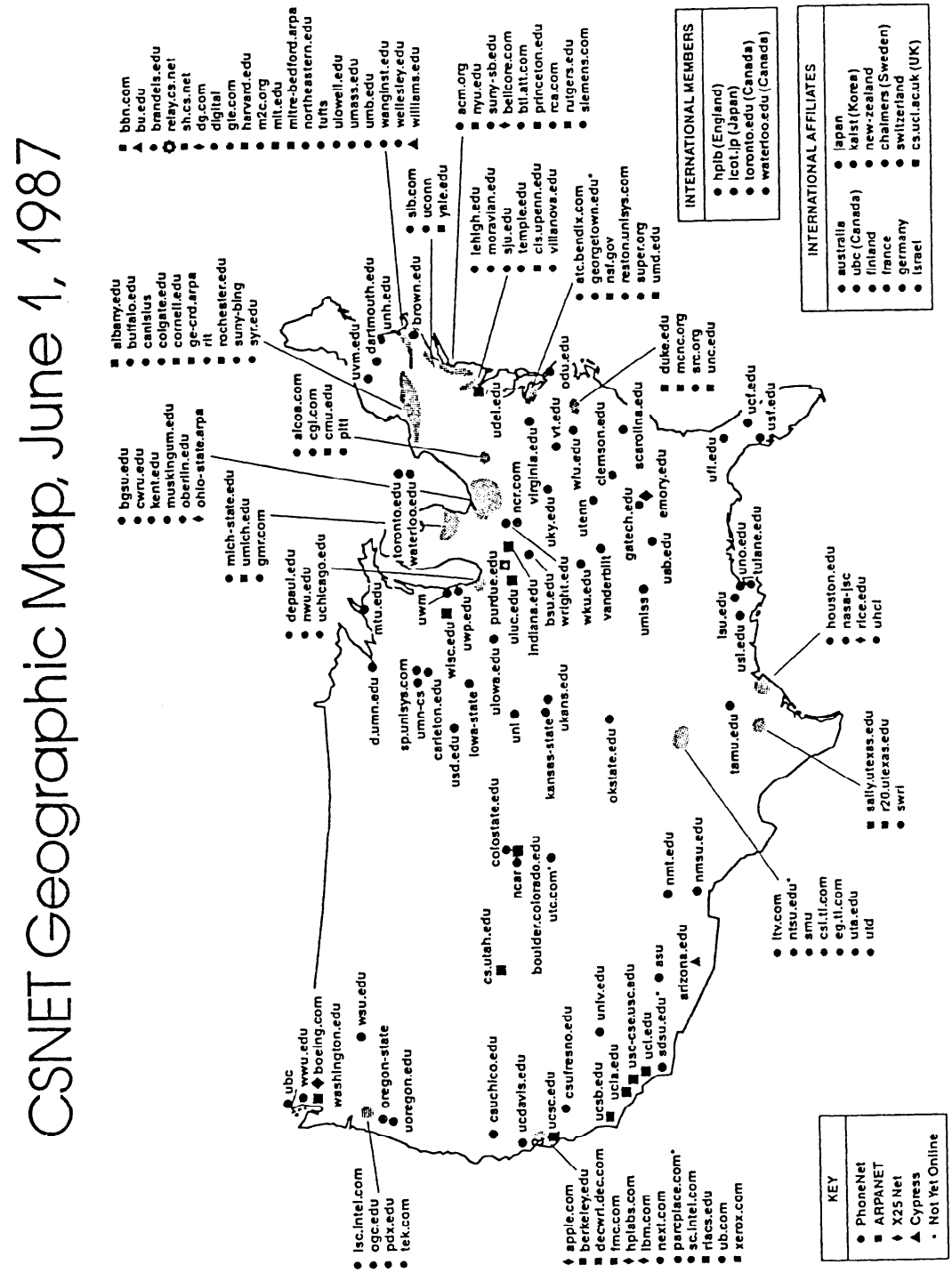
An example of mail

```
From cb%a%lanl.gov%beta.lanl.gov@RELAY.CS.NET Fri Aug 21 06:12:00 1987
Received: by nigsun.nig.junet (3.2/6.2Junet)
        id AA03471; Fri, 21 Aug 87 06:11:57 JST
Received: by ccut.cc.u-tokyo.junet (5.51/6.2.9Junet)
        id AA23886; Fri, 21 Aug 87 00:50:33 JST
Return-Path: <cb%a%lanl.gov%beta.lanl.gov@RELAY.CS.NET>
Received: from relay.cs.net by RELAY.CS.NET id ac24935; 20 Aug 87 11:24 EDT
Received: from beta.lanl.gov by RELAY.CS.NET id aa01599; 20 Aug 87 11:25 EDT
Received: by LANL.GOV (5.54/1.14)
        id AA04157; Thu, 20 Aug 87 08:42:49 MDT
Received: by LANL-MILNET-GW.GOV (5.54/5.17)
        id AA21909; Thu, 20 Aug 87 08:43:16 MDT
Received: by a (5.51/5.17)
        id AA02461; Thu, 20 Aug 87 08:42:08 MDT
Date: Thu, 20 Aug 87 08:42:08 MDT
From: Christian Burks <cb%a@lanl.gov>
Message-Id: <8708201442.AA02461@a>
To: smiyazaw%nigsun.nig.junet%utokyo-relay.csnet@RELAY.CS.NET
Subject: acknowledging receipt of note
Cc: cb%a@lanl.gov
Received: from CSNet-Relay by utokyo-relay; 21 Aug 87 0:48:42-JST (Fri)
Status: RO

Sanzo,

Thanks for the notes...I'm addressing this to "smiyazaw@nigsun.nig.junet"
to see if it gets through.  Please let me know if you receive it.

                                        Christian Burks (cb@lanl.arpa)
                                        Los Alamos National Laboratory
```

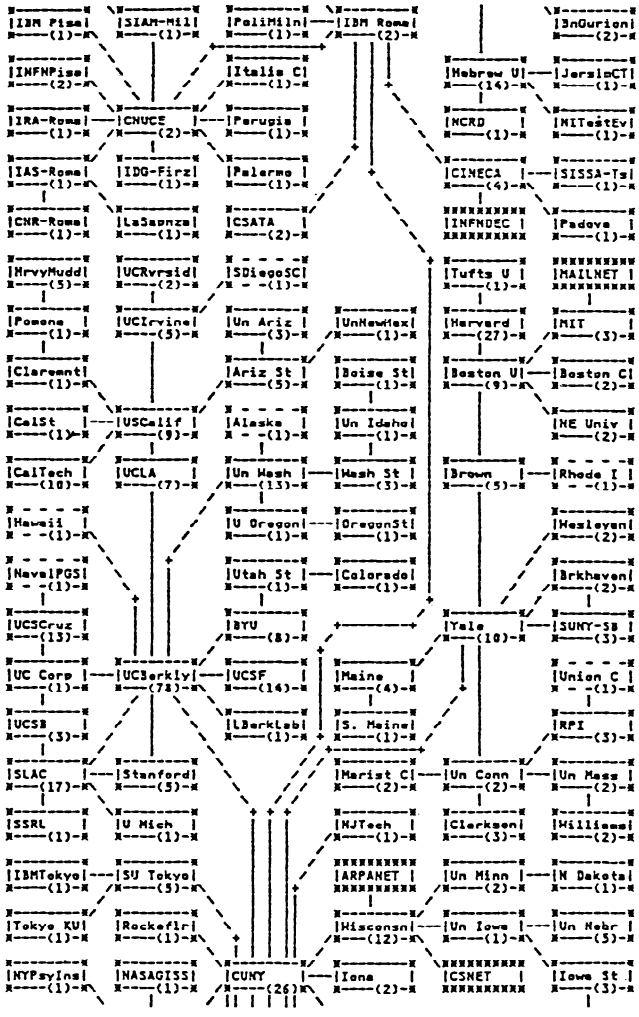


Understandable networks at nigsun, niguts, and nigvms; that is, it is unnecessary to specify a gateway to the following network, if CSNET is used as a gateway.

```
.csnet          # csnet: computer science network that consists of
                #  arpanet, X25net, phonenet, ...
.arpa           # arpa: apra network that consists of
 .gov[.arpa]    #  gov: U.S. govermental organizations
 .edu[.arpa]    #  edu: U.S. educational institutes
 .com[.arpa]    #  com: commercial organizations
 .mil[.arpa]    #  mil: milnet: the Defence Data Network
.uk             # uk:   JANET (Joint Academic Network) in the United Kingdom
.net            # net:  public networks including CSNET, UUCP, BITNET etc
.bitnet         # bitnet: RSCS based strore-and-forward networks
 .bitnet        #   bitnet: Bitnet itself
 .bitnet        #   earn: The European Academic Research Network
.uucp           # uucp: uucp network
.oz             # oz:   ACSNET in Australia
.kr             # kr:   Korea network
.juice          # juice: juice network in Japan
.jeida          # ?
```


CSNET Geographic Map, June 1, 1987
KEY
PhoneNet
ARPANET
X25 Net
Cypress
Not Yet Online
INTERNATIONAL MEMBERS
hplb (England)
icot.jp (Japan)
toronto.edu (Canada)
waterloo.edu (Canada)
INTERNATIONAL AFFILIATES
australia
ubc (Canada)
finland
france
germany
israel
japan
kaist (Korea)
new-zealand
chalmers (Sweden)
switzerland
cs.ucl.ac.uk (UK)

BITNET Geographical Map (1986)



BITNET 構成図の一部

To send/receive overseas mails

Overseas mails can be sent or received via csnet or through kddlab.

To use csnet, users must have an account on tansei (VAX/8600 subsystem) in the Computer Center of the Tokyo Univ.; refer to Computer Center News vol.19 No.7.8 Usually, people who can get an account on tansei are those in educational or national institutes. Call 03-812-2111 ext. 2716 to get application forms.

If you cannot use the tansei, that is, If you are ones who are working for profitable organizations, you can use kddlab as a gateway to send mails to foreign countries.

To use kddlab as a gateway, you must be a member of InetClub ("Kokusai Kagaku Gijutsu Tsushin-mou Riyou Club"). Please contact with the Tele-Serve at the following address.

Tele-Serve		Lab. of Prof. Nobuo Saito
1-8-1 Ootemachi, Chiyodaku	or	Suuri Kagaku
Tokyo		Keio Univ.
03-279-1032		4-1-1 Hiyoshi, Kitaku
member@kddlabs.junet		Yokohama, Kanagawa

KDDLINK

If you cannot use the tansei, you can use kddlab as a gateway to send mails to foreign countries. They are ones who are working for profitable organizations. To use kddlab as a gateway, you must be a member of "Kokusai Kagaku Gijutsu Tsushin-mou Riyou Club" Please contact with that club at the following address.

Tele-Serve		Lab. of Prof. Nobuo Saito
1-8-1 Ootemachi, Chiyodaku	or	Suuri Kagaku
Tokyo		Keio Univ.
03-279-1032		4-1-1 Hiyoshi, Kitaku
member@kddlabs.junet		Yokohama, Kanagawa

Address representation:

You must explicitly specify the route of KDDLINK.

Destination address must be postfixed by

```
...@kddlab.kddlabs.junet
```

For exapmle, the address 'cb@lanl.gov' for the mail routed to CSNET will be

```
cb%lanl.gov@kddlab.kddlabs.junet
```

You address is

```
'your-login-name'%niguts.nig.junet@kddlab.kddlabs.junet
```

See 'address', 'route_map', and 'ex.addresses' for the representation of destination address.

CSNET (Phonenet)

To use csnet, users must have an account on the tansei (VAX/8600 subsystem) in the Computer Center of the Tokyo University.

Usually, people who can get an account on the tansei are those in educational or national institutes.

Expenses of KDD Venus-P needed to send and receive mails will be claimed on your account of the tansei; 170 yen / 1 KB.

Also, you should keep in your mind that expenses of telephone lines to send and receive mails from or to the NIG are payed in the DDBJ budget at present.

Please save money.

1) Account appication; call 03-812-2111 ext. 2716 to get application forms.

2) Registration of your account on the tansei (vax-8600/ultrix),
   Login the tansei by the login-name 'newuser' and follow prompts.
   You can use 'call tansei' command on the niguts.

```
Ex.     login: newuser          # must be typed in lower case
        Your name: a88657       # must be typed in lower case
        VOS3 Password: PASSWORD # Type PASSWORD noticed on the form.
```

3) Registration of your mailing addresses to use csnet.

```
% csnet [option]
        -h              # help
        -j              # list all JUNET host-names
        -j host         # list JUNET host-names containing 'host'
        -m              # list all mail-addresses for you and
                        # ask for a new mail-address
        -d              # list all mail-addresses for you and
                        # ask for a mail-address to delete
        -s              # show how to send mails to other users
        -r              # show how to receive mails form other users
        -l [period]     # list account; YYMM or YYMM-YYMM
```

Address representation:

See 'address', 'route_map', and 'ex.addresses' for the representation of destination address.

Most of sites can understand 'your-login-name'@niguts.nig.junet.
If you want to specify the route of CSNET, your address will be
'your-login-name'%niguts.nig.junet@relay.cs.net

Reference:

Computer Center News of the Tokyo Univ., Vol.19 No.7.8, pp.49-55

How to write mails in Japanese

Kanji code used in the JUNET is JIS-83 (new JIS). A kanji code used in UTS is the extended unix code (EUC). So, mails written by jvi in the EUC have to be converted to mails in JIS-83.

To do so, you may use the 'tojis' filter;

```
% tojis <mail.euc >mail.jis
% mailx -s "subject" address <mail.jis
```

A filter to convert JIS-83 to EUC, 'toeuc', is also available on the niguts.

The mailx.rc file in /usr/lib/mailx includes a definition of PAGER to convert JIS to EUC. Thus, JIS-to-EUC code conversion will be automatically done.

Bulletin Boards

There are two kinds of bulletin boards in the niguts.

One is topics bulletin board for niguts users. Any user can submit topics and create topics. Use 'man topic' to know how to use it.

Another is the JUNET-USENET(User's Network) that is a bulletin board shared among many computer systems around the world. USENET is a logical network, sitting on top of several physical networks, including UUCP, BLICN, BERKNET, X.25, and the ARPANET. Sites on USENET include many universities, private companies, and research organizations. Most of the members of USENET are either university computer science departments or part of AT&T. Currently, there are over 50,000 participants at over 2,000 USENET sites in the USA, Canada, Europe, Japan and Korea with more joining every day. Most are running the UNIX* operating system.

Try `% readnews -n all`

Use the following commands to know how to handle news.

```
% man readnews; % man vnews; % man postnews; % findman news
```

Printing man documents

Man documents may be printed on an Apple laser writer connected to nigsun by the command, pman.

```
% pman manual_entries
```

See also
troff

Printing troff documents

Troff printer driver is not available for uts. In the nig system, SUN 3-260C has a postscript printer, Apple Laser Writer, and the printer driver for it. Thus, you may use it for troff printing. Commands are prepared for such a purpose.

```
% sun man ptroff | pg                    # to know how to use it.
% ptroff [options] < a_troff_file        # print a troff document

# Please note  that ptroff on uts can be used only as a filter;
# that is,
# % ptroff [options] a_troff_file
# is incorrect.
```

In the example above, troff on nigsun is used; fonts are also those of nigsun. To use troff on uts, you must use otroff (old troff); ditroff device-independent troff) is not available on nigsun yet.

```
% sun man pscat | pg
% otroff [options] | pscat [options] '| lpr' # use otroff on uts
```

See also
printing_man

Printing TeX documents

TeX is installed on nigsun. Please use the command 'nigsun' to login nigsun, or 'sun' for remote command execution.

Terminal emulators for personal computers

Introduction

One of characteristics of unix is that unix has a nice feature such that many type of terminals can be supported; programs such as screen-editors use termcap or terminfo data base to get information specific to the terminal type in order to manipulate cursor movement on the screen.

On the other hand, only DEC terminal such as VT-100 or VT-200 are supported in VAX/VMS system; the screen-editor EDT is used only on these types of terminals; VT-100 is the industrial standard of terminal.

Thus if you want to use the vax/vms system rather than unix, you should get a VT-100 emulator. Of course, any emulator should work as dumb terminals.

If you plan to use your terminal as a graphic terminal, you should get a tektronix emulator; graphic software packages available in our system fully support tektronix graphic terminals such as 4010 and 4014 B/W terminals and 4016 and 4028 type of color graphic terminals.

Public doman softwares that may be obtained from us:

Kermit for PC9801 and generic MS-DOS	$NIG/src/kermit/mskerm
VT emulator for PC9801/XA	$NIG/src/vt_emulator/vt_1.0

You may download those programs. If you want to get them in floppy diskettes, please get an application form by using "getinfo" command, filled out the form, and mail it to ddbj@niguts.nig.junet.

VT emulator for NEC PC-9801/XA

VT emulator is a VT-terminal emulator software for NEC PC-9801/XA that was programmed by Dr. A. Ito et al. at the Institute of Medical Science, Tokyo University, and was deposited to the DECUS Software Library.

It can emulate

1) VT52/VT80E/VT100/VT220/VT282 display
2) TEK4010/TEK4012/{TEK4014}/{VT55}/VT125/VT240/VT284 B/W graphics
3) {TEK4027A}/{GIGI}/VT241/VT246 color graphics

Note: The emulations for {} are not available in the version 1.0.

It is powerful enough as a VT-terminal emulator and well made.
NEC standard "Bunsetsu Henkan" program (NECDIC.DRV, NECDIC.SYS) is used for the conversion to Kanji.

This is one of public domain softwares that may be obtained from the NIG. You may download the source, binary programs and documents that are in the directory $NIG/src/vt_1.0. If you want to get them in floppy diskettes, please get an application form by using "getinfo" command", filled out the form, and mail to ddbj@niguts.junet.

Kermit

Kermit is a public-domain software that implements the kermit protocol for file transfer between wide range of computers. Also, Kermit works as a dumb terminal emulator. The Kermit program for NEC PC-98xx that you may get from NIG is an extended version of Kermit that was transplanted on PC-98xx by Motooka, et al. (Center News of the Computer Center of Tokyo Univ., Vol. 17, No. 12, pp. 36-42 and pp. 43-47, 1985; Vol. 18, No. 5 pp. 100-105, 1986), and has been extended by S. Miyazawa in the NIG to allow the use of shift-JIS Japanese characters.

How to get it

You may download the source, binary programs and documents that are in the directory $NIG/src/kermit/mskerm. If you want to get them in floppy diskettes, please get an application form by using the "getinfo" command, fill out the form, and mail it to "ddbj", if you can already access our computer.

How to use kermit

Its use as a terminal emulator

Most important thing is to set parameters properly for communication. Parameters that depend on host system are as follows.

```
parameters              for NIG computers
-------------------------------------------------------------
baud rate       set baud 2400   # depends on a modem used.
parity          set parity none
echo            set local off
flow-control    set flow-control xon/xoff
handshake       set handshake none

# To see the values of parameters, type "status".
# To get help, type "?"; ex. "?", "set?, "set baud?".
```

A sample for such initial setting of parameters is included as a file "nig.set" in a distribution package from NIG. Modify the file for particular host according to your circumstance. If you prepare mskermit.ini, kermit will execute it as a setup command file.

Example:

```
A> kermit               # run kermit on local PC
...
Kermit-MS> status       # to see the value of parameters
Kermit-MS> take nig.set # or prepare mskermit.ini for initial setup
connecting to host ...

atd0559756036           # Hayes command to modem for dialing
connect 2400 baud       # message from modem

(Send CR or BREAK to get a login prompt.)
(BREAK is necessary to change baud rate)
(Type escape b to make kermit send BREAK.)

...
login: guest            # login host
password: guest
Terminal type (msdos): msdos
...
% kermit                # run kermit on remote
...
C-Kermit> set ...       # setup for file transfer; parity etc.


% ctrl-d                # logout host
...

(Type escape-character c to return to the Kermit-MS mode)

Kermit-MS> exit
A>                      # returned to the ms-dos command level
```

File transfer

File transfer between unix systems

"uucp" is used to transfer files between unix systems connected by phone lines.
Use "man" to know how to use it.

File transfer between systems networked by the Ethernet-TCP/IP in NIG

1) rcp: between unix systems.

2) ftp: between systems that support the DARPA protocol, including nigvms.

Use "man" to know how to use them.

File transfer programs for any system

There are two programs available. Both are in public domain.
You may copy them for your own use.

1) kermit
   % man kermit # to know how to use it at the sh level.

   Its source and documents are in the directory, "$NIG/src/kermit"

2) xmodem
   % xmodem

   Its source and documents are in the directory, "$NIG/src/xmodem"

The pc9801 versions are also in those directories.

Tools such as archive and file conversion are available for ms-dos and unix;
the source programs are in $NIG/src/msdos_tools.

How to use kermit for file transfer

I. Basic

1) When text files are transferred, C-Kermit and Kermit-MS should be in the mode appropriate for text transfer as follows.

```
C-Kermit> set file type text            # default

Kermit-MS> set EOF ctrl-Z
```

"Set file type text" will append CR at the end of each line, if files are transferred from unix to msdos, and remove CR in the case of reverse direction.

Here it should be noted that msdos file has CR at the end of line, but unix file does not; the former is called stream CR-LF file, and the latter stream LF file.

"set EOF ctrl-Z" demands that ctrl-Z be handled as the end of file; "word star" uses ctrl-Z as the EOF signal.

2) In the case of binary files, modes must be

```
C-Kermit> set file type binary

Kermit-MS> set EOF noctrl-Z             # default
```

II. Examples

In the following, it is assumed that remote and local kermits are set in the right mode; baud rate, parity, ...

```
A> kermit                 # run kermit on local
...
Kermit-MS> take nig.set # or prepare mskermit.ini for initial setup
connecting to host ...

atd0559756036             # Hayes command to modem for dialing
connect 2400 baud         # message from modem

(Send CR or BREAK to get a login prompt.)
(BREAK is necessary to change baud rate)
(Type escape b to make kermit send BREAK.)
...
login: guest              # login host
password: guest
Terminal type (msdos): msdos
...
% kermit                  # run kermit on remote
...
C-Kermit> set ...         # setup for file transfer; parity etc.
```

---

1) By using the server mode of host kermit:

```
C-Kermit> server          # put C-Kermit in the server mode

(Type escape-character c to return to the Kermit-MS mode; default of
escape character is ctrl-].)
```

```
Kermit-MS> get
Remote Source Filer: remote.file
Local Destination File: local.fil

......


Kermit-MS> send local.fil remote.fil
...

Kermit-MS> finish
Kermit-MS> connect
connecting to host ....
....

C-Kermit> exit
%
```

2) By using send and receive commands:

```
C-Kermit> receive
(Type escape-character c to return to the Kermit-MS mode)

Kermit-MS> send local.fil remote.file

...

Kermit-MS> connect
connecting to host ...
...

C-Kermit> send remote.file
(Type escape-character c to return to the Kermit-MS mode)

Kermit-MS> receive local.fil

...

Kermit-MS> connect
connecting to host ...
...

C-Kermit> exit
%

------------------------------------------------------

% ctrl-d                # logout host
...

(Type escape-character c to return to the Kermit-MS mode)

Kermit-MS> exit
A>
```

III. Useful Tools

It is convenient to have tools that convert files between msdos and unix file structure, and archive files; get information of "tools".

Arctool and convtool programs in this directory were made by N. Takayama in Tokushima Univ. These are public-domain software.

Reference: N. Takayama, Center News of Computer Center of Tokyo Univ., Vol. 19, No. 2, pp. 41-44, 1987

Characteristics:

1) Makear and decompar are archive programs that run on msdos and unix systems, and keep time stamp of files in making and decomposing archives. Thus they are very useful for transferring many files at once.

2) Conv program converts Japanese character codes among ATT/DEC code, JIS-78(old JIS), JIS-83, and shift-JIS. It is also able to strip or append CR at the end of line in order to convert file structures between unix and msdos. Ms-dos file (stream CR and LF file) has CR at the end of line but unix file (stream LF file) does not.

Usage:

To know how to use these programs, type program name without argument.

Examples:

1) file transfer from msdos to unix system

In msdos,

```
> makear -f files.ar file.1 [file.2 ...]
```

Let us assume that files.ar is transferred from msdos to unix by using kermit; archive files must be transfered in the binary mode (set file type binary), if kermit is used.

In unix,

```
% decompar files.ar
% conv -lt -filtcr *
```

Options -lt for conv are specified to make file name in lower case and to keep time stamp of files. -filtcr option does remove CR at the end of each line and ctrl-z at the end of file. Old files are kept with the name of file.BAK.

2) file transfer from unix to msdos

```
% conv -lt -unfiltcr file.1 [file.2 ...]
% makear -f files.ar file.1 [file.2 ...]

(Transfer files.ar in the binary mode of kermit. )

> decompar files.ar
```

GKS graphics FORTRAN subroutines library

1) The location of the graphics library
   object archive:
   /usr/local/lib/libgks?.a gks 2-dimensional graphics library

   NOTE: gks is an international standard for graphics. The use of gks is strongly recommended instead of plot10-tcs routines.
   source:
   /usr/local/plot10 Please note that this software is copyrighted.

2) To use the graphics library,

   Examples:
   % cc options programs /usr/local/lib/libgks?.a /usr/lib/lib?77.a -lm
   NOTE: "_" is postfixed to Fortran routine names.

   % f77 options programs /usr/local/lib/libgks?.a

3) Manuals: there are manuals in the workstation room.
   If you are an outside user, go to a computer center near your office and you may find GKS there; most computer centers have the GKS package.

Plot10-tcs graphics FORTRAN subroutines library

1) The location of the graphics library
   object archive:
   /usr/local/lib/libtcs.a plot10 old graphics library

   NOTE: gks is an international standard for graphics. The use of gks is strongly recommended instead of plot10-tcs routines.
   source:
   /usr/local/plot10 Please note that this software is copyrighted.

2) To use the graphics library,

   Examples:
   % cc options programs /usr/local/lib/libtcs.a /usr/lib/lib?77.a -lm
   NOTE: "_" is postfixed to Fortran routine names.

   % f77 options programs /usr/local/lib/libtcs.a

3) Manuals: there are manuals in the workstation room.
   If you are an outside user, go to a computer center near your office and you may find the PLOT10 manuals there; most computer centers have the PLOT10 packages.

IMSL statistical and mathematical FORTRAN subroutines library

1) Online manual: Please use the getinfo command.

2) Location of the IMSL library

object archive:

```
/usr/local/lib/libimsld.a       for double precision routines
/usr/local/lib/libimsls.a       for single precision routines
```

NOTE: In this UNIX system, single precision routines take the same time as double precision routines do; because calculations are done in double precision, irrespectively of single or double precision routines. Thus, usually it is no meaning to use single precision routines.

source:

```
/usr/local/imsl          Please note that this software is copyrighted.
```

2) How to use the IMSL library?

Examples:

```
% cc options programs  /usr/local/lib/libimsld.a /usr/lib/lib?77.a -lm
        NOTE: "_" is postfixed to Fortran routine names.

% f77 options programs /usr/local/libimsld.a
```

Content of the IMSL Libraries

Analysis of Variance
Basic Statistics
Categorized Data Analysis
Differential Equations; Quadrature; Differentiation
Eigensystem Analysis
Forecasting; Econometrics; Time Series; Transforms
Generation and Testing of Random Numbers
Interpolation; Approximation; Smoothing
Linear Algebraic Equations
Mathematical and Statistical Special Functions
Non-Parametric Statistics
Observation Structure; Multivariate Statistics
Regression Analysis
Sampling
Utility Functions
Vector-Matrix Arithmetic
Zeros and Extrema; Linear Programming

Emacs screen editor

GNU-emacs screen editor has been installed; the installation is not complete yet, thus you must wait for emacs to load initialization files written in Lisp.

GNU-emacs is a public domain software. Even so, it is the best version of emacs; we made a mistake to buy another version of emacs called cca-emacs. Thank Dr. R. Stallman for inventing the original much-imitated EMACS editor. Copyright notice and other documents may be found in the directory /usr/local/gnu-emacs-18.40.

```
 ./GNU  : explains what GNU is.
 ./DISTRIB      : order form of the program and manuals.
 ./COPYING      : copyright notice.
```

Tutorial courses are available; type gemacs, and follow messages.
  To stop emacs, type ctrl-x ctrl-x
  To exit temporarily, type ctrl-z

NOTE: Please make sure that Xon/Xoff of your terminal is turned off;
<ctrl-s> and <ctrl-q> are both interpreted as commands by emacs.
See "ctrl-s_ctrl-q" by using "getinfo".

Please send mails to smiyazaw if you find any bugs. Sanzo Miyazawa, 06/09/87

```
ctrl-s_ctrl-q   ctrl-v          delete-char     screen_update

Item or 'q'? q
```

Work Directory: WK

In the uts, work disk area may be used to temporarily keep large files. The your work directory is stored in the symbol, WK; try "echo $WK". Files in $WK directory will not be backed up at all.

Item or 'q'? DDBJ*

DDBJ online news

Application/	data_submit/	db_catalog	db_manuals/
dir_of_files	growth/	newsletters/	softwares/
versions_of_db	vms_softwares		

Item or 'q'?

DNA data submission

To submit data to ddbj, embl or genbank, please use an appropriate submission form for each data bank. Fill out the form, and mail it to each data bank.

The data banks agreed to share journals that each data bank scans for data entry. So, if your data is published in one of those journals, please submit your data to the data bank that is in charge of that journal. "journal-list" shows what journals each data bank scans.

Media for data submission that can be handled by all of the DNA data banks are

1) Electronic mail
2) Magnetic tape (9 tracks)
3) Floppy disk; IBM-PC (5.25" or 3.5") formats

However, it is recommended to use electronic mail, because automated processing may be used for electronic mails.

Mailing address (...@niguts.nig.junet):

ddbjsub or DDBJsub	data submission to DDBJ
emblsub or EMBLsub	data submission to EMBL
gbsub or GBsub	data submission to GenBank

Notes:

- Please be careful to make files readable by any program; especially if you make it in PC.
  - Files must be simple text files; nondocument-open for Word Star.
  - Each line must be shorter than 80 characters and ended by <CR> and/or <LF>.
- If you want to use floppy for data submission, please don't forget to format floppy disk compatibly with IBM-PC; see "ibm-pc_floppy".
- You may obtain a floppy diskette of submission form from the DDBJ.

List of journals scanned by each of DDBJ, EMBL, and GenBank
update: 05/13/87

Journals	currently scanned by	comments
Agricul Biol Chem	DDBJ	
Biochem Biophys Res Commun	GenBank	
Biochem J	EMBL	
Biochemistry-USA	GenBank	
Biochim Biophys Acta	EMBL	
Biochimie	EMBL	
Can J Biochem	GenBank	
Cancer Res	EMBL	
Cell	GenBank	
Cell Struct Funct	DDBJ	
Chem Pharm Bull	DDBJ	
Cold Spring Harb Symp Quant Biol	GenBank	
Curr Gen	EMBL	
DNA	GenBank	
Develop Biol	GenBank	
Devel Growth Diff	DDBJ	
EMBO J	EMBL	
Eur J Biochem	EMBL	
Eur J Immunol	EMBL	
FEBS Lett	EMBL	
Gene	GenBank	
Genes Develop	EMBL	
Genetics	EMBL	
Genomics	GenBank	
Hoppe-Seylers Z Physiol Chem	EMBL	
Immunogenetics	GenBank	
J Bacteriol	GenBank	
J Biochem Tokyo	DDBJ	
J Biol Chem	GenBank	
J Cell Biol	EMBL	
J Clin Invest	GenBank	
J Exp Med	EMBL	
J Gen Microbiol	GenBank	
J Gen Virol	EMBL -> DDBJ	since 10/87
J Immunol	GenBank	
J Mol Biol	EMBL	
J Mol Evol	EMBL	
J Virol	GenBank	
Jpn J Cancer Res	DDBJ	
Jpn J Genet	DDBJ	
Microbiol Immunol	DDBJ	
Mol Biochem Parisitol	GenBank	
Mol Biol Evol	GenBank	
Mol Biol Med	GenBank	
Mol Cell Biol	GenBank	
Mol Gen Genet	EMBL	
Mol Microbiol	EMBL	
Nature	EMBL	
Nucl Acid Res	EMBL	
Nucl Acid Res Spec Pub	EMBL	
Nucl Acid Res Spec Suppl	EMBL	
Oncogene	EMBL	
Oncogene Res	EMBL	
Plant Cell Physiol	DDBJ	
Plant Mol Biol	GenBank	
Plasmid	GenBank	
Proc Nat Acad Sci USA	GenBank	
Science	GenBank	
Virology	GenBank	
Zool Sci	DDBJ	

IBM-PC 5.25" or 3.5" compatible floppy disk format

Disk Characteristics	NEC PC-9801/XA/XL MS-DOS	IBM PC-XT/AT PC-DOS
2HD 1.2 MB = 1024 bytes/sector x 8 sectors/track x 77 tracks x 2 sides	Under version 2.xx or 3.xx >Format	cannot read/write
2HD 1.2 MB = 512 bytes/sector x 15 sectors/track x 80 tracks x 2 sides	Under version 3.xx or some ver. 2.xx >Format /5	can read/write, if 2HD can used.
2DD 720 kB = 512 bytes/sector x 9 sectors/track x 80 tracks x 2 sides	Under version 2.xx or 3.xx >Format /9	can read/write with ver. 3.30. In the case of other versions, it may not.
2DD 640 kB = 512 bytes/sector x 8 sectors/track x 80 tracks x 2 sides	Under version 2.xx or 3.xx >Format	can read/write with ver. 3.30. In the case of other versions, it may not.
2DD 360 kB or = 512 bytes/sector 2D x 9 sectors/track x 40 tracks x 2 sides	can only read	can read/write
2DD 320 kB or = 512 bytes/sector 2D x 8 sectors/track x 40 tracks x 2 sides	cannot read/write	can read/write with ver. 3.30. No data for other versions.

Footnotes:

1) 2HD means double side, high density and double track (96 TPI) floppy.
   It is called double side and high capacity (2HC) in the U.S.A.
2) 2DD means double side, double density and double track (96 TPI) floppy.
3) 2D means double side, double density (48 TPI) floppy.

Versions of data bases

DNA data base	Release	date	
DDBJ	1	07/87	
EMBL	13	10/87	
GENBANK	50	05/20/87	
GENBANK	48	02/16/87	for msdos floppies
HIV-N	87.b	06/87	Human Retroviruses and AIDS
KABAT		1983	Seq. of Imm. Interest
NBRF	31	06/87	

Protein data base	Release	date	
DDBJ	1	07/87	translated from DDBJ
HIV-P	87.b	06/87	Human Retroviruses and AIDS
KABAT		1983	Seq. of Imm. Interest
NBRF-PIR	13	06/30/87	
PGtrans	35	09/85	translated from GenBank
SWISSPROT	5	09/87	

Protein structure data base

PDB	40	04/87

Directories of data base files

FILES	global symbols	Directory
	DB	/usr/usrs/dbms/db/
DDBJ	DDBJ	./mt/ddbj
GenBank	GENBANK	./mt/genbank
EMBL	EMBL	./mt/embl
NBRF	NBRF	./mt/nbrf
PIR	PIR	./mt/pir
HIV	HIV	./mt/hiv/nuc
		./mt/hiv/protein
PDB	PDB	./pdb

Keyword	Database and Organization (* denotes available database)

DDBJ * DNA Data Bank of Japan
National Institute of Genetics
Mishima, Shizuoka 411
DDBJnews (online news)
DDBJsub@niguts.nig.junet (for data submission)
ddbj (for general inquiries)

EMBL * EMBL Nucleotide Sequence Data Library
European Molecular Biology Laboratory
Postfach 10.2209
D-6900 Heidelberg
West Germany
(06221) 387-257
datasubs@embl.earn (for data submission)
datalib@embl.earn (for general inquiries)

GenBank * Genetic Sequence Data Bank
GenBank(R)
Bolt Beranek and Newman, Inc.
Los Alamos National Laboratory
Mail Stop K710
Los Alamos, NM 87545
(505) 667-7510
cb@lanl.gov (Internet address)
GBSUBMIT (BIONET address)
GBSUBMIT (online address)

KABAT * Sequences of Proteins of Immunological Interest
Maintained by Dr. Kabat and others,
and distributed by Bolt Beranek and Newman, Inc.

NBRF * Nucleic Acid Sequence Database of the
Protein Identification Resource (PIR)
National Biomedical Research Foundation

HIV * Human Retroviruses and AIDS
Nucleic and Amino Acid Sequences
Gerald Myers et al.
Los Alamos National Laboratory
T-10, MS K710
Los Alamos, NM 87545

PDB * Protein Data Bank
Brookhaven National Laboratory
Upton, New York 11973, USA
abola@bnldag.bitnet

Distribution in Japan:
Y. Katsube or K.Yoshida
Institute for Protein Research
Osaka Univ.
Yamadaoka, 3-2, Suita, Osaka 565

PIR * Protein Sequence Database of the
Protein Identification Resource (PIR)
National Biomedical Research Foundation

SWISSPROT*SWISS-PROT Protein Sequence Data Bank
Protein Sequence Data Bank
University of Geneva
Medical Biochemistry Department
1211 Geneva 4
Switzerland
phone (00 41 22) 46 87 58

Softwares for DNA/protein sequence/structure analyses on the VAX/VMS

NAQ - Nucleic Acid Query System
PSQ - Protein Sequence Query System
Both softwares are ones developed by NBRF-PIR and freely distributed.

Ideas - Integrated Data Base and Extended Analysis System
for Nucleotide Sequence and Proteins
developed by Dr. M. Kanehisa in the Kyoto Univ.

UWGCG - General sequence analysis program package developed by the
University Wisconsin Genetics Computer Group

Staden - Staden program package for gel analyses

CHARMM - A Program for Macromolecular Energy, Minimization, and Dynamics
Calculations developed by Dr. M. Karplus at the Harvard Univ.

Softwares for DNA/protein structure analyses on the Iris 3020 3D WS

MIDAS - Molecular Interactive Display And Simulation
developed in the computer graphics laboratory at the UCSF

Softwares available on the M380Q/UTS

flat - Flat file data base manipulation programs

phylip - Phylogeny Inference Package (version 2.6) by Felsenstein et al.

staden - Staden program package for gel analyses

Flat file data base manipulation programs

available commands

```
and file1 file2 [files]                  - and entries in files
getembl "files" [entries]                - getembl entries from files
getgb "files" [entries]                  - get genbank entries from files
getpir "files" [entries]                 - get pir entries from files
or file1 file2 [files]                   - or entries in files
rcdembl [-f "files"] record-types        - get specific records from embl files
rcdgb [-f "files"] record-types          -get specific records from genbank files
rcdpir [-f "files"] record-types         - get specific records from pir files
srchembl [options] reg.-express. [files]- search regular express. in embl files
srchgb [options] reg.-express. [files]   - search regular express. in gb files
srchpir [options] reg.-express. [files] - search regular express. in pir files
xor file1 file2 [files]                  - exclusive-or entries in files

seqext [options] key file                - extract from a GenBank file sequences
                                           specified in FEATURES with given key
pepttr [-a] [-c usage_file] seqfile      - translate DNA to peptide
albg [-d coeff const] file1 file2        - global alignment of file1 and file2
wlb file1 file2                          - Wilbur-Lipman homology search
```

How to use "flat" programs

```
niguts% flat
niguts% set embl=$EMBL/annent.dat
niguts% rcdembl -f $embl OC | srchembl -i primates >primates
niguts% wc -l primates
   1927 primates
niguts% rcdembl -f $embl DE KW | srchembl -i oncogene >oncogene
niguts% wc -l oncogene
    394 oncogene
niguts% rcdembl -f $embl DE KW | srchembl -i "growth factor" >growth
niguts% wc -l growth
    113 growth
niguts% rcdembl -f $embl DE KW | srchembl -i "receptor" >receptor
niguts% wc -l receptor
    359 receptor
niguts% or oncogene growth receptor | wc -l
    814
niguts% : # rcdembl -f $embl DE KW | srchembl -i 'oncogene | growth | receptor' | wc -l
niguts% and oncogene growth | wc -l
     26
niguts% and oncogene growth receptor >cancer
niguts% wc -l cancer
      5 cancer
niguts% and cancer primates >primates.cancer
niguts% wc -l primates.cancer
      3 primates.cancer
niguts% xor cancer primates.cancer >nonprimates.cancer
niguts% wc -l non*
      2 nonprimates.ca
niguts% getembl $embl <primates.cancer >primates.can.seq
niguts% exit

niguts% pg primates.can.ceq
ID   HSEGF01   standard; RNA; 2400 BP.
XX
AC   X00663;
        .
        .
        .
```

UNIX システムの解説書とマニュアル

遺伝情報分析研究室　宮沢三造

I. UNIXシステムについての紹介

（紹介は多数あるのでここではその代表をひとつだけ挙げる。）

1. UNIXシステムの動向、石田晴久
   東京大学大型計算機センターニュース、Vol. 17, No. 11, 1985, pp53-58.

II. UNIXシステムについての解説

初心者には定評のある 1 番目の本をお勧めする。訳もあるが、英文も定評のある本なので是非英語で読むことを勧める。計算機を使用しながら読むと良い。　2 番目の本はBourne shellの作成者が書いた本で、Kernigan の本に比較すると、辞書的に読む本である。3 番目の本はシステムマネージャーのための本ですが、システムの構成を知る上で役立ちます。

1. "The Unix Programming Environment", Kernigan, B. W. and Pike, R., Prentice-Hall, Inc., Newjersey, 1984. (ISBN 0-13-937699, 0-13-937681-X for Paper Back)
2. "The UNIX System", Bourne, S. R., Addison-Wesley Publishing Company, Tokyo, 1983. (ISBN 0-201-13791-7)
3. "Unix for Super-Users", Eric Foxley, Addison-Wesley Publishing Company, Tokyo, 1985. (ISBN 0-201-14228-7)

III. マニュアル

UNIX マニュアルはオンラインマニュアルが完備していますので、man コマンドを使用すれば、読むことができます。

UNIXシステムの勉強には、learn コマンドをご利用ください。計算機が UNIX を教えます。

System V、日本語訳　（初版はRelaease 2.1, 第二版はRelease 3.0）

1. Unix System V, ユーザ-レファレンス-マニュアル,
   AT&T Bell Laboratories（日本ユニソフト訳）、共立出版、1986.
2. Unix System V, プログラマ-リファレンス-マニュアル,
   AT&T Bell Laboratories（日本ユニソフト訳）、共立出版、1986.
3. Unix System V, システム-アドミニストレーション-リファレンス-マニュアル
   AT&T Bell Laboratories（日本ユニソフト訳）、共立出版、1986.

System V、英文: 付属の資料参照
直接アメリカに注文しなくてばならない。
Order form 請求先：AT&T Unix Pacific, Tel. 03-431-3305
105 港区西新橋 2丁目21番 2号、第一南桜ビル

4. Release 2.0
5. Release 3.0

4.2 BSD UNIX

1. Ultrix-32 ¥155,900
DEC ダイレクト、Tel. 03-818-6001、担当 飯田
2. Sun 3 manual

Micro VAX II/Micro VMS manual； help コマンドをご利用下さい。

1. Micro VMS ¥92,900
日本語 Micro VMS ¥35,000 （日本語機能説明編）
DEC ダイレクト、Tel. 03-818-6001、担当 飯田

GKS manual
大型計算機センターで導入している所が多いので、近くの人は利用するとよい。

1. ソニーテクトロニクス（株）情報機器課
141 品川区北品川 5丁目 9番31号
Tel. 03-448-4885

ターミナルエミュレーター

遺伝情報分析研究室　宮沢三造

UNIX システムは種々のターミナルに対応することができます。下記のKERMITプログラムのみでも、NEC PC-9801でスクリーンエデイターが利用できます。VAX/VMSでスクリーンエデイターを利用するには ANSI X 3.64 準拠の端末（VT100, VT220)エミュレーターが必要です。

1. KERMIT； DDBJでPC9801版を配布します。

各種パソコン、ミニコン、汎用大型機など数多くの機種向けに用意されているファイル転送可能な端末エミュレーターです。このKermitについては、東大大型計算機センターニュース(vol.17 NO.12)「ファイル転送のためのKermit方式について」(P36)、「汎用ファイル転送プログラムKermitの使い方」(P43) に紹介されています。特殊なプロトコル（Kermit方式）を使いファイル転送しており、安心して転送できます。

2. VTエミュレーター（Decus Soware Library登録版）； DDBJでPC9801/XA版を配布します。

東京大学医科学研究所伊藤氏作成のものでPublic domain software。 NEC PC-9801/XAで以下の端末をエミュレートする。

- VT52/VT80E/VT100/VT220/VT282
- TEK4010/TEK4012/{TEK4014}/{VT55}/VT125/VT240/VT284　モノクログラフィック
- {TEK4027A}/{GIGI}/VT241/VT246　カラーグラフィック

VTシリーズ端末エミュレーターとしては完璧である。またグラフィック端末もエミュレートし、非常に完成度の高いエミュレーターである。日本語変換としてはNEC標準の文節変換が使用できます。（NECDIC.DRV, NECDIC.SYSを使用します。）

3. GraphTalk　　インターソフト（株）　03-293-3338　　¥98,000

- VT-100/200, 漢字 VT-282 エミュレーション
- テクトロ4010/4014グラフィック・エミュレーション
- XMODEMプロトコル・パソコン間ファイル転送
- Kermitプロトコル・PC←→UNIXファイル転送
- 自動ダイヤル（ヘイズATコマンド・サポート）

等、多機能なターミナルミュレーターです。

4. TEK4014 + VT80/VT100 + 日本語ターミナルエミュレーター　　約 ¥120,000

TEKTRONIX 4106 エミュレーター （NEC PC98XA用）　　約 ¥120,000

サイバネットシステム（株）

（販）丸菱エレクトロニクス（株）　　03-341-2566

- Kermitプロトコル・PC←→UNIXファイル転送

非常に完成度の高いエミュレーターです。

5. VT98　　CSK : 03-344-1811　　約 ¥50,000

PC-9801 (MS-DOS)を VT-100, KJ-100, VT-80, テクトロのグラフィックス端末 (TEKTRONIX 4010コマンドのサブセットをサポート) として使用できる端末エミュレータです。漢字の入出力、グラフィックス表示、コントロールコードの表示機能など、多機能な端末エミュレーターの一つです。また、VT-100 端末に似たSET-UP機能があり非常に使いやすい。UNIXとのファイル転送機能もあります。(日本語フロント・プロセッサVJE使用可)

パソコン通信向け端末エミュレーター:

6. CTERM　　アスキー (株) : 03-486-7111　　¥ 9,800

各種の漢字コードの送受信、ANSI標準のエスケープシーケンス、さらにXMODEMプロトコルのサポート、オートダイアル機能など定型作業の記述ができるプログラム機能など、あると便利な機能がたくさんついています。現在、PC-9801 (MS-DOS)用のみですが他の機種についても販売予定とのこと。(日本語フロント・プロセッサVJE-Σ付きは20,000円。) 9600 bps での使用は無理かも知れません。

7. ESterm　　アスキー : 03-486-7111　　¥22,000, ¥28,000 (VJE-beta込み)

VT100モード有り。kermit, xmodemサポート。モデム用 AT/V25bisコマンドサポート。

8. 蘭98　　管理工学研 : 03-405-1827　　¥25,000　(松茸つき)

VT100モード有り。xmodemサポート。モデム用 AT コマンドサポート。

9. まいとーく　インターソフト : 03-293-3338　　¥28,000

VT100モード有り。xmodemサポート。モデム用 AT/V25bisコマンドサポート。マルチウインドー有り。

10. 漢たむII　コムネックス : 052-251-348　　¥18,000

kermit, xmodemサポート。モデム用 AT/V25bisコマンドサポート。

注) 東京工業大学総合情報処理センター広報 No. 115, p.9, 1986/3
東京大学大型計算機センターニュース Vol. 19, No.7-8, pp.82-85, pp.86-88, 1987
を参考にした。

モデムについて

10/07/87　遺伝情報分析研究室　宮沢三造

計算機側のモデムは CTS 2400 AMH を 5 台 購入した。このモデムの特徴は 2400baud まで自動切り替えで対応できること、最も普及している Hayse コマンドが使用できること、error check & error correction をモデムレベルで実行する MNP protocol class IV をサポートしていることである。モデムの値段は加速度的に安くなりつつあるので、伝送エラーの生ずる恐れのない MNP モデムを使用することをお勧めする。

尚、東京大学大型計算機センターニュース Vol. 18 No. 12 pp.5-6, 1986 に、モデムのリストがあるので参照するとよい。

モデム名	規格				NCU			コマンド			備考	参考	問い合わせ
	2400 V22bis	1200 V22	300 V21	300 baud BELL103	AA	MA	MM	Hayes	V25bis	他	（エラーフリー等）	価格	
CTS 2424AMH	○	○		○	○	○	○	○			MNP class 4	¥92k	03-834-0336 KME 03-366-9741 コンピュー. 03-341-2566 丸菱エレ... 03-294-8238 コネクト
MICROCOM													
AX/2400	○	○		○	○	○	○	○		○	MNP class 4 MAX:2400bps	¥98k	03-220-0535 ヒューコム
AX/2400C	○	○		○	○	○	○	○		○	MNP class 5 MAX:2400bps (throughput 4800)	¥150k	
AX/9624C	○	○		○	○	○	○	○		○	MNP class 6 MAX:9600bps (throughput 19200)	¥250k	
OSI8224	○	○	○	○	○	○	○	○	○		MNP class 3 (call-back security check) モデム設定の remote control	¥128k	03-546-1234 インテグラン（株）
CDS224 series II	○	○	○	○	○	○	○	○		○	X.PC MNP class 4	¥170k	03-436-9511 兼松エレクトロニクス

注）1. MNP エラーフリーモデムでは、モデムと計算機とは 9600 bps までの任意の伝送速度で接続可能

2. flow control は通常 XON/XOFFと bidirectional hardware control が可能である。

3. X.PC： TYMNET が提唱しているエラーフリープロトコル
MNP： MICROCOM が提唱しているエラーフリープロトコル
MNP の解説 1） NIKKEI BYTE September, 1986, pp. 76- 84
2） ASCII Vol.10, No.11 November, 1986, pp.238-239

4. MICROCOMのモデムは MNPモードの際 8ビットデータの送受信が不可能です。

第２種パケット交換サービス

契　約　料		800円／回線

毎月の料金

接続通信料	200bps　又は　300bps		20円／3 分
	1,200bps		30円／3 分
通　信　料	＜ 100Km	0.4円	（1パケットにつき128
	＜ 500Km	0.5円	オクテットまでごとに）
	＞ 500Km	0.6円	

付加サービスの工事費

短縮ダイヤル	1,000円／回線
着信課金	1,000円／回線

NTT

第２種パケット交換サービス（ＤＤＸ－ＴＰ）申込書

標準無手順用

昭和　年　月　日

1　お申込者　　ふりがな 氏名（会社名）　　印

ふりがな 代表者名

ご住所

2　ご利用開始希望年月日　昭和　年　月　日

3　ご利用電話番号　（　　）　－

4　端末設備の設置場所　〒　都道府県　市郡　区　町

5　ご連絡先　ふりがな 氏名（会社名）

電話番号（　　）　－

6　伝送速度
□　２００ｂ／ｓ（全二重）
□　３００ｂ／ｓ（全二重）
□　１２００ｂ／ｓ（全二重）
（該当の□欄にレ印をご記入ください）

7　モデムまたは音響カプラの名称　機器名

メーカ名

認定番号

本欄にご記入のない場合は、以下の項目について自動的に条件が設定されます。
なお、オプションをご希望の方は該当の□欄にレ印をご記入ください。

	自動設定の場合	オプション
8　伝送ｺｰﾄﾞ	〔JIS8(ﾊﾟﾘﾃｨｰなし)〕	□ JIS7（偶数ﾊﾟﾘﾃｨｰ） □ その他（　　）
9　標準ﾌﾟﾛﾌｨｰﾙ	〔14〕	☒ 2 □ その他（　　）
10　ｽﾄｯﾌﾟﾋﾞｯﾄ長	〔1〕	□ 2
11　音声ﾒｯｾｰｼﾞ案内	〔要（手動応答）〕	□ 不要（自動応答）
12　ﾓﾃﾞﾑの通信ﾓｰﾄﾞ	〔自動切替（起呼低群・着呼高群）〕	□ 高群受け固定 □ 低群受け固定
13　ﾊﾝﾄﾞｼｪｰｸ機能（1200b/sの場合）	〔有〕	□ 無
14　発着信専用扱い	〔発着両用〕	□ 発信専用 □ 着信専用
15　短縮ﾀﾞｲﾔﾙ	〔不要〕	□ 要
16　着信課金	〔不要〕	□ 要

〔ＮＴＴ記入らん〕

受付番号		契約締結局	FAX（　　）
受付局		記事欄	①適合検査依頼番号　（　．　．　）
開通年月日			②適合検査合格番号　（　．　．　）
受付者			③その他

コード変換テーブル

表　ASCII → EBCDIC 変換テーブル

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	00 NUL	10 DLE	40 SP	F0 0	7C @	D7 P	BF `	97 p								
1	01 SOH	11 DC1	5A !	F1 1	C1 A	D8 Q	81 a	98 q								
2	02 STX	12 DC2	7F "	F2 2	C2 B	D9 R	82 b	99 r								
3	03 ETX	13 DC3	7B #	F3 3	C3 C	E2 S	83 c	A2 s								
4	37 EOT	3C DC4	5B $	F4 4	C4 D	E3 T	84 d	A3 t								
5	2D ENQ	3D NAK	6C %	F5 5	C5 E	E4 U	85 e	A4 u								
6	2E ACK	32 SYN	50 &	F6 6	C6 F	E5 V	86 f	A5 v								
7	2F BEL	26 ETB	7D '	F7 7	C7 G	E6 W	87 g	A6 w								
8	16 BS	18 CAN	4D (	F8 8	C8 H	E7 X	88 h	A7 x								
9	05 HT	19 EM	5D)	F9 9	C9 I	E8 Y	89 i	A8 y								
A	25 LF	3F SUB	5C *	7A :	D1 J	E9 Z	91 j	A9 z								
B	0B VT	27 ESC	4E +	5E ;	D2 K	79 [	92 k	8B {								
C	0C FF	1C FS	6B ,	4C <	D3 L	CF \	93 l	4F ¦								
D	0D CR	1D GS	60 -	7E =	D4 M	49]	94 m	9B }								
E	0E SO	1E RS	4B .	6E >	D5 N	B0 ^	95 n	5F ~								
F	0F SI	1F US	61 /	6F ?	D6 O	6D —	96 o	07 DEL								

注）使用したASCII からEBCDICへのこのコード変換は、ASCII からFACOM EBCDICコードへの変換です。IBM や日立のEBCDICコードではありません。またFACOM EBCDICコードとは言っても内部コードではなく、通信制御装置に接続されたターミナルでASCII 変換（USASCII 変換ではない）を指定した時システムがする(EBCDIC->ASCII) 変換の逆変換に相当します。よって、ASCII ターミナルでは正しく表示されますが、チャンネル装置に接続されたFACOM のディスプレイターミナル、プリンターでは '[' 、']' 等が正しく表示されません。ご注意ください。

Genetic Sequence Data Bank
22 August 1987

DDBJ/GenBank/EMBL Data Submission Form

DDBJ/GenBank(R)/EMBL DATA REQUEST FORM

DDBJ Online, Phone: +81 559 75 6036 Login-name: ddbjnews
Please call the DDBJ to get a floppy disk of this form.
E-mail Address: ddbj@niguts.nig.junet for general inquiries
ddbjsub@niguts.nig.junet for data submission
Mailing Address: DDBJ, Lab. Genetic Information Analysis
National Institute of Genetics
Mishima, Shizuoka 411, Japan
Telephone: +81 559 75 0771 x647

GENERAL INSTRUCTIONS

This form solicits the information needed for a nucleotide sequence data bank entry. By completing it and returning it to us promptly you will help us to enter your data in the data bank accurately and rapidly.

Please answer all questions which apply to your data, if necessary using copies of this form for logically distinct sequences. This version of the data request form is designed to be filled in using an editor on your own computer. Start typing each response on a line below a line of dashes (------) and whenever more room is needed, introduce a new line, either by entering a 'hard' carriage return (if your editor has that distinction), or by just allowing automatic wraparound. You do not need to indent the new line. The recommended right margin setting is between columns 72 and 80. When you have completed this form, please send it to us, together with a "clean" copy of your sequence data (in one of the machine readable formats described in this form or, if this is impossible, an uncluttered printout). You are welcome to transmit the filled in form and sequence data electronically through the DDBJ online system or over the JUNET if you wish. Please send us a copy of the manuscript that corresponds to this submission if there is one.

If at some future time new data become available which would make the data bank entry more informative (e.g., function of the gene product or location of important sites within the sequence), or if you discover errors in the sequence, we urge you to contact us so that we can update your entry.

PERSON COMPLETING THIS FORM

Name	
Organization	
Address	
(City,St,Zip)	
Telephone	

On what medium and in what format are you sending us your sequence data? (see descriptions at the end of this form)

[ ] magnetic tape
density [ ] 800 [ ] 1600 [ ] 6250
character code [ ] ASCII [ ] EBCDIC
record length: blocksize: label type: No label
[ ] electronic mail
[ ] diskette; format:
[ ] check here if you wish to have your submission medium returned

ACCESSION NUMBER

An accession number is permanently associated with every sequence placed into the data banks. If an accession number has already been assigned to this work, the number will appear in the box above. If the box is blank a number will be assigned upon receipt of the data. We strongly recommend that all references to data as they reside in the data banks cite accession number.

CITATION INFORMATION

Published [ ] Accepted [ ] Submitted [ ] Other

Authors

Title

Journal

Volume, Pages, Yr

If we finish the entry before the paper appears in print, do you agree that it can be made available in the data bank?
[ ] Yes. (Please send us a signed statement to that effect)
[ ] No, it should be made available only after publication, scheduled for (date, if known):

Does the sequence which you are sending with this form include data that do not appear in the above journal article?
[ ] yes (please indicate start and end positions in features table below
[ ] no
If you plan to publish the additional data in another article, please provide the following information, if known:

Authors

Title

Journal

Volume, Pages, Yr

Please list references to papers which report sequences overlapping with that submitted here.

First Author	Journal	Vol	Year	Pages

DESCRIPTION OF SEQUENCED SEGMENT

If possible, please answer questions using standard nomenclature or conventions. NOT ALL QUESTIONS ARE RELEVANT TO ALL SEQUENCES.

[ ] Genomic DNA [ ] cDNA [ ] organelle DNA, please specify:
[ ] tRNA [ ] rRNA [ ] snRNA [ ] other, please specify:

Biological Function and Source

gene name(s) (e.g., lacZ)	
gene product name (e.g., beta-D-galactosidase, EC 3.2.1.23)	
Source Organism (e.g. Mus musculus, Drosophila melanogaster)	
haplotype	
strain (e.g., K12; BALB/c)	
library (type; name)	
clone(s)	
genomic location	
length of sequence (bp)	
tissue or cell line source	
[ ] germ line	[ ] rearranged
any other relevant information	

STRUCTURE OF REPORTED SEQUENCE; FEATURES

How is the 5′ end of this sequence defined experimentally?

Restriction site	Enzyme	
		If sequence does not start at cut site, at what base does the recognition sequence begin?
		Bases from 5′ end
Other		

Below please list the first and last base numbers of all significant features experimentally identified within the sequence, and whether the feature is encoded by the strand complementary to that reported here. Include features identified by pattern alone if they help clarify sequence structure or function; distinguish these by a 'P' in the last column of the table.

Examples:
- Transcribed regions (mRNA, rRNA, tRNA, etc.),
- Regions subject to post-transcriptional modification (introns, modified bases, polyadenlyation,etc),
- Translated regions,
- Regions subject to post-translational modification (signal peptides, etc),
- Regulatory signals (promoters, operators, attentuators, enhancers, etc),
- Repetitive sequences (Alu, LTR, etc.),
- Sites of DNA (or genomic RNA) insertion, deletion,
- Protein binding sites.

Also use this table to give the inclusive base numbers of regions not explicitly reported in the primary reference or of regions taken from other publications.

Base numbering for features: [ ] matches that of paper
[ ] starts at 1
[ ] starts at:

Feature	Start Base Number	End Base Number	'C' for Comp. Strand	'P' for ID by pat.

(Add as necessary; do not bother to continue the grid)					

KEYWORDS

Describe the properties of the sequence in terms of its associated phenotype, the biological/enzymatic activity of its product, the general functional classification of the gene and/or gene product, whatever else you think is relevant.	
molecules that gene product can bind (e.g., DNA; Ca++; proteins)	
post-translational modifications (e.g., glycosylation)	
subcellular location of gene product	
any other relevant information	

FORMATS FOR SUBMITTED DATA

We are happy to accept data submitted in any of the following formats.

1. Magnetic tapes: 9-track only (fixed-length records preferred); 800, 1600 or 6250 bpi (any blocksize); ASCII or EBCDIC character codes; unlabelled.

2. Floppy disks: 5 1/4 inch, NEC PC-9800 MS-DOS format

3. Printed copy: Please do not reduce the size of the letters in the sequence. Lowercase letters are preferred. A computer printout is fine. The copy should not show amino acids, restriction enzymes, or any other annotation except base numbers.

Whatever format you choose, we would appreciate receiving the sequence data in a form which conforms as closely as possible to the following standards.

Each sequence should include the names of the authors, the journal in which the article will appear, and the accession number assigned to your sequence, if we have provided you with one.

Each distinct sequence reported should be listed separately and its length in bases clearly indicated.

The sequence should be listed using the same number of bases per line and in the 5′ to 3′ direction. If both strands are listed, the top strand should be 5′ to 3′.

Enumeration should begin with a "1" and ascend in the direction 5′ to 3′. If you must use negative enumeration, a clear indication should be given as to whether or not zero is included.

Undetermined base positions within the sequence should be indicated with the character "n".

DDBJニュースレター申し込み書　　[ ] 新規　　[ ] 継続、訂正

必要事項を記入して下記の宛先までお送り下さい。
宛先：　411 三島市谷田1111、国立遺伝学研究所　遺伝情報センター
遺伝情報分析研究室　DDBJ係

ふりがな
氏名_____ 日付_____
ふりがな
所属_____ 電話_____
ふりがな
住所_____
（宛先を記したラベル2枚を同封下さい。）

DDBJニュースレター

[ ] 定期配布　　_____部　　[ ] 一時配布　　_____部

マニュアル　その他

DNA データ

GenBank：　[ ] User's manual for MT　　[ ] Manual for floppy version

EMBL：　[ ] User's manual & Release notes　[ ] _____

NBRF：　[ ] User's manual　[ ] _____

蛋白質データ

NBRF：　[ ] User's manual　[ ] _____

PGtrans：　[ ] User's manual　[ ] _____

（注）　User's manualは、配布磁気テープにはファイルとして含まれます。

データバンク運営に関するコメント

DNA,蛋白質データ配布申し込み書　[　] 新規　[　] 継続、訂正

必要事項を記入して下記の宛先までお送り下さい。[　] の中の。印はdefaultを意味します。　宛先：　411 三島市谷田1111、国立遺伝学研究所　遺伝情報センター
遺伝情報分析研究室　DDBJ係

ふりがな
氏名_____ 日付_____
ふりがな
所属_____ 電話_____
ふりがな
住所_____
（宛先を記したラベル2枚を同封下さい。）

DNA データ

[　] GenBank：[。] MT （6250 bpi, 1200ft; 1600 bpi, 2400ft × 2 ）
[　] Floppy （5.5' 2HD/2DD, 20 枚）
[。] 一時配布　[　] 定期配布（年　4 回）
[　] EMBL ：　(6250 bpi, 1200ft; 1600 bpi, 3600 ft)
[。] 一時配布　[　] 定期配布
[　] NBRF ：　[。] 一般配布用（6250 bpi, 600ft ; 1600 bpi, 1200 ft ）
[　] VAX/VMS　(6250 bpi, 600ft ; 1600 bpi, 1200 ft)
[。] 一時配布　[　] 定期配布
[　] DDBJ ：　[　] Floppy （5.5' 2HD/2DD, 1 枚）

蛋白質データ

[　] NBRF ：　[。] 一般配布用（6250 bpi, 1200 ft ; 1600 bpi, 2400ft ）
[　] VAX/VMS　(6250 bpi, 1200 ft ; 1600 bpi, 2400ft)
[。] 一時配布　[　] 定期配布

（注） 定期配布をお望みの方はあらかじめテープをお送り下さい。一時配布の場合は、あらかじめテープをお送り下さるか、もしくは使用後テープを送り返して下さい。

磁気テープ（9 Track ）フォーマット

Density:　[　] 1600 bpi　[。] 6250 bpi
使用できる最も高い Densityを指定してください。

Tape Label:　[。] unlabeled

Block size:　[　] 2400　[　] 3200　[　] 6400　[。] 12800 bytes　[　]

Record size:　[。] Fixed 80 bytes　[　] Variable

Character code:　[。] ASCII　（英小文字）　[　] EBCDIC

（注）VAX/VMS 版は、COPY or BACKUP command にて作成；density だけお答え下さい。
GenBank floppyは　MS-DOS 2DD 又は 2HDです。

ソフトウエア配布申し込み書

必要事項を記入して下記の宛先までお送り下さい。
宛先： 411 三島市谷田1111、国立遺伝学研究所　遺伝情報センター
遺伝情報分析研究室　DDBJ係

ふりがな
氏名_____ 日付_____
ふりがな
所属_____ 電話_____
ふりがな
住所_____
（宛先を記したラベル2枚を同封下さい。）

[ ] Kermit and Tools　5.25インチフロッピー 2HD 又は 2DD 3枚をお送り下さい。
[ ] キーボードに（^のキーと共に）~がある。（PC-9801 VX 以上）
[ ] キーボードに（^のキーと共に）~がない。（PC-9801 Vm 以下）

Kermitは ファイル転送用プログラムです。IBM-PC, NEC PC9801 用は端末エミュレーターとしても9600baudまで動作します。他の計算機の場合はGeneric MS-DOS版を使用ください。日本語は Shift-JISを用います。VJE-beta も使用可能です。

- UNIXシステムではスクリーンエディターも使用できますので、完全な日本語端末エミュレーターとして用いることができます。
- 残念ながら VAX/VMSシステムの場合は、スクリーンエディターは使用できません。日本語も使用できません。スクリーンエディター、日本語を使用したい場合は、DEC 端末(VT100,VT200...)エミュレーターを使用下さい。
- MSDOS は copyrighited ですので、MSDOSでformatしたフロッピーを MSDOS所持の証拠としてお送り下さい。

Toolsはファイル転送用ツールです。

[ ] VT emulator　5.25インチフロッピー 2HD 又は 2DD 3枚をお送り下さい。

東京大学医科学研究所伊藤氏作成したもので、DECUSソフトウエアライブラリーに登録されているPublic domain softwareです。NEC PC-9801/XAで以下の端末をエミュレートする。
- VT52/VT80E/VT100/VT220/VT282
- TEK4010/TEK4012/{TEK4014}/{VT55}/VT125/VT240/VT284モノクログラフィック
- {TEK4027A}/{GIGI}/VT241/VT246　カラーグラフィック

VTシリーズ端末エミュレーターとしては完璧である。日本語変換としてはNEC標準の文節変換が使用できます。（NECDIC.DRV, NECDIC.SYSを使用します。）
VAX/VMSを使用する際だけでなくグラフィック端末エミュレーターにもなりますのでUNIX用としても有用です。

ファイル転送用Kermitは、MS-DOS Generic版もPC98用の実行プログラムが付属していますが、先のPC98版の使用をお薦めします。

マニュアルは、印刷物としては配布いたしません。ファイルを出力して下さい。（印刷したものを入手したい方は、伊藤氏まで問い合わせ下さい。）

国立遺伝学研究所DNAデータベース等利用申請書

年　　月　　日

国立遺伝学研究所長 殿

貴研究所のDNAデータベース等利用について下記のとおり申請します。なお、それらの利用にあたっては、「国立遺伝学研究所DNAデータベース等利用規則」を遵守します。

記

<table>
<tr><td colspan="2">①申請区分</td><td>□新規 □継続</td><td>②利用期間</td><td colspan="4">年　月　日～　年　月　日</td></tr>
<tr><td colspan="2">※ＩＤ</td><td colspan="2"></td><td>※ユーザネーム</td><td colspan="3"></td></tr>
<tr><td rowspan="4">③利用申請者</td><td>職　名</td><td colspan="2"></td><td>（ローマ字）
氏　名</td><td colspan="3">㊞</td></tr>
<tr><td>（英訳）
所　属</td><td colspan="5"></td></tr>
<tr><td>（英訳）
所在地</td><td colspan="5">〒□□□－□□　　☎　　（　　）</td></tr>
<tr><td>④利用目的</td><td colspan="6"></td></tr>
<tr><td colspan="2">⑤利用計算機等</td><td colspan="2">□M380Q/UNIX □MicroVAXII/VMS</td><td>⑥ディスク利用量</td><td colspan="2">M380Q：　MB
VAX ：　MB</td></tr>
<tr><td colspan="2">⑦接続方法</td><td colspan="3">□電話 □DDX－パケット(□第一種 □第二種)</td><td>⑧通信速度</td><td>□1200 □2400 □____</td></tr>
<tr><td rowspan="3">⑨支払責任者</td><td>職　名</td><td colspan="2"></td><td>氏　名</td><td colspan="2">㊞</td></tr>
<tr><td>所　属</td><td colspan="5"></td></tr>
<tr><td>所在地</td><td colspan="5">〒□□□－□□　　☎　　（　　）</td></tr>
<tr><td rowspan="3">⑩経理責任者</td><td>職　名</td><td colspan="2"></td><td>氏　名</td><td colspan="2">㊞</td></tr>
<tr><td>所　属</td><td colspan="5"></td></tr>
<tr><td>所在地</td><td colspan="5">〒□□□－□□　　☎　　（　　）</td></tr>
<tr><td colspan="2">⑪利用見込額</td><td>円</td><td>⑫支出科目</td><td colspan="3">□国立学校校費 □附属病院校費 □文部省科学研究費
□研究所校費 □国立学校受託研究費 □その他(　　)</td></tr>
</table>

※については記入しないで下さい。

記 入 要 領

① 申 請 区 分　該当する事項にチェックして下さい。なお、「継続」とは、利用期間終了後、引き続き利用申請する場合をいいます。

② 利 用 期 間　利用期間は、一会計年度内ですので、その間の利用期間を記入して下さい。

③ 利 用 申 請 者
- 職　　名　教授、助教授、講師、助手、研究員等と記入して下さい。なお、大学院学生は〔博士〕〔修士〕の課程を記入して下さい。
- 所　　属　申請者が所属する大学、学部、学科又は研究所等の名称を記入して下さい。なお、大学院学生は、研究科名、専攻名まで記入して下さい。
- 氏　　名　上段に氏名をローマ字で名、姓の順に記入して下さい。
- 所 在 地　所属の住所を記入して下さい。なお、所属がない場合には、現住所を記入して下さい。

④ 利 用 目 的　当研究所ＤＮＡデータベース等利用を必要とする研究テーマを記入して下さい。

⑤ 利用計算機等　利用する計算機等にチェックして下さい。なお、磁気テープ及びフロッピーディスクにチェックした場合は、事前に申し込み書を提出して下さい。（申し込み書は、DDBJニュースレターにあります。）
又、⑥～⑧までは、計算機を利用する場合にのみ記入して下さい。

⑥ ディスク利用量　ディスク利用量を記入して下さい。なお、長期保存のディスクは、最大10ＭＢまでです。

⑦ 接続方法及び
⑧ 通 信 速 度　該当する事項にそれぞれチェックして下さい。

⑨ 支 払 責 任 者
1）申請者が支払うべき利用負担金については、その支払いに責任のもてる者を記入して下さい。
2）支出科目が科学研究費の場合は、研究費の配分を受けている者を記入して下さい。
3）所属及び所在地が申請者と同じときは、〔利用申請者に同じ〕と記入して下さい。

⑩ 経 理 責 任 者
1）予算執行の法的責任を有する事務担当者を記入して下さい。
たとえば、事務〔部〕長、会計〔経理〕課長、会計〔経理〕係長等
2）所属及び所在地が申請者又は支払責任者と同じときは〔利用申請者に同じ〕又は〔支払責任者に同じ〕と記入して下さい。

⑪ 利 用 見 込 額　利用料金の見込額を記入して下さい。

⑫ 支 出 科 目　該当する事項にチェックして下さい。ただし、「その他」の場合は、私費等その経費の名称を記入して下さい。

※　ただし、⑨～⑫までについては、昭和62年度に利用する場合には、記入する必要はありません。

年　月　日

国立遺伝学研究所DNAデータベース等利用　終了／中止／承認内容変更　届

国立遺伝学研究所長 殿

ユーザネーム				
職　名		氏名		㊞
所　属				

下記により、ＤＮＡデータベース等利用を終了／を中止／の承認内容を変更したのでお届けします。

記

終了／中止／変更　理　由			
終了／中止／変更　年月日	年　月　日	備考	

計算機接続回線：DDBJnewsでloginして各種情報を得ることができます。

電話回線

外線　M-380Q/UTS (Unix System V Release 2)

0559-75-6036　　CCITT 2400/1200 bpi, MNP error correction

6037　　CCITT 2400/1200 bpi, MNP error correction

MicroVAX II/VMS

0559-75-6038　　CCITT 2400/1200 bpi, MNP error correction

内線　FACOM 380Q/UTS

0559-75-0771 : 676　　CCITT 2400/1200 bpi

677　　CCITT 2400/1200 bpi

678　　CCITT 2400/1200 bpi

679　　CCITT 2400/1200 bpi

DDX-P address : 522-5127　(網間接続の場合は 163-060-522-5127)

- 回線初期設定　:　Full duplex, Remote echo, No party, 8 bit code
  1 start bit, 1 stop bit, Xon/Xoff
- UTS の場合は、Break 信号により2400 bpi→1200→300 →2400を切り換えます。
- VMS の場合は、autoband 設定により自動切り換えですので、<CR>を数回送ってください。

UTS login 時の注意

- usernameは必ず英小文字
  (Initial of first name + first 7 characters of last name)
- terminal type はPC9801のmsdos がdefault です。vt100 その他多くの端末がサポートされています。

VAX login 時の注意

- terminalは DEC端末(VT100,VT200,...)か、dumb端末のみサポートします。

UTS, VMS　その他の計算機(SUN,IRIS) は互いにremote login可能です。

UTS で "gentinfo" コマンドを利用し、その他必要な情報を得て下さい。