# Using Personal MHS on Your Laptop

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This AppNote presents methods for configuring and using NetWare MHS (personal version) on a laptop computer. The information is geared to those who use a laptop as their personal workstation, both at the home office and away from the office. It outlines how to set up Personal MHS on the laptop, and gives sample batch files for invoking MHS and electronic mail programs under this configuration.

# Contents

## Introduction

This document has been written for the benefit of laptop users. It outlines various hints that allow the single user to exploit facilities offered by Novell's Message Handling Service v1.5 (personal version). Most of these hints are procedural. They afford the traveling laptop user considerable operational benefits. Some of the topics covered include:

● An overview of the special needs of a laptop user as they apply to electronic mail (E-mail).
● Quick start instructions for setting the various MHS directory parameters, highlighting the values that result in an appropriate configuration for Personal MHS users.
● A sample batch file that invokes MHS and E-mail products in a fashion corresponding to typical laptop usage.
● A sample procedure for substituting the appropriate phone numbers as required when initiating calls from different locations.

The tips included in this document are not intended to replace the MHS documentation, but rather as examples of the applicability of MHS facilities to laptop usage profiles.

## The Special Needs of a Laptop User

In today's business environment, there is an increasing population of users who have replaced the classic desktop workstation with a laptop computer. When in the office, the laptop is connected to the LAN via a docking station or a specialized network adapter. When out of the office, these users still want to have full access to their applications of habit. They require this access, however, in standalone mode. This AppNote documents an implementation that serves those needs as they correspond to E-mail programs.

The configuration for this implementation has been defined to give users:

● The ability to create, read, forward, and reply to E-mail when their laptop is not connected directly to the home LAN.
● The ability to "pick up" and "drop off" queued E-mail whenever the opportunity presents itself (at airports, in hotel rooms, or from the home).
● A simplified procedure for changing phone numbers, prefixes, and suffixes.

The following assumptions were made in preparing this document:

● The laptop in question also serves as the user's personal workstation, replacing the desktop system.
● The laptop has sufficient disk space to store E-mail application software, the MHS Connectivity Manager software, and E-mail queues.

● The user has installed a single-user version of an MHS based E-mail application.
● The laptop has a built-in Hayes compatible modem.
● The laptop user has the requirement to specify different dialing strings to connect to the MHS hub, depending on the location when initiating the call.
● The user will always dial into the same hub for E-mail. (This is also true when the user is at the home office, even though it will probably just be an internal switchboard connection.)

Figure 1 is a diagram of the recommended configuration.

**Figure 1: Configuration for asynchronous dial-in to departmental MHS from a laptop.**

## Benefits of This Configuration

There are substantial benefits to be derived from implementing the configuration as documented in this article. The main ones are listed below.

Reduction in Long Distance Telephone Costs.  The user is not "in session" while reading and creating E-mail. The duration of the call is only for the E-mail transfer time.

The user can also supply a telephone calling card number to which the call is billed. This is typically less expensive than the costs incurred by hotel long distance surcharges.

Personal Productivity Gain.  The user can work offline when a connection to the LAN is not available.

Minimal Out-of-Office Impact.  Even when out of the office, the user can still collaborate on documents and projects. This is possible because revisions, updates, and so forth can easily be sent to co-workers via E-mail.

Ease of Use.  This configuration minimizes the requirement for users to become proficient at managing MHS directories and initiating modem connections.

## Setting Up the MHS Directories

This section provides hints for configuring MHS for the laptop user. It provides suggested values for parameters presented in the menus within the "Manage Directories" and the "Setup Transport Manager" activities. The Usernames and Hostnames specified in these examples will have to be modified as appropriate for your installation.

The installation procedure primes the MHS directory with default routing information and so on. However, you should make the following recommended changes and additions.

### Setting Up Your Host

The following notes apply to the parameters under "Manage Directories - Set Up This Host."

Hostname.  The value assigned to this parameter must be unique within your MHS mail backbone. This requires coordination with the corporate E-mail administration group.

Administrative Username.  Although this defaults to "ADMIN," the Personal MHS user should alter this to specify his or her own username as the administrative user. This ensures that error messages, normally sent to the administrator, are sent to the primary user instead.

Is this host part of a multihost workgroup (Y/N)?  Answer "Yes" to this question *first*, since the rest of the menu's contents change depending how you answer this question. Answering "Yes" here allows you to specify that the laptop user's workgroup is different than the MHS Hostname specified above. As a result, the laptop user can be part of the bigger departmental or corporate-wide workgroup. This simplifies addressing requirements, resulting in ease of administration and making it easier for others to send E-mail to you.

Workgroup Name.  Since the Multihost Workgroup parameter was set to "Yes," specify the corporate-wide workgroup name as explained above. (This will be different from the Hostname.)

Preferred Hub.  This is the name of the host that your laptop always dials in to. The value assigned to this parameter must match the name with which the dialed host responds.

The MHS installation procedure assumes "NHUB" to be the preferred hub. Since your laptop will be calling into your own departmental MHS Connectivity Manager, replace "NHUB" with the name of your local hub. Consult the corporate E-mail administrator for the correct hub name.

When you enter a hub name, MHS searches its directory for a definition for that host. If it does not exist, MHS defines this new host, and you will be presented with the appropriate pop-up menus. (See the information under "Defining Additional Hosts That Your Laptop Calls" for details of recommended responses.)

Dialing Prefix.  Leave this parameter blank. Later in this document, we discuss the use of the MHSUSER utility to alter dial numbers. Since MHSUSER cannot alter the Dialing Prefix parameter, you'll have more flexibility by not assigning a value to this parameter.

Does this host provide routing services?  Answer "Yes" to this parameter.

## Defining Additional Users

The following notes apply to the parameters under "Manage Directories - Names of Users at This Host."

Names of Users at This Host.  Since this is a single-user environment, there should be no additions to this list. However, for the single user defined, specify the name of the preferred application. If possible, install your most heavily used E-mail application with an application name of "MHS." Don't forget to add any other application names under the "also uses" fields. These may include other E-mail products or mail-enabled applications that you may have installed.

Routes To Workgroups,
Hosts, and Gateways

The following notes apply to "Managing Directories - Routes to Workgroups, Hosts, and Gateways."

Defining Additional Hosts That Are Accessed Through the Hub.  Although MHS will route E-mail for unknown workgroups through the preferred hub, some E-mail applications require explicit routing definitions for any workgroup to which the user wishes to send messages.

If your E-mail application requires explicit routing, define the workgroups by selecting the "ADD" function from the pop-up menu. Specify the workgroups as being accessible via an "Intermediary Workgroup, Host, or Gateway." This results in the creation of an "HVIA <hubname>" entry in the MHS directory.

The host definition for the preferred hub will have already been created when you enable "This Host Provides Routing Services" in setting up your own host.

Defining Additional Hosts That Your Laptop Calls.  Select the "ADD" function from the pop-up menu. For a host that you wish to call, specify the host as being accessible via a "Telephone Call To That Host."

This is the option that is invoked when you defined your preferred hub. It will cause your laptop MHS to initiate the calls to the hub.

Telephone Number.  Enter the default dialing string to access this hub. A flexible method for specifying dialing strings is discussed later in this document.

Number of Tries to Connect.  When defining the hub to which Personal MHS connects, set the deactivation count to the maximum (99). This will prevent deactivation of the hub after failed connection attempts in normal use. The user must restart the transport manager after a failed connection attempt.

Get Remote Mail.  Set this parameter to "Yes." This will allow E-mail to be sent to and received from the hub.

Defining a Gateway. *Defining a gateway is recommended for the laptop user.* A future AppNote will discuss how this gateway definition helps in automating basic office procedures (such as forms distribution through E-mail).

Define the gateway as follows:

    Host Name: SMFSEND
    Description: Batch Email Pickup
    Gateway Version: 70
    COMMAND: -FC:\BATMAIL

Specifying Gateway Version 70 allows this gateway to

exploit MHS 1.5 features such as sending one copy to multiple recipients (deferred fan-out) and including multiple attachments in one E-mail parcel.

User Routes.  It is not necessary to define any "User Routing" entries in the Personal MHS directory. Leave this blank.

Names of Affiliated Workgroups.  It is not necessary to define any "Affiliated Workgroup" entries in the Personal MHS directory.

## Setting Up the Transport Server

The following notes apply to parameters and menu items within the "Set Up Transport Server" activity at the main menu.

Log Files.  MHS log files can accumulate and consume a considerable amount of disk space. Divert these to a RAM disk if possible, and copy them to your hard disk as part of the batch file that invokes the MHS Connectivity Manager. Since you will likely want to look at data immediately after problematic transmissions, this method saves only the data pertaining to the most recent invocation.

Schedule Every x Seconds.  Specify the absolute minimum value for this parameter. The user will only start the MHS Transport Manager when an E-mail transmission or collection is desired.

Speed Sensing.  Set speed sensing to "N0" unless your laptop is going to receive calls.

## Sample File to Invoke MHS and Terminate After One Pass

Use the following MHSONCE.BAT file to start the MHS Connectivity Manager on your laptop.

```
@ECHO OFF
D:
CD\MHS\EXE
MHS -1
REM Invoke the E-mail application to see what mail came in
CALL C:\BATS\BMAIL.BAT
REM Save Current LOG Files
COPY E:\SDREGE.* C:\LOG\*.* > \DEV\NUL
DEL  E:\SDREGE.* > \DEV\NUL
C:
CD\MENU
```

The following notes explain how this batch file works.

1.  The MHS software has been installed on drive D in this example.

2.   The inclusion of the "-1" parameter when you call MHS causes the program to run and then terminate after there is no more mail to deliver. Thus the MHS Connectivity Manager relinquishes control and the batch file resumes.

3.   It makes sense to invoke the E-mail user agent after having run the Connectivity Manager. The call to BMAIL.BAT serves this purpose.

4.   Overwrite the log files on the hard disk with the data from this Connectivity Manager Session's log files. This keeps only the data pertaining to the last connection, limiting the data buildup on the laptop's local disk.

5.   This batch file is designed to be invoked by a menu selection.

## Procedure to Change the Dialing String as Required

For ease of use, you can implement the MHSDIAL.BAT procedure shown in Figure 2 below in your menu application. In this batch file, defaults and constants have been hard coded wherever possible (for example, "-X31").

Due to the inability to pass commas through DOS positional parameters, the batch file uses a DOS environment variable named %VIA%. If your usage never requires the passing of modem delay characters (",,,,") between the telephone number and the calling card number, you can eliminate the use of the %VIA% parameter.

***Figure 2: MHSDIAL.BAT file that allows the user to specify variable dialing parameters.***

Examples of using of the MHSDIAL.BAT process are given in the next section.

## Sample Control File for the Novell Menu Program

Below is a sample of commands you could use in a Novell Menu script file to select various phone numbers for dialing. The Novell menu application must be copied to the laptop's local disk in order to use this facility as shown in this example.

Note the use of the Novell menu system's ability to accept keyboard input and pass it to the command in the selected item. This is illustrated under the "User specified number"

line.

```
%Phone Number Management,5,10
9-1-800
  @ECHO OFF
  SET VIA=9,1,800-555-9998
  CALL C:\BATS\MHSDIAL.BAT DEPTMHS 2
  SET VIA=
0-801
  @ECHO OFF
  SET VIA=0,801-555-1213,,,,12345678901234
  CALL C:\BATS\MHSDIAL.BAT DEPTMHS 2
  SET VIA=
Provo Office
  @ECHO OFF
  SET VIA=1213
  CALL C:\BATS\MHSDIAL.BAT DEPTMHS 2
  SET VIA=
User specified number
  @ECHO OFF
  SET VIA=@1"Enter Full Dial String Required"
  CALL C:\BATS\MHSDIAL.BAT DEPTMHS 2
  SET VIA=
```

The following notes explain this script file.

1. The name of the user's departmental hub being modified is "DEPTMHS."

2. The ADMIN Password for this MHS Connectivity Manager is embedded in the MHSDIAL.BAT file.

3. The number "2" specifies that the host is accessed via dial.

4. The batch file assumes that the DEPTMHS host has two means of access. One is a local telephone number (801) 555-1213, and the other is an incoming toll-free line (800) 555-9998. Replace these fictitious phone numbers and the calling card number with your actual numbers.

5. The character string

```
@1"Enter Full Dial String Required"
```

causes the Novell Menu program to prompt the user for input preceded by the message within the double quotes. The user then specifies his custom dialing string as required.

## Summary

The preceding information is offered as assistance to Personal MHS users. It is designed to allow users to get a quick start, and to simplify the operation of the localized E-mail on the laptop.