

IPv6 Readiness Report

doe.gov.my — doe.gov.my



Scan to verify

Category: Government • Generated: 04 Jul 2026, 22:34 MYT • Last Checked: 04 Jul 2026, 03:37 MYT • Verification ID: e1a2db1b-19d8-4906-8cb5-f203820b4e56

Report generated from National IPv6 Readiness Monitor — <https://ipv6.my6.my>

Audit trail: <https://ipv6.my6.my/audit/e1a2db1b-19d8-4906-8cb5-f203820b4e56>

<p>X</p> <p>Non-Compliant</p> <p>MGv6C-1.0</p>	<p>47%</p> <p>No IPv6 Support</p>	<p>IPv6-ONLY READINESS</p> <p>Website: X Not Ready</p> <p>DNS: ✓ Ready</p> <p>Email: X Not Ready</p>
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<p>IPv4 ADDRESSES</p> <p>202.75.5.59</p>

Network Information (WHOIS / RDAP)

IPv4 Network	
Organization	GITN Sdn. Bhd.
Country	MY
ASN	AS17564
ASN Name	GITN-PCN-AS-AP - GITN (M) Sdn. Bhd., MY
Network (CIDR)	202.75.4.0/22

Web Services (35%)				0 / 8
#	CHECK	RESULT	DETAIL	
1	AAAA Record	FAIL	No AAAA record found in DNS.	
2	Globally Routable IPv6	FAIL	IPv6 address is not globally routable.	
3	HTTP over IPv6	FAIL	HTTP is not accessible over IPv6.	
4	HTTPS over IPv6	FAIL	HTTPS is not accessible over IPv6.	
5	IPv6-Only Reachability	FAIL	Site is not reachable when limited to IPv6-only.	
6	TLS Certificate Valid (IPv6)	FAIL	TLS certificate is invalid, expired, or hostname mismatch over IPv6.	
7	Dual-Stack (IPv4 + IPv6)	FAIL	Domain is IPv6-only or IPv4-only.	
8	HTTP/3 (QUIC)	FAIL	No HTTP/3 support detected.	

DNS & DNSSEC (25%)				4 / 5
#	CHECK	RESULT	DETAIL	
1	NS Has AAAA Record	PASS	Nameserver has IPv6 address.	
2	NS Reachable via IPv6	PASS	Nameserver is reachable via IPv6 on port 53.	
3	NS Answers Queries via IPv6	PASS	DNS queries answered over IPv6.	
4	DNSSEC Validated	PASS	DNSSEC fully validated.	
5	Reverse DNS (PTR)	FAIL	No PTR record found.	
6	DS Record at Parent	PASS	DS record found at parent zone.	
7	RRSIG Valid	PASS	RRSIG signatures are current and valid.	

#	CHECK	RESULT	DETAIL
8	Signing Algorithm	INFO	RSASHA256

Email Services (25%) 4 / 6

#	CHECK	RESULT	DETAIL
1	MX Record Exists	PASS	MX record found.
2	MX Server Has IPv6	PASS	MX server has AAAA record.
3	SMTP Reachable via IPv6	FAIL	SMTP is not reachable over IPv6.
4	STARTTLS over IPv6	FAIL	STARTTLS not available over IPv6.
5	SPF Record	PASS	SPF record found.
6	DKIM Selector	INFO	No common DKIM selector found.
7	DMARC Record	PASS	DMARC record found.

IPv4 Baseline (15%) 2 / 3

#	CHECK	RESULT	DETAIL
1	A Record	PASS	202.75.5.59
2	HTTP over IPv4	FAIL	HTTP is not accessible over IPv4.
3	HTTPS over IPv4	PASS	HTTPS (port 443) responds over IPv4 — 2906ms TTFB.

Audit Trail & Evidence Record

Verification ID	e1a2db1b-19d8-4906-8cb5-f203820b4e56
Domain	doe.gov.my
Check Mode	Manual
Status	Completed
Started	04 Jul 2026, 03:36:55 MYT
Finished	04 Jul 2026, 03:37:50 MYT
Test Node Profile	dual stack
Engine Version	2.0.0
MGv6C Version	1.0.0
Audit URL	https://ipv6.my6.my/audit/e1a2db1b-19d8-4906-8cb5-f203820b4e56

Integrity Verification

✓ INTEGRITY VERIFIED	
Algorithm	hmac-sha256-v1
Root Hash	c1bc122565c212107187d01e9788f7c7642c8709c8d854f8258d3cf1f4dad376
http_headers	e1a64deb98b5885b42d0327b30beae8c33858c1883bb8886524fee615741ee35
dns_responses	60662b022193e61139ed532c9bb62bc45517292b667555cefe72435434b714e9
tls_handshake	4d35b870647607d4d7281e57de58fabbe48d8ca78a72e7f10e36bec73d7089f0
connectivity_log	46455668cc54207162c9e7dd70618cdf0b15105e3d7b2a1c96ba23a9cc2330fc
dns_resolution_times	87124b1ce43b7f2d4e39fae99e78910e58a415e18b454758da79705710ec86f1

Test Node Identity

Os	Linux srv1440888 6.8.0-124-generic #124-Ubuntu SMP PREEMPT_DYNAMIC Tue May 26 13:00:45 UTC 2026 x86_64
Hostname	srv1440888
Php Version	8.3.32
Server Ipv4	76.13.221.142
Server Ipv6	2a02:4780:5e:2789::1

DNS Resolution Performance

Comparison of A (IPv4) vs AAAA (IPv6) query times across resolvers and transports. Shows median (p50) and 95th percentile (p95) of 3 samples per tuple.

Resolver	Transport	A p50 (ms)	A p95 (ms)	AAAA p50 (ms)	AAAA p95 (ms)	Delta (ms)
System	Default	10.59	21.11	20.51	20.58	+9.9
Google	IPv4	15.95	19.03	34.89	39.92	+18.9
Google	IPv6	31.32	44.76	33.64	34.93	+2.3
Cloudflare	IPv4	16.26	25.83	9.27	13.23	-7
Cloudflare	IPv6	25.47	42.52	43.1	53.17	+17.6

DNS Evidence

A

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 29171
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
doe.gov.my. 3600 IN A 202.75.5.59
```

DS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 35661
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
doe.gov.my. 3600 IN DS 58030 8 2 89AED2796BD212A96595BB042235134F536FF87164699F67EECB5560 2669716F
doe.gov.my. 3600 IN DS 58030 8 1 97156231ED99ECCE184193E6D045EB5CCE647441
```

MX

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 17001
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 5, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
doe.gov.my. 300 IN MX 5 alt1.aspmx.l.google.com.
doe.gov.my. 300 IN MX 5 alt2.aspmx.l.google.com.
doe.gov.my. 300 IN MX 1 aspmx.l.google.com.
doe.gov.my. 300 IN MX 10 alt4.aspmx.l.google.com.
doe.gov.my. 300 IN MX 10 alt3.aspmx.l.google.com.
```

NS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 3877
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
doe.gov.my. 3600 IN NS dns2.gitn.net.my.
doe.gov.my. 3600 IN NS dns1.gitn.net.my.
```

TXT

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 56217
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 4, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
doe.gov.my. 3600 IN TXT "google-site-verification=jelfWnFpNiO9NYNK1safkmBXJH3mG0RbSwFwwA_TzUc"
doe.gov.my. 3600 IN TXT "MS=13AB96183468BF42CCDB17F9DFD4707032C4B3FE"
doe.gov.my. 3600 IN TXT "MS=ms65966251"
doe.gov.my. 3600 IN TXT "v=spf1 ip4:103.8.147.12/30 ip4:219.92.54.177/32 ip4:103.156.82.32/29 ip4:103.156.83.32/29 include:_spf.google.com ~all"
```

AAAA

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 11691
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
doe.gov.my. 3600 IN SOA dns1.gitn.net.my. root.dns1.gitn.net.my. 2026062001 3600 900 3600000 3600
```

RRSIG

```
dns1.gitn.net.my. root.dns1.gitn.net.my. 2026062001 3600 900 3600000 3600
SOA 8 3 3600 20260802185941 20260703175941 42093 doe.gov.my. jLgNx+6ScfyVD9FM0QXm67XIVNwEEqiSx32vbI/46Iw4YbM6u5u0V6ju
WnUMjVR3Kn0mBfvHwgsyIi22ir8Hf0GzZCjLxovfce7/FeRcYCeZpvM XsWGhHhRdx/AFmZ8XtwczEbR6vVLNcA0f1giphvbc5/pJ01jz5XWkEpS s+A=
```

DNSKEY

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 43001
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
;; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
doe.gov.my. 3600 IN DNSKEY 257 3 8 AwEAAadzW2gQP1hv9DwKqtIX88KEW64EaVtx1wZ0fum/wBjH92QRTi89 /eyIF9hHngpgPHmKE+CINWV+FuIS+rCFxt8tEv23Esk8eMBCf1dwSFEX
lgTCvkKeg6WnB9Q1wK5/R2drG31f5s9kZv+rbebULW4d0GqhRIJXpeLf hVrCFX0+z0YC09l9lBsVzSW+L+mStU21vL2ZCJ3ACug7vDS3X7RrJPKd
Uy5ryo4KAB7EcNqu0i0riGlsuAT/w0wqdBkjdZ85dgCgWH0Y5XkxjCs VdavVMoyru0zPfn/NY06dw1Kbvzs2iY43VnYtNdnTrF6JRLZa3MIQxjj jDHwsrVqTKE=
doe.gov.my. 3600 IN DNSKEY 256 3 8 AwEAAb9okblQ70AgzXuBAZg4WrNpXMyo4K7uLHzrrFrvp361fcx2idHb KRJvHJRp/feYmtleFw4UCC0hpihNu64kfnX0899hiVmXvXndtT3+pG/
qNiwWzIQcjYSQnwT5eR/gUja04NlR3h9XsLQ4k8LhXUnkdb1WfNu9s7p 5UEP5irJ
```

DNSSEC_VALIDATION

```
; fully validated
doe.gov.my. 3600 IN SOA dns1.gitn.net.my. root.dns1.gitn.net.my. 2026062001 3600 900 3600000 3600
doe.gov.my. 3600 IN RRSIG SOA 8 3 3600 20260802185941 20260703175941 42093 doe.gov.my. jLgNx+6ScfyVD9FM0QXm67XIVNwEEqiSx32vbI/46Iw4YbM6u5u0V6ju
WnUMjVR3Kn0mBfvHwgsyIi22ir8Hf0GzZCjLxovfce7/FeRcYCeZpvM XsWGhHhRdx/AFmZ8XtwczEbR6vVLNcA0f1giphvbc5/pJ01jz5XWkEpS s+A=
```


HTTP Response Evidence

IPv4 HTTP (port 80)

HTTP Status	0
Connected IP	202.75.5.59
Connect Time	5.81 ms
TTFB	0 ms
Total Time	10002.17 ms
Error	Operation timed out after 10002 milliseconds with 0 bytes received

IPv4 HTTPS (port 443)

HTTP Status	200
Connected IP	202.75.5.59
Connect Time	16.03 ms
TTFB	2838.23 ms
Total Time	2838.33 ms

Response Headers:

```
{
  "0": "HTTP/2 301",
  "1": "server: nginx",
  "2": "date: Fri, 03 Jul 2026 19:37:47 GMT",
  "3": "content-type: text/html; charset=UTF-8",
  "4": "location: https://www.doe.gov.my/",
  "5": "set-cookie: TDZwMtvLQBG=CtqVAbnkd; expires=Sat, 04-Jul-2026 19:37:46 GMT; Max-Age=86400; path=/; secure",
  "6": "set-cookie: RMyqowlu_-L=ATCHUMilh_z3j%40a5; expires=Sat, 04-Jul-2026 19:37:46 GMT; Max-Age=86400; path=/; secure",
  "7": "set-cookie: HApGsVhfCGXwiRF=m18AvpD6; expires=Sat, 04-Jul-2026 19:37:46 GMT; Max-Age=86400; path=/; secure",
  "8": "set-cookie: Jcth_RBoVQEAL=_5uMXg7PSV; expires=Sat, 04-Jul-2026 19:37:46 GMT; Max-Age=86400; path=/; secure",
  "9": "x-ua-compatible: IE=edge",
  "10": "x-redirect-by: WordPress",
  "11": "wpo-cache-status: not cached",
  "12": "wpo-cache-message: The request method was not GET (HEAD)",
  "14": "HTTP/2 200",
  "15": "server: nginx",
  "16": "date: Fri, 03 Jul 2026 19:37:48 GMT",
  "17": "content-type: text/html; charset=UTF-8",
  "18": "vary: Accept-Encoding",
  "19": "set-cookie: TDZwMtvLQBG=CtqVAbnkd; expires=Sat, 04-Jul-2026 19:37:47 GMT; Max-Age=86400; path=/; secure",
  "20": "set-cookie: RMyqowlu_-L=ATCHUMilh_z3j%40a5; expires=Sat, 04-Jul-2026 19:37:47 GMT; Max-Age=86400; path=/; secure",
  "21": "set-cookie: HApGsVhfCGXwiRF=m18AvpD6; expires=Sat, 04-Jul-2026 19:37:47 GMT; Max-Age=86400; path=/; secure",
  "22": "set-cookie: Jcth_RBoVQEAL=_5uMXg7PSV; expires=Sat, 04-Jul-2026 19:37:47 GMT; Max-Age=86400; path=/; secure",
  "23": "x-ua-compatible: IE=edge",
  "24": "link: <https://www.doe.gov.my/wp-json/>; rel=\"https://api.w.org/\"",
  "25": "link: <https://www.doe.gov.my/wp-json/wp/v2/pages/478>; rel=\"alternate\"; title=\"JSON\"; type=\"application/json\"",
  "26": "link: <https://www.doe.gov.my/>; rel=shortlink",
  "27": "wpo-cache-status: not cached",
  "28": "wpo-cache-message: The request method was not GET (HEAD)"
}
```

Connectivity Test Evidence

Test	Result
TCP Connect IPv4 → port 80	404 0.005450 0.013660
TCP Connect IPv4 → port 443	301 0.006098 1.515239

Test Node Network Evidence

Node Profile	dual stack
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Egress Connectivity

IPv4 Egress	76.13.221.142
IPv6 Egress	2a02:4780:5e:2789::1

Sysctl IPv6 Flags

net.ipv6.conf.all.disable_ipv6	0
--------------------------------	---

IPv6 Routes

```
2a02:4780:5e::/48 dev eth0 proto kernel metric 256 pref medium
fe80::/64 dev eth0 proto kernel metric 256 pref medium
default via 2a02:4780:5e::1 dev eth0 proto static metric 1024 pref medium
```

IPv4 Routes

```
default via 76.13.221.254 dev eth0 proto static
10.6.101.0/24 dev wg0 scope link
10.6.102.0/24 dev wg0 scope link
76.13.221.0/24 dev eth0 proto kernel scope link src 76.13.221.142
172.29.0.0/24 dev wg0 scope link
```