



Web Site Mini-Guide: Undeliverable E-Mail

When you send a newsletter or on-line course using CourseBot, you will invariably receive some notices about undeliverable e-mail. This guide takes you through the process of capturing and managing those notices.

Introduction

Everybody who manages a mailing list has to deal with the problem of undeliverable e-mail – also known as “bounced” e-mail. The Internet’s e-mail system is reasonably good, because it usually informs you of these failures. But then it’s your responsibility to manage these e-mail addresses.

Undeliverable e-mail falls into a number of categories, depending on the reason it was undeliverable:

1. Courtesy messages: The recipient is out of the office for some time, so they set up their e-mail program to send you a polite reply automatically. You can ignore these messages.
2. Delay warnings: If the Internet cannot deliver its e-mail immediately, but thinks it has a reasonable chance of delivering it later, it sends you a warning message, informing you of the delay. Again, you can ignore these messages.
3. Content failure: If your e-mail is blocked because of its content (in other words, it’s been blocked by a spam filter or corporate firewall), you **sometimes** get back a failure message. You usually ignore this message, because you hope that the next message won’t be blocked in the same way.
4. “Soft bounces”: You receive a failure message if the Internet is unable to deliver the e-mail for some other **temporary** reason – such as a full mailbox, or some temporary access problems. In this case, you can usually ignore the problem, hoping it will correct itself next time. However, if the problem persists, see a doctor ... err, no, it might be a permanent failure.
5. “Hard bounces”: You receive a failure message if there’s a permanent problem – such as the closure of the account, mis-typed address or mailbox disabled. In this case, you might as well remove the e-mail address from your mailing list immediately, because it will never work again.

Because of all these variations, it’s not a trivial matter to handle all your undeliverable e-mail yourself – especially as your mailing list grows. That’s why CourseBot includes some special software to help you manage this mail.

Broadly, you manage the undeliverable e-mail like this:

- Gather up all the failure messages in your e-mail program.
- Upload them to CourseBot for processing.
- CourseBot reads them, classifies them according to their severity, and shows you a list of e-mail addresses it recommends that you remove.
- You confirm these recommendations, or make changes of your own.
- You manually delete any other addresses that CourseBot couldn't manage.

The rest of this user guide goes through these processes in detail.

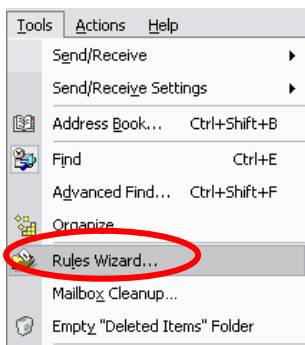
Capturing undeliverable e-mail

The first step in the process is to gather up all the undeliverable e-mail in one place. If you've just been collecting it in your in-box, that's not the most appropriate place for it. Instead, you can create an automatic rule in your e-mail program so that it recognises these failure messages and files them away automatically in a special place.

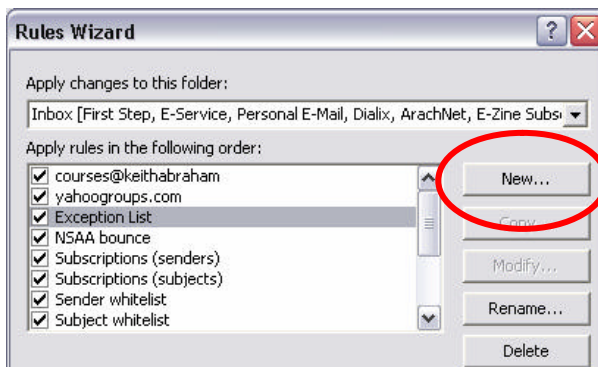
We're going to demonstrate how to do that using Microsoft Outlook. If you're using other e-mail software, you'll have to figure out how to do this yourself by adapting these instructions.

Start by creating a new folder – e.g. "Subscriptions" – in Outlook for the failure messages.

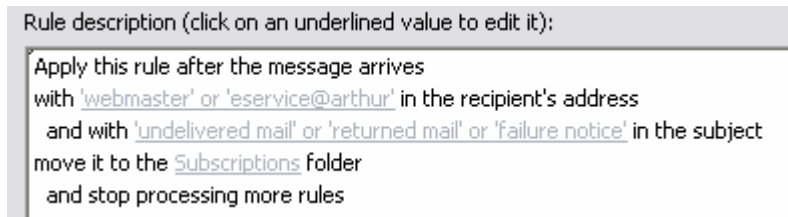
Then open the Rules Wizard from the Tools menu:



Click the New button to create a new rule:



We'll now take you through the specific steps of creating the rule. To give you an overview of the process, this is what you'll end up with for the rule:

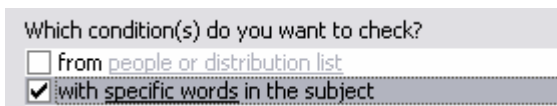


Follow the steps below to achieve this result ...

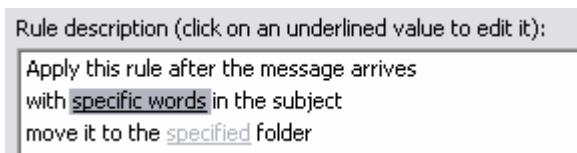
- Create from template:



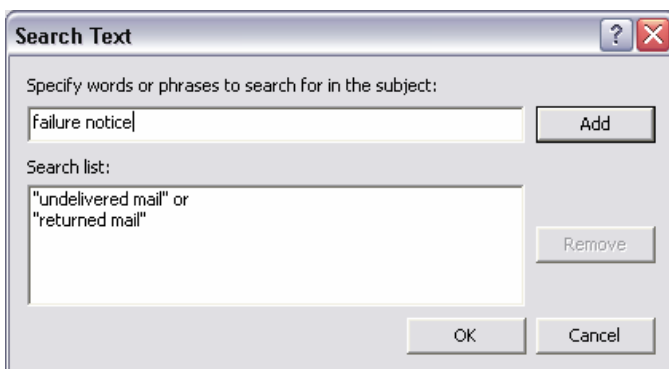
- Turn off the "people or list" option, and turn on "specific words in subject":



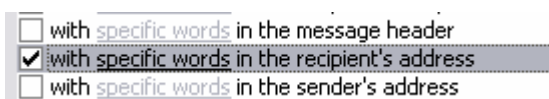
- Click the "specific words" link at the bottom of the page so that you can choose the specific words:



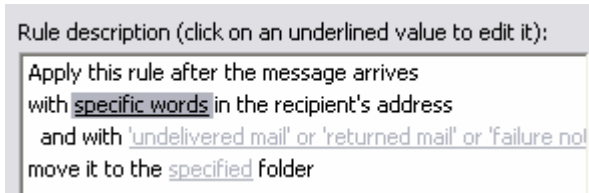
- Add the phrases "undelivered mail", "returned mail" and "failure notice", then click OK:



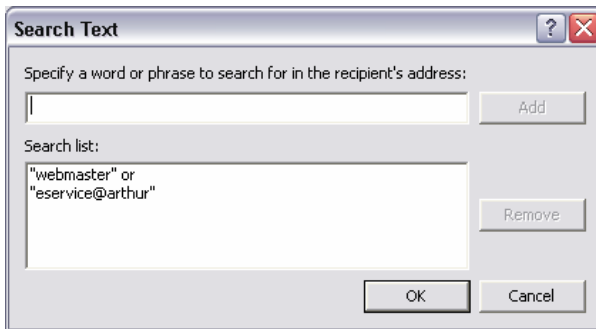
- Scroll down the list of options at the top and click the "specific words in the recipient's address" option:



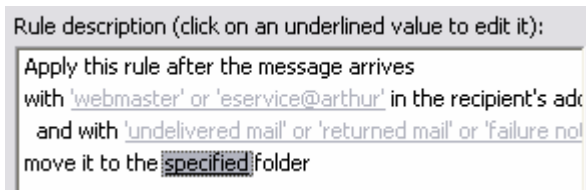
- Again, click “specific words” in the bottom area to open the window:



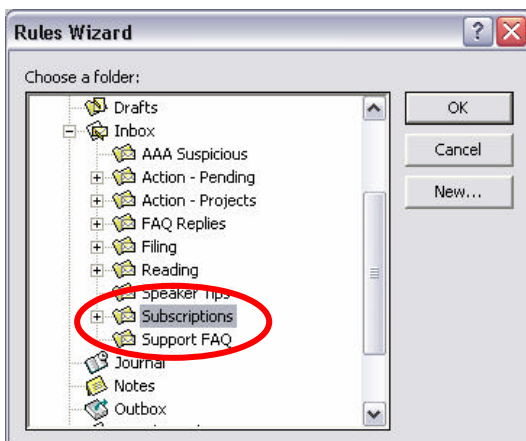
- This time, add the words “webmaster” and “eservice@arthur”, then click OK and Next.



- Click “specified” in the bottom area so that you can choose where to file this e-mail:



- This shows you a list of e-mail folders. Choose the new folder that you created earlier:

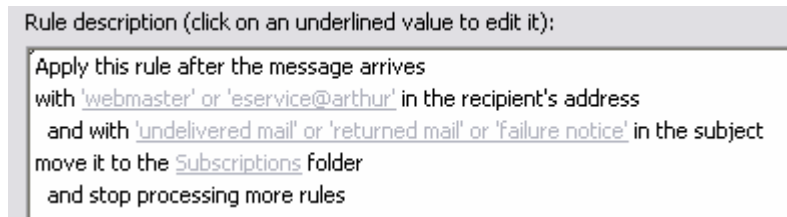


- Finally, as a precaution, click the link to stop any more rules:



- Then give this rule a name and click “Finish”.

That completes the process. Again, here is the final rule:



Upload to CourseBot

The next time you send e-mail using CourseBot, you'll receive the failure messages. Most of them occur within a few minutes of sending the e-mail, though some take considerably longer – even days.

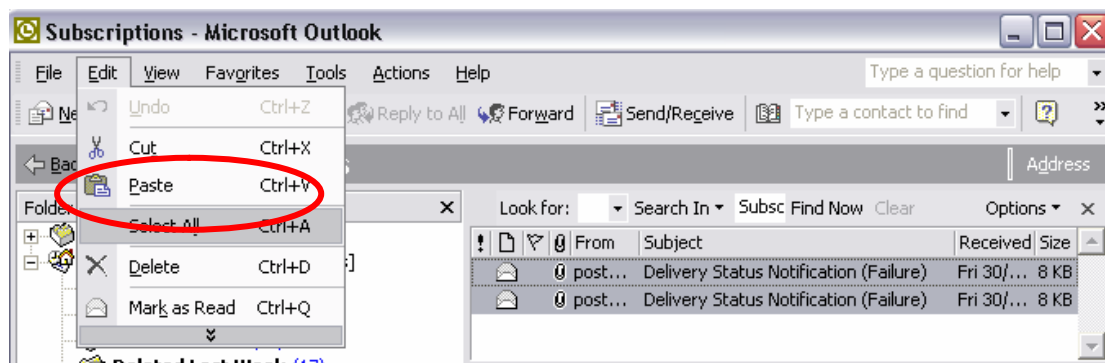
You can upload them to CourseBot at any time. We recommend that you wait until you're confident that most of them have arrived, to save yourself the effort of doing the process again later.

Save to disk

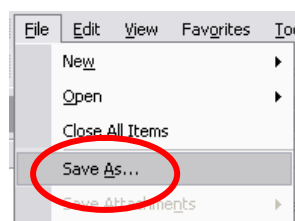
The first part of this process is to save the failure messages to disk. Again, we're going to demonstrate this using Microsoft Outlook; you'll have to adapt this to suit other e-mail programs.

Start by going to the folder where you've collected the undeliverable e-mail, and **check that it does only contain undeliverable e-mail**. Remove any other legitimate e-mail from this folder; otherwise CourseBot might accidentally remove that sender's e-mail address.

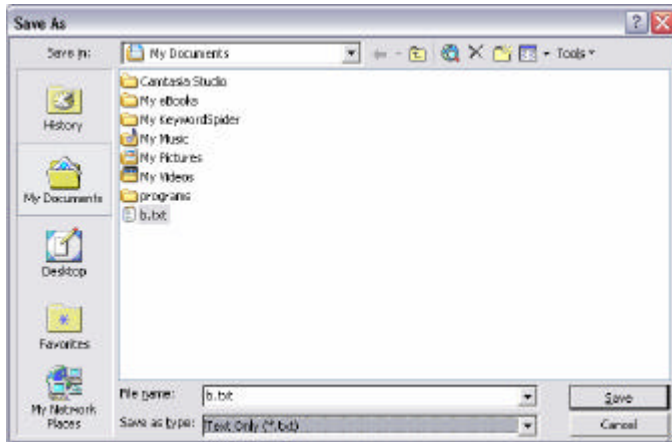
Then choose all the messages by using the Select All option in the Edit menu:



From the File menu, choose "Save As":



and save the results in a text file somewhere – for example, in My Documents on a PC:



Upload to the Web site

Log in to the E-Service administration area in the usual way. Scroll down to the CourseBot area, and you'll see these options for handling undeliverable e-mail:

Undeliverable E-mail

- ◆ [Submit batch of undeliverable mail](#)
- ◆ [View status](#)

You almost always use the first of these options, because you'll be submitting a batch of failure messages and processing them immediately (as we'll describe here). However, you can always go back in at any time and click "View status" to see the failure messages that CourseBot still has pending for future processing.

For now, click the "Submit batch ..." link, which takes you to a page where you can upload your file of failure messages.

Load file:

Click the Browse button, find the saved file on your hard disk, choose it, then click "Confirm" to upload it. Depending on the size of the file, this could take a while.

Classifying the messages

As it's uploading the file, CourseBot reads the messages to determine what each one means. It discards warning and courtesy messages, and then classifies the remaining messages according to their severity.

At the end of this process, CourseBot displays a list of potentially "broken" e-mail addresses. The list is colour-coded to help you quickly see which addresses are to be deleted.

Here's an example of such a list:

Process Bounced E-Mail		Ignored	1-3 errors	4+ errors	30+ days	Major error	Unknown
Date	E-Mail Address	I'll Handle This Myself	Unsubscribe This Address	Ignore This Time	Ignore Always		
2005/09/05	jenwong2@blah.com - over quota	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		
2005/09/05	blah@blah.co.nz - 550	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>		
2005/09/05	blah@campus.co.nz - delivery to the following recipients failed	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		
2005/09/05	maria.blah@blah.com.au - delivery to the following recipients failed (4)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
2005/09/05	cairms@blah.com.au - delivery to the following recipients failed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>		
2005/09/05	blah@queenslanders.org.au - delivery to the following recipients failed	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		
2005/09/05	jeremy@blah.com.au - delivery to the following recipients failed	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		
2005/09/05	tracy@blah.wow.aust.com - invalid recipient	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>		

(Note: For privacy reasons, all e-mail addresses in these examples have been changed)

Let's look at some of these specifically:

- This is a non-existent mailbox error, which is a permanent problem. CourseBot earmarks this for immediate deletion:

```
2005/09/05 cparton@mail.blah.com.au
           - no mailbox here by that name
```

- This is a vague error message, but it's happened more than three times, so CourseBot now marks it for deletion:

```
2005/09/05 maria.blah@blah.com.au
           - delivery to the following recipients failed (4)
```

- This is also a vague error message, and it's recurred after more than 30 days, so CourseBot now marks it for deletion:

```
2005/09/05 jeremy@blah.com.au
           - delivery to the following recipients failed
```

- This mailbox is full, which is a temporary problem only, so CourseBot ignores it this time:

```
2005/09/05 jenwong2@blah.com
           - over quota
```

- This is an address that would normally be marked for deletion, but we've decided to manually preserve it by clicking in the "Ignore Always" column:

```
2005/09/05 cairns@blah.com.au
           - delivery to the following recipients failed
```

As you can see, CourseBot classifies each failure message, and decides to process it accordingly.

Take a quick look through the list, especially those items marked with a selection in the "Unsubscribe This Address" column:

Date	E-Mail Address	I'll Handle This Myself	Unsubscribe This Address	Ignore This Time	Ignore Always
2005/09/05	jenwong2@blah.com - over quota	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
2005/09/05	blah@blah.co.nz - 550	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
2005/09/05	blah@campus.co.nz - delivery to the following recipients failed	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
2005/09/05	maria.blah@blah.com.au - delivery to the following recipients failed (4)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

These e-mail addresses will be deleted by CourseBot, unless you choose otherwise. If you do decide to keep an address, you can tick one of the other three columns:

- **I'll Handle This Myself:** Use this to remove the failure message from CourseBot's list, as if you had never uploaded it.
- **Ignore This Time:** Use this to keep a record of this failure, without removing this address just yet. For example, if you suspect that a user's e-mail account has been closed temporarily, you might choose this option.
- **Ignore Always:** Use this for addresses that keep getting returned, even though you know the e-mail is getting through. This does happen, though it's rare.

After you've gone through the list in this way, click the "Process Bounced E-Mail" button (there's one at the top and the bottom of the list). This tells CourseBot to go ahead and remove any bad e-mail addresses.

Manual processing

In general, you'll find that CourseBot does a pretty good job of handling most of the failure messages. However, you sometimes find that it reports some errors, like this:



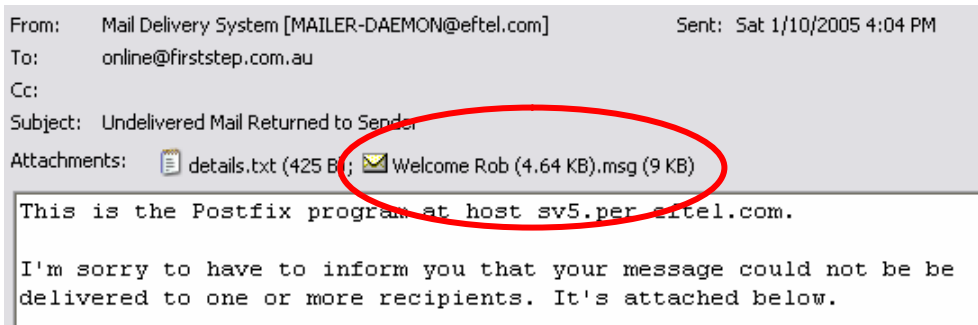
This usually happens when the user has their e-mail forwarded to a different address. You get the failure message from the mail server at the final e-mail

address, but CourseBot only knows about the original address, so it can't delete the e-mail address.

When this happens, you have to delete these e-mail addresses manually. If you still have the failure messages in Microsoft Outlook, this is usually easy to do.

Do the following steps for each address:

- Search for it in the Outlook folder where you saved the failure messages.
- When you find the message, look for an attachment, which is the original message sent to that person:



- If the attachment is there, open it and look for a "Manage subscription" (or similar) link near the bottom of the page:



Click this link, and it will open a Web page where you can unsubscribe the user from all mailing lists.

- Sometimes there's no attachment, but the original message is in the body of the failure message, and contains this line:

```
<!-- If you can read this, click below to change to text format: -->
<!-- http://www.eservice.com.au/coursebot-manage/firststep,10542,1196 -->
```

If you see this, click the link and it also takes you to the Manage Subscription page.

- If neither of these options applies, look around in the message for what might have been the original e-mail address. Then, from the E-Service administration page, click "Search for subscribers" and search for this address. From there, you can remove the address from all mailing lists.

Occasionally, you'll find that it's impossible to find the original e-mail address. In that case, you'll just have to shrug your shoulders and put up with the inconvenience. The next time you receive e-mail at this address, tick the "Ignore Always" column.

After you've finished processing these addresses manually, click the "I'll Handle These Myself" link so that CourseBot knows to remove them from its list:



Clean-up

After processing the failure messages, go back to Outlook and delete them from your folder.