

IPv6 Readiness Report

icu.gov.my — icu.gov.my



Scan to verify

Category: Government • Generated: 04 Jul 2026, 22:39 MYT • Last Checked: 04 Jul 2026, 03:08 MYT • Verification ID: 9799ef29-7fa8-4996-88e7-3a0f32a9e84c

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

Audit trail: <https://ipv6.my6.my/audit/9799ef29-7fa8-4996-88e7-3a0f32a9e84c>

<p>X</p> <p>Non-Compliant</p> <p>MGv6C-1.0</p>	<p>52%</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>103.8.147.162</p>

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)	103.8.147.2/31

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%) 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 — 28ms TTFB.

Audit Trail & Evidence Record

Verification ID	9799ef29-7fa8-4996-88e7-3a0f32a9e84c
Domain	icu.gov.my
Check Mode	Scheduled
Status	Completed
Started	04 Jul 2026, 03:07:39 MYT
Finished	04 Jul 2026, 03:08:42 MYT
Test Node Profile	dual stack
Engine Version	2.0.0
MGv6C Version	1.0.0
Audit URL	https://ipv6.my6.my/audit/9799ef29-7fa8-4996-88e7-3a0f32a9e84c

Integrity Verification

✓ INTEGRITY VERIFIED	
Algorithm	hmac-sha256-v1
Root Hash	2944a0632ee4c5db344f376b860c715c737748835efc8d0aebcd05f88ea8a96a
http_headers	7985b9c5df4d8094354f2b42fa65adad1dc4127404f2fb715e9dd9b321f00dcf
dns_responses	2e96e3fcc132910ba77757e855c4f684f16de28e0c9decbfd96d871adf438023
tls_handshake	3f2f092ca911c2af691e457eb79419c76cf89d1e6c5137b2bcd88a9a42fe0202
connectivity_log	2a299a6cb9299fc2736fc21425a28cd01abcc415c3211a3e9901eee8355d5045
dns_resolution_times	6b03b918582451384ddef86f80b7d6216fc648604215a49880e70ae106094a0f

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	32.83	37.44	28.16	33	-4.7
Google	IPv4	68.32	82.33	50.29	76.13	-18
Google	IPv6	72.49	76.18	63.64	66.48	-8.8
Cloudflare	IPv4	41.82	61.35	61.82	76.65	+20
Cloudflare	IPv6	30.56	43.71	53.77	575.11	+23.2

DNS Evidence

A

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 7534
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
icu.gov.my. 3600 IN A 103.8.147.162
```

DS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 18558
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
icu.gov.my. 86344 IN DS 7054 8 1 3F231BB9AD6E1F2539400C08D529D36BA136C183
icu.gov.my. 86344 IN DS 7054 8 2 7C23F68488485EEBFDE51A5EB3BDD3AC3486C48FDF06541CDD079920 65AC2478
```

MX

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 16597
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 5, AUTHORITY: 0, ADDITIONAL: 1

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

NS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 16778
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

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

TXT

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 6984
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 4, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
icu.gov.my. 3600 IN TXT "MS=ms88448846"
icu.gov.my. 3600 IN TXT "google-site-verification=CC4zh7r55cN85F6k6R68hDPuS2yLjHV6GJQ2xlcypHw"
icu.gov.my. 3600 IN TXT "MS=0D372DBDDAF6936700B2D50DA7C703E7D21CEE77"
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"
```

AAAA

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 38059
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
icu.gov.my. 3600 IN SOA dns1.gitn.net.my. planning.gitn.com.my. 2026062947 10800 3600 604800 38400
```

RRSIG

dns1.gitn.net.my. planning.gitn.com.my. 2026062947 10800 3600 604800 38400
SOA 8 3 3600 20260802183941 20260703173941 6325 icu.gov.my. cZtEY7ynx4v2ISFQZfoZYwyD4A6t8w8VguBwbj1AsxykT7+H1ZpLazn
aL259f5UUEhEAcr7TwwC6xVCMd1qKf1v2mD2cP3TJeTB5yK7nsEEYzIU 63J+vyauHjvd3uosEtSAqSk4QVseXyCv8vvsrNZHL7WwQZv5FtXPfTyX UMc=

DNSKEY

; Got answer:
; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 2723
; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1
; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
; ANSWER SECTION:
icu.gov.my. 3544 IN DNSKEY 257 3 8 AwEAAbwBw486TrJFrgL+F1Z8tF2FpKMciEqi4/4sI6t9IrJ/bGEguCxm LfAipvhvJ0Si/Q2xvNHinVpY6m2P3Rj584fbuFCnJ0708BCT/QRNeCtr
CRUnmshfXUhpaoEbVEYA/Wpa4GjzUSkk77BcBowmYw9D5ifbaR45pgX6 kopax2W510ghZHY2y7BR+D112255xEK19DouHHx6gUe4Jiag/3S/vMc5
l6bJBP24pd5Iy9+2TskG546YCaooAe7SByXiIVCuPYaJXiIN8MVhI0j X9Q7InZ/KsuhR9t4/K8uihssgPi0X19IWW69G4PL93a0RFfJpnueF08Q VxZVF2Ym5Ek=
icu.gov.my. 3544 IN DNSKEY 256 3 8 AwEAAAdkEGiMSUwG1zakPke302AB0mDsnu9p1N95zS7oacYgtqNIjtjuS6 XCw+IxtNhTXHV80uZ6LIE9M8dTkP3mgrKDjN4Un0eqIRxI00V6SjQp
IRv00Dn000yev77u1Ux2NFQwnR0gAVvI7o0KH0ugzTnU1IzA2bLhjlJs 9N0yBz3d

DNSSEC_VALIDATION

; fully validated
icu.gov.my. 3544 IN SOA dns1.gitn.net.my. planning.gitn.com.my. 2026062947 10800 3600 604800 38400
icu.gov.my. 3544 IN RRSIG SOA 8 3 3600 20260802183941 20260703173941 6325 icu.gov.my. cZtEY7ynx4v2ISFQZfoZYwyD4A6t8w8VguBwbj1AsxykT7+H1ZpLazn
aL259f5UUEhEAcr7TwwC6xVCMd1qKf1v2mD2cP3TJeTB5yK7nsEEYzIU 63J+vyauHjvd3uosEtSAqSk4QVseXyCv8vvsrNZHL7WwQZv5FtXPfTyX UMc=

HTTP Response Evidence

IPv4 HTTP (port 80)

HTTP Status	404
Connected IP	103.8.147.162
Connect Time	15.69 ms
TTFB	46.59 ms
Total Time	46.7 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, 03 Jul 2026 19:08:42 GMT"
}
```

IPv4 HTTPS (port 443)

HTTP Status	404
Connected IP	103.8.147.162
Connect Time	5.64 ms
TTFB	27.02 ms
Total Time	27.05 ms

Response Headers:

```
[
  "HTTP/2 404",
  "content-length: 315",
  "content-type: text/html; charset=us-ascii",
  "date: Fri, 03 Jul 2026 19:08:42 GMT"
]
```

Connectivity Test Evidence

Test	Result
TCP Connect IPv4 → port 80	302 0.006745 0.015738
TCP Connect IPv4 → port 443	404 0.006245 0.054366

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
```