

New Domain Records for eMail

Aug 2024

WARNING!!! - THIS GUIDE IS NOT YET COMPLETE!!! - WARNING!!!

Introduction

When you add a domain, if you wish to use the domain for email, there are some records that you will have to add to ensure your email works, and works reliably.

Here we will see what records to add, and how to get the information for them. I am using [Porkbun](#) as my domain provider, so for other domain providers the information you require will be the same, but where they list it will differ.

The records we need to add are a variety of CNAME, MX and TXT records.

This guide assumes you are using [Porkbun](#) for your domain host and [MXRouting](#) for your email host.

CNAME Record

A “canonical name” (CNAME) record points from an alias domain to a “canonical” domain. A CNAME record is used in lieu of an A record, when a domain or subdomain is an alias of another domain. All CNAME records must point to a domain, never to an IP address.

Here is an example of a CNAME record.

CNAME	mail.mymail.co.uk	mail.acutaldomain.net	600
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In the above example, we are using mail.mymail.co.uk to point to the domain mail.actualdomain.net, this means if multiple personal domains are all using the same mail domain, you can give each one a pretty name.

From Porkbun, open your list of domains and find the domain you want to start adding mail records too, hover over the domain name and you will see a menu for **DNS | NS** appear.



Select **DNS**.

The following page will appear.

MANAGE DNS RECORDS

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Here you can configure custom DNS records for your domain.

Type

CNAME - Canonical name record

Host

Leave blank to create a record for the root domain. Use * to create a wildcard. Please note that ALIAS records do not support wildcards.

mail

.therlowe.uk

Answer

pixel.mxrouting.net

TTL

600

Priority

Notes

This is for your own use and does not affect DNS.

This CNAME points mail.therlowe.uk to the actual mail server pixel.mxrouting.net. mail.therlowe.uk is used in the mail client for IMAP and SMTP address.

Cancel

Add

Quick DNS Config

Here you can configure your DNS records for some popular services with a single (ok, sometimes two) click of a button.

Google Workspace

Blogger

Webflow

Big Cartel

Office 365

GitHub

Squarespace

Shopify

Bluesky

Copy DNS records from another one of your already configured domains.

domain name

Submit

Current Records

TYPE ↕	HOST	ANSWER	TTL	PRIORITY	OPTIONS
--------	------	--------	-----	----------	---------

We need to fill out the following:

- CNAME
- mail
- ANSWER
- pixel.mxrouting.net
- TTL
- 600

PRIORITY - leave blank

Notes - you can enter useful information for reminder in here.

Click [Add](#)

At the bottom of the page you will now see a new record has been added.

Current Records

<u>TYPE</u> ↕	<u>HOST</u>	<u>ANSWER</u>	<u>TTL</u>	<u>PRIORITY</u>	<u>OPTIONS</u>
CNAME	mail.therlowe.uk	pixel.mxrouting.net	600		 
notes	This CNAME points mail.therlowe.uk to the actual mail server pixel.mxrouting.net. mail.therlowe.uk is used in the mail client for IMAP and SMTP address.				

CNAME Second Record

The first CNAME record was for use with mail clients (its the address you put in the IMAP and SMTP boxes). While pixel.mxrouting.net isn't too hard to remember, if you have a record with your own domain, in this example mail.therlowe.uk its much easier to remember.

The second record we are using for webmail. Rather than an email user having to remember to go to pixel.mxrouting.net to get access to their webmail, we can use a CNAME record to direct them their from a more memorable address.

Again, open up your DNS page to add a record.

MANAGE DNS RECORDS

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×

Here you can configure custom DNS records for your domain.

Type

CNAME - Canonical name record

Host

Leave blank to create a record for the root domain. Use * to create a wildcard. Please note that ALIAS records do not support wildcards.

webmail

.therlowe.uk

Answer

pixel.mxrouting.net

TTL

600

Priority

Notes

This is for your own use and does not affect DNS.

This is to create a memorable CNAME for webmail that points to pixel.mxrouting.net

Cancel

Add

We need to fill out the following:

CNAME	- webmail
ANSWER	- pixel.mxrouting.net
TTL	- 600
PRIORITY	- leave blank
Notes	- you can enter useful information for reminder in here.

Click **Add**

At the bottom of the page you will now see both the records that have been added.

Current Records

TYPE ↕	HOST	ANSWER	TTL	PRIORITY	OPTIONS
CNAME	mail.therlowe.uk	pixel.mxrouting.net	600		 
notes	This CNAME points mail.therlowe.uk to the actual mail server pixel.mxrouting.net. mail.therlowe.uk is used in the mail client for IMAP and SMTP address.				
CNAME	webmail.therlowe.uk	pixel.mxrouting.net	600		 
notes	This is to create a memorable CNAME for webmail that points to pixel.mxrouting.net				

Add Domain and User

Before we can move on to the next step of adding TXT records, we need to add our domain and user to our mail provider, otherwise we will not be able to look up the pertinent information that is required in our TXT records.

Please follow this guide [Link Here](#) to do the following:

1. Add a Domain
2. Add a User
3. Find the three records you will need for your domain provider (DKIM, SPF and DMARC)

TXT Records

TXT records are a type of Domain Name System (DNS) record in text format, which contain information about your domain. TXT records also have information that helps external network servers and services handle outgoing email from your domain.

Add DKIM Record

We found out from our mail provider MXRouting that our DKIM record should be:

1. The Name - x._domainkey
2. The TTL - 3600
3. The Type - TXT
4. The Value - This is the really long string you can see.

We can add this record in [Porkbun](#).

Open the **DNS** Settings for the domain.

MANAGE DNS RECORDS

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Here you can configure custom DNS records for your domain.

Type

TXT - Text record

Host

Leave blank to create a record for the root domain. Use * to create a wildcard. Please note that ALIAS records do not support wildcards.

x._domainkey

.therlowe.uk

Answer

v=DKIM1; k=rsa;
p=MIIBIjANBgkqhkiG9w0BAQFAAQCAQ8AMIIRCgKCAQFA8hzYvNdFhTmvl07xFtG68MkY21vxflN/OMTlg5fNg4Tm7b
eDtqSzHtyslbRo4QO3e idjaagQpGwf8VmsU3+mAFV2yngyUc
wNrIRx+oBQDrQRFa4r kdNEVFz5HUIb+iGq7xCk+Brlii1deAnc
OfD5R2BilXloJo1WIA6E 1J11ZV093QV110AN11T211Z3VW03VY1EJ12A17011F304J32MGwxSNrQ1ZvRs5OtLhEVOPSVUx1

TTL

600

Priority

Notes

This is for your own use and does not affect DNS.

Domain Key listed in MXRouting for this account

Cancel

Add

Enter the DKIM record values above (need to get the DKIM record from MXRouting mail provider).

Click **ADD**.

You should now see the DKIM record at the bottom of the page under **Current Records** (I have removed part of the key for security reasons (not sure if it can be abused or not))

Current Records

<u>TYPE</u> ↕	<u>HOST</u>	<u>ANSWER</u>	<u>TTL</u>	<u>PRIORITY</u>	<u>OPTIONS</u>
CNAME	webmail.therlowe.uk	pixel.mxrouting.net	600		 
notes	This is to create a memorable CNAME for webmail that points to pixel.mxrouting.net				
CNAME	mail.therlowe.uk	pixel.mxrouting.net	600		 
notes	This CNAME points mail.therlowe.uk to the actual mail server pixel.mxrouting.net. mail.therlowe.uk is used in the mail client for IMAP and SMTP address.				
TXT	x_domainkey.therlowe.uk	v=DKIM1; k=rsa; p=MIIBIjANBgkqhkiG9w0BAQEFAAOC AQ8AMIIBCgKCAQEA8hzYyNdEbTmvI0 ZxFtG68MkY21vxflN/OMTlg5fNg4Tm7 beDti d4HQM K4Nd tyZw0L ph5d /2yngy Ucw h v9R71 W33L 54paFgl w6X7 Brlii1de AncOfD5R2BilXIoJo1WIA6ERr/JH/nzoQ GQk/h0XNh+ZHsW/65vVIE3r9X17dHr P9dZJ32MGwxSNrQ1ZvRs5OtLhEVOPS VUx1Tvyqfu+0RabOGiqcQIDAQAB	600		 
notes	Domain Key listed in MXRouting for this account				

SPF Record

We found out earlier what our SPF record looks like, it came from MXRouting mail server.

1. The Name - therlowe.uk (just your domain name) so the 'host' part in Porkbun should be empty.
2. The TTL - 3600
3. The Type - TXT
4. The Value - "v=spf1 include:mxroute.com -all"

[Open the DNS Settings in Porkbun for your domain.](#)

MANAGE DNS RECORDS

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Here you can configure custom DNS records for your domain.

Type

TXT - Text record

Host

Leave blank to create a record for the root domain. Use * to create a wildcard. Please note that ALIAS records do not support wildcards.

This Should be Empty

.therlowe.uk

Answer

"v=spf1 include:mxroute.com -all"

TTL

600

Priority

Notes

This is for your own use and does not affect DNS.

Remember, for this record we leave the Host blank

Cancel

Add

Again, you should now see the SPF Record at the bottom of the page under **Current Records**.

Current Records

TYPE ↕	HOST	ANSWER	TTL	PRIORITY	OPTIONS
CNAME	webmail.therlowe.uk	pixel.mxrouting.net	600		 
notes	This is to create a memorable CNAME for webmail that points to pixel.mxrouting.net				
CNAME	mail.therlowe.uk	pixel.mxrouting.net	600		 
notes	This CNAME points mail.therlowe.uk to the actual mail server pixel.mxrouting.net. mail.therlowe.uk is used in the mail client for IMAP and SMTP address.				
TXT	x._domainkey.therlowe.uk	v=DKIM1; k=rsa; p=MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEA8hzYyNdEbTmvl0ZxFtG68MkY21vxflN/OMTlg5fNg4Tm7beDtqSzHtysIbRo4QO3Sldk8tcd4HQM K4Nd5wLWPa9g43/PfWdlVzB1+yZw0Lph5djaagQpGwf8VmsU3+mAFV2yngyUcwNrlRx+oBQDrQRFa4mfemw9R71W33LmZqzONX2FG0YIU/1FXz754paFglw6X7kdNEVFz5HUIb+iGq7xCk+Brlii1deAncOfD5R2BilXloJo1WIA6ERr/jH/nzoQGQk/h0XNh+ZHsW/65vIE3r9X17dHrP9dZj32MGwxSNrQ1ZvRs5OtLhEVOPS VUx1Tvyqfu+0RabOGIqcQIDAQAB	600		 
notes	Domain Key listed in MXRouting for this account				
TXT	therlowe.uk	"v=spf1 include:mxroute.com -all"	600		 
notes	Remember, for this record we leave the Host blank				

DMARC Record

As discussed, the DMARC record is 'site wide' so although you can add many domains and accounts to the MXRouting mail server, they all share the same DMARC record, we just have to change the embedded domain name in the record.

Type	-	TXT
Host	-	_dmarc
Answer	-	v=DMARC1; p=quarantine: rua=mailto;ukgreenn@therlowe.uk

Open the Porkbun DNS page and enter the following:

MANAGE DNS RECORDS

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Here you can configure custom DNS records for your domain.

Type

TXT - Text record

Host

Leave blank to create a record for the root domain. Use * to create a wildcard. Please note that ALIAS records do not support wildcards.

_dmarc

.therlowe.uk

Answer

v=DMARC1; p=quarantine: rua=mailto:ukgreenn@ronwalker.co.uk

TTL

600

Priority

Notes

This is for your own use and does not affect DNS.

DMARC record used for all of your Domain and email accounts

Cancel

Add

Again, you can now see the DMARC Record at the bottom of the DNS Page.

Current Records

TYPE ↕	HOST	ANSWER	TTL	PRIORITY	OPTIONS
CNAME	webmail.therlowe.uk	pixel.mxrouting.net	600		 
notes	This is to create a memorable CNAME for webmail that points to pixel.mxrouting.net				
CNAME	mail.therlowe.uk	pixel.mxrouting.net	600		 
notes	This CNAME points mail.therlowe.uk to the actual mail server pixel.mxrouting.net. mail.therlowe.uk is used in the mail client for IMAP and SMTP address.				
TXT	x_domainkey.therlowe.uk	v=DKIM1; k=rsa; p=MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEA8hzYyNdEbTmvI0ZxFtG68MkY21vxflN/OMTlg5fNg4Tm7beDtqSzHtyslBRo4QO3SIdk8tcd4HQM K4Nd5wLWPa9g43/PfWdlVzB1+yZw0Lph5djaagQpGwf8VmsU3+mAFV2yngyUcwNrlRx+oBQDrQRFa4mfemw9R71W33LmZqzONX2FG0YiU/1FXz754paFglw6X7kdNEVFz5HUIb+IGq7xCk+Brli1deAncOfD5R2BilXloJo1WIA6ERr/jH/nzoQGQk/h0XNh+ZHsW/65vViE3r9X17dHrP9dZJ32MGwxSNrQ1ZvRs5OtLhEVOPS VUx1Tvyqfu+0RabOGiqcQIDAQAB	600		 
notes	Domain Key listed in MXRouting for this account				
TXT	therlowe.uk	"v=spf1 include:mxroute.com -all"	600		 
notes	Remember, for this record we leave the Host blank				
TXT	_dmarc.therlowe.uk	v=DMARC1; p=quarantine: rua=mailto:ukgreenn@therlowe.uk	600		 

MX Records

What is a DNS MX record?

A DNS 'mail exchange' (MX) record directs email to a mail server. The MX record indicates how email messages should be routed in accordance with the Simple Mail Transfer Protocol (SMTP, the standard protocol for all email).

Example of an MX record:

example.com	record type:	priority:	value:	TTL
@	MX	10	mailhost1.example.com	45000
@	MX	20	mailhost2.example.com	45000

The 'priority' numbers before the domains for these MX records indicate preference; the lower 'priority' value is preferred. The server will always try mailhost1 first because 10 is lower than 20. In the result of a message send failure, the server will default to mailhost2.

The email service could also configure this MX record so that both servers have equal priority and receive an equal amount of mail:

example.com	record type:	priority:	value:	TTL
@	MX	10	mailhost1.example.com	45000
@	MX	10	mailhost2.example.com	45000

This configuration enables the email provider to equally balance the load between the two servers.

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