

Supplement #52

84 Elm Street • Peterborough, NH 03458 USA
TEL (010)1-603-924-8818 • FAX (010)1-603-924-6348
Website: <http://www.softlanding.com> Email: techsupport@softlanding.com

SETTING UP THE TURNOVER® FOR ISERIES V100 MAIL DAEMON

This document provides detailed information about the TURNOVER® for iSeries v100 Mail Daemon, including what it is, why you would want to use it, and instructions for installing and configuring it.

BACKGROUND	2
CONSIDERATIONS FOR USING THE MAIL DAEMON	3
<i>Shortcuts and URLs</i>	3
<i>Documents</i>	3
REQUIREMENTS	4
INSTALLING AND CONFIGURING THE MAIL DAEMON.....	5
<i>Editing the tmaild.properties file</i>	6
<i>JavaMail properties</i>	6
<i>TURNOVER® for iSeries v100 Mail Daemon properties</i>	7
<i>Settings that are related to EXPRESSDESK® for iSeries v100</i>	9
<i>Plain text mail settings</i>	10
<i>HTML mail settings</i>	10
<i>iSeries connection properties</i>	11
<i>SMTP authentication properties</i>	11
STARTING AND ENDING THE MAIL DAEMON (MANUALLY).....	12
SETTING UP AN AUTOSTART JOB.....	13
<i>Determining where the autostart job will run</i>	13
<i>Creating a job description</i>	13
<i>Adding an autostart job entry</i>	14
MULTIPLE TURNOVER® FOR ISERIES V100 ENVIRONMENTS	15
<i>Creating the TSNDMAPI data queue in data libraries</i>	15
LOG SETTINGS	16
HTML MESSAGE SUPPORT.....	17
<i>HTML template</i>	17
<i>Overriding HTML and plain text configuration settings</i>	19

BACKGROUND

In TURNOVER® Release 4.0, we enhanced TURNOVER® to send email messages. How this works is that some action or event occurs in the project system for which you have configured TURNOVER® to send an email message. This causes an entry to be placed on a data queue (*DTAQ) object with control information about the message. A companion program running on a Windows PC/Server monitors this *DTAQ and builds and sends the message. Historically, this program had to run on Windows because that is where the email APIs that were needed to send the message resided. This has always been a problem or at least an inconvenience for many customers that do not want to maintain or run a Windows server. In addition, there are other problems such as making sure the program is restarted after the Windows system is rebooted or the iSeries server is IPL'd or being backed up. Customers have long asked for a solution that could run natively on the iSeries and therefore be managed by standard iSeries work management features.

With the addition of Java to the iSeries, and the release of the JavaMail APIs by Sun Microsystems, this is now possible. Using these tools and APIs, we have created the TURNOVER® Mail Daemon. This is a program written in Java that monitors that same *DTAQ and builds and sends the same email messages. Since it is written in Java, you can run this program on your iSeries server and manage it just like any other job. For the most part, we were able to recreate and support all of the features provided by the existing Enhanced Mail Messenger. However there are some differences and considerations that you need to take into account before switching to this new program. In addition, since we were starting over, we also introduced some new features in this messenger that have been asked for over the years and which do not exist in the Enhanced Mail Messenger.

We will continue to support both programs, the Enhanced Mail Messenger and the TURNOVER® Mail Daemon for the foreseeable future. If sometime in the future, we find that most customers are using the Mail Daemon, then we may decide to stop supporting the Windows-based messenger. It will really depend on what our customers tell us they need. However, because the Mail Daemon is better positioned strategically for enhancements, we are likely to add most new features only to it.

CONSIDERATIONS FOR USING THE MAIL DAEMON

This describes some differences between the Mail Daemon and the Windows Messenger. These differences involve documents, shortcuts, and URLs.

The TURNOVER® for iSeries v100 Client allows you to attach “links” to tasks. These links can be to any of the following:

- Document attachments
- Shortcuts to documents
- Areas internal to TURNOVER® for iSeries v100 such as tasks or requesters.

You can configure your email message so that these links are attached to the message.

Shortcuts and URLs

When a shortcut or URL is to be attached to the message, the Windows messenger uses a special Windows API for creating a shortcut to a file or a URL. These are “.lnk” or “.url” files and are special Windows files. It is not possible, or at least is not feasible, to create these files using Java. What we do instead is simply write the URL in the message text and, for shortcuts, we write a file:// URL. Almost all mail clients will recognize these URL’s and convert them into clickable links. So, in effect, the feature works the same but just looks different. If you rely on sending shortcuts or URL’s in your message then you would want to test this out and make sure it works for your mail clients.

Documents

When a document is to be attached to the message, the program that is sending the message has to be able to physically read that document using the path provided in the link. Normally, this will be expressed in a “UNC-style” path name, such as [\\Server\Share\Dir\Filename.ext](#). The Windows program can just follow this same path to the file in order to attach it. The same is true of the Java messenger, unless it is running on the iSeries (which is where we intend it to run). For the iSeries to access that same file located on a Windows server, a number of things must happen:

1. You must configure your iSeries to enable it to “see” your Windows network in the IFS. This is a special file system called “/QNTC”. You configure it by configuring and running a service on the iSeries called NetServer. This is the same service that you use so that your iSeries appears in Network Neighborhood to a PC.
2. The Mail Daemon will automatically convert the path name in the task link so that it looks like this /QNTC/Server/Share/Dir/Filename.ext and it will try to read that file.

Setting up the TURNOVER® for iSeries v100 Mail Daemon

3. The User ID on the iSeries that the mail daemon is running with must be a valid user name on your Windows network and their password must match. There is a global default in TURNOVER® for iSeries v100 called the “QNTC Adopted authority user”. The mail daemon will run as whatever profile is entered in this default.
4. If your tasks links are referenced with drive mappings, then the document will not be found and will not be attached to the message.
5. One final consideration needs to be given in the area of the reliability of the QNTC file system. In our experience with it over the past couple of years we have found that it can be unreliable and cannot be “fixed” without an IPL. If the file system is not available, documents attachments will not work. You need to evaluate how important that feature is to you.
6. If for any of the above reasons there is a problem accessing the document, then the Mail Daemon will convert the link into a shortcut as a file:// URL. This may be an acceptable workaround.

You can set a global property to just convert all document attachments to shortcuts and not even try to attach them as links. You might want to do this to ensure that large documents are not being emailed around. In general, a shortcut link is more efficient as long as the mail recipients are on your local network and can access the files by the shortcut.

REQUIREMENTS

TURNOVER® Release 5.3, from September 2003 or later.

A mail server that supports the SMTP (which just about all mail servers do). If your server has been set up to not allow relaying, then it will need to be changed to allow relaying from at least the IP address of your iSeries server.

The following OS/400 Licensed Programs are required:

5722JC1	*BASE	Toolbox for Java
5722JV1	*BASE	Developer Kit for Java
5722JV1	5	Java Developer Kit 1.3

Finally, the system value QMLTTHDACN must be set to a value of 1 or 2. (A value of 2 is the shipped default from IBM.)

INSTALLING AND CONFIGURING THE MAIL DAEMON

The TURNOVER® Mail Daemon is installed on your iSeries as part of TURNOVER® for iSeries v100. You simply need to configure it and set up your iSeries to automatically run it as an autostart job in one of your subsystems.

Configuring the Mail Daemon is relatively easy. You just need to create and edit a plain-text properties file in the IFS. You can do this using the EDTF command from a 5250 session, or by connecting to the IFS from a Windows PC and editing the file in Notepad.

All of the Mail Daemon's files are stored in the IFS in the /TurnOver/tmaild folder. We ship all of the configuration files with an extra extension of ".bak" on the end. Therefore, when you install future cumulative changes or upgrades of TURNOVER® for iSeries v100, we will never overlay your settings with the files we ship.

You must first rename the five files in the /TurnOver/tmaild folder with the ".bak" extension to remove the extension. It is important that you rename all five files. You should have the following files:

commons-logging.properties

simplelog.properties

template.html

tmaild.properties

turnoverjoblog.properties

The only file you really need to edit is **tmaild.properties**. This file contains the information that the Mail Daemon needs to connect to your TURNOVER® for iSeries v100 environment running on your iSeries, as well as various other settings that control its behavior.

A properties file consists of a series of "name=value" pairs. When editing the file, the only part that you should ever edit is the "value". With that in mind, let's go through the settings in the file and explain their meaning so that you can enter the appropriate values. Note that while we are going to go through the file in the order the properties appear as we ship the file, the actual order of the properties in the file does not matter. We tried to lay out the file so that the properties you really need to possibly edit are near the top, and the ones you are unlikely to edit are at the bottom.

Setting up the TURNOVER® for iSeries v100 Mail Daemon

Editing the tmaild.properties file

The first part of the file contains the information that Mail Daemon needs to connect to TURNOVER® for iSeries v100 on your iSeries server.

```
#
# TurnOver Connection Properties
#
# Specify the correct names for the libraries
# TurnOver is installed in on your system as
# well as the TurnOver environment to use.
#
turnoverProgramLibrary=SOFTTURN
turnoverDataLibrary=SOFTTURND
turnoverCommandLibrary=SOFTTURNE
turnoverEnvironment=ENGLISH
```

You just need to supply the names of the libraries where you have TURNOVER® for iSeries v100 installed as well as the name of your environment.

JavaMail properties

The JavaMail properties are used by the JavaMail APIs, which the Mail Daemon uses to send the messages.

```
#
# JavaMail Properties
#
# Consult the following URL for documentation and all possible values.
#
# http://java.sun.com/products/javamail/javadocs/com/sun/mail/smtp/package-  
summary.html
#
# Typically, the only value you need to provide is the TCP/IP
# name or address of your mail server.
#
mail.debug=false
mail.smtp.host=mail.yourcompany.com
mail.smtp.port=25
mail.smtp.sendpartial=true
```

The value you will need to change is **mail.smtp.host**. You should change this value to the TCP/IP name or address of your SMTP server, and leave the other values as shipped.

TURNOVER® for iSeries v100 Mail Daemon properties

The TURNOVER® for iSeries v100 Mail Daemon properties contain some of the basic settings for how the messages are sent.

```
#
# Properties for TurnOver Mail Daemon
#
defaultFromUser=TurnOver Mail Messenger
defaultFromAddress=someaddress@yourcompany.com
alwaysAttachDocumentsAsShortcuts=false
alwaysUseDefaultFromAddress=false
subject=RE: ##TASK## - ##DESC##
recipientSeparator=,
temp=/TurnOver/tmaild/temp
```

When TURNOVER® for iSeries v100 sends an email message, it typically obtains the message's "from" information from the user responsible for the message being sent. This is always an iSeries User Profile; TURNOVER® for iSeries v100 has to look up that user's name and email address in the database. When TURNOVER® for iSeries v100 cannot find a value, it sends empty values with the message. The Mail Daemon then uses the values you have specified for the **defaultFromUser** and **defaultFromAddress** properties.

This version of the Mail Daemon also has a new **alwaysUseDefaultFromAddress** property. You can set the value of this property to "true" to have the Mail Daemon always use the same value for the emails it sends.

You can use the **alwaysAttachDocumentAsShortcuts** property to prevent documents from being attached to messages and to have the Mail Daemon convert them to file URLs instead. Because the URL will be specific to your local network, only users on your local network will be able to use the URL. (In general, we are assuming that you will leave this value as "false".) The two reasons you might want to use this feature are:

- 1) Savings in bandwidth/storage because your mail system is not sending large document attachments.
- 2) Ensuring that a document attachment never leaves your internal network. Note that while the user will still see the URL in the message (including information about the server, share, and document name), s/he will not be able to access it.

The **subject** property lets you specify the format of the message subjects. The two substitution values that you can put in your value are **##TASK##** (for the task ID) and **##DESC##** (for the task description).

Setting up the TURNOVER® for iSeries v100 Mail Daemon

This version of the Mail Daemon lets you specify, when using standard internet email addresses, multiple recipients in a single email message. When defining a message, such as an escalation table message, you just need to separate the email addresses with a character like a comma or semi-colon. A comma is, by default, the character defined in the **recipientSeparator** property. If you use a character other than a comma, you must replace the comma with that character in the **recipientSeparator** property. Also, if instead of internet addresses, you use values (specifically *RSRC, *RQST, *COORD, or *ENTERED) to specify email recipients, you cannot use a character-separated list. When using values, you can supply only one value for each message.

Finally, the **temp** property specifies a path on your iSeries where the Mail Daemon will create temporary files. (The Mail Daemon uses the temp folder as a place where it can create task link file attachments.) The Mail Daemon creates the file, attaches it to the message, sends the message, and deletes the file. You should not need to change this value.

Settings that are related to EXPRESSDESK® for iSeries v100

For customers that are using the browser-based EXPRESSDESK® for iSeries v100 application to access the TURNOVER® for iSeries v100 Helpdesk. There are some settings in the Mail Daemon that allow you to leverage that. Specifically, when the Mail Daemon needs to create some kind of TURNOVER® for iSeries v100 link, instead of creating the link file that is used by the TURNOVER® for iSeries v100 Client, we can instead create a URL to the equivalent function in EXPRESSDESK® for iSeries v100.

```
#
# ExpressDesk Related Settings
#
createURLExternal=true
createURLInternal=false
internalDomain=yourcompany.com
changeTaskURL=http://www.yourcompany.com/xdesk/changetask.do?taskID=##TASK##
viewTaskURL=http://www.yourcompany.com/xdesk/viewtask.do?taskID=##TASK##
reviewTaskURL=http://www.yourcompany.com/xdesk/changetask.do?taskID=##TASK##
formsURL=
changeRequesterURL=
viewRequesterURL=
```

The Mail Daemon categorizes the recipient of a message in two ways: Internal or External. If a message is going to multiple recipients, and any of them are External, then the message is considered External. The way that the Mail Daemon determines this is based on the **internalDomain** property. If you do not edit this property and enter your mail domain, the Mail Daemon will consider all messages as External for the purposes of this area. Therefore, be sure to edit that property and enter your mail domain.

Remember, the point of these settings pertains only to TURNOVER® for iSeries v100 links that are added to messages. The issue is whether you want to create the style of link that opens the item using the TURNOVER® for iSeries v100 Client, or if you want to the item to open a web browser.

For the **createURLExternal** and **createURLInternal** properties, specify “true” or “false”.

For the various URL properties, specify the URL to access its associated function. You must enter the base URL for your setup of EXPRESSDESK® for iSeries v100. If you leave any URL blank, the Mail Daemon creates a TURNOVER® for iSeries v100 style link. Several of the URL settings are included for future expansion and currently do not have an equivalent function in EXPRESSDESK® for iSeries v100. You should leave these blank.

Plain text mail settings

One of the features introduced with the Mail Daemon is the ability to send messages as HTML. There are a number of reasons why you should not do this, and, by default, that feature is turned off. Nonetheless, the Mail Daemon has specific settings that control how plain text and HTML messages are formatted.

```
#
# Plain text Mail Settings
#
delim=\n
linksHeading=\n\nLinks:\n\n
attachmentHeading=
```

Do not change the **delim** property for plain text messages. You might want to change the **linksHeading** or **attachmentHeading** properties. Those items are generally located at the end of the message, and when they are present, this just gives you a chance to stick some text before them to make them stand out. Be sure to include some “\n” line breaks (delimiters) to format it correctly.

HTML mail settings

These settings are basically the same as the plain text, except you are now obviously supplying HTML and can include any valid HTML.

```
#
# HTML Mail Settings
#
useHTML=false
HTMLTemplate=/TurnOver/tmaild/template.html
delimHTML=<br>
linksHeadingHTML=<br><br><font face="Verdana, Arial, Helvetica, sans-serif"
size="3" color="red"><b><i>Links:</i></b></font><br><br>
attachmentHeadingHTML=
```

The main property, **useHTML**, controls the default message type.

Setting up the TURNOVER® for iSeries v100 Mail Daemon

iSeries connection properties

You should not need to edit these properties. However, because they are critical to the Mail Daemon working properly, they need to be in the file.

```
#
# iSeries Connection Properties
#
# These only need to be changed if you are
# NOT running the Mail Daemon on the same
# iSeries server as TurnOver. If that is the case,
# then you need to change the two references to "localhost"
# to the TCP/IP name or address of your iSeries server
# and you also need to specify a valid user name and password.
#
as400System=localhost
as400User=*current
as400Password=*current
jdbcUserName=*current
jdbcPassword=*current
jdbcDriver=com.ibm.as400.access.AS400JDBCdriver
jdbcURL=jdbc\:as400\://localhost;translate binary\=true;date format\=iso
```

SMTP authentication properties

Some email servers will not allow you to send email using SMTP without authenticating. These properties allow you to provide user and password information required for SMTP authentication:

```
#
# SMTP Authentication
#
# If your SMTP server requires authentication, then comment out and fill
# in appropriately the following properties.
#
# mail.smtp.auth=true
# mail.smtp.username=
# mail.smtp.password=
#
```

Save your changes when you are finished. Also, note that the **tmajd.properties** file is only read when the Mail Daemon is started. Therefore, if you start tweaking the settings later, you must stop and start the Daemon for the changes to take effect.

STARTING AND ENDING THE MAIL DAEMON (MANUALLY)

Do not bother with this step until you have reviewed all of the previous information and properly configured all of the settings in your **tmaild.properties** file.

Ultimately, you will want to configure the mail daemon to start as an autostart job (described in the next section, *Setting Up an Autostart Job*). While you are working out the details of the configuration, you might just want to start and stop it manually.

You start the Mail Daemon with the **TMAILD** command. Because this command only runs in a batch job, you have to use the **SBMJOB** command to submit the job to batch. If you use **SBMJOB**, be sure to submit the job to a multi-threaded job queue. You should do this because this job will not end until you end it with **ENDJOB** and your job queue will get backed up.

The command takes three parameters; you can probably use their defaults. The first parameter is the path to the **tmaild.properties** file that we configured in the previous steps. You can likely leave the default value of **/TurnOver/tmaild/tmaild.properties**.

The second parameter is the path to a log file for error messages. Again, you can probably use the default. We use this log file to direct any Java-level errors output from the JVM. This file is usually only needed if you are having major problems getting the Daemon started. Once the Mail Daemon is running, it logs all of its runtime messages into the job log of its job, allowing you to monitor it like any other job.

The final parameter is simply the version of Java to use; again just use the default.

As already mentioned, submit the job to a job queue that allows multiple jobs to run at once. Also, make sure that the library list for the job includes your TURNOVER® for iSeries v100 libraries. When the job starts, a second job named QJVACMDSRV will be started in the same subsystem. This is where the Java code runs, and where all of the work is actually done. This is the job that will have messages logged by the Daemon, and is also the job to end when you want to end the Daemon. If you end the job *CNTRLD it will detect that and end itself cleanly, although we have never experienced any issues when ending the job *IMMED.

SETTING UP AN AUTOSTART JOB

Starting and ending the job manually (as described in the previous section, *Starting and Ending the Mail Daemon (Manually)*), is a good way to get started with the Mail Daemon and test out different configuration options. However, once those details are worked out, you will likely want to configure the Mail Daemon to start and end automatically when one of your subsystems is started and ended.

The steps you must perform to set up the Mail Daemon as an autostart job are described in this section.

Determining where the autostart job will run

The first step is to determine what subsystem the job will run in. You could run it in the TSERVER subsystem if you are already using that subsystem to run other TURNOVER® for iSeries v100 autostart jobs. The only problem with that option is that the subsystem is tuned to favor interactive-type jobs like those that are used with our Client/Server modules. The jobs also run with an interactive priority. For the most part, the Mail Daemon does not use a lot of resources and that would probably be OK. However, the exception is when the job starts. Java jobs have a fairly high CPU percentage when they first startup as the Java classes are loaded and JIT compiled. This only last for a minute or less; and if your subsystems will always be started during an IPL or after hours, then it will not be a problem. The main point is to consider it, and if necessary reconfigure the subsystem to change the job priority.

Of course you could also just run the Mail Daemon in a subsystem that is tuned for batch jobs like QBATCH or QPGMR.

Creating a job description

To configure an autostart job, you must have a job description. The job description configures the initial environment and also specifies the command to run to start the job. Specify the **TMAILD** command with the same parameters as explained in the previous section. Here is an example:

```
CRTJOB JOB (QGPL/TMAILD)
      JOBQ (QGPL/TSERVER)
      TEXT ('TurnOver Mail Daemon')
      USER (TSERVER)
      RQSDTA ('TMAILD PROPS (''/TurnOver/tmaild/tmaild.prope
                rties'' LOGFILE (''/TurnOver/tmaild/logs/tmai
                ld.log''))')
      INLLIBL (SOFTTURN SOFTTURND SOFTTURNE)
      JOBMSGQFL (*WRAP)
```

Setting up the TURNOVER® for iSeries v100 Mail Daemon

In this example, you have created a job description named TMAILD in QGPL and configured it to use the TSERVER job queue also in QGPL. The really important parts though, are the following:

- 1) USER(username) – Must specify a valid user to be an autostart job.
- 2) RQSDTA(command) – The TMAILD command string to execute.
- 3) INLLIBL(turnover libs) – Include the TURNOVER® for iSeries v100 libraries

Adding an autostart job entry

Once you have created the job description, configuring the autostart job is easy. Just run this command:

```
ADDAJE SBSDB(QGPL/TSERVER)
        JOB(TMAILD)
        JOBD(QGPL/TMAILD)
```

In this example, you are:

- 1) Adding the autostart job entry to the TSERVER subsystem.
- 2) Specifying the name you want to give the job (TMAILD).
- 3) Specifying the job description you created in the previous step.

If you stop and start the subsystem, the job should start. The rules for ending and monitoring the job are the same as explained in the previous section.

MULTIPLE TURNOVER® FOR ISERIES V100 ENVIRONMENTS

The TURNOVER® Mail Daemon can only monitor and process a single TURNOVER® for iSeries v100 environment. If you have multiple environments for which you need mail processing, all you have to do is create multiple “properties” files that contain the configuration information. You then set up multiple autostart jobs. In each autostart job, you execute the TMAILD command with a different set of parameters for the properties and log file, as well as the TURNOVER® for iSeries v100 library list.

Creating the TSNDMAPI data queue in data libraries

If you have multiple environments (that is, several TURNOVER® for iSeries v100 data libraries), for messaging to work, you need to delete the TSNDMAPI data queue in the SOFTTURN library and create one of these queues in each environment’s data library.

The TURNOVER® Mail Daemon polls the TSNDMAPI data queue on the iSeries computer, looking for messages to send. The data queue contains the message text, as well as information about the message sender and the intended recipient. The Mail Daemon uses this information to send the message using your SMTP mail server.

You could write programs that will issue the TMAILMSG command to write to the data queue, or that will read and process the records in the data queue. Any program you write should check for the version information (see table below) before processing the information in the rest of the record. If a record in the data queue does not begin with this version, your program should ignore that record.

The record layout of the TSNDMAPI data queue follows.

Setting up the TURNOVER® for iSeries v100 Mail Daemon

Field Description	From	To	Contents
Version	1	10	'V1R0M0'
	(Empty)	11	
Message	12	267	
	(Empty)	268	
Task	269	278	
	(Empty)	279	
Task Description	280	359	
	(Empty)	360	
From User Name	361	391	
	(Empty)	392	
From Company	393	422	
	(Empty)	423	
From e-Mail	424	679	
	(Empty)	680	
To User Name	681	711	
	(Empty)	712	
To e-Mail	768	1023	

LOG SETTINGS

The Mail Daemon uses the Apache commons-logging log framework to log messages. We wrote and include an iSeries-specific extension that allows the log messages to be directed to an iSeries job log, making it very easy to monitor the Mail Daemon and determine if it is working. For example, with the default log settings, if the Mail Daemon is working and sending messages, you should see messages like this in the job log:

```
[INFO] Messenger - Message sent to auser@softlanding.com
[INFO] Messenger - Message sent to blake@softlanding.com
[INFO] Messenger - Message sent to elms@softlanding.com
[INFO] Messenger - Message sent to smith@softlanding.com
```

If there are any specific problems that prevent it from sending a message, those problems will also be logged and should help you diagnose the problem. It is possible to increase the amount of messages being logged by editing the log configuration files, specifically the `turnoverjoblog.properties` file. However, you should probably wait until you work with a UNICOM Systems, Inc. Technical Support Representative to attempt to diagnose a specific problem.

HTML MESSAGE SUPPORT

As was previously touched upon (see *Installing and Configuring the Mail Daemon* on page 5), the Mail Daemon has the ability to send HTML formatted messages. We recommend that you do not do this simply because they use more bandwidth, not all mail clients are configured to read them, and finally in this age of overwhelming SPAM, one of the first indicators used by SPAM detection tools is to look for HTML mail.

All that being said, if you have some reasons why sending HTML mail makes sense, then the Mail Daemon can do it. The configuration for sending HTML mail has already been discussed, so we will not repeat that here. In this section, we just want to go over some of the finer details.

HTML template

One of the first things you need is an HTML template. This should contain all of the look and feel for the message. If you want your message to contain any graphics or to use stylesheets, you must load those graphics on a Web server and refer to them in your message using the full URL to the file. In other words, the graphics are NOT sent with the message. Instead, the HTML for the message can cause the mail client to go out and download the graphics on demand.

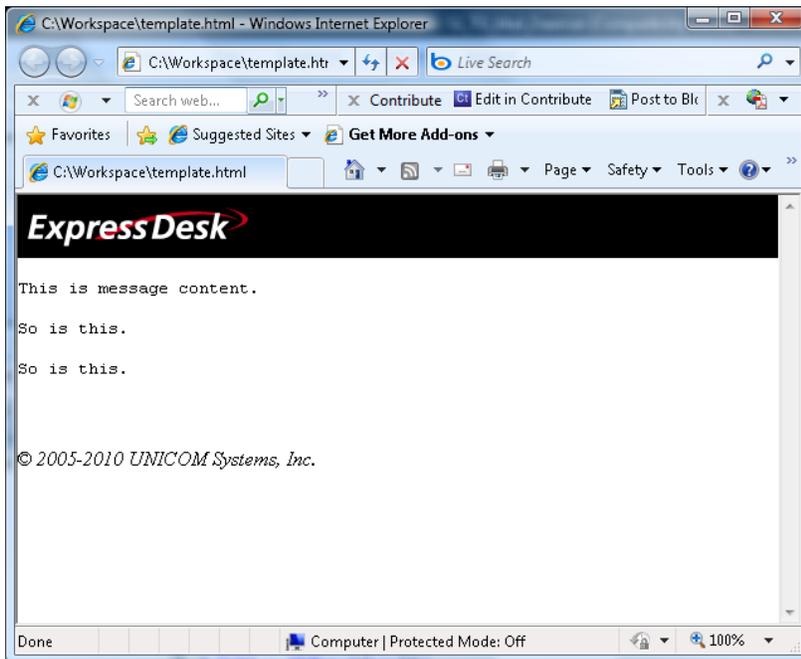
The only thing that is specific to the Mail Daemon is that your template must contain `##MSG_CONTENT##` at the point in the HTML where all of the message text should be inserted. This would also include any URL links that were added to the message as well as the “Links Heading” as defined in the configuration. Here is the example we ship:

```
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">
<html>
<head>
<title></title>
</head>
<body bgcolor="#FFFFFF" marginwidth="0" marginheight="0" leftmargin="0"
topmargin="0">
<table width="100%" cellpadding="0" cellspacing="0" border="0">
<tr bgcolor="black"><td height="50"><IMG border="0"
src="http://support.softlanding.com/images/expressdesklogo.gif" width="189"
height="37"></td></tr>
<tr><td><pre><font size="2">
##MSG_CONTENT##
</font></pre></td></tr>
<tr><td>&nbsp;</td></tr>
<tr><td><i>&copy; 2005-2010 UNICOM Systems, Inc.</i></td></tr>
</table>
</body>
</html>
```

All of the style and formatting is included in the template, with the exception of one logo. That is HREF'd to a Web server containing the graphic.

Setting up the TURNOVER® for iSeries v100 Mail Daemon

A message sent with that template would look something like this (except you would see it in your mail client with the subject and from address in your mail client as always):



Overriding HTML and plain text configuration settings

The Mail Daemon also allows you to override the HTML and plain text configuration settings on an individual message basis. You can do this by using the email feature of TURNOVER® for iSeries v100 that uses a report mask. In the report mask, you can use the following new directives:

`##TX`

Use this in positions 1-4, and as the only content of, the first line in the report mask. This instructs the Mail Daemon to send the message as plain text. If the default was to use HTML, this would override the default.

`##TF (optional template name)`

Use this in positions 1-4, and as the only content of, the first line in the report mask. This instructs the Mail Daemon to use HTML. You can also include a path to an HTML template. For example:

```
##TF /TurnOver/tmaild/template2.html
```

So, you can use the `##TF` switch in two ways, as follows:

- To override a default plain text setting to use HTML.
- To specify a custom template. (You might want your default template to be for your internal emails and to have a custom template for customers.)

If you have any questions about the information in this document, please contact a UNICOM Systems, Inc. Technical Support Representative by phone, fax, or email at the locations shown at the beginning of this document.