



```
joe@mail:~$ echo "How can we troubleshoot email??"
```

```
How can we troubleshoot email??
```

```
joe@mail:~$ echo "The first place to look will be the exim/mainlog"
```

```
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```

```
joe@mail:~$ less /var/log/exim4/mainlog
```

```
2023-08-09 20:17:00 1qTpc3-000EiH-NF TLS session: (certificate verification failed): certificate invalid: delivering unencrypted to H=stumail.cs.utahtech.edu [144.38.192.231] (not in hosts_require_tls)
2023-08-09 20:17:00 1qTpc3-000EiH-NF => joe.francom@utahtech.edu R=smarthost T=remote_smtp_smarthost H=stumail.cs.utahtech.edu [144.38.192.231] K C="250- 666 byte chunk, total 666\n250 OK id=1qTpc4-0001VV-6D"
2023-08-09 20:17:00 1qTpc3-000EiH-NF Completed
2023-08-09 20:17:08 TLS error on connection from [144.38.199.38] (recv): A TLS fatal alert has been received: Certificate is bad
2023-08-09 20:17:08 1qTpcC-000EiP-ES <= bob@www.thegummibear.com H=(www.thegummibear.com) [144.38.199.38] P=esmtip K S=649 id=E1qTpcC-000LpN-00@www.thegummibear.com
2023-08-09 20:17:09 1qTpcC-000EiP-ES TLS session: (certificate verification failed): certificate invalid: delivering unencrypted to H=stumail.cs.utahtech.edu [144.38.192.231] (not in hosts_require_tls)
2023-08-09 20:17:09 1qTpcC-000EiP-ES => dixiejoe2020@gmail.com R=smarthost T=remote_smtp_smarthost H=stumail.cs.utahtech.edu [144.38.192.231] K C="250- 668 byte chunk, total 668\n250 OK id=1qTpcD-0001Vg-Go"
2023-08-09 20:17:09 1qTpcC-000EiP-ES Completed
2023-08-09 20:28:27 TLS error on connection from [144.38.199.38] (recv): A TLS fatal alert has been received: Certificate is bad
2023-08-09 20:28:27 1qTpn9-000EiX-PF <= bob@www.thegummibear.com H=(www.thegummibear.com) [144.38.199.38] P=esmtip K S=671 id=E1qTpn9-000LpY-7F@www.thegummibear.com
2023-08-09 20:28:28 1qTpn9-000EiX-PF TLS session: (certificate verification failed): certificate invalid: delivering unencrypted to H=stumail.cs.utahtech.edu [144.38.192.231] (not in hosts_require_tls)
2023-08-09 20:28:28 1qTpn9-000EiX-PF => dixiejoe2020@gmail.com R=smarthost T=remote_smtp_smarthost H=stumail.cs.utahtech.edu [144.38.192.231] K C="250- 690 byte chunk, total 690\n250 OK id=1qTpnA-0001WX-ES"
2023-08-09 20:28:28 1qTpn9-000EiX-PF Completed
(END)
```

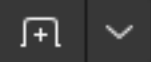
```
joe@mail:~$ echo "You should see that email completed on a successful send, if it is not successful, you may see a helpful error message"
```

You should see that email completed on a successful send, if it is not successful, you may see a helpful error message

```
joe@mail:~$ echo "If you are doing the smtp simple assignment, you really might only look in this file, and/or make sure that DNS is working correctly"
```

If you are doing the smtp simple assignment, you really might only look in this file, and/or make sure that DNS is working correctly

```
joe@mail:~$
```



```
joe@mail:~$ echo "If you are doing the satellite assignment, you would check that logfile on both the satellite AND the mail server. Your satellite MUST send email through your mailserver. Your mailserver in turn relays mail through stumail"
```

```
If you are doing the satellite assignment, you would check that logfile on both the satellite AND the mail server. Your satellite MUST send email through your mailserver. Your mailserver in turn relays mail through stumail
```

```
joe@mail:~$ █
```



```
joe@mail:~$ echo "Here is a good tool for checking that your SPF and dns is working correctly"
```

```
Here is a good tool for checking that your SPF and dns is working correctly
```

```
joe@mail:~$
```




spf checker



Google

Ingredient

Syntax

Mxtoolbox

Microsoft

Images

Email

Videos

Shopping

All filters

About 89,900,000 results (0.29 seconds)



MxToolbox

https://mxtoolbox.com > spf

SPF Check & SPF Lookup - Sender Policy Framework (SPF)

ABOUT SPF RECORD CHECK. The SPF Record Check is a diagnostic tool that acts as a Sender Policy Framework (SPF) record lookup and **SPF validator**.



EasyDMARC

https://easydmarc.com > tools > spf-lookup

SPF Record Checker and Lookup Tool

Check if an **SPF** record is published on a domain and deployed correctly, identify its issues, and validate your **SPF** record. **Check Your SPF Record Now!**

[SPF tags and their definitions](#) · [How To Check SPF Record via...](#)



Mimecast

https://www.mimecast.com > products > spf-record-ch...

SPF Record Check - DMARC Analyzer



SPF Record Check - Lookup SPF Records

Domain Name

IP (Optional) 

www.thegummibear.com

:

SPF Record Lookup

Solve Email Delivery Problems

ABOUT SPF RECORD CHECK

The SPF Record Check is a diagnostic tool that acts as a Sender Policy Framework (SPF) record lookup and SPF validator. This test will lookup an SPF record for the queried domain name, display the SPF Record (if found), and run a series of diagnostic tests (SPF Validation) against the record, highlighting any errors found with the record that could impact email delivery.

Sender Policy Framework (SPF) records allow domain owners to publish a list of IP addresses or subnets that are authorized to send email on their behalf. The goal is to





ARE YOU CONFIDENT that your email is getting through? FIND OUT WITH DELIVERY CENTER

```
v=spf1 mx ip4:144.38.192.231 a:stumail.cs.utahtech.edu ~all
```

Prefix	Type	Value	PrefixDesc	Description
Prefix	Typev	Valuespf1	PrefixDesc	DescriptionThe SPF record version
Prefix+	Typemx	Value	PrefixDescPass	DescriptionMatch if IP is one of the MX hosts for given domain name.
Prefix+	Typeip4	Value144.38.192.231	PrefixDescPass	DescriptionMatch if IP is in the given range.
Prefix+	Typea	Valuestumail.cs.utahtech.edu	PrefixDescPass	DescriptionMatch if IP has a DNS 'A' record in given domain.
Prefix~	Typeall	Value	PrefixDescSoftFail	DescriptionAlways matches. It goes at the end of your record.

	Test	Result
Status	NameSPF Record Published	ResponseSPF Record found

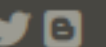


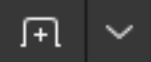


	Test	Result
Status ✓	NameSPF Record Published	ResponseSPF Record found
Status ✓	NameSPF Record Deprecated	ResponseNo deprecated records found
Status ✓	NameSPF Multiple Records	ResponseLess than two records found
Status ✓	NameSPF Contains characters after ALL	ResponseNo items after 'ALL'.
Status ✓	NameSPF Syntax Check	ResponseThe record is valid
Status ✓	NameSPF Included Lookups	ResponseNumber of included lookups is OK
Status ✓	NameSPF Type PTR Check	ResponseNo type PTR found
Status ✓	NameSPF Void Lookups	ResponseNumber of void lookups is OK
Status ✓	NameSPF MX Resource Records	ResponseNumber of MX Resource Records is OK
Status ✓	NameSPF Record Null Value	ResponseNo Null DNS Lookups found

[dns lookup](#) [smtp diag](#) [blacklist](#) [http test](#) [dns propagation](#)

Reported by **ns2.thegummibear.com** on 8/9/2023 at 3:36:34 PM (UTC -5), [just for you.](#)





```
joe@mail:~$ echo "if you have ANY errors on that page, go fix your DNS. The likely issues  
are a malformed SPF TXT record, or you haven't input the MX records for all your satellite  
s"  
if you have ANY errors on that page, go fix your DNS. The likely issues are a malformed SP  
F TXT record, or you haven't input the MX records for all your satellites  
joe@mail:~$
```

```
joe@mail:~$ echo "Dig tests can also be useful"
```

```
Dig tests can also be useful
```

```
joe@mail:~$ dig @8.8.8.8 mail.thegummibear.com TXT | grep TXT
```

```
; <<>> DiG 9.18.12-0ubuntu0.22.04.2-Ubuntu <<>> @8.8.8.8 mail.thegummibear.com TXT
```

```
;mail.thegummibear.com.          IN      TXT
```

```
mail.thegummibear.com.  21600  IN      TXT      "v=spf1 mx ip4:144.38.192.231 a:stumail.cs
```

```
.utahtech.edu ~all"
```

```
joe@mail:~$
```