



IPv6 Readiness Report

jkr.gov.my — jkr.gov.my

Category: Government • Generated: 20 Apr 2026, 21:25 MYT • Last Checked: 07 Mar 2026, 01:08 MYT • Verification ID: 5e86c423-c0c4-496d-adcf-b900a40e452a

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

Audit trail: <https://ipv6.my6.my/audit/5e86c423-c0c4-496d-adcf-b900a40e452a>

 Non-Compliant <small>MGv6C-1.0</small>	 47% Partial Support	IPV6-ONLY READINESS Website: X Not Ready DNS: X Not Ready Email: X Not Ready
---	---	---

IPV4 ADDRESSES 110.159.246.128
--

Network Information (WHOIS / RDAP)

IPv4 Network	
Organization	UNIFI-HOME
Country	MY
ASN	AS4788
ASN Name	TTSSB-MY TM TECHNOLOGY SERVICES SDN. BHD., MY
Network (CIDR)	110.159.224.0/19

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.
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	110.159.246.128
2	HTTP over IPv4	PASS	HTTP (port 80) responds over IPv4 — 136ms TTFB.
3	HTTPS over IPv4	PASS	HTTPS (port 443) responds over IPv4 — 83ms TTFB.

Audit Trail & Evidence Record

Verification ID	5e86c423-c0c4-496d-adcf-b900a40e452a
Domain	jkr.gov.my
Check Mode	Manual
Status	Completed
Started	07 Mar 2026, 01:07:36 MYT
Finished	07 Mar 2026, 01:08:23 MYT
Test Node Profile	dual stack
Engine Version	2.0.0
MGv6C Version	1.0.0
Audit URL	https://ipv6.my6.my/audit/5e86c423-c0c4-496d-adcf-b900a40e452a

Integrity Verification

✓ INTEGRITY VERIFIED	
Algorithm	hmac-sha256-v1
Root Hash	56c33318ec905df42f3ff343353a32305483bc5fe08a3312d2249f505cdd9ab2
http_headers	80105616606509065541d15622292a1e546daf1f01615b84e78c173700ae2431
dns_responses	b5697ae537f85506183630242b56c229bcdc5296f1028fe700cfc0d8acf7b451
tls_handshake	b2a094f8ef3b2a24de7d3748aa17b4d204c76c228456087c60b70d695e4dd422
connectivity_log	9e0d66c562bf7ad04a768dccb393b51b03029ae771cd6d0e999ed47cfd4c5064
dns_resolution_times	ceb0ba625ed7084c5e29997900abe130c7b573473a1a630118e86d6f45ce1cce

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	9.31	17.2	5.97	15.03	-3.3
Google	IPv4	28.19	28.97	29.71	32.29	+1.5
Google	IPv6	27.01	28.97	29.94	43.13	+2.9
Cloudflare	IPv4	8.01	17.98	11.1	91.07	+3.1
Cloudflare	IPv6	17.95	36.91	18.9	36.13	+0.9

DNS Evidence

A

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 58018
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; AUTHORITY SECTION:
jkr.gov.my. 00051300IN0S0A0dns1.gitn.net.my. root.dns1.gitn.net.my. 2026022449 10800 3600 604800 38400
```

DS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 44223
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
jkr.gov.my. 000215600IN0DS02659 8 2 FA88967F6D85DAAE9AD4B189D8DB0589984D97D71AE8D84643A341CE 2E7157CE
jkr.gov.my. 000215600IN0DS02659 8 1 BE99807727680BEDF8E961BDAA63FA636B05F8B
```

MX

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 40305
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 5, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
jkr.gov.my. 00030000IN0MX010 alt4.aspmx.l.google.com.
jkr.gov.my. 00030000IN0MX010 alt3.aspmx.l.google.com.
jkr.gov.my. 00030000IN0MX01 aspmx.l.google.com.
jkr.gov.my. 00030000IN0MX05 alt1.aspmx.l.google.com.
jkr.gov.my. 00030000IN0MX05 alt2.aspmx.l.google.com.
```

NS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 26990
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
jkr.gov.my. 00036000IN0NS0dns2.gitn.net.my.
jkr.gov.my. 00036000IN0NS0dns1.gitn.net.my.
```

TXT

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 10204
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
jkr.gov.my. 00030000IN0TXT0"google-site-verification=w0ksh9JJvb29QibWd6Lar30XWljwq-5cLeNaBzikB8"
jkr.gov.my. 00030000IN0TXT0"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: 55869
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; AUTHORITY SECTION:
jkr.gov.my. 000155100IN0S0A0dns1.gitn.net.my. root.dns1.gitn.net.my. 2026022449 10800 3600 604800 38400
```

RRSIG

```
dns1.gitn.net.my. root.dns1.gitn.net.my. 2026022449 10800 3600 604800 38400
```

```
SOA 8 3 3600 20260405034412 20260306024412 46011 jkr.gov.my. M1eYicpvd26jIz+x7ZRpCH/WZI56cvaxnVlwQb6Qt0g4DzQR5ByKNoL5
v/rHyq8q4maWfbaVtrKFXLcjuwJdf/8yg64p4RL3kTY+F5YeLzi9cvHW D0mqvk2HsrJXuL9uo0h6aXU/oKpBu7a0yWcstFEu/dsBWPce0f0imZ9J tmg=
```

DNSKEY

```
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 7322
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
jkr.gov.my. 3600 IN DNSKEY 257 3 8 AwEAAbqwEkHNxd9uZ7p04NZUWLQA1UqkdPaA2yua+8p+q7FP9RhiRwrj PqL01BeI5u882ZxXhFicMCTdghGMEJ66037CfeF3u1o7mePIXgodBUT
+Y0ZeElBf0TTwP8z1JKR2dCgh/pnGMHCpL1H6NrF1F0bM2A2H4Sft3uM gjt6sRwwihkrKEfsGyhHVvdgQj+pxbUUKqnIcu8mqL6xtnWd5prHVo0U
VcHuG3BfrD0u8Mu987H00CY4Rv13gw5usa55VJskhzuNxq6s80SBmuaT LyGLmsk/k9TFPW7WGLmP4EQQ0sNuy+k0RMKldQomKcpv6LSTMBjnJhzV WfzVyYSIRBU=
jkr.gov.my. 3600 IN DNSKEY 256 3 8 AwEAAByBR0s1yKA1pbFmf8xdCmCgwfi4KCbWxf2vYn3y8agZhwL74dL1 VK0Dp4uR1tsz/sDXL/8h/w43Z9oz0Pgy2HPpyrDyToMmZ66PuH7ZU+T9
zhDJR16U4d0rL8xGVSpEcNd0RcXD0R3mP9gx0yyeZy/3sWQ1K3M1nxT0 0NjIe5n/
```

DNSSEC_VALIDATION

```
; fully validated
jkr.gov.my. 3600 IN SOA dns1.gitn.net.my. root.dns1.gitn.net.my. 2026022449 10800 3600 604800 38400
jkr.gov.my. 3600 IN RRSIG SOA 8 3 3600 20260405034412 20260306024412 46011 jkr.gov.my. M1eYicpvd26jIz+x7ZRpCH/WZI56cvaxnVlwQb6Qt0g4DzQR5ByKNoL5
v/rHyq8q4maWfbaVtrKFXLcjuwJdf/8yg64p4RL3kTY+F5YeLzi9cvHW D0mqvk2HsrJXuL9uo0h6aXU/oKpBu7a0yWcstFEu/dsBWPce0f0imZ9J tmg=
```


HTTP Response Evidence

IPv4 HTTP (port 80)

HTTP Status	200
Connected IP	110.159.246.128
Connect Time	39.76 ms
TTFB	122.06 ms
Total Time	122.19 ms

Response Headers:

```
{
  "0": "HTTP/1.1 302 Found",
  "1": "Date: Fri, 06 Mar 2026 09:04:37 GMT",
  "2": "Server: Apache",
  "3": "Via: 1.1 3Ps.jkr.gov.my (Access Gateway-ag-C23AB777ECEF2CDD-84514711)",
  "4": "Location: https://3Ps.jkr.gov.my/",
  "5": "Content-Type: text/html; charset=iso-8859-1",
  "7": "HTTP/1.1 200 OK",
  "8": "X-Frame-Options: SAMEORIGIN",
  "9": "X-XSS-Protection: 1; mode=block",
  "10": "X-Content-Type-Options: nosniff",
  "11": "Cache-Control: no-cache",
  "12": "Connection: close",
  "13": "Content-Type: text/html; charset=utf-8",
  "14": "Pragma: no-cache",
  "15": "Content-Length: 247"
}
```

IPv4 HTTPS (port 443)

HTTP Status	200
Connected IP	110.159.246.128
Connect Time	19.96 ms
TTFB	85.87 ms
Total Time	85.9 ms

Response Headers:

```
[
  "HTTP/1.1 200 OK",
  "X-Frame-Options: SAMEORIGIN",
  "X-XSS-Protection: 1; mode=block",
  "X-Content-Type-Options: nosniff",
  "Cache-Control: no-cache",
  "Connection: close",
  "Content-Type: text/html; charset=utf-8",
  "Pragma: no-cache",
  "Content-Length: 247"
]
```

Connectivity Test Evidence

Test	Result
TCP Connect IPv4 → port 80	302 0.020232 0.041394
TCP Connect IPv4 → port 443	200 0.021689 0.088192

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
```