

IPv6 Readiness Report

rtm.gov.my — rtm.gov.my



Scan to verify

Category: Media • Generated: 04 Jul 2026, 22:34 MYT • Last Checked: 04 Jul 2026, 03:41 MYT • Verification ID: 011e50fc-d7f9-45cf-bd8c-b70566b9f150

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

Audit trail: <https://ipv6.my6.my/audit/011e50fc-d7f9-45cf-bd8c-b70566b9f150>

<p>X</p> <p>Non-Compliant</p> <p>MGv6C-1.0</p>	<p>37%</p> <p>No IPv6 Support</p>	<p>IPv6-ONLY READINESS</p> <p>Website: X Not Ready</p> <p>DNS: X Not Ready</p> <p>Email: X Not Ready</p>
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<p>IPv4 ADDRESSES</p> <p>163.53.155.90</p>

Network Information (WHOIS / RDAP)

IPv4 Network	
Organization	GITN Sdn Bhd
Country	MY
ASN	AS141201
ASN Name	JDN-AS-MY - Jabatan Digital Negara (JDN), MY
Network (CIDR)	163.53.152.0/22

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%)				1 / 5
#	CHECK	RESULT	DETAIL	
1	NS Has AAAA Record	FAIL	No nameserver has an AAAA record.	
2	NS Reachable via IPv6	FAIL	No nameserver is reachable over IPv6.	
3	NS Answers Queries via IPv6	FAIL	Nameserver does not answer queries 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%) 3 / 3

#	CHECK	RESULT	DETAIL
1	A Record	PASS	163.53.155.90
2	HTTP over IPv4	PASS	HTTP (port 80) responds over IPv4 — 88ms TTFB.
3	HTTPS over IPv4	PASS	HTTPS (port 443) responds over IPv4 — 98ms TTFB.

Audit Trail & Evidence Record

Verification ID	011e50fc-d7f9-45cf-bd8c-b70566b9f150
Domain	rtm.gov.my
Check Mode	Manual
Status	Completed
Started	04 Jul 2026, 03:41:05 MYT
Finished	04 Jul 2026, 03:41:28 MYT
Test Node Profile	dual stack
Engine Version	2.0.0
MGv6C Version	1.0.0
Audit URL	https://ipv6.my6.my/audit/011e50fc-d7f9-45cf-bd8c-b70566b9f150

Integrity Verification

✓ INTEGRITY VERIFIED	
Algorithm	hmac-sha256-v1
Root Hash	52c485b7dec15680eccc157b0cbf3072d315638636cb5ede222c91e6f7af0ac
http_headers	b58858636fe61d96a76271448c7f7fc6cd0cfb24876aece2f42c48b264b41662
dns_responses	3a7e136363149be3d1a82d1098c111d7281991bad06b5f63ec6c4719b2e6897a
tls_handshake	773967bf3418e30343bccd486de9f12eca9397fc9715eddeb9d73bfe28b25806
connectivity_log	e46ee2ffcc19d81bbd27b65fb192c8bb2e2d3b8f7ee7994aced27b81554c8fdc
dns_resolution_times	c6482807dc549cd0372259b8f65fd8084ca58d00dfed5a97423b4cc257921c8d

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	22.17	22.34	23.89	24.7	+1.7
Google	IPv4	21.73	34.49	34.31	46.61	+12.6
Google	IPv6	39.07	41.74	41.97	43.89	+2.9
Cloudflare	IPv4	11.63	24.53	22.99	24.09	+11.4
Cloudflare	IPv6	27.74	42.09	39.64	40.11	+11.9

DNS Evidence

A

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 5187
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
rtm.gov.my. 3600 IN A 163.53.155.90
```

DS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 17391
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
rtm.gov.my. 3600 IN DS 8 2 08C4340804055E660DE1B2D1FCA49017A6B8BBA876230512664DAEFD 4FF1249C
rtm.gov.my. 3600 IN DS 8 1 B9726A458DF630B3B12FC2417A4C86BF4F0D9F68
```

MX

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 43600
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 5, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
rtm.gov.my. 3600 IN MX 5 ALT1.ASPMX.L.GOOGLE.COM.
rtm.gov.my. 3600 IN MX 5 ALT2.ASPMX.L.GOOGLE.COM.
rtm.gov.my. 3600 IN MX 1 ASPMX.L.GOOGLE.COM.
rtm.gov.my. 3600 IN MX 10 ALT4.ASPMX.L.GOOGLE.COM.
rtm.gov.my. 3600 IN MX 10 ALT3.ASPMX.L.GOOGLE.COM.
```

NS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 36813
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 4, AUTHORITY: 0, ADDITIONAL: 5

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
rtm.gov.my. 3600 IN NS ns2.rtm.gov.my.
rtm.gov.my. 3600 IN NS ns3.rtm.gov.my.
rtm.gov.my. 3600 IN NS ns4.rtm.gov.my.
rtm.gov.my. 3600 IN NS ns1.rtm.gov.my.
```

TXT

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 26915
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 3, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
rtm.gov.my. 300 IN TXT "google.com, pub-4875379667456202, DIRECT, f08c47fec0942fa0"
rtm.gov.my. 300 IN TXT "google-site-verification=Czk0GWAAnM7YiuFKICshZxc0YudoMHRke4Z9EFcw75k"
rtm.gov.my. 300 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 include:mailgun.org ~all"
```

AAAA

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 34589
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
rtm.gov.my. 3579 IN SOA ns1.rtm.gov.my. mta.rtm.gov.my. 2026060514 14400 900 1209600 3600
```

RRSIG

```
ns1.rtm.gov.my. mta.rtm.gov.my. 2026060514 14400 900 1209600 3600
SOA 8 3 3600 20281001000000 20260605065952 62622 rtm.gov.my. IFC8P+aeHrE/5QfHal/NryaXl31WTVmVQI86Wl7LJoVn2fZF66Wezup/
/3aN3+FFQ7oHXnp1w4Rqn1eBTkF/LxJkUx5mCKyLGzgb3k6SIdu/kemU 96+i f8a8nXXLa51vA0Np0GQazJ5E0MeMRx8GC8ss1pvUly0gy4Zhi1Sa 5TA=
```

DNSKEY

```
;; Got answer:
;; ->HEADER<- opcode: QUERY, status: NOERROR, id: 5648
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
rtm.gov.my. 3579 IN DNSKEY 257 3 8 Av85vql09DN9d6JUImxRzqMDALxY0PoFvUGEiST3xk1WgnjRkQZuqV+d 9dqp3yJZZ/ZjD9dctbDFyP99W6EPhKpeUb5y45iJf+ceXed0/hBsZDld
IfHX2jzK+0qdh5Wd+6BsREG9E16fuqEMj7Mcmabz16FL2kBBUJgz25x DJdTWS0=
rtm.gov.my. 3579 IN DNSKEY 256 3 8 Av85yqmd5XLZ9ti0rmHjZqBZFD/N/Tzm26CW7YYtLHKIMsz6MZcuG5H0 jTvAfX5u9uGpZXR+ZSxu4Uv4CTHm2YqF/dEu0gXDSvTLPCVn/380XZdj
fTncxqF8HXr7F4dgejSDcn0SgOuXygJ7ie3vJWlmmgB1V6x+Z3lT7twD qXff2hc=
```

DNSSEC_VALIDATION

```
; fully validated
rtm.gov.my. 3579 IN SOA ns1.rtm.gov.my. mta.rtm.gov.my. 2026060514 14400 900 1209600 3600
rtm.gov.my. 3579 IN RRSIG SOA 8 3 3600 20281001000000 20260605065952 62622 rtm.gov.my. IFC8P+aeHrE/5QfHal/NryaXl31WTVmVQI86Wl7LJoVn2fZF66Wezup/
/3aN3+FFQ7oHXnp1w4Rqn1eBTkF/LxJkUx5mCKyLGzgb3k6SIdu/kemU 96+i f8a8nXXLa51vA0Np0GQazJ5E0MeMRx8GC8ss1pvUly0gy4Zhi1Sa 5TA=
```



```
b20vcmVwb3NpdG9yeS8wDQYJKoZIhvcNAQELBQADggEBAJmQyC1fQorUC2bbmANz
EdSIhLIoU4r7rd/9c446ZwTbw1MUcBQJfMPg+NccmBqixD7b6QDjynCy8SIwIVbb
0615XoFYC20UgDX1b10d65pHBf9ZjQCxQNqQmJYaumxtf4z1s4dfjGRzNpZ5eWl0
6r/4ngGPoJVpjemEuunl1Ig423g7mNA2eymw0LIYkN5S0wCuaiFIFJ6GLazhgDEw
fpoLu4usBC0mmQDo8dIm7A9+04orkjgTHY+GzYZSR+Y0fFukAj6KYXwidlNaLFMz
hriSqHkVoflShx8xpfywgVcvzfT03PYkz6fiNJBonf6q8amaEsybwMbdqKwIX7e
SPY=
-----END CERTIFICATE-----
---
Server certificate
subject=C = MY, ST = Kuala Lumpur, L = Kuala Lumpur, O = Jabatan Penyiaran Malaysia, CN = *.rtm.gov.my
issuer=C = BE, O = GlobalSign nv-sa, CN = GlobalSign RSA OV SSL CA 2018
---
No client certificate CA names sent
Peer signing digest: SHA256
Peer signature type: RSA-PSS
Server Temp Key: X25519, 253 bits
---
SSL handshake has read 3373 bytes and written 392 bytes
Verification: OK
---
New, TLSv1.3, Cipher is TLS_AES_256_GCM_SHA384
Server public key is 2048 bit
Secure Renegotiation IS NOT supported
Compression: NONE
Expansion: NONE
No ALPN negotiated
```


HTTP Response Evidence

IPv4 HTTP (port 80)

HTTP Status	200
Connected IP	163.53.155.90
Connect Time	23.39 ms
TTFB	63.46 ms
Total Time	63.57 ms

Response Headers:

```
{
  "0": "HTTP/1.1 301 Moved Permanently",
  "1": "Server: nginx",
  "2": "Date: Fri, 03 Jul 2026 19:41:27 GMT",
  "3": "Content-Type: text/html",
  "4": "Content-Length: 162",
  "5": "Connection: keep-alive",
  "6": "Location: https://www.rtm.gov.my/",
  "7": "Strict-Transport-Security: max-age=31536000; includeSubDomains; preload",
  "8": "X-Content-Type-Options: nosniff",
  "9": "X-Frame-Options: DENY",
  "10": "Content-Security-Policy: frame-ancestors 'none';",
  "12": "HTTP/1.1 200 OK",
  "13": "Server: nginx",
  "14": "Date: Fri, 03 Jul 2026 19:41:27 GMT",
  "15": "Content-Type: text/html",
  "16": "Content-Length: 2525",
  "17": "Last-Modified: Mon, 08 Dec 2025 05:33:39 GMT",
  "18": "Connection: keep-alive",
  "19": "ETag: \"69366333-9dd\"",
  "20": "Strict-Transport-Security: max-age=31536000; includeSubDomains; preload",
  "21": "X-Content-Type-Options: nosniff",
  "22": "X-Frame-Options: DENY",
  "23": "Content-Security-Policy: frame-ancestors 'none';",
  "24": "Referrer-Policy: strict-origin-when-cross-origin",
  "25": "Permissions-Policy: geolocation=(), microphone=(), camera=(), fullscreen=(self), payment=(), usb=()",
  "26": "Content-Security-Policy:",
  "27": "default-src 'self';",
  "28": "script-src 'self' 'unsafe-inline' https://www.googletagmanager.com https://cdn.jsdelivr.net;",
  "29": "connect-src 'self' https://www.google-analytics.com https://www.rtm.gov.my blob;",
  "30": "style-src 'self' 'unsafe-inline' https://cdnjs.cloudflare.com https://fonts.googleapis.com https://cdn.jsdelivr.net;",
  "31": "font-src 'self' https://cdnjs.cloudflare.com https://fonts.gstatic.com https://cdn.jsdelivr.net;",
  "32": "img-src 'self' data;",
  "33": "media-src 'self' https://www.rtm.gov.my blob;",
  "34": "object-src 'none';",
  "35": "base-uri 'self';",
  "36": "frame-ancestors 'self' https://developer.mozilla.org;",
  "37": "Accept-Ranges: bytes"
}
```

IPv4 HTTPS (port 443)

HTTP Status	200
Connected IP	163.53.155.90
Connect Time	22.29 ms
TTFB	76.53 ms
Total Time	76.62 ms

Response Headers:

```
{
  "0": "HTTP/1.1 301 Moved Permanently",
  "1": "Server: nginx",
  "2": "Date: Fri, 03 Jul 2026 19:41:27 GMT",
  "3": "Content-Type: text/html",
  "4": "Content-Length: 162",
  "5": "Connection: keep-alive",
  "6": "Location: https://www.rtm.gov.my/",
  "7": "Strict-Transport-Security: max-age=31536000; includeSubDomains; preload",
  "8": "X-Content-Type-Options: nosniff",
  "9": "X-Frame-Options: DENY",
  "10": "Content-Security-Policy: frame-ancestors 'none';",
}
```

```

"12": "HTTP/1.1 200 OK",
"13": "Server: nginx",
"14": "Date: Fri, 03 Jul 2026 19:41:28 GMT",
"15": "Content-Type: text/html",
"16": "Content-Length: 2525",
"17": "Last-Modified: Mon, 08 Dec 2025 05:33:39 GMT",
"18": "Connection: keep-alive",
"19": "ETag: \"69366333-9dd\"",
"20": "Strict-Transport-Security: max-age=31536000; includeSubDomains; preload",
"21": "X-Content-Type-Options: nosniff",
"22": "X-Frame-Options: DENY",
"23": "Content-Security-Policy: frame-ancestors 'none';",
"24": "Referrer-Policy: strict-origin-when-cross-origin",
"25": "Permissions-Policy: geolocation=(), microphone=(), camera=(), fullscreen=(self), payment=(), usb=()",
"26": "Content-Security-Policy:",
"27": "default-src 'self';",
"28": "script-src 'self' 'unsafe-inline' https://www.googletagmanager.com https://cdn.jsdelivr.net;",
"29": "connect-src 'self' https://www.google-analytics.com https://www.rtm.gov.my blob;",
"30": "style-src 'self' 'unsafe-inline' https://cdnjs.cloudflare.com https://fonts.googleapis.com https://cdn.jsdelivr.net;",
"31": "font-src 'self' https://cdnjs.cloudflare.com https://fonts.gstatic.com https://cdn.jsdelivr.net;",
"32": "img-src 'self' data;",
"33": "media-src 'self' https://www.rtm.gov.my blob;",
"34": "object-src 'none';",
"35": "base-uri 'self';",
"36": "frame-ancestors 'self' https://developer.mozilla.org;",
"37": "Accept-Ranges: bytes"
}
    
```

Connectivity Test Evidence

Test	Result
TCP Connect IPv4 → port 80	301 0.016400 0.034184
TCP Connect IPv4 → port 443	301 0.009487 0.035303

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
    
```