

IPv6 Readiness Report

kbs.gov.my — kbs.gov.my



Scan to verify

Category: Government • Generated: 13 Jun 2026, 18:39 MYT • Last Checked: 13 Jun 2026, 00:56 MYT • Verification ID: d928ea40-d766-4470-8a8c-2def7fd49f41

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

Audit trail: <https://ipv6.my6.my/audit/d928ea40-d766-4470-8a8c-2def7fd49f41>

<p>X</p> <p>Non-Compliant</p> <p>MGv6C-1.0</p>	<p>42%</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>
--	---	--

IPv4 ADDRESSES
202.75.6.253

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%)				3 / 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	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%) 2 / 3

#	CHECK	RESULT	DETAIL
1	A Record	PASS	202.75.6.253
2	HTTP over IPv4	FAIL	HTTP is not accessible over IPv4.
3	HTTPS over IPv4	PASS	HTTPS (port 443) responds over IPv4 — 320ms TTFB.

Audit Trail & Evidence Record

Verification ID	d928ea40-d766-4470-8a8c-2def7fd49f41
Domain	kbs.gov.my
Check Mode	Scheduled
Status	Completed
Started	13 Jun 2026, 00:55:34 MYT
Finished	13 Jun 2026, 00:56:58 MYT
Test Node Profile	dual stack
Engine Version	2.0.0
MGv6C Version	1.0.0
Audit URL	https://ipv6.my6.my/audit/d928ea40-d766-4470-8a8c-2def7fd49f41

Integrity Verification

✓ INTEGRITY VERIFIED	
Algorithm	hmac-sha256-v1
Root Hash	f77759f7fb60d585b2f7b89bd002f6d21359dc9e09b22401c28387df514df250
http_headers	60863973a5da5db43992edc3b49638bbd518fa4f74cbef55450954b2322027e1
dns_responses	8e97a51e6d6b9e924fe24ab2cd743275fda5169fe0b03cf56663d5b33d6a1a69
tls_handshake	a8cd8b02e3f6165d53a4706d7f2c6bd2ecf584e19c352e7ab374aea17b8a865d
connectivity_log	d01b8a19138bd4e3e9fe0a7500e865e158be63b8aeb4bf159b7d1a762f09fe4
dns_resolution_times	00f7ce601e2feda384cc3ca63e4dd9c35b113446ef6c5f7500aca8ebbf93d470

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	8.3.31
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	34.89	40.66	14.9	30.6	-20
Google	IPv4	41.12	46.91	43.27	45.76	+2.2
Google	IPv6	33.29	40.8	42.34	48.06	+9.1
Cloudflare	IPv4	8.06	9.03	8.3	23.99	+0.2
Cloudflare	IPv6	40.63	51.98	14.19	62.44	-26.4

DNS Evidence

A

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 40137
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
kbs.gov.my. 3600 IN SOA dns1.gitn.net.my. root.dns1.gitn.net.my. 2026052659 3600 900 3600000 3600
```

DS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 13184
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
kbs.gov.my. 86331 IN DS 35704 8 2 EFCDB96BCA7730AF2FFABE58D0C1E7D2990AB94DAE4269AC84B7AE24 6D45531B
kbs.gov.my. 86331 IN DS 35704 8 1 C53E39ECA042F572904E06C2DEB67B7F0951B50D
```

MX

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 33009
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 5, AUTHORITY: 0, ADDITIONAL: 1

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

NS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 42211
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

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

TXT

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 34196
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 3, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
kbs.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 ~all"
kbs.gov.my. 300 IN TXT "MS=E24042AAA3B136D5C11F7E39C30D5AC0224D28F4"
kbs.gov.my. 300 IN TXT "google-site-verification=ijt89L0ft-PhNeBtZVfkyD4rdU85XxeAni8fqx__Cus"
```

AAAA

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 22403
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
kbs.gov.my. 3600 IN SOA dns1.gitn.net.my. root.dns1.gitn.net.my. 2026052659 3600 900 3600000 3600
```

RRSIG

```
dns1.gitn.net.my. root.dns1.gitn.net.my. 2026052659 3600 900 3600000 3600
```

```
SOA 8 3 3600 20260711222625 20260611212625 1416 kbs.gov.my. Za0yv7cvdVxmcwpL3LJHB8yHlfz5Bu8qR+B03crdfyTqR/zk6pfTaIbN
oJ0f0q2MqD4YcmGzY0f6xBrqdM99Kwfh7Td0CIpdr0+fc2CfvGS80ron gT3H7IPw2Ck2nousaze97HU3IzaWduiFjmEHuvZISyUT0WLaft1rqX5v JRo=
```

DNSKEY

```
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 51761
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
kbs.gov.my. 3600 IN DNSKEY 256 3 8 AwEAAbmXYTf8YiZBTuo1yD9XtGcEi4P37A3jaXq160nv5bQWZ9E4Cqg NIrPWSRsAIN1tFKy4nwadchU0Ds0tjCnlsKbJxDMqkSAD9B7Hf4UjByM
2koKp6TjRmQXlfNwXPSQDBnKzs3VHfVsprVbisWfYgqMumuLJaoR9yk epkKGhA1
kbs.gov.my. 3600 IN DNSKEY 257 3 8 AwEAAbMEcIMJAC331NDM8i5YpHrcd2c2INnAjdIHLgS+/M4BDa31s6uv wmsxe7+Bk0IilZRIICMTXxrA56JYqZYnHg43JyGovHk6383S+EZ9rMva
y60V01JUfMvXAf3RotnBKu5idLci0x2TH3KfxjC2eoU99H2E+HNLlDsC /KX2ku4PYApsRvUsMVD3CdtXxeqU0tv5c5XLjIX+cwqV3v3F+uyVAVd5
Kt7V7CF8pyVVAIixY5+uuVokya/cQ/iegFyc6Xki4oWlsZIJ8RZDBZ2Y kokJqH5ep5LC3q483bo2kPnIZg7kEcVdoE5cfy9gAjwCzcD03QnoN6G0 Pr6RRq0E9G0=
```

DNSSEC_VALIDATION

```
; fully validated
kbs.gov.my. 3600 IN SOA dns1.gitn.net.my. root.dns1.gitn.net.my. 2026052659 3600 900 3600000 3600
kbs.gov.my. 3600 IN RRSIG SOA 8 3 3600 20260711222625 20260611212625 1416 kbs.gov.my. Za0yv7cvdVxmcwpL3LJHB8yHlfz5Bu8qR+B03crdfyTqR/zk6pfTaIbN
oJ0f0q2MqD4YcmGzY0f6xBrqdM99Kwfh7Td0CIpdr0+fc2CfvGS80ron gT3H7IPw2Ck2nousaze97HU3IzaWduiFjmEHuvZISyUT0WLaft1rqX5v JRo=
```


HTTP Response Evidence

IPv4 HTTP (port 80)

HTTP Status	0
Connected IP	
Connect Time	0 ms
TTFB	0 ms
Total Time	8003.56 ms
Error	Failed to connect to kbs.gov.my port 80 after 8003 ms: Timeout was reached

IPv4 HTTPS (port 443)

HTTP Status	200
Connected IP	202.75.6.253
Connect Time	11.89 ms
TTFB	308.92 ms
Total Time	309.08 ms

Response Headers:

```
{
  "0": "HTTP/2 301",
  "1": "server: nginx",
  "2": "date: Fri, 12 Jun 2026 16:56:53 GMT",
  "3": "content-type: text/html",
  "4": "content-length: 162",
  "5": "location: https://www.kbs.gov.my/",
  "7": "HTTP/2 301",
  "8": "server: nginx",
  "9": "date: Fri, 12 Jun 2026 16:56:53 GMT",
  "10": "content-type: text/html; charset=utf-8",
  "11": "location: https://www.kbs.gov.my/ms/",
  "12": "set-cookie: 3d5c4c221af1b313e88fb01053fc4cda=4bskf4sqggh21fcgl5s455bd7; path=/; secure; HttpOnly",
  "13": "x-xss-protection: 1; mode=block",
  "14": "x-content-type-options: nosniff",
  "15": "strict-transport-security: max-age=31536000",
  "16": "content-security-policy: ; frame-ancestors 'self'",
  "17": "x-frame-options: SAMEORIGIN",
  "18": "referrer-policy: strict-origin-when-cross-origin",
  "19": "cross-origin-opener-policy: same-origin",
  "20": "cache-control: no-store, no-cache, must-revalidate, post-check=0, pre-check=0",
  "21": "expires: Wed, 17 Aug 2005 00:00:00 GMT",
  "22": "last-modified: Fri, 12 Jun 2026 16:56:53 GMT",
  "23": "pragma: no-cache",
  "24": "content-security-policy: default-src 'self' https: data: 'unsafe-inline' 'unsafe-eval'; frame-ancestors *;",
  "25": "x-content-type-options: nosniff",
  "26": "x-xss-protection: 1; mode=block",
  "27": "referrer-policy: no-referrer-when-downgrade",
  "28": "permissions-policy: geolocation=(self), camera=(), microphone=()",
  "29": "strict-transport-security: max-age=31536000; includeSubDomains; preload",
  "31": "HTTP/2 200",
  "32": "server: nginx",
  "33": "date: Fri, 12 Jun 2026 16:56:53 GMT",
  "34": "content-type: text/html; charset=utf-8",
  "35": "vary: Accept-Encoding",
  "36": "set-cookie: 3d5c4c221af1b313e88fb01053fc4cda=f8cs294vr3mtbdi6qv1uq3mq64; path=/; secure; HttpOnly",
  "37": "x-xss-protection: 1; mode=block",
  "38": "x-content-type-options: nosniff",
  "39": "strict-transport-security: max-age=31536000",
  "40": "content-security-policy: ; frame-ancestors 'self'",
  "41": "x-frame-options: SAMEORIGIN",
  "42": "referrer-policy: strict-origin-when-cross-origin",
  "43": "cross-origin-opener-policy: same-origin",
  "44": "expires: Wed, 17 Aug 2005 00:00:00 GMT",
  "45": "last-modified: Fri, 12 Jun 2026 16:56:53 GMT",
  "46": "cache-control: no-store, no-cache, must-revalidate, post-check=0, pre-check=0",
  "47": "pragma: no-cache",
  "48": "content-security-policy: default-src 'self' https: data: 'unsafe-inline' 'unsafe-eval'; frame-ancestors *;",
  "49": "x-content-type-options: nosniff",
  "50": "x-xss-protection: 1; mode=block",
  "51": "referrer-policy: no-referrer-when-downgrade",
  "52": "permissions-policy: geolocation=(self), camera=(), microphone=()",
  "53": "strict-transport-security: max-age=31536000; includeSubDomains; preload"
```

```
}

```

Connectivity Test Evidence

Test	Result
TCP Connect IPv4 → port 80	000 0.000000 0.000000
TCP Connect IPv4 → port 443	000 0.005403 0.000000

Test Node Network Evidence

Node Profile	dual stack
--------------	------------

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
76.13.221.0/24 dev eth0 proto kernel scope link src 76.13.221.142
```