

# IPv6 Readiness Report

jkr.gov.my — jkr.gov.my



Scan to verify

Category: Government • Generated: 04 Jul 2026, 23:38 MYT • Last Checked: 04 Jul 2026, 04:08 MYT • Verification ID: c7d1d76d-ca14-4094-af7d-401989d276e0

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

Audit trail: <https://ipv6.my6.my/audit/c7d1d76d-ca14-4094-af7d-401989d276e0>

<p><b>X</b></p> <p><b>Non-Compliant</b></p> <p>MGv6C-1.0</p>	<p><b>47%</b></p> <p><b>No IPv6 Support</b></p>	<p><b>IPv6-ONLY READINESS</b></p> <p>Website: <b>X Not Ready</b></p> <p>DNS: <b>X Not Ready</b></p> <p>Email: <b>X Not Ready</b></p>
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<p><b>IPv4 ADDRESSES</b></p> <p>110.159.246.128</p>
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## 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.	

#	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%) 3 / 3

#	CHECK	RESULT	DETAIL
1	<b>A Record</b>	<b>PASS</b>	110.159.246.128
2	<b>HTTP over IPv4</b>	<b>PASS</b>	HTTP (port 80) responds over IPv4 — 185ms TTFB.
3	<b>HTTPS over IPv4</b>	<b>PASS</b>	HTTPS (port 443) responds over IPv4 — 119ms TTFB.

### Audit Trail & Evidence Record

Verification ID	c7d1d76d-ca14-4094-af7d-401989d276e0
Domain	jkr.gov.my
Check Mode	Scheduled
Status	Completed
Started	04 Jul 2026, 04:06:56 MYT
Finished	04 Jul 2026, 04:08:00 MYT
Test Node Profile	dual stack
Engine Version	2.0.0
MGv6C Version	1.0.0
Audit URL	https://ipv6.my6.my/audit/c7d1d76d-ca14-4094-af7d-401989d276e0

### Integrity Verification

<p><b>✓ INTEGRITY VERIFIED</b></p>	
Algorithm	hmac-sha256-v1
Root Hash	31642b6fe6493b773042bc415fd816532c00dbcc626c91e63919d346fbb7fefb
http_headers	3fac89624240a518bc7667db3e9a5e582da10b6dfa0de2aa1869a660eb69c99a
dns_responses	c7c8284c46f0c92dc33f1380f4b9b247ab688372c63ce7745eb9bf5397cce66b
tls_handshake	b2a094f8ef3b2a24de7d3748aa17b4d204c76c228456087c60b70d695e4dd422
connectivity_log	b28481d5bebf3cf5cf130cee57b6f494335322a15168a62698d0cfc5a9142ba5
dns_resolution_times	eea039fb434239e554357411b1581480e3464e909ba1cbe82a9dac943659e73e

### 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	12.18	18.95	18.4	20.11	+6.2
Google	IPv4	17.68	23.72	28.59	42.86	+10.9
Google	IPv6	33.22	39.95	40.94	45.92	+7.7
Cloudflare	IPv4	11.48	20.95	11.23	13.08	-0.3
Cloudflare	IPv6	8.98	9.69	19.93	48.41	+11



## DNS Evidence

### A

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 36179
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
jkr.gov.my. 3600 IN SOA dns1.gitn.net.my. root.dns1.gitn.net.my. 2026062455 10800 3600 604800 38400
```

### DS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 13532
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
jkr.gov.my. 3600 IN DS 2659 8 1 BE99807727680BEDF8E961BDAAC63FA636B05F8B
jkr.gov.my. 3600 IN DS 2659 8 2 FA88967F6D85DAAE9AD4B189D8DB0589984D97D71AE8D84643A341CE 2E7157CE
```

### MX

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 13902
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 5, AUTHORITY: 0, ADDITIONAL: 1

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

### NS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 43276
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

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

### TXT

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 16713
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
jkr.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"
jkr.gov.my. 300 IN TXT "google-site-verification=w0ksh9JJvb29QibWd6Lar30XWljwq-5cLeNaBzikB8"
```

### AAAA

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 32401
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
jkr.gov.my. 3599 IN SOA dns1.gitn.net.my. root.dns1.gitn.net.my. 2026062455 10800 3600 604800 38400
```

### RRSIG

```
dns1.gitn.net.my. root.dns1.gitn.net.my. 2026062455 10800 3600 604800 38400
```

SOA 8 3 3600 20260802184238 20260703174238 46011 jkr.gov.my. TH3jjKHyaEl5qeM0shYstQYNIzXtv0pKkVpW0PeHbpa+eW5udA+apIA  
hgy6+T1crrfWYqL2QY+UU1FrnlunfyevCEnFqRd/r2EJ+TzgcGBkDAM JmAI5BX7E3ALzgxW3FGT+n55F14Uwyyw9LFAK9cUuSGY6TKLEJ7XpK+S qgo=

DNSKEY

```
;; Got answer:
;; ->HEADER<- opcode: QUERY, status: NOERROR, id: 39191
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
jkr.gov.my. 003543 IN DNSKEY 257 3 8 AwEAAbqwEkHNxd9uZ7p04NZUWLQA1UqkdPaA2yua+8p+q7FP9RhiRwrj PqL01BeI5u882ZxXhFicMCTdgkhGMEJ66037CfeF3u1o7mePIXgodBUT
+Y0ZeElBf0TTwP8z1JKR2dCgh/pnGMHCpL1H6Nrf1F0bM2A2H45ft3uM gjt6sRwwihkrKEfsGyhHVvdgQj+pxbUUKqnIcu8mqL6xtnmWd5prHVo0U
VcHuG3BfrD0u8Mu987H00CY4Rv13gw5usa55VJskhzuNxq6s80SBmuaT LyGLmsk/k9TFPW7WGLmP4EQQ0sNuy+k0RMKldQomKcPv6LSTMBjnJhzV WfzVyYSIRBU=
jkr.gov.my. 003543 IN DNSKEY 256 3 8 AwEAAByBR0s1yKA1pbFmf8xdCmCgwfi4KCbWxf2vYn3y8agZhwL74dL1 VK0Dp4uR1tsz/sDXL/8h/w43Z9oz0Pgy2HPpyrDyToMmZ66PuH7ZU+T9
zhDJR16U4d0rL8xGVSpEcNd0RcXD0R3mP9gxQyyeZy/3sWQ1K3M1nxT0 0NjIe5n/
```

DNSSEC\_VALIDATION

```
; fully validated
jkr.gov.my. 003543 IN SOA dns1.gitn.net.my. root.dns1.gitn.net.my. 2026062455 10800 3600 604800 38400
jkr.gov.my. 003543 IN RRSIG SOA 8 3 3600 20260802184238 20260703174238 46011 jkr.gov.my. TH3jjKHyaEl5qeM0shYstQYNIzXtv0pKkVpW0PeHbpa+eW5udA+apIA
hgy6+T1crrfWYqL2QY+UU1FrnlunfyevCEnFqRd/r2EJ+TzgcGBkDAM JmAI5BX7E3ALzgxW3FGT+n55F14Uwyyw9LFAK9cUuSGY6TKLEJ7XpK+S qgo=
```







## HTTP Response Evidence

### IPv4 HTTP (port 80)

HTTP Status	200
Connected IP	110.159.246.128
Connect Time	44.29 ms
TTFB	168.32 ms
Total Time	168.43 ms

#### Response Headers:

```
{
  "0": "HTTP/1.1 302 Found",
  "1": "Date: Fri, 03 Jul 2026 19:58:36 GMT",
  "2": "Server: Apache",
  "3": "Via: 1.1 3Ps.jkr.gov.my (Access Gateway-ag-C23AB777ECEF2CDD-19344997)",
  "4": "Location: https://3Ps.jkr.gov.my/",
  "5": "Content-Type: text/html; charset=iso-8859-1",
  "7": "HTTP/1.1 200 OK",
  "8": "Date: Fri, 03 Jul 2026 20:08:08 GMT",
  "9": "Expires: Thu, 19 Nov 1981 08:52:00 GMT",
  "10": "Cache-Control: no-store, no-cache, must-revalidate, post-check=0, pre-check=0",
  "11": "Pragma: no-cache",
  "12": "Content-Type: text/html; charset=UTF-8",
  "13": "Set-Cookie: PHPSESSID=9984uje43fuc4u9ik6c5fod3q1; path=/",
  "14": "Vary: Accept-Encoding",
  "15": "Cache-Control: no-store",
  "16": "Cache-Control: no-cache",
  "17": "Set-Cookie: ZNPCQ003-32393500=f6039fb9; Path=/; Domain=.jkr.gov.my",
  "18": "Via: 1.1 3Ps.jkr.gov.my (Access Gateway-ag-C23AB777ECEF2CDD-19344998)",
  "19": "Set-Cookie: TS01bb5e7e=01e5bb7bf0f7ef147b099852f7f62e9ebc8db1a4a67e8b4481f73495824d1f98faa0205c5a6c2ac5abb643504de6b6668d113382272aa9e85bfd9f13bca4caee9c75725350; Path=/",
  "20": "Set-Cookie: TS01b5eb0f=01e5bb7bf064868fabc78048f6e07ce9a032e918697e8b4481f73495824d1f98faa0205c5af07f8277ab9158630ef108425b651322f510bb27ca14f23948eba6faf5277ac9; path=/; domain=.jkr.gov.my",
  "21": "Transfer-Encoding: chunked"
}
```

### IPv4 HTTPS (port 443)

HTTP Status	200
Connected IP	110.159.246.128
Connect Time	22.29 ms
TTFB	129.81 ms
Total Time	129.86 ms

#### Response Headers:

```
[
  "HTTP/1.1 200 OK",
  "Date: Fri, 03 Jul 2026 20:08:08 GMT",
  "Expires: Thu, 19 Nov 1981 08:52:00 GMT",
  "Cache-Control: no-store, no-cache, must-revalidate, post-check=0, pre-check=0",
  "Pragma: no-cache",
  "Content-Type: text/html; charset=UTF-8",
  "Set-Cookie: PHPSESSID=m8a7frh7t2lbf5n6b96v3cuq3; path=/",
  "Vary: Accept-Encoding",
  "Cache-Control: no-store",
  "Cache-Control: no-cache",
  "Set-Cookie: ZNPCQ003-32393500=f6039fb9; Path=/; Domain=.jkr.gov.my",
  "Via: 1.1 3Ps.jkr.gov.my (Access Gateway-ag-C23AB777ECEF2CDD-19344999)",
  "Set-Cookie: TS01bb5e7e=01e5bb7bf0046b7456a70df880f74c03843d496274dd17de7a1e111deaae55ed5c3761414283bfd31d7f016588e60c8814a0ed1f89f4f068e9d68c3efe2b854d3211444f93; Path=/",
  "Set-Cookie: TS01b5eb0f=01e5bb7bf06cc9d5ff86b4e8cc9fe45f1757460747dd17de7a1e111deaae55ed5c376141424af377c0d9862cee773572e193639ba7f79adc26c83dca567e91686cb0a3863; path=/; domain=.jkr.gov.my",
  "Transfer-Encoding: chunked"
]
```

### Connectivity Test Evidence

Test	Result
TCP Connect IPv4 → port 80	302 0.020487 0.043695
TCP Connect IPv4 → port 443	200 0.020377 0.117834

### 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
```