

## 第4章 GWS邮件管理

### 练习1

略

### DNS介绍

CNAME记录、TXT记录、MX记录、SPF、DKIM和DMARC 还有NS记录、A记录等。

Name/Host/Alias	Record Type	Priority	Value/Answer/Destination
Blank or @	A	NA	216.239.32.21
Blank or @	MX	1	ASPMX.L.GOOGLE.COM
Blank or @	MX	5	ALTI.ASPMX.L.GOOGLE.COM
Blank or @	MX	10	ASPMX3.GOOGLEMAIL.COM
mail	CNAME	NA	ghs.googlehosted.com.
Blank or @	TXT	NA	google-site-verification=6tTalLzrBX_Ks69jle8
www	CNAME	NA	ghs.googlehosted.com.

### 练习2

参考链接<https://support.google.com/a/answer/140034>



1.先要创建用户账号（应该是指邮箱）然后再将MX记录转到GWS上 2.TTL默认是3600，但正常使用Gmail后可以改为86400，这样更新频率会改为每天1次 3.如果是要把现行的邮箱系统转移到GWS上，可以保留现在的MX记录，但调低优先级（比如将优先级改为10+），当所有邮箱都经由Google后，再删除原MX记录，这样保证不会有邮件丢失

### 练习3

检查MX 工具URL为<https://toolbox.googleapps.com/apps/checkmx/>

Domain name	
<u>example.com</u>	<a href="#">RUN CHECKS!</a>
DKIM selector (optional)	

## ! trident365.com

There were some critical problems detected with this domain. Mail-flow is probably affected. Please refer to the corresponding help articles.

!	<a href="#">SPF must allow Google servers to send mail on behalf of your domain.</a>	?	<a href="#">Help center article</a>
!	<a href="#">Domain must have at least one mail server.</a>	?	<a href="#">Help center article</a>
!	DKIM is not set up.	?	<a href="#">Help center article</a>
!	DMARC is not set up.	?	<a href="#">Help center article</a>
!	<a href="#">MTA-STS DNS Record.</a>		
!	<a href="#">No Google mail exchangers found. Relayhost configuration?</a>	?	<a href="#">Help center article</a>

点击报警会给出解决方法

## 测试1

*You need to make a change to your MX records and you want the change to be implemented as soon as possible. What approach can you take?*

1. Change your MX records in the admin console and reduce the Time to Live (TTL) value to one hour. Once the change has been implemented revert the TTL value to 24 hours
2. **Make the change in your DNS console and reduce the Time to Live (TTL) value to 1 hour. Once the change has been implemented revert the TTL value to 24 hours**
3. Change your MX records in the admin console and reduce the Time to Live (TTL) value to one hour
4. Make the change in your DNS console and reduce the Time to Live (TTL) value to 1 hour

*Which type of DNS record determines where mail destined for your domain is routed?*

1. **MX Record**
2. TXT Record
3. NS Record
4. CNAME Record

*In general, from where would you manage your domain's DNS records?*

1. All of the options here
2. In your local DNS files
3. **In your domain registrar console**
4. In the Google Workspace admin console

What are common uses for a DNS TXT record when using Google Workspace? (Choose 2)

1. Customise a Google service address
2. Control inbound mail to your domain
3. **Domain verification**
4. **Email security records**

## 邮件安全

3招 SPF DKIM 和 DMARC  
SPF: verify the domain you own  
DKIM: prevent email spoofing on outbound message by adding an encrypted header  
DMARC: tell email servers how to handle messages that fail SPF/DKIM checks

## 练习1

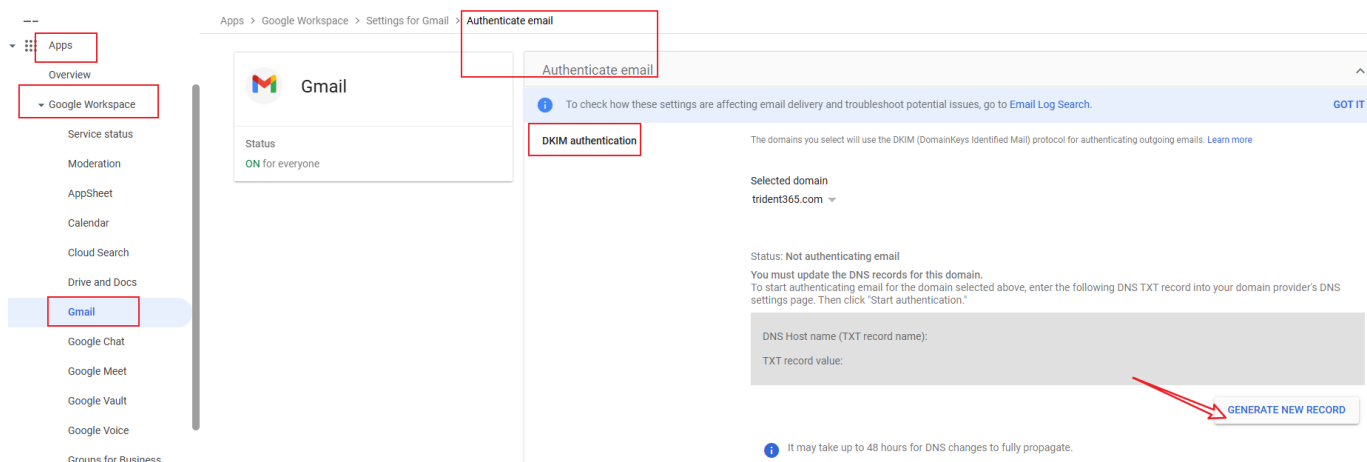
SPF 通过添加TXT记录到DNS中 Xserver中已经有一条记录了，现在在后面追加

```
include:_spf.google.com ~all
```


记录生效需要24小时左右 参考链

接：<https://support.google.com/a/answer/33786#zippy=%2Cspf-%E8%AE%B0%E5%BD%95%E7%A4%BA%E4%BE%8B>

## 练习2



# Generate new record



You must wait 24 to 72 hours after enabling Gmail with a registered domain before you can create a DKIM record. [Learn more.](#)

If you are currently authenticating email from this domain, generating a new TXT record will stop authentication until you restart it and wait for DNS to update.

Select DKIM key bit length

2048 ▼

Prefix selector (optional)

google

CANCEL GENERATE

生成后长这个样子

Status: Not authenticating email

You must update the DNS records for this domain.

To start authenticating email for the domain selected above, enter the following DNS TXT record into your domain provider's DNS settings page. Then click "Start authentication."

DNS Host name (TXT record name):  
google.\_domainkey

TXT record value:  
v=DKIM1; k=rsa;  
p=MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAe1ap/h/3GclIga0i00iQ18Q/6786OfROcx4LIsXHA5MjsXokNH99or  
hTDKhrWZX6JL/cKGysjZDF...NmfQ+/pLWfPHvuZ6  
br3Wsq...XNGL7up0Tlhqv/UVbw8F1Z  
91/kOZQdf...

GENERATE NEW RECORD

 It may take up to 48 hours for DNS changes to fully propagate.

START AUTHENTICATION

生成的记录在Xserver的DNS DKIM记录中已经有了，一模一样。 参考链接：  
<https://support.google.com/a/answer/174124>

## 练习3

✓ _dmarc.trident365.com	TXT	v=DMARC1; p=none; rua=mailto:admin@trident365.com	3600	0
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这条TXT记录告诉收件邮箱服务器，如果判定Fail如何操作，这里是通知管理员。

## 测试2

*What is the main purpose of a Sender Policy Framework (SPF) record?*

1. **It specifies which servers/domains can send messages on your behalf**
2. It can be used to verify that message content is authentic and has not changed
3. It defines the action to take on suspicious incoming messages

*You have been asked to implement DomainKeys Identified Mail (DKIM) for your organization. How would you do this?*

1. Enable DKIM from Apps > Google Workspace > Gmail > Authenticate email
2. Enable DKIM directly in your DNS records
3. Generate a key from your DNS records and add it to the Google Workspace admin console. Then Enable DKIM from Apps > Google Workspace > Gmail > Authenticate email
4. **Generate a DKIM record from Apps > Google Workspace > Gmail > Authenticate email. Add the record to your DNS records and then start authentication from the admin console**

*What policy defines what to do if an incoming message is not authenticated?*

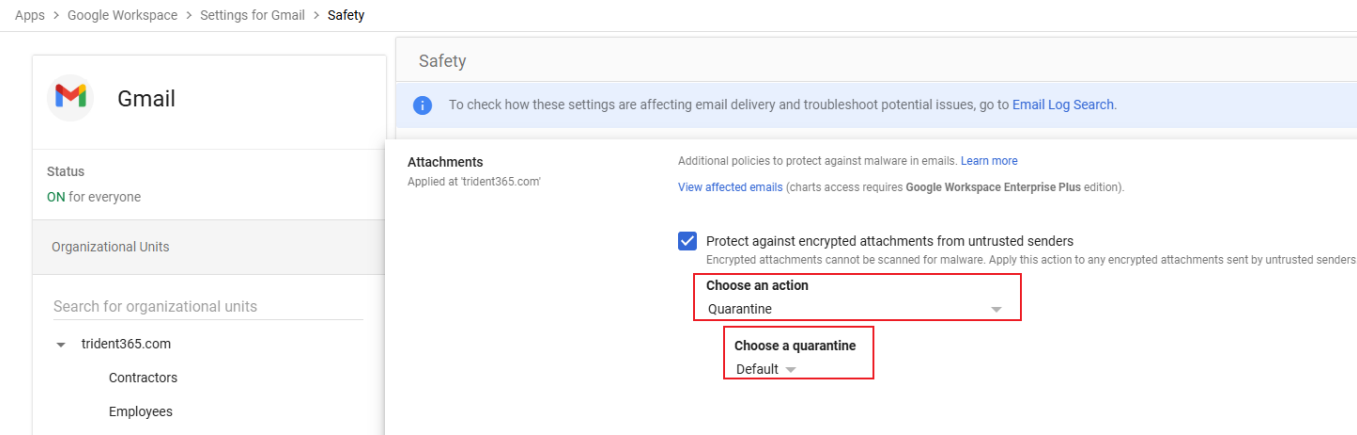
1. SPF
2. DKIM
3. All of the options here
4. **DMARC**

*DKIM adds an encrypted signature to the header of all outgoing messages. What happens if you don't turn on email signing with your own domain DKIM key?*

1. Gmail signs all outgoing messages with a temporary key generated for your domain
2. **Gmail signs all outgoing messages with this default DKIM domain key d=\*.gappssmtp.com**
3. Gmail signs all outgoing messages with a key generated using the From address in the message
4. Messages are sent as normal with no additional headers

## 邮件安全配置

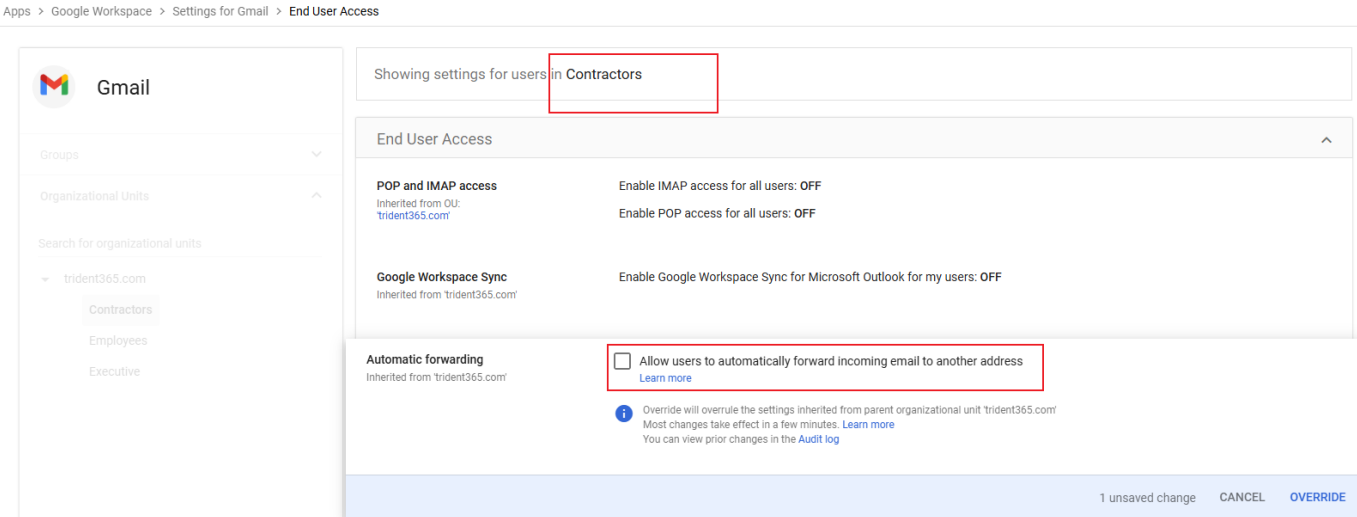
对于未受信任的发件人的加密附件，处理方式是隔离。



即便你把某一个域加为安全，但这里的设定仍然会生效。各自相互独立

## 练习2

对于外包人员，禁止他们的自动转发邮件到个人邮箱，并且禁止POP和IMAP，但那些开户GWS Sync的人例外。



现在Rules也会终止工作

## 测试3

The attachment section in the Gmail Safety settings page allows you to protect against malicious attachments. What actions can you perform on a suspicious attachment? (Choose 2)

1. Keep email in inbox without warning
2. **Move email to spam**
3. Send to a designated user
4. **Keep email in inbox and show warning**

You have enabled protection against anomalous attachment types in emails from the Gmail > Safety page but you are finding some emails with valid attachment types are not being delivered. How can you resolve this?

1. Ask each user to create an allowlist of allowable file types
2. **Add an allowlist of allowable file types to the entry in the Attachments section on the Safety page**
3. Have all messages that trigger this setting delivered to a quarantine and then release the messages manually
4. You cannot control what file types are considered anomalous so you must disable this protection to allow messages to be delivered

What are valid reasons for allowing per-user outbound gateways in your organization? (Choose 2)

1. **An outbound gateway ensures that the same mail server delivers all messages from otherdomain and that server has a record that the mail has been sent**
2. Mail delivery times are improved because messages bypass the Gmail servers
3. **An outbound gateway can prevent the appearance of “on behalf of” addresses in the From field**
4. Allows your users to send mail from their business and personal Gmail account from one inbox

Google recommends against the use of the Image URL proxy allowlist?

1. **True**
2. False

## 练习1

添加一个信任IP地址，虽然是信任，但如果从它发出来可疑邮件，仍然会被放入垃圾邮箱

Apps > Google Workspace > Settings for Gmail > Spam, phishing, and malware

Showing settings for users in trident365.com

Spam, phishing, and malware

To check how these settings are affecting email delivery and troubleshoot potential issues, go to [Email Log Search](#). GOT IT

**Email allowlist**  
Applied at 'trident365.com'

An email allowlist is a list of IP addresses from which you want your users to receive emails. Mail sent from these IP addresses should not be marked as spam. In order to take full advantage of Gmail's spam filtering service and for best spam classification results, IP addresses of your mail servers that are forwarding email to Gmail should be added to Inbound Gateway and not in IP allowlist. [Learn more](#)

Enter the IP addresses for your email allowlist

172.217.25.142

Separate entries with commas

Most changes take effect in a few minutes. [Learn more](#)  
You can view prior changes in the [Audit log](#)

1 unsaved change CANCEL SAVE

从自己的邮箱发一封邮件给GWS管理员邮箱。在Console中添加黑名单

Settings for Gmail > Manage address list

Manage address lists

Manage blocked list

Add address list

Name \*

Block Me

This field is required.

Search address

Address

██████████@gmail.com

BULK ADD ADDRESSES

ADD ADDRESS

i

Most changes take effect in a few minutes. [Learn more](#)

You can view prior changes in the [Audit log](#)

CANCEL

SAVE

Add setting

Blocked senders

[Learn more](#)

Required: enter a short description that will appear within the setting's summary.

1. Add addresses or domains that you want to automatically reject messages from

No lists used yet.

[Use existing list](#)

[Create or edit list](#)

2. Edit the default rejection notice

Optional

Enter customized rejection notice. (e.g. "Your email has been rejected because it violates organization policy").

Select Address Lists

☒

Address list name

Number of addresses

☒

Block Me

1

参考链接  
接：<https://support.google.com/a/answer/2364632?hl=zh-Hans&sjid=16549908282098203174-AP>

练习2

创建白名单 Gmail>Spam,Phishing and Malware>Spam



## Add setting

### Approved Senders

All incoming messages are subjected to Google's spam filters. Messages that are detected as spam are automatically placed in spam folder.

#### Options

- ☒ Be more aggressive when filtering spam.
- ☒ Put spam in administrative quarantine

Default ▼

#### Options to bypass filters and warning banners

- ☒ Bypass spam filters for internal senders.
- ☒ Bypass spam filters for messages from senders or domains in selected lists.  
No lists used yet.  
[Use existing list](#) [Create or edit list](#)
- ☐ Bypass spam filters and hide warnings for messages from senders or domains in selected lists.  
No lists used yet.  
[Use existing list](#) [Create or edit list](#)
- ☐ Bypass spam filters and hide warnings for all messages from internal and external senders (not recommended).

CANCEL

SAVE

## Add address list


Name \*

Approved Senders

This field is required.

Address	Authentication required (received mail only) <a href="#">Learn more</a>
<input type="text" value="██████████@gmail.com"/>	<input checked="" type="checkbox"/>

[BULK ADD ADDRESSES](#) [ADD ADDRESS](#)

 Most changes take effect in a few minutes. [Learn more](#)  
You can view prior changes in the [Audit log](#)

[CANCEL](#) [SAVE](#)



虽然添加了白名单，但仍然要做验证，即Sender authentication保护，所以不要关闭它



除了增加SpamFilter另一个措施是使用预Scan

参考链接：<https://support.google.com/a/answer/7380368>

## 测试4

Which of the following are reasons to use an inbound gateway? (Choose 2)

1. Can be used for batch delivery of email to Gmail
2. Improves mail delivery performance
3. **Spam filtering**
4. **Message archiving**

Your organization has been receiving unwanted emails from another organization, and attempts by you to get the organization to stop sending the emails have failed. What approach is best to stop messages from this organization from reaching your users?

1. Configure a blocked senders list and add the domain's IP address to the list
2. Ask each of your user's to block the domain
3. **Configure a blocked senders list and add the domain name to the list**
4. Contact Google Support and ask them to block the organization for you

*Messages from a single person that you trust are being marked as spam by Gmail. What approach is best to ensure that these messages reach the intended recipients inboxes?*

1. Setup a security sandbox rule for the user to have all mail verified by the sandbox prior to delivery
2. **Add a spam setting which bypasses spam filters for messages received from addresses within an approved senders list. Add the user's email address to the list**
3. Ask each of your users to add the contact to their personal contacts
4. Add the user's email address to your email allowlist

## 邮件合规检查

1. Attachment compliance
2. Content compliance
3. objectionable content compliance

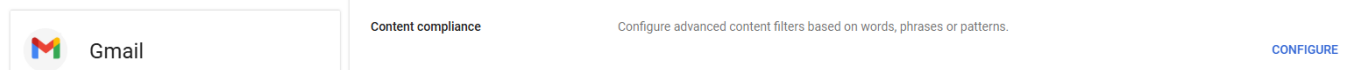
触发后的动作

1. rejected before reaches the recipient
2. be sent to admin
3. be modified before delivery

DLP对策

## 练习1

Apps > Google Workspace > Settings for Gmail > Compliance



## 练习2

Advanced content match

Location

Body

Match type

Contains text

Content

jupiter

CANCEL

SAVE

Content compliance

Secure Project Jupiter

1. Email messages to affect

☐ Inbound

☒ Outbound

☐ Internal - Sending

☐ Internal - Receiving

2. Add expressions that describe the content you want to search for in each message

If ANY of the following match the message

Expressions

Location: Body

Contains text: jupiter

ADD

3. If the above expressions match, do the following

Modify message

Headers

☐ Add X-Gm-Original-To header

☐ Add X-Gm-Spam and X-Gm-Phishy headers

☐ Add custom headers

Subject

☐ Prepend custom subject

Route

☐ Change route

Envelope recipient

☒ Change envelope recipient

☒ Replace recipient

samantha.morse@trident365.com

Hide options

A. Address lists

☒ Use address lists to bypass or control application of this setting

☒ Bypass this setting for specific addresses / domains

☐ Only apply this setting for specific addresses / domains

No lists used yet.

Use existing list Create or edit list

Select Address Lists

☐ Address list name

Number of addresses

☐ Approved Senders

1

☒ executive

4

Only apply this setting for specific addresses / domains

executive (4)

Use existing list Create or edit list

Status

Source

Actions

ID

attachments

Enabled

Locally applied

Edit - Disable - Delete

78917

然后发一封包含jupiter(在标题或是正文)的邮件到自己个人邮箱，发现是收不到的。

练习3

Add setting

Objectionable content

Learn more

Looking for bad words

1. Email messages to affect

☐ Inbound

☒ Outbound

☒ Internal - Sending

☐ Internal - Receiving

2. Add words you want to search for in each message

☒ Custom objectionable words

Enter words

porn

3. If the above expressions match, do the following

Quarantine message

Move the message to the following quarantine:


Default

CANCEL

SAVE

发送

违规邮件，然后查看隔离邮件（使用管理员账号）

**Gmail**

Status  
ON for everyone

Manage quarantines

Name
Default

也可以访问下列URL <https://email-quarantine.google.com/adminreview>



管理员需要定期处理隔离邮件，如果30天内不处理，会被自动删除

## 其他合规对策

1. email and chat auto-deletion 删除超过某一时间的信息
2. OCR for email attachment (并不是所有GWS版本都支持)
3. restrict delivery (一般用于教育账号)
4. Security sandbox (微软家的EDR也有这个功能)

## 测试5

*You want to prevent your users from receiving mail from baddomain.com. What is the best way to achieve this?*

1. **Add baddomain.com to a blocked senders list**
2. Add baddomain.com's IP address to the blocked senders list
3. Create a security sandbox rule to filter and delete messages to/from baddomain.com
4. Configure the 'Restrict delivery' setting to prevent message exchange between your users and baddomain.com

*What actions can an administrator perform on a quarantined message? (Choose 2)*

1. **Deny**
2. **Allow**
3. Return to sender
4. Deliver to another recipient

*In which type of compliance control can you apply a Data Loss Prevention (DLP) rule for Gmail?*

1. Objectionable content
2. **Content compliance**
3. Optical Character Recognition (OCR)
4. Attachment compliance

*Which statements are true for an objectionable content rule? (Choose 2)*

1. **An objectionable content setting works on inbound and outbound messages**
2. In an objectionable content setting you use a predefined list of objectionable words for filtering for objectionable content
3. An objectionable content setting works on inbound messages only
4. **In an objectionable content setting you create word lists for filtering for objectionable content**

## Mail routing

有3种方式，默认的Direct还有Dual以及Split Delivery Dual用于小范围测试邮件，需要新旧2个邮箱都收到邮件。（或是邮件迁移时，比如收购公司接收的一批邮箱（非GWS Split Delivery用于进来的邮件分发到不同邮箱，它同Dual都是暂时操作而非长期。

### 练习1

设定Split Delivery

# Add mail route

Name

[Learn more](#)

Legacy Mail Platform

This field is required.

1. Specify email server

Only ports numbered 25, 587, and 1024 through 65535 are allowed.

Single host ▼

██████████.com : 25

## 2. Options

- ☐ Perform MX lookup on host
- ☒ Require mail to be transmitted via a secure (TLS) connection (Recommended)
  - ☒ Require CA signed certificate (Recommended)
    - ☒ Validate certificate hostname (Recommended)

[Test TLS connection](#)

CANCEL [SAVE](#)


Port不

能为空



Showing settings for users in **trident365.com**


### Routing


 To check how these settings are affecting email delivery and troubleshoot potential issues, go to [Email Log Search](#). [GOT IT](#)

**Outbound gateway** [Learn more](#)  
Applied at 'trident365.com'

Route outgoing emails to the following SMTP server:

**Routing** Routing begins once you start delivering email to Google's servers.

 Most changes take effect in a few minutes. [Learn more](#)

 [CONFIGURE](#)

Add setting

Routing

Learn more

Split Delivery

1. Email messages to affect

☒ Inbound

☐ Outbound

☐ Internal - Sending

☒ Internal - Receiving

2. For the above types of messages, do the following

Modify message

Route

☒ Change route

☐ Also reroute spam

☐ Suppress bounces from this recipient

Legacy Mail Platform

Hide options

A. Address lists

☐ Use address lists to bypass or control application of this setting

Apply address lists to correspondents

☐ Bypass this setting for specific addresses / domains

☐ Only apply this setting for specific addresses / domains

B. Account types to affect

☐ Users

☐ Groups

☒ Unrecognized / Catch-all

这样所有未定额站以识别的用户发来的邮件都会被转到Legacy邮件服务器，适用于还未迁移到Gmail的人。

参考链接：<https://support.google.com/a/answer/2614757>

From:  
<https://trident365.com/> - 三叉戟

Permanent link:  
[https://trident365.com/doku.php?id=resources:courses:gws\\_c4&rev=1737643496](https://trident365.com/doku.php?id=resources:courses:gws_c4&rev=1737643496)

Last update: **2025/01/23 23:44**

