



DeskLink Installation Supplement

You should understand the following basic characteristics of the DeskLink HPDesk/HP OpenDesk gateway process:

The gateway is a bi-directional process, passing messages (including those with attachments) between the DeskLink Internet-compatible (SMTP) mail world and Hewlett-Packard's HPDesk/HP OpenDesk system.

There is a pre-defined location that will be created in HPDesk "NTMAIL" which will point to the gateway. This location name can be changed, though the default is "NTMAIL".

Messages are routed through the gateway from HPDesk to DeskLink by:

- 1) Creating foreign aliases for mail users that point to the DeskLink gateway
- 2) Addressing mail to anyone/NTMAIL with an Internet address in ()s - i.e. anyone/NTMAIL (user@host1.domain.org) -or-
Anyone (user@host1.domain.org)/NTMAIL

(Note that the location "NTMAIL" can be changed via the DeskLink HPDesk configuration screen described below.)

Messages are routed through the gateway from DeskLink to HPDesk by:

- 1) Addressing mail to a desk address @ the HPDesk system's Internet name - i.e.
John_Smith/LOC1/00@system1.domain.organization
(Note that spaces in HPDesk names can be replaced by "_"s)
DeskLink's HPDesk gateway will also accept incoming mail in the format:
John_Smith%00%LOC1@system1.domain.organization
(where the location and sublocation are reversed and "%"s are used as delimiters instead of "/"s - this is according to Wollongong's HPDesk gateway address format.)
- 2) Any message for a recipient encountered by DeskLink that is not explicitly defined as a NetMail/3000 user (if you also have the NetMail/3000 user interface) will be passed on to HPDesk for resolution. This allows a mixture of NetMail/3000 users *and* HPDesk users to coexist on the same computer (users can pick the interface they prefer). **The exception to this is that if you have the DESKLINKVERIFY JCW set in the DeskLink job, then all inbound message recipients are verified before they are accepted for delivery.** If the recipient doesn't exist - the message is "refused" and the sender gets a normal "no such recipient" type undeliverable notice. When this verification is turned off, messages are always sent into HPDesk for resolution, and it is then up to the HPDesk postmaster (General Delivery user) to manually send back notices of undeliverable messages.

NOTE: For the gateway process to function, the DeskLink background job (DESKLINK.JOB.THREEK) must be logged on and executing, and either the HPDesk FSCAREF process or the DESKINT process (if you're using the Intrinsic gateway) must be running. Verify this by issuing the ":MAILSTATUS" command from MGR.HPOFFICE. It doesn't matter whether DeskLink or the HPDesk trucks are started first, either side will "catch up" once started.

Two gateways in one:

The DeskLink gateway (as of version B.07) now includes two different gateway options - you can choose either, or even run both in parallel. The original gateway used the FSC (foreign service connection), the new gateway uses HPDesk's Intrinsic interface. The new (Intrinsic) gateway supports all the features of the old gateway, with a few additions. Using the Intrinsic gateway, HPDesk recipients will get complete (reply-able) distribution lists - these include all foreign as well as HPDesk recipients. The new gateway also handles forwarded messages somewhat better than the old gateway. If you are configuring a new system, we recommend that you use the Intrinsic gateway if it is available to you.

The installation job automatically takes care of the following items:

- 1) Builds the group NETMAIL.HPOFFICE with the required attributes and assigns a random group password to it.
- 2) Installs the HPDesk specific DeskLink files.

You (the mail system administrator) need to take care of the following:

In DeskLink

- 1) RUN NETMAINT.PUB.THREEK, select the maintenance option on the main menu, then select the OpenDesk FSC Gateway configuration screen or the OpenDesk Intrinsic Gateway configuration screen (depending on which gateway you wish to use) and confirm the setup of the gateway from DeskLink's end. The OpenDesk FSC Configuration screen will look like the following:

```
NetMaint - ver B.07 98/02/18 -- 3k Associates, Inc.
  OpenDesk GATEWAY CONFIGURATION - MAINTENANCE

Host name:  HP3000.ACME.COM

Network description:  NetMail/3000<->HPDESK interface

Gateway input filename(from OpenDesk):
  NETMAIL.NETMAIL.HPOFFICE

Gateway output filename(to OpenDesk):
  AREFIPC.MAILDB.HPOFFICE

Desk Location:  NIMAIL
Place headers in Desk Messages? [N]

Default encoding [M]
(M) MIME/base 64
(U) UUencode
(B) BIN/HEX

Outgoing Address Format [3]
(1) "First_Last" only
(2) "First_Last"/Location
(3) "First_Last"/Location/Subloc.
(4) "First.Last" only
(5) "First.Last"/Location
(6) "First.Last"/Location/Subloc.

[ ] [ ] [ Print Screen ] [ Refresh Screen ]
[ ] [ ] [ Previous Menu ] [ Exit NetMaint ]
```

- Assign a system name to route HPDesk destined mail to (usually this is the same name as the Internet name of the system, but can be an entirely separate system name referring to the same computer if desired). Enter this name in the "Host name:" field.
- The network description is a comment
- You may specify an encoding type for outbound binary attachments from HPDesk users. The default value is to use MIME (the Internet mail standard for multimedia mail attachments) but if your users will regularly be communicating with users on non-MIME compatible mail systems, you may wish to choose the "Uuencode" option, or even the "BinHex" option (used by some Macintosh mail systems; though uuencode is more common among non-MIME mailers).
- The incoming message file should be: NETMAIL.NETMAIL.HPOFFICE

- You may select the format for outgoing HPDesk addresses. DeskLink converts HPDesk addresses to an Internet-compatible format, which can be generated in any one of the following formats (assume an HPDesk user name of John Smith, at location ADMIN and sub-location 01, with the gateway machine named "deskgate.bigcorp.com"):
 - 1) "John Smith/ADMIN/01"@deskgate.bigcorp.com
 - 2) "John Smith/ADMIN"@deskgate.bigcorp.com
 - 3) "John Smith"@deskgate.bigcorp.com

Any format is valid, and usage depends on your particular requirements. Fully qualified names (type 1) are advised in most cases, as this ensures deliverability in HPDesk if users with the same names exist on different HPDesk nodes. Some might consider this format ugly however, and prefer strict Internet-looking addresses (type 3). Type 3 which will work as long as HPDesk doesn't encounter the same names on different nodes; in which case incoming mail will be returned to the sender or go to General Delivery to be resolved - depending on the setting of the DESKLINKVERIFY JCW. To use this type, you may need to set up your HPDesk system as "node resolving". Type 2 is a compromise between the other two.

- The outgoing message file should be: AREFIPC.MAILDB.HPOFFICE (not changeable)
- The location (which defaults to "NTMAIL") is the HPDesk location users will route outbound mail to. In HPDesk, by default, users send mail to: anyone/ntmail (Internet address). ("anyone" here means just that, any name - whatever is used here is ignored; "ntmail" is the location that the HPDesk gateway is "at"; and "Internet address" is where the user provides the actual Internet format mail address for the recipient -- something like "support@3k.com" for instance).
- The "place headers in Desk Messages" is an optional setting. Since it is sometimes inconvenient to "open" the distribution list in HPDesk, and since messages coming into HPDesk via the FSC interface cannot contain complete distribution lists (they can only show HPDesk recipients of the message - not other Internet users) it is often useful to have DeskLink copy a minimal set of these headers into the "body" of the message. The headers that are copied are those listed in the file "DESKHEAD.DATA.THREEK", and can be edited to site preferences. Any header included in this file will be copied into HPDesk messages (IF it appears in the original message of course). By default, the following headers are included if this option is enabled: From, To, Sender, Cc, Resent-From, Resent-To, Resent-Sender, Resent-Cc, and Resent-Date.

If you are using the OpenDesk Intrinsic Gateway, the screen will look like this:

```
NetMaint - ver B.07 98/02/18 -- 3k Associates, Inc.
OpenDesk GATEWAY CONFIGURATION - MAINTENANCE

Host name:  HP3000.ACME.COM

Network description:  HPDesk Intrinsic<->DeskLink

Intrinsic Gateway Name:  DESKGATE
Default encoding [M]
(M) MIME/base 64
(U) UUencode
(B) BIN/HEX

Intrinsic Gateway Password:  *****
Outgoing Address Format [3]
(1) "First_Last" only
(2) "First_Last"/Location
(3) "First_Last"/Location/Subloc.
(4) "First.Last" only
(5) "First.Last"/Location
(6) "First.Last"/Location/Subloc.

Desk Location:  DSKLNK
Place headers in Desk Messages? [N]

[ ] [ ] [ Print Screen ] [ Refresh Screen ] [ ] [ ] [ Previous Menu ] [ Exit NetMaint ]
```

- Assign a system name to route HPDesk destined mail to (usually this is the same name as the Internet name of the system, but can be an entirely separate system name referring to the same computer if desired). Enter this name in the "Host name:" field.
- The network description is a comment
- You may specify an encoding type for outbound binary attachments from HPDesk users. The default value is to use MIME (the Internet mail standard for multimedia mail attachments) but if your users will regularly be communicating with users on non-MIME compatible mail systems, you may wish to choose the "Uuencode" option, or even the "BinHex" option (used by some Macintosh mail systems; though uuencode is more common among non-MIME mailers).
- The Intrinsic gateway name should be whatever name you use when creating the Intrinsic gateway in HPDesk's MAILCONFIG: for example DESKGATE.
- You may select the format for outgoing HPDesk addresses. DeskLink converts HPDesk addresses to an Internet-compatible format, which can be generated in any one of the following formats (assume an HPDesk user name of John Smith, at location ADMIN and sub-location 01, with the gateway machine named "deskgate.bigcorp.com"):

- 1) "John Smith/ADMIN/01"@deskgate.bigcorp.com
- 2) "John Smith/ADMIN"@deskgate.bigcorp.com
- 3) "John Smith"@deskgate.bigcorp.com

Any format is valid, and usage depends on your particular requirements. Fully qualified names (type 1) are advised in most cases, as this ensures deliverability in HPDesk if users with the same names exist on different HPDesk nodes. Some might consider this format ugly however, and prefer strict Internet-looking addresses (type 3). Type 3 which will work as long as HPDesk doesn't encounter the same names on different nodes; in which case incoming mail will be returned to the sender or go to General Delivery to be resolved - depending on the setting of the DESKLINKVERIFY JCW. To use this type, you may need to set up your HPDesk system as "node resolving". Type 2 is a compromise between the other two.

- The Intrinsic Gateway password is the password you will use when creating the Intrinsic gateway in HPDesk's MAILCONFIG. For the DeskLink product you MUST use an all upper-case password. For example, "DESKPASS".
- The location (which defaults to "DSKLNK") is the HPDesk location users will route outbound mail to. In HPDesk, by default, users send mail to: anyone/dsklnk (Internet address). ("anyname" here means just that, any name - whatever is used here is ignored - though we recommend "inet/dsklnk" as a standard; "dsklnk" is the location that the HPDesk Intrinsic gateway is "at"; and "Internet address" is where the user provides the actual Internet format mail address for the recipient -- something like "support@3k.com" for instance).
- The "place headers in Desk Messages" is an optional setting. Since it is sometimes inconvenient to "open" the distribution list in HPDesk it is sometimes useful to have DeskLink copy a minimal set of these headers into the "body" of the message. When using the Intrinsic gateway, distribution lists on incoming messages ARE always complete (unlike the FSC interface), so this option is purely personal preference. The headers that are copied are those listed in the file "DESKHEAD.DATA.THREEK", and can be edited to site preferences. Any header included in this file will be copied into HPDesk messages (IF it appears in the original message of course). By default, the following headers are included if this option is enabled: From, To, Sender, Cc, Resent-From, Resent-To, Resent-Sender, Resent-Cc, and Resent-Date.

In HPDesk

Log in as the HPDesk System Administrator (or MGR.HPOFFICE, MAILDB) and enter

: MAILCONFIG

You'll see a menu something like the following (the menu displayed is from OpenDesk, your particular version may not be identical, but will probably be similar):

OPENDESK CONFIGURATOR Main Menu

This is the Main Menu of the OpenDesk Configurator. The functions available to you are identified on the function keys shown below:

Config OpenDesk - Allows you to initialize or alter the OpenDesk configuration by adding new elements, or deleting or modifying existing elements.

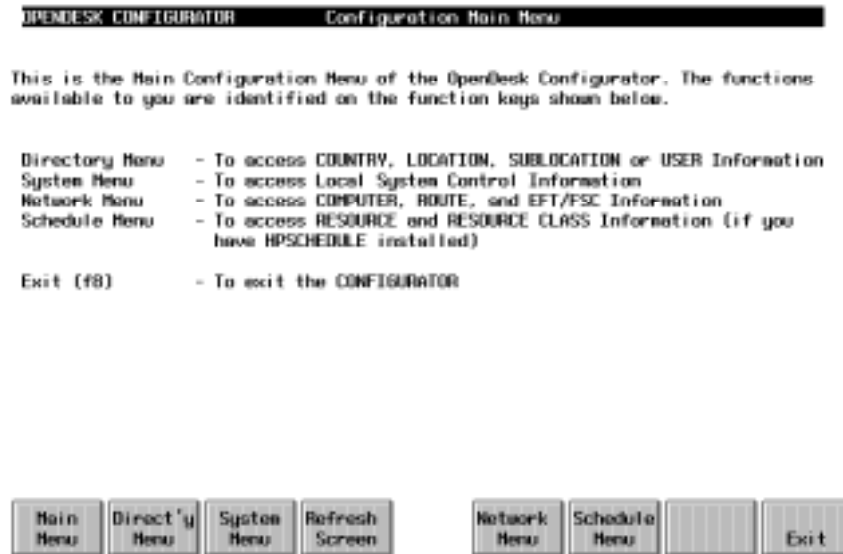
Create Database - Provides for the initial creation of the OpenDesk data base.

Expand Database - Allows you to re-create the OpenDesk data base as its contents begin to reach the data base capacity. NOTE: That to keep the current content, you must UNLOAD the data base before recreating a new one, and then RELOAD the data base after it has been re-created.

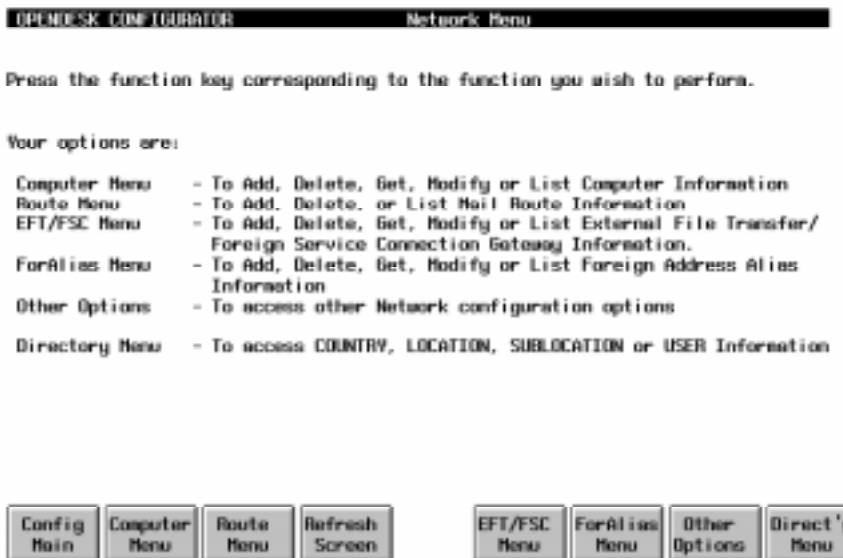
Exit (f8) - Exit the CONFIGURATOR



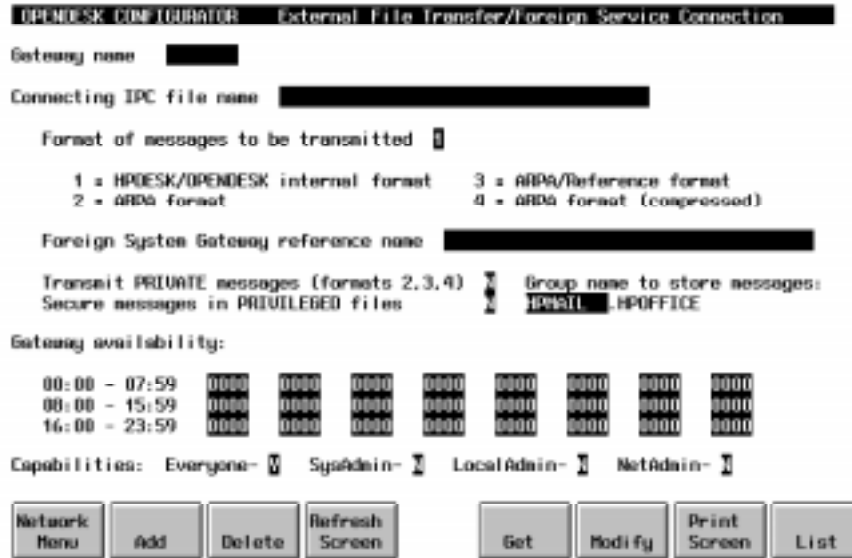
Select the choice to config HPDesk. You'll see a menu something like this:



Now, select the network menu:

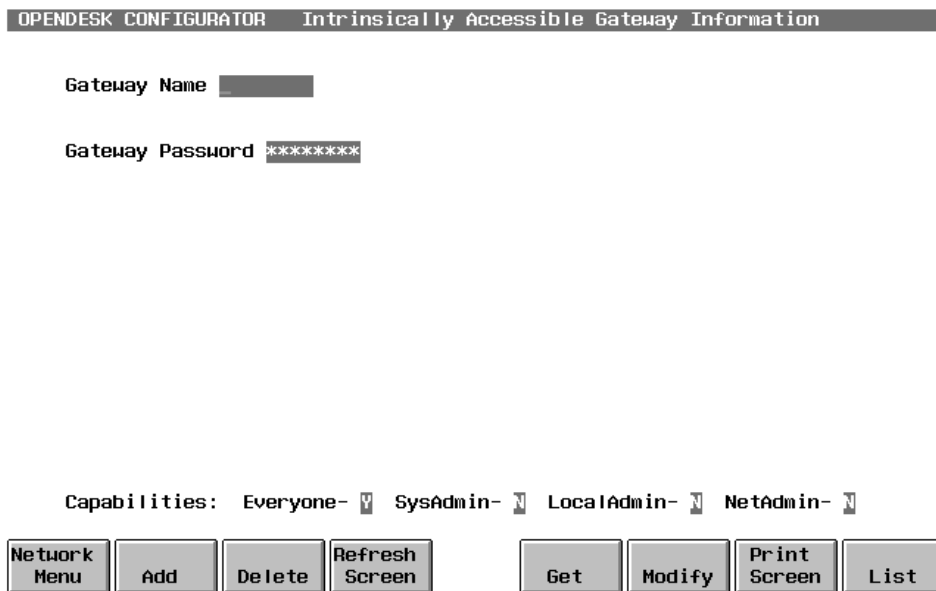


If you are configuring the FSC gateway then at the network menu, select the EFT/FSC Menu. It will look something like this:



- Using this screen, define a gateway called "DESKLINK" (Gateway name). Give it the fully qualified name of the IPC file (NETMAIL.NETMAIL.HPOFFICE). Select "3" (ARPA Reference) for the format. Leave the Foreign System Gateway reference name blank. Transmit private messages should be "Y" or "N" depending on system preference. Secure messages in PRIVILEGED files should be "N". The group name to store messages should be "NETMAIL.HPOFFICE". The "Gateway Availability" information should be set to all "4"s. The capability setting should be the standard (Everyone - Y, others N).

If you are configuring the Intrinsic gateway, you should select the option titled "Other options". This will bring you to a menu with an option to configure the Intrinsic gateway (Igateway on the screen). Select this option. This screen will look like this:



- Using this screen, define a gateway called "DESKLINK" (Gateway name) and a password IN ALL UPPER CASE LETTERS - for example "DESKPASS". Leave the Capabilities settings at their defaults and hit Add.

Go back to the Directory menu, and select the Locations menu:

HPDESK CONFIGURATOR Location Information

Location Code [] of Country Code []

Location Name []

Do you want this update applied to the directory on other sites?

Directory Menu Add Delete Refresh Screen Get Modify Print Screen List

- (2) Under the locations screen and define (at least) one Location Code called "NTMAIL" (note no "E") for FSC gateway setups, or "DSKLNK" for Intrinsic gateway setups. (Note that if you changed the location name in the HPDesk configuration screen described in the previous section, you must use the name you entered instead. There is no special meaning to either "NTMAIL" or "DSKLNK" - they are only the examples we use. We do recommend that you use these names if you don't have good reason to do otherwise though as it will make diagnostics that much easier later if needed.) You can also add other locations if you plan to add directory information for remote locations and want them separated for neatness. Note the locations "NTMAIL" or "DSKLNK" do not require (or allow) sublocations. Give the gateway a description and a valid country code. If you have other HP3000s in your HPDesk network then you probably want the update applied to the directory on your other systems; if not then the answer to the last prompts doesn't matter.

Go back to the directory menu and select the Hierarchic Addressing screen.

```

HPDESK CONFIGURATOR      Hierarchical Addressed Locations
-----
Location name [ ]

Is your computer a node-resolving computer for this location? That is,
can the names of users on the location be resolved from the directory
on this computer? [ ]

If YES, name of Sublocation on this Location to which messages having
unresolvable names should be sent (optional) [ ]
-----
Automatic Directory Update Control

Incoming : From this location : [ ] Accept Remote Updates
          :                   : [ ] Accept Remote and Local Updates
          :                   : [ ] Accept Local User Deletions
          : About this location : [ ] Accept Password Updates
          :                   : [ ] Accept User Updates

Outgoing : About this location : [ ] Distribute User Updates
          :                   : [ ] Distribute THIS Update

[Directory Menu] [Add] [Delete] [Refresh Screen]
[Get] [Modify] [Print Screen] [ ]

```

- (3) Add the location name "NTMAIL" (or "DSKLNK", or the name you specified in the NetMaint HPDesk configuration screen if different), specifying that you are NOT a node resolving computer for that location. The directory update fields do not apply here, so you can leave them at the default values. If you plan on using both gateways simultaneously, add both "NTMAIL" and "DSKLNK" locations.

Go back to the Network menu, and select the routes screen:

```

HPDESK CONFIGURATOR      Route Information
-----
Route Location [ ] Sublocation [ ]

through

Computer/Gateway [ ]

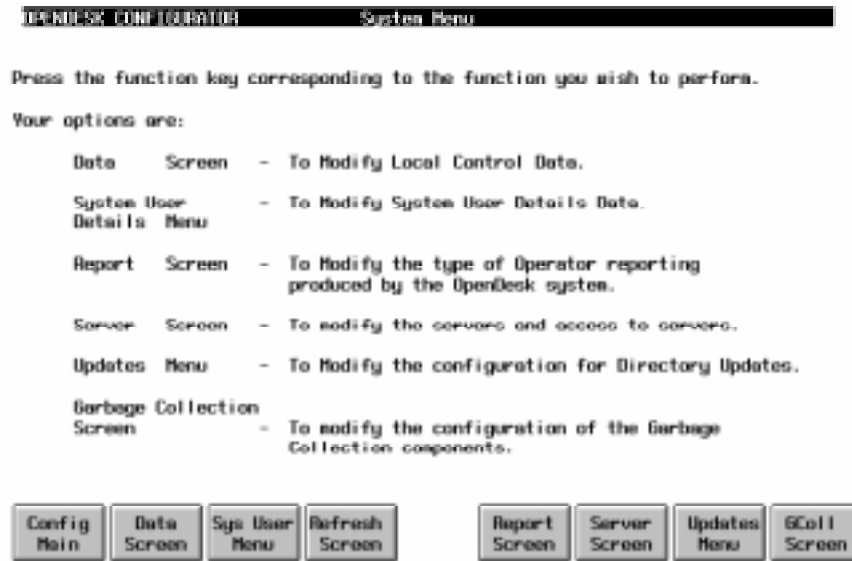
Route Priority [ ]
Blank - No restrictions on this route
A - Route DEFERRED mail only
B - Route NORMAL and DEFERRED mail only

[Network Menu] [Add] [Delete] [Refresh Screen]
[Get] [Modify] [Print Screen] [List]

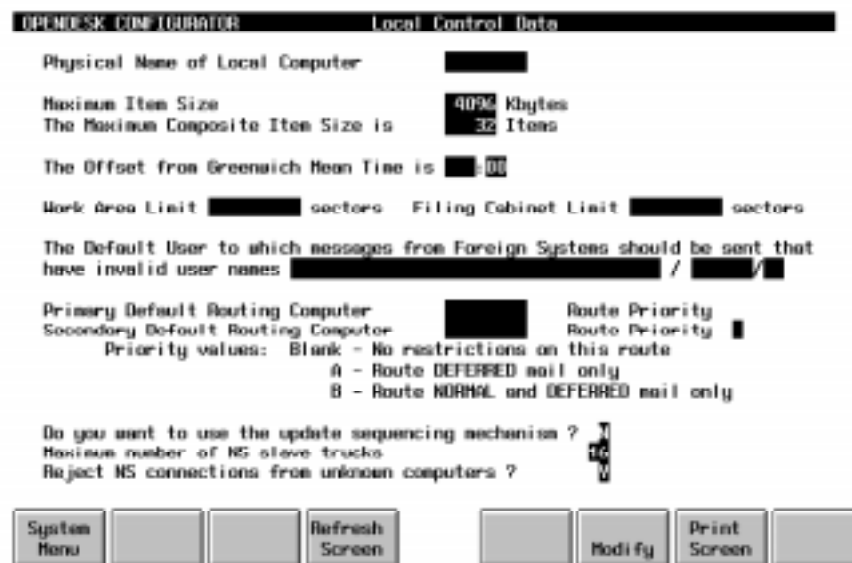
```

- (4) On the Routes screen add route location "NTMAIL" (or "DSKLNK" or whatever location you entered in the NetMaint HPDesk configuration screen). Leave the sublocation field blank. Enter "DESKLINK" in the "Computer/Gateway" field, and blank out the "Route Priority" field. You will also want to enter routes on this screen for any other locations you might have defined for this gateway (in the steps above).

Now go back to the Network menu and select "config main" to get to the main menu. Select the System menu:



- (5) If you don't have one already, be sure to define a Default User under the Data Screen (as follows). This is where undeliverable mail will end up if you don't use the "DESKLINKVERIFY" switch. The only fields of relevance here are "The Default User to which messages from Foreign Systems should be sent that have invalid names" and the "Maximum Item Size". Make sure there is a valid HPDesk mailbox name in the Default User field, with location and sublocation. This mailbox will receive incoming messages that HPDesk could not figure out the correct recipient for. The physical name of the computer should display automatically (and isn't changeable here) and it's a good idea to make sure your offset from Greenwich Mean Time is correct. The Maximum Item Size limits the size of messages that can be imported into HPDesk. Messages that are too large get refused (or dropped into an error file for the FSC process). You should set this value large (say "15000 Kbytes" - which is the maximum) to avoid impeding users with large attachments.



- (6) If you will be using the FSC gateway, exit the HPDesk configuration program and build the message file that Desk will use to communicate with DeskLink. While logged on in the HPOFFICE account (with AM capability or access to the NETMAIL group), do the following:

:BUILD NETMAIL.NETMAIL;REC= -80,,,ASCII;MSG

(Intrinsic gateway users need not build this file)

- (7) To get the HPDesk configuration to take affect and the FSC truck to activate, you need to at least:

:MAILMANOFF

:MAILROOMOFF

(after these two jobs stop, do a:)

:MAILON

(and if you are using the FSC gateway and haven't modified the MAILON UDC to start the FSC truck, you will also need to do:)

:MAILFSCAREFON

For users of the Intrinsic gateway, you would start the Intrinsic gateway process like this:

:MAILGATEINTON

If your site automatically stops and restarts HPDesk overnight it may be preferable to wait for the normal restart (especially if there are users in HPDesk when you make the configuration changes). If you do wait, don't forget to make sure the FSCAREF or GATEINT process gets started (if your site hadn't previously used FSC or Gateway Intrinsic processes it is very likely disabled). Once HPDesk is active, entering the following command (from MGR.HPOFFICE)

:MAILSTATUS

will list the status of the various HPDesk processes, and you can make sure the FSCAREF (ARPAREF) or GATEINT process is active.

Remember: when starting HPDesk with :MAILON, bear in mind that the FSCAREF process (incoming FSC truck) and the GATEINT process do not start automatically, so you have to do a :MAILFSCAREFON manually (or modify the MAILON UDC).

You also need to start the DeskLink background job now that you have configured HPDesk. The background job runs independently from any HPDesk jobs or processes, and can be stopped and started without affecting HPDesk. To start the DeskLink background job, type:

:STREAM DESKLINK.JOB.THREEK

(You may need to insert passwords and set JCW options in the job stream.)

Adding foreign users to HPOpenDesk's Directory

You can add users to the HPOpenDesk directory so that they will appear to other Desk users like any other Desk mailbox, but will actually have any messages automatically routed to another mail system (via the DeskLink gateway). This obviously makes it much easier for your existing HPDesk users to communicate with peers on other e-mail systems as the mailboxes look just like any other HPDesk user, just at a different location. You don't HAVE to do this; HPDesk users can always enter an Internet address at their To: or Cc: prompts if they wish; but entering commonly-used mailboxes directly in the HPDesk directory can make communications a little more streamlined and appear more uniform - and free Desk users from having to remember what are sometimes long and odd-looking e-mail addresses for other systems. Addresses are entered in the HPDesk directory with the following steps (all done in MAILCONFIG):

- 1) Create a new location in HPDesk - for example call it "SMTPGW".
- 2) In the Hierarchical menu (under the directory menu) enter the location from the previous step "SMTPGW", and select "No" for the node-resolving computer entry, then select "Add".
- 3) In the Routes menu (from the Directory menu go to Network menu then to Route menu) enter the location you used ("SMTPGW" in our example), leave sublocation blank, enter "DESKLINK" in the "through gateway" field, and leave the route-priority field blank, then select "Add" to add the route.

You now have a location set up to which you can add (foreign mail system) users. Now you need to start adding users:

- 4) In the User menu (under the Directory menu) enter a user name, fill in the location you used above ("SMTPGW"), leave the sublocation field blank, and select "Add".

Repeat step 4 for all the users you want to add.

- 5) In the ForAlias menu (from the Directory menu go to the Network menu then select ForAlias menu), enter "DESKLINK" in the gateway name field, enter a user name that you added in the previous step in the "user name" field, enter the location you used ("SMTPGW") in the location field, leave the sublocation field blank, and in the address box below, enter the e-mail address (in Internet format) then select "Add". Note that the e-mail addresses should look something like "username@host.domain.organization" - don't forget the "@".

Repeat step 5 for all the users you want to add.