

IPv6 Readiness Report

dosm.gov.my — dosm.gov.my



Scan to verify

Category: Government • Generated: 04 Jul 2026, 22:33 MYT • Last Checked: 04 Jul 2026, 03:33 MYT • Verification ID: 9fda707d-ad13-4fb5-b360-816cd2b8da91

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

Audit trail: <https://ipv6.my6.my/audit/9fda707d-ad13-4fb5-b360-816cd2b8da91>

<p>X</p> <p>Non-Compliant</p> <p>MGv6C-1.0</p>	<p>43%</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>202.75.7.189</p>
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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%) 3 / 6

#	CHECK	RESULT	DETAIL
1	MX Record Exists	PASS	MX record found.
2	MX Server Has IPv6	FAIL	MX server has no IPv6 address.
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	DKIM selector found: default_domainkey
7	DMARC Record	PASS	DMARC record found.

IPv4 Baseline (15%) 2 / 3

#	CHECK	RESULT	DETAIL
1	A Record	PASS	202.75.7.189
2	HTTP over IPv4	FAIL	HTTP is not accessible over IPv4.
3	HTTPS over IPv4	PASS	HTTPS (port 443) responds over IPv4 — 110ms TTFB.

Audit Trail & Evidence Record

Verification ID	9fda707d-ad13-4fb5-b360-816cd2b8da91
Domain	dosm.gov.my
Check Mode	Manual
Status	Completed
Started	04 Jul 2026, 03:33:31 MYT
Finished	04 Jul 2026, 03:33:58 MYT
Test Node Profile	dual stack
Engine Version	2.0.0
MGv6C Version	1.0.0
Audit URL	https://ipv6.my6.my/audit/9fda707d-ad13-4fb5-b360-816cd2b8da91

Integrity Verification

✓ INTEGRITY VERIFIED	
Algorithm	hmac-sha256-v1
Root Hash	7323f4362d3dfefc1ec75f6c5236b5b15bb1d29e439057efd8a2127d0d7ef51c
http_headers	6465953749e23ac9b0850d3c4c208be206f997fbce18c7aa16c10eeebcfb9df0
dns_responses	8cca147e47be0b7bc9c3ea3baf1187c544ad69c4cb4a852ca7a8796b163db019
tls_handshake	a5d4c934c2f8645b9b7e3aaeba7285d337d73cf3513f4460d9137d13fe07098f
connectivity_log	4e6ff2525907b55d367f420c38b8ee8dc5b8aa25e504e9f44f10d9ca52b9bbc
dns_resolution_times	a51102ac7d69298e83b11be181107fc84836cf8e25f6f735e7418ffc4ad46865

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	10.86	20.87	11.25	21.21	+0.4
Google	IPv4	15.11	32.86	43.78	45.29	+28.7
Google	IPv6	30.53	45.95	34.78	43.54	+4.3
Cloudflare	IPv4	9.67	10.81	13.1	20.91	+3.4
Cloudflare	IPv6	22.6	42.19	21.41	48.42	-1.2

DNS Evidence

A

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 21896
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
dosm.gov.my. 3600 IN A 202.75.7.189
```

DS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 30329
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
dosm.gov.my. 3600 IN DS 46300 8 1 710FC1207BB4833A28C19C6D23B227C5991649F1
dosm.gov.my. 3600 IN DS 46300 8 2 30008C5FA7B0E4D5F5F4C9F0273B072BA568B17F6167D2B4CCCE3799 D85EE855
```

MX

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 44082
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 3, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
dosm.gov.my. 3600 IN MX 5 spass.dosm.gov.my.
dosm.gov.my. 3600 IN MX 10 isvw1.dosm.gov.my.
dosm.gov.my. 3600 IN MX 20 isvw2.dosm.gov.my.
```

NS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 32580
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

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

TXT

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 29181
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 5, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
dosm.gov.my. 3600 IN TXT "MS=54E2E8B27824DE160D2491EA65D0454CD9CC7A27"
dosm.gov.my. 3600 IN TXT "v=spf1 mx a:mail.dosm.gov.my a:spass.dosm.gov.my a:relay.dosm.gov.my ip4:150.242.181.69 -all"
dosm.gov.my. 3600 IN TXT "globalsign-domain-verification=048QXnr3jd_77eY9s1m/LcgbiAe4CQGfnvMJLyhRmQ"
dosm.gov.my. 3600 IN TXT "86S-t71-h16"
dosm.gov.my. 3600 IN TXT "globalsign-domain-verification=02t2mJwJwL8GdQIpdbt-KMW_4oIm-d0A-ggUw3Do1f"
```

AAAA

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 35135
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
dosm.gov.my. 3600 IN SOA dns1.gitn.net.my. planning.gitn.com.my. 2026062639 10800 3600 604800 38400
```

RRSIG

```
dns1.gitn.net.my. planning.gitn.com.my. 2026062639 10800 3600 604800 38400
```

```
SOA 8 3 3600 20260802145106 20260703135106 58104 dosm.gov.my. Efj7V6e+GJ3C4vMZQIHUw9UaIS6Jo8xJaAk4sujYkzWPErc6CInkAnye
vnFSXLhr10oDKTYfWKUWFJpL9lwVeyRkjpHq1pFnk3TjGhM9SpA8PIRa JvK+fWp/+kZxhPhPCRrh9S1uinGG2FwuGbd/S0pTBib5kEo7ABvVJcDq C+0=
```

DNSKEY

```
;; Got answer:
;; ->HEADER<- opcode: QUERY, status: NOERROR, id: 52250
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
dosm.gov.my. 3600 IN DNSKEY 256 3 8 AwEAAAYDbk0AQk8BZ/oLNTg6ZvmdwfA4EgrmaPU0X2oKj315p/K/14fR 5hDhrTUBajB+fyPpA4u3L48U69y11TcyBELA8+LQ2z+Jyzlp6RoPRIZI
3FZ17+l0MnAJetYnPK5Msnqo4Zs3/ptsBGDQ5z9Zb9RjiXZKGAAPN8rH wLhTfYMR
dosm.gov.my. 3600 IN DNSKEY 257 3 8 AwEAAcsB95cSQL5fYLxNg3id1vjPsXAEApvTyMp8LtSR/Xql20gmw+MG lXvftEoo8zg/kbfufRZJeBmr547zH1QBnjkLTLpBv0m3pTCvbZtzIzB
r9ka91k0kL0gDMw8mXmDiMNj f5oyTjXTcednzWIjMy1ZOskKqYzyHoo 6CC0/EDqZnkoxdcG1N2vQKruEJNnYqZJ2UtnVT+CkdF3G+Gh79F8utCO
j3Y5lCzYJeEoPpkxST3bzS0kGdTzYBHryK1G/N09tWZcXmMnMCrsD6CL gCu0n+H0IXcbrT/0X5Qs1hpoSub954EPpUAjBt3C0k03t9N9NdBinXN4 aPMGLZKHgAs=
```

DNSSEC_VALIDATION

```
; fully validated
dosm.gov.my. 3600 IN SOA dns1.gitn.net.my. planning.gitn.com.my. 2026062639 10800 3600 604800 38400
dosm.gov.my. 3600 IN RRSIG SOA 8 3 3600 20260802145106 20260703135106 58104 dosm.gov.my. Efj7V6e+GJ3C4vMZQIHUw9UaIS6Jo8xJaAk4sujYkzWPErc6CInkAnye
vnFSXLhr10oDKTYfWKUWFJpL9lwVeyRkjpHq1pFnk3TjGhM9SpA8PIRa JvK+fWp/+kZxhPhPCRrh9S1uinGG2FwuGbd/S0pTBib5kEo7ABvVJcDq C+0=
```


HTTP Response Evidence

IPv4 HTTP (port 80)

HTTP Status	0
Connected IP	202.75.7.189
Connect Time	7.11 ms
TTFB	0 ms
Total Time	10002.58 ms
Error	Operation timed out after 10002 milliseconds with 0 bytes received

IPv4 HTTPS (port 443)

HTTP Status	200
Connected IP	202.75.7.189
Connect Time	13.54 ms
TTFB	105.41 ms
Total Time	105.52 ms

Response Headers:

```
{
  "0": "HTTP/1.1 301 Moved Permanently",
  "1": "Server: nginx",
  "2": "Date: Fri, 03 Jul 2026 19:33:58 GMT",
  "3": "Content-Type: text/html",
  "4": "Content-Length: 162",
  "5": "Connection: keep-alive",
  "6": "Location: https://www.dosm.gov.my/",
  "7": "Upgrade: HTTP/2.0",
  "8": "Connection: Upgrade",
  "9": "Access-Control-Allow-Methods: GET, POST, OPTIONS, HEAD",
  "10": "Access-Control-Allow-Headers: DNT,User-Agent,X-Requested-With,If-Modified-Since,Cache-Control,Content-Type,Range",
  "11": "Access-Control-Expose-Headers: Content-Length,Content-Range",
  "12": "Access-Control-Max-Age: 31536000",
  "13": "X-Content-Type-Options: nosniff",
  "14": "X-Frame-Options: SAMEORIGIN",
  "15": "X-XSS-Protection: 1; mode=block",
  "16": "Strict-Transport-Security: max-age=31536000; includeSubDomains; preload",
  "17": "X-Permitted-Cross-Domain-Policies: master-only",
  "18": "Content-Security-Policy: default-src 'self'; script-src 'self' 'unsafe-inline' 'unsafe-eval' blob: *; img-src 'self' data: *; style-src 'self' 'unsafe-inline' *; connect-src 'self' *; font-src 'self' data: *; frame-src 'self' *; object-src 'none'; media-src 'self' *; frame-ancestors 'self';",
  "19": "Permissions-Policy: geolocation=(), microphone=(), camera=(), fullscreen=*, autoplay=(self)",
  "20": "Referrer-Policy: strict-origin-when-cross-origin",
  "21": "Expect-CT: enforce; max-age=3600",
  "22": "Content-Security-Policy: upgrade-insecure-requests",
  "23": "Set-Cookie: Path=/; HttpOnly; Secure",
  "24": "Set-Cookie: cookiesession1=678B28A316F559888F1352F688E36349;Expires=Sat, 03 Jul 2027 19:33:57 GMT;Path=/;HttpOnly",
  "26": "HTTP/1.1 200 OK",
  "27": "Server: nginx",
  "28": "Date: Fri, 03 Jul 2026 19:33:58 GMT",
  "29": "Content-Type: text/html; charset=UTF-8",
  "30": "Connection: keep-alive",
  "31": "Vary: Accept-Encoding",
  "32": "Upgrade: HTTP/2.0",
  "33": "Connection: Upgrade",
  "34": "Access-Control-Allow-Methods: GET, POST, OPTIONS, HEAD",
  "35": "Access-Control-Allow-Headers: DNT,User-Agent,X-Requested-With,If-Modified-Since,Cache-Control,Content-Type,Range",
  "36": "Access-Control-Expose-Headers: Content-Length,Content-Range",
  "37": "Access-Control-Max-Age: 31536000",
  "38": "X-Content-Type-Options: nosniff",
  "39": "X-Frame-Options: SAMEORIGIN",
  "40": "X-XSS-Protection: 1; mode=block",
  "41": "Strict-Transport-Security: max-age=31536000; includeSubDomains; preload",
  "42": "X-Permitted-Cross-Domain-Policies: master-only",
  "43": "Content-Security-Policy: default-src 'self'; script-src 'self' 'unsafe-inline' 'unsafe-eval' blob: *; img-src 'self' data: *; style-src 'self' 'unsafe-inline' *; connect-src 'self' *; font-src 'self' data: *; frame-src 'self' *; object-src 'none'; media-src 'self' *; frame-ancestors 'self';",
  "44": "Permissions-Policy: geolocation=(), microphone=(), camera=(), fullscreen=*, autoplay=(self)",
  "45": "Referrer-Policy: strict-origin-when-cross-origin",
  "46": "Expect-CT: enforce; max-age=3600",
  "47": "Content-Security-Policy: upgrade-insecure-requests",
  "48": "Set-Cookie: Path=/; HttpOnly; Secure",
  "49": "Set-Cookie: cookiesession1=678B28A3AFC19A2C91ABA9750D4D26B3;Expires=Sat, 03 Jul 2027 19:33:57 GMT;Path=/;HttpOnly"
}
```

Connectivity Test Evidence

Test	Result
TCP Connect IPv4 → port 80	301 0.004720 0.009772
TCP Connect IPv4 → port 443	000 0.005629 0.000000

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
```