

IPv6 Readiness Report

icu.gov.my — icu.gov.my

Category: Government • Generated: 20 Apr 2026, 21:24 MYT • Last Checked: 07 Mar 2026, 01:04 MYT • Verification ID: e1962193-5b41-4464-a039-067d729c6803

Report generated from National IPv6 Readiness Monitor — <https://ipv6.my6.my>Audit trail: <https://ipv6.my6.my/audit/e1962193-5b41-4464-a039-067d729c6803>

X Non-Compliant MGv6C-1.0	52% Partial Support	IPv6-ONLY READINESS Website: X Not Ready DNS: ✓ Ready Email: X Not Ready
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IPv4 ADDRESSES

103.8.147.162

Network Information (WHOIS / RDAP)

IPv4 Network	
Organization	PCN
Country	MY
ASN	AS17564
ASN Name	GITN-PCN-AS-AP GITN M Sdn. Bhd., MY
Network (CIDR)	103.8.147.4/30

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.
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	103.8.147.162
2	HTTP over IPv4	PASS	HTTP (port 80) responds over IPv4 — 48ms TTFB.
3	HTTPS over IPv4	PASS	HTTPS (port 443) responds over IPv4 — 24ms TTFB.

Audit Trail & Evidence Record

Verification ID	e1962193-5b41-4464-a039-067d729c6803
Domain	icu.gov.my
Check Mode	Manual
Status	Completed
Started	07 Mar 2026, 01:04:11 MYT
Finished	07 Mar 2026, 01:04:37 MYT
Test Node Profile	dual stack
Engine Version	2.0.0
MGv6C Version	1.0.0
Audit URL	https://ipv6.my6.my/audit/e1962193-5b41-4464-a039-067d729c6803

Integrity Verification

✓ INTEGRITY VERIFIED	
Algorithm	hmac-sha256-v1
Root Hash	b59ec6a5830d48581a65db98dd435edceb05677a403fb85707f679403d04691e
http_headers	e9374329f147ad69f8aedca75a0faad5c9e1a93a81c0e1b71f493d8c5657607
dns_responses	0af64cf36bf114dbfc5371c6f3f447744d065312d2de88a6c98bad1c222539bd
tls_handshake	3f2f092ca911c2af691e457eb79419c76cf89d1e6c5137b2bcd88a9a42fe0202
connectivity_log	2bfc6bf865bb471b4de95fb40f196afeab1aaba492d78b937e017906ab114fdf
dns_resolution_times	066e4bce52f7f569196312331989638b86eb07d017f5ab735d9487602700c639

Test Node Identity

Os	Linux srv1440888 6.8.0-101-generic #101-Ubuntu SMP PREEMPT_DYNAMIC Mon Feb 9 10:15:05 UTC 2026 x86_64
Hostname	srv1440888
Php Version	8.3.30
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	13.84	24.03	8.89	24.34	-5
Google	IPv4	32.53	39.03	17.1	31.11	-15.4
Google	IPv6	32.67	33.18	26.99	40.98	-5.7
Cloudflare	IPv4	16.69	16.97	13.79	18.29	-2.9
Cloudflare	IPv6	52.54	65.64	20.08	40.03	-32.5

DNS Evidence

A

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 35307
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
icu.gov.my. 3600 IN A 103.8.147.162
```

DS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 33494
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
icu.gov.my. 3600 IN DS 7054 8 1 3F231BB9AD6E1F2539400C08D529D36BA136C183
icu.gov.my. 3600 IN DS 7054 8 2 7C23F6848B485EEBFDE51A5EB3BDD3AC3486C48FDF06541CDD079920 65AC2478
```

MX

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 22963
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 5, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
icu.gov.my. 3600 IN MX 10 ALT4.ASPMX.L.GOOGLE.COM.
icu.gov.my. 3600 IN MX 1 ASPMX.L.GOOGLE.COM.
icu.gov.my. 3600 IN MX 5 ALT1.ASPMX.L.GOOGLE.COM.
icu.gov.my. 3600 IN MX 10 ALT3.ASPMX.L.GOOGLE.COM.
icu.gov.my. 3600 IN MX 5 ALT2.ASPMX.L.GOOGLE.COM.
```

NS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 35116
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
icu.gov.my. 3600 IN NS dns2.gitn.net.my.
icu.gov.my. 3600 IN NS dns1.gitn.net.my.
```

TXT

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 46245
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 4, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
icu.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"
icu.gov.my. 3600 IN TXT "MS=0D372DBDDAF6936700B2D50DA7C703E7D21CEE77"
icu.gov.my. 3600 IN TXT "MS=ms88448846"
icu.gov.my. 3600 IN TXT "google-site-verification=CC4zh7r55cN85F6k6R68hDPuS2yL1HV6JQ2xlCypHw"
```

AAAA

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 41585
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; AUTHORITY SECTION:
icu.gov.my. 1800 IN SOA dns1.gitn.net.my. planning.gitn.com.my. 2026030340 10800 3600 604800 38400
```

RRSIG

```
dns1.gitn.net.my. planning.gitn.com.my. 2026030340 10800 3600 604800 38400
SOA 8 3 3600 20260405061425 20260306051425 6325 icu.gov.my. bdRZpqUVb9bQenCj25neCw5AV+PtWB5S2Jyc63HiL0tj90Pv3c2c6A3a
+N0XlrTYSrzjKwDHugfkrJwvJxxmncJ3onWvz8L4YuK07tqM19xQ2DLo vXye9MrQ1W0D68axpf2LecVNBFCFSBXXK6kC4Pf9wUuDsP7JVxFdc0Qwc M1o=
```

DNSKEY

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 24946
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
;; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
icu.gov.my. 3600 IN DNSKEY 257 3 8 AwEAAbwBw486TrJFrgL+F1Z8tF2FpKMciEqi4/4sI6t9IrJ/bGEguCxm LfAipvhvJ0Si/Q2xvNHinVpY6m2P3Rj584fbuFCnJ0708BCT/QRNeCtr
CRUnmshfXUhpaoEbVEYA/Wpa4GjzUSkk77BcBowmYw9D5ifbaR45pgX6 kopax2W510ghZHY2y7BR+D112255xEK19DouHHx6gUe4Jiag/3S/vMc5
l6bJBP24pd5Iy9+2TskG546YCaonAe7SByXiIVCuPYaJXiIN8MVhI0j X9Q71nZ/KsuhR9t4/K8u1hssgPi0X19IWW69G4PL93a0RFfJpnueF08Q VxZVF2Ym5Ek=
icu.gov.my. 3600 IN DNSKEY 256 3 8 AwEAAAdkEGiMSUwG1zakPke302AB0mDsnu9p1N95zS7oacYgtqNIjtjuS6 XCw+IxtNhTXHV80UCZ6LIE9M8dTKp3mgrKDjN4Un0eqIRxI00V6SjQp
IRv00Dn000yev77u1Ux2NFQwnR0gAVvI7o0kH0ugzTnU1IzA2bLhj1Js 9N0yBz3d
```

DNSSEC_VALIDATION

```
; fully validated
icu.gov.my. 3600 IN SOA dns1.gitn.net.my. planning.gitn.com.my. 2026030340 10800 3600 604800 38400
icu.gov.my. 3600 IN RRSIG SOA 8 3 3600 20260405061425 20260306051425 6325 icu.gov.my. bdRZpqUVb9bQenCj25neCw5AV+PtWB5S2Jyc63HiL0tj90Pv3c2c6A3a
+N0XlrTYSrzjKwDHugfkrJwvJxxmncJ3onWvz8L4YuK07tqM19xQ2DLo vXye9MrQ1W0D68axpf2LecVNBFCFSBXXK6kC4Pf9wUuDsP7JVxFdc0Qwc M1o=
```


HTTP Response Evidence

IPv4 HTTP (port 80)

HTTP Status	404
Connected IP	103.8.147.162
Connect Time	11.85 ms
TTFB	38.81 ms
Total Time	38.86 ms

Response Headers:

```
{
  "0": "HTTP/1.0 302 Moved Temporarily",
  "1": "Location: https://icu.gov.my/",
  "2": "Server: BigIP",
  "3": "Connection: Keep-Alive",
  "4": "Content-Length: 0",
  "6": "HTTP/2 404",
  "7": "content-length: 315",
  "8": "content-type: text/html; charset=us-ascii",
  "9": "date: Fri, 06 Mar 2026 09:04:37 GMT"
}
```

IPv4 HTTPS (port 443)

HTTP Status	404
Connected IP	103.8.147.162
Connect Time	7.5 ms
TTFB	28.91 ms
Total Time	28.93 ms

Response Headers:

```
[
  "HTTP/2 404",
  "content-length: 315",
  "content-type: text/html; charset=us-ascii",
  "date: Fri, 06 Mar 2026 09:04:37 GMT"
]
```

Connectivity Test Evidence

Test	Result
TCP Connect IPv4 → port 80	302 0.004717 0.010024
TCP Connect IPv4 → port 443	404 0.010715 0.038765

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