

# IPv6 Readiness Report

kuskop.gov.my — kuskop.gov.my




Scan to verify

Category: Government • Generated: 13 Jun 2026, 18:45 MYT • Last Checked: 13 Jun 2026, 01:27 MYT • Verification ID: c703db61-495b-4c7c-b103-ca69a441aff8

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

Audit trail: <https://ipv6.my6.my/audit/c703db61-495b-4c7c-b103-ca69a441aff8>

 <b>Partially Compliant</b> <small>MGv6C-1.0</small>	<b>60%</b> <b>Partial Support</b>	<b>IPv6-ONLY READINESS</b> Website: <span style="color: red;">✗ Not Ready</span> DNS: <span style="color: green;">✓ Ready</span> Email: <span style="color: red;">✗ Not Ready</span>
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<b>IPv6 ADDRESSES</b> 2401:b00:6:210::80	<b>IPv4 ADDRESSES</b> 103.8.160.95
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## Network Information (WHOIS / RDAP)

	IPv6 Network	IPv4 Network
Organization	GITN Sdn. Bhd.	KeTTHA
Country	MY	MY
ASN	AS17564	AS17564
ASN Name	GITN-PCN-AS-AP - GITN (M) Sdn. Bhd., MY	GITN-PCN-AS-AP - GITN (M) Sdn. Bhd., MY
Network (CIDR)	2401:b00::/32	103.8.160.92/30

Web Services (35%) <span style="float: right;">3 / 8</span>			
#	CHECK	RESULT	DETAIL
1	AAAA Record	PASS	2401:b00:6:210::80
2	Globally Routable IPv6	PASS	All addresses are 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)	PASS	Domain has both A and AAAA records.
8	HTTP/3 (QUIC)	FAIL	No HTTP/3 support detected.

DNS & DNSSEC (25%) <span style="float: right;">5 / 5</span>			
#	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)	PASS	PTR record found in ip6.arpa.
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	<b>Signing Algorithm</b>	<b>INFO</b>	RSASHA256

**Email Services** (25%) 4 / 6

#	CHECK	RESULT	DETAIL
1	<b>MX Record Exists</b>	<b>PASS</b>	MX record found.
2	<b>MX Server Has IPv6</b>	<b>PASS</b>	MX server has AAAA record.
3	<b>SMTP Reachable via IPv6</b>	<b>FAIL</b>	SMTP is not reachable over IPv6.
4	<b>STARTTLS over IPv6</b>	<b>FAIL</b>	STARTTLS not available over IPv6.
5	<b>SPF Record</b>	<b>PASS</b>	SPF record found.
6	<b>DKIM Selector</b>	<b>INFO</b>	No common DKIM selector found.
7	<b>DMARC Record</b>	<b>PASS</b>	DMARC record found.

**IPv4 Baseline** (15%) 1 / 3

#	CHECK	RESULT	DETAIL
1	<b>A Record</b>	<b>PASS</b>	103.8.160.95
2	<b>HTTP over IPv4</b>	<b>FAIL</b>	HTTP is not accessible over IPv4.
3	<b>HTTPS over IPv4</b>	<b>FAIL</b>	HTTPS is not accessible over IPv4.

### Audit Trail & Evidence Record

Verification ID	c703db61-495b-4c7c-b103-ca69a441aff8
Domain	kuskop.gov.my
Check Mode	Scheduled
Status	Completed
Started	13 Jun 2026, 01:21:04 MYT
Finished	13 Jun 2026, 01:27:34 MYT
Test Node Profile	dual stack
Engine Version	2.0.0
MGv6C Version	1.0.0
Audit URL	https://ipv6.my6.my/audit/c703db61-495b-4c7c-b103-ca69a441aff8

### Integrity Verification

<p><b>✓ INTEGRITY VERIFIED</b></p>	
Algorithm	hmac-sha256-v1
Root Hash	af9dbed26e422e525c324795b9cf57b3738f2e85617170455b94ba7bc54f76e6
http_headers	be396f5ff5415379b33a94588a119478c6cc6b3857a5d4feb8d662136807ad0e
dns_responses	fc16e6e80050fdb7b70741b36ca137c01e9ee2cfa01bdc376ffdd7d3ba5e81d
tls_handshake	272cb30e16bd08f6c118c878c6807c32c6cb04fc1e0bc535a3780bb33bbc2dac
connectivity_log	984df820bbcc6bbfb056bbe48c308184a576171583b285122107f3d0fc1ccfd
dns_resolution_times	3ceb1d16a84f6d03b0cb7280bb7929d7946e17719dc88195c1f9e07a95cfaaec

### 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	10.87	19.73	22.31	22.97	+11.4
Google	IPv4	48.96	52.67	42.25	43.28	-6.7
Google	IPv6	32.34	44.72	16.64	18.31	-15.7
Cloudflare	IPv4	21.37	21.7	21.47	23.16	+0.1
Cloudflare	IPv6	9.92	27.61	22.96	25.2	+13



## DNS Evidence

### A

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 38254
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
kuskop.gov.my. 00000000000000000000000000000000 103.8.160.95
```

### DS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 19497
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
kuskop.gov.my. 00000000000000000000000000000000 8 2 335A82E4DB1BA4F38BF054D603C3AFE8D546E78BC47FD9CD73D48DB6 4E7873BE
kuskop.gov.my. 00000000000000000000000000000000 8 1 A30CD572CE1F91BBB5611A84D8BE97592C2EFF3F
```

### MX

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 57466
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 5, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
kuskop.gov.my. 00000000000000000000000000000000 5 alt1.aspmx.l.google.com.
kuskop.gov.my. 00000000000000000000000000000000 10 alt4.aspmx.l.google.com.
kuskop.gov.my. 00000000000000000000000000000000 5 alt2.aspmx.l.google.com.
kuskop.gov.my. 00000000000000000000000000000000 10 alt3.aspmx.l.google.com.
kuskop.gov.my. 00000000000000000000000000000000 1 aspmx.l.google.com.
```

### NS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 14991
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
kuskop.gov.my. 00000000000000000000000000000000 00000000000000000000000000000000 dns1.gitn.net.my.
kuskop.gov.my. 00000000000000000000000000000000 00000000000000000000000000000000 dns2.gitn.net.my.
```

### TXT

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 58130
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 4, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
kuskop.gov.my. 00000000000000000000000000000000 00000000000000000000000000000000 "0009697373756577696C647365637469676F2E636F6D"
kuskop.gov.my. 00000000000000000000000000000000 "MS=ms76898747"
kuskop.gov.my. 00000000000000000000000000000000 "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"
kuskop.gov.my. 00000000000000000000000000000000 "google-site-verification=rnkJfd-CSRDAL_UA9g338PF9Et0l12KjnrJGXZxxfzI"
```

### AAAA

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 916
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
kuskop.gov.my. 00000000000000000000000000000000 2401:b00:6:210::80
```

RRSIG

```
dns1.gitn.net.my. planning.gitn.com.my. 2026031847 10800 3600 604800 38400
SOA 8 3 3600 20260712054651 20260612044651 55653 kuskop.gov.my. YK/SWskSaa9efG939hMi9oPqNJQLZXw3VLEKs4iRueDrhgbQPMEVXfWH
FT3rB5gknvvtSbQIK5X2UAYNR3fTVM3WsdawWmSvbIcbbVEzXD9E1+Jb JU8cv7aiQ80NKQ\ufxI07E9qxDvaGSmDjzmTwWBwz3JURf/35I6IYutc pgA=
```

DNSKEY

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 18838
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
kuskop.gov.my. 2026031847 IN DNSKEY 256 3 8 AwEAAZ1MsJnhqf8k4DFsJCNk4wxm+YN7/QwHNV00J2t50c9ZUjBEcmNn zPdQ+9K363yJQqLZYafFL8PSAr5DHqCGff63qagT+btTW9vgRA72WzR
1tMw/TyMaUG7+ZrQiN+mmw3i5w+bqrSgqsrj04ft+96yDVNzL8ymTNWG CzSPMBYb
kuskop.gov.my. 2026031847 IN DNSKEY 257 3 8 AwEAAeobyPFq45kcIq7umNiR8T5oTYuESkeESLkoLU5u2IQ90vSpqsmG JAmZCU+/MrH8GdZ4MYz+D1l8PYZejsixtmrtnU4sIEakIRGJ1X4lmRXz
/qonXQgjB6D/VNHCnwMVj7U6weA8NN510EoSB9sUTwrEK7d0kGEq4PJZ Y0DZW8Ah++h7a/MGP1ZK4WpGuyXU0CNQx9ZIx4T6xzWUZSZHbiza90W6
+InAcwzyKSUp5a2UQCqBjvXHkCicVp1Lb+XI87KHj+rn1vJUUnUXix84 wXuGyJF8EK3UeIchjEgLerdGsqHzbEdu/2r17epW3wjhtBZFvpHPaJC Q50J4zWMFQM=
```

DNSSEC\_VALIDATION

```
; fully validated
kuskop.gov.my. 2026031847 IN SOA dns1.gitn.net.my. planning.gitn.com.my. 2026031847 10800 3600 604800 38400
kuskop.gov.my. 2026031847 IN RRSIG SOA 8 3 3600 20260712054651 20260612044651 55653 kuskop.gov.my. YK/SWskSaa9efG939hMi9oPqNJQLZXw3VLEKs4iRueDrhgbQPMEVXfWH
FT3rB5gknvvtSbQIK5X2UAYNR3fTVM3WsdawWmSvbIcbbVEzXD9E1+Jb JU8cv7aiQ80NKQ\ufxI07E9qxDvaGSmDjzmTwWBwz3JURf/35I6IYutc pgA=
```

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## TLS Handshake Evidence

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### IPv6 Connection

IP Used	2401:b00:6:210::80
IP Version	6

```
4037011D147C0000:error:8000006E:system library:BI0_connect:Connection timed out:../crypto/bio/bio_sock2.c:114:calling connect()
4037011D147C0000:error:10000067:BI0 routines:BI0_connect:connect error:../crypto/bio/bio_sock2.c:116:
connect:errno=110
```

## HTTP Response Evidence

### IPv4 HTTP (port 80)

HTTP Status	0
Connected IP	
Connect Time	0 ms
TTFB	0 ms
Total Time	8002.58 ms
Error	Failed to connect to kuskop.gov.my port 80 after 8002 ms: Timeout was reached

### IPv6 HTTP (port 80)

HTTP Status	0
Connected IP	
Connect Time	0 ms
TTFB	0 ms
Total Time	1073.49 ms
Error	Failed to connect to kuskop.gov.my port 80 after 1073 ms: Couldn't connect to server

### IPv4 HTTPS (port 443)

HTTP Status	0
Connected IP	
Connect Time	0 ms
TTFB	0 ms
Total Time	8002.38 ms
Error	Failed to connect to kuskop.gov.my port 443 after 8002 ms: Timeout was reached

### IPv6 HTTPS (port 443)

HTTP Status	0
Connected IP	
Connect Time	0 ms
TTFB	0 ms
Total Time	8003.03 ms
Error	Failed to connect to kuskop.gov.my port 443 after 8003 ms: Timeout was reached

## Connectivity Test Evidence

Test	Result
TCP Connect IPv4 → port 80	000 0.000000 0.000000
TCP Connect IPv6 → port 80	000 0.000000 0.000000
TCP Connect IPv4 → port 443	000 0.000000 0.000000
TCP Connect IPv6 → port 443	000 0.000000 0.000000

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### Test Node Network Evidence

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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
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#### 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
```