

IPv6 Readiness Report

melaka.gov.my — melaka.gov.my

Category: Government • Generated: 20 Apr 2026, 21:23 MYT • Last Checked: 07 Mar 2026, 01:08 MYT • Verification ID: 9b5cae30-a542-46ec-9dff-f41670da33f8

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

Audit trail: <https://ipv6.my6.my/audit/9b5cae30-a542-46ec-9dff-f41670da33f8>

X Non-Compliant MGv6C-1.0	28% No IPv6 Support	IPv6-ONLY READINESS Website: X Not Ready DNS: X Not Ready Email: X Not Ready
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IPv4 ADDRESSES

1.9.133.68

Network Information (WHOIS / RDAP)

IPv4 Network	
Organization	SUK-MELAKA
Country	MY
ASN	AS4788
ASN Name	TTSSB-MY TM TECHNOLOGY SERVICES SDN. BHD., MY
Network (CIDR)	1.9.133.0/25

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%)

1 / 5

#	CHECK	RESULT	DETAIL
1	NS Has AAAA Record	FAIL	No nameserver has an AAAA record.
2	NS Reachable via IPv6	FAIL	No nameserver is reachable over IPv6.
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	ECDsap256SHA256

Email Services (25%) 3 / 6

#	CHECK	RESULT	DETAIL
1	MX Record Exists	PASS	MX record found.
2	MX Server Has IPv6	FAIL	MX server has no IPv6 address.
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%) 2 / 3

#	CHECK	RESULT	DETAIL
1	A Record	PASS	1.9.133.68
2	HTTP over IPv4	FAIL	HTTP is not accessible over IPv4.
3	HTTPS over IPv4	PASS	HTTPS (port 443) responds over IPv4 — 23ms TTFB.

Audit Trail & Evidence Record

Verification ID	9b5cae30-a542-46ec-9dff-f41670da33f8
Domain	melaka.gov.my
Check Mode	Manual
Status	Completed
Started	07 Mar 2026, 01:08:25 MYT
Finished	07 Mar 2026, 01:08:56 MYT
Test Node Profile	dual stack
Engine Version	2.0.0
MGv6C Version	1.0.0
Audit URL	https://ipv6.my6.my/audit/9b5cae30-a542-46ec-9dff-f41670da33f8

Integrity Verification

✓ INTEGRITY VERIFIED	
Algorithm	hmac-sha256-v1
Root Hash	c57a4cefc5214b0d4b412c422542036f2145b0ef55e418151160c9ac5de94772
http_headers	f1242eed0c94d3066447a4c08be70f7903c1ee18737051239b722dfa9a48b0dc
dns_responses	9860f484f3e888fc2b6e5ab9111c0f458cf18f5bc3973a97c8dc85982e5660ba
tls_handshake	a3541855fe5c97b30675a9857b81656ab502884982c3c59e1f017809460b8886
connectivity_log	5621918f739c7a05a2149adac61b1835024c4118cc72da50a8859bd0497da66e
dns_resolution_times	bebcc02913303b8f0a40ac1c6f5c8fd92337935cd44b500677204b19a004d9e3

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	17.84	19.44	8.24	17.06	-9.6
Google	IPv4	28.52	29.91	32.44	48.7	+3.9
Google	IPv6	27.16	30.84	33	48.96	+5.8
Cloudflare	IPv4	27.01	29.49	19.01	28.09	-8
Cloudflare	IPv6	7.97	8.79	23.83	38.64	+15.9

DNS Evidence

A

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 6360
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
melaka.gov.my. 3600 IN A 1.9.133.68
```

DS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 126
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
melaka.gov.my. 21600 IN DS 42504 13 2 707E61AF26525874D10CC969A5C787BD3F2558F11353FF4CF54530AA 3403CEA0
melaka.gov.my. 21600 IN DS 42504 13 1 E48324742EB9FEDAFC63BF34B6808F12FFEFB
```

MX

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 49130
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
melaka.gov.my. 3600 IN MX 10 hanglipohdrc.melaka.gov.my.
melaka.gov.my. 3600 IN MX 5 hanglipoh.melaka.gov.my.
```

NS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 7280
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
melaka.gov.my. 3600 IN NS bendahara1.melaka.gov.my.
melaka.gov.my. 3600 IN NS bendahara2.melaka.gov.my.
```

TXT

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 48175
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 3, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
melaka.gov.my. 3600 IN TXT "google-site-verification=RSKb4ayxGc6AokNz9IrwPNa7nxxI2k5WvIQXGr_IY8"
melaka.gov.my. 3600 IN TXT "v=spf1 mx ip4:203.31.38.164 -all"
melaka.gov.my. 3600 IN TXT "MS=CEFEF6D1285C0D606292AC0626FD12B96BC6D2B3"
```

AAAA

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 5545
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; AUTHORITY SECTION:
melaka.gov.my. 1800 IN SOA bendahara1.melaka.gov.my. hostmaster.melaka.gov.my. 2035843400 3600 300 1209600 3600
```

RRSIG

```
bendahara1.melaka.gov.my. hostmaster.melaka.gov.my. 2035843400 3600 300 1209600 3600
SOA 13 3 3600 20260405044943 20260306034943 1636 melaka.gov.my. TeRn/rsxeI7j1EuVT41B1dxyfFkveqNC3H+KNJCJX/Cm3RpVxED/Gw6Q GfKgVj5mw8vuVoE9EraCMf/ZIUJcYg==
```

DNSKEY

```
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 58503
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 3, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
melaka.gov.my. [3600]IN [DNSKEY]257 3 13 CV1cBu2foepRU5uXsfWdb3jlyVF8HxL4nqEJJp6pp6AGaofZfVs4Dfmb vIDMZlr1105YrLGJI7Rm9ln04djqIw==
melaka.gov.my. [3600]IN [DNSKEY]256 3 13 qX/5jXYwXrY5k+GjkjTWmXLeW3aPhzwhHF6E0n5MMxYyGMy/POpma/xY KwFhXkz9L+zMMNX6YYxkiwPZQJqJw==
melaka.gov.my. [3600]IN [DNSKEY]256 3 13 ETKztMGiWvzm+/01WXmpGayB5aUKzafEs7/a2qyVmvY/mCC6Ed732D1Q m4ko+NH5pqgvkvvFs0ErMS4tDltpIQ==
```

DNSSEC_VALIDATION

```
; fully validated
melaka.gov.my. [3600]IN [SOA]bendahara1.melaka.gov.my. hostmaster.melaka.gov.my. 2035843400 3600 300 1209600 3600
melaka.gov.my. [3600]IN [RRSIG]SOA 13 3 3600 20260405044943 20260306034943 1636 melaka.gov.my. TeRn/rsxeI7j1EuVT41B1dxyfFkveqNC3H+KNJCJX/Cm3RpVxED/Gw6Q
GfKgVj5mw8vuVoE9EraCMf/ZIUJcYg==
```



```

VAYDVR0fBE0wSzBj0EegRYZDaHR0cDovL2Nybc5zZWNoawdvLmNvbS9TZWN0awdv
UHVibGljU2VydmyQXV0aGVudGljYXRpb255b290UjQ2LmNybDcBhAYIKwYBBQUH
AQEEeDB2ME8GCCsGAQUFBzAChkNodHRwOi8vY3J0LnNlY3RpZ28uY29tL1NlY3Rp
Z290dWJsaWNTZXJ2ZXJBR0Zw50aWNoZGlvdjJ3b3RSNDYucDdjMCMGCSGAQUF
BzABhdodHRwOi8vbnZzc5zZWNoawdvLmNvbTANBgkqhkiG9w0BAQwFAAOCAGEA
Yt0C9Fy+TqECFw40IospI92klGgoSZGP0S0XMBqmsGWZUQ7rux7cj1du6d9rd6C8
ze1B2eQjkrGkIL/0F1s7vSmgYVafsRoZd/IHUrkoQvX8FZwJsmPu7amgBfaY3g+d
q1x0jNGKb6I6BzdL6LgMD9qxp+3i7GQ0nd9J8LFSietY6Z4jUBzVo0oz8iAU840F
h2HhAuiPw1ai0VnY38RTI+8kepGWVfGxfBwzWH9uIjeooIeaosVFvE8cmYUB4TSH
5dUyD0jHct2+8ceKEtIoFU/FfHq/mDaVnvcDCZxtIgitdMFQdMZAvehm0byhrDD
4NQC0gaI9AAGfj4L90tkARzhQLNyRf87Kln+YU0lgCG9HLg3rG08q+Y4pplS0d
unQZ6ZxPngIf0ApbPVf5hCe58EZwiWdHIMn9LPP6+F404y8NNugbQixBber+x536
WrZhFZLjEkhp7fFXf9r32rNPFb74X/U90Bdy4Lzp3+X1ukh1BuMxA/EEhDoT0S3L
7ABvc7BYSubQ24900cdkiZUh3ZwDrakMVrbaTxUM2p24N6d+ns2zptWCva6jzW
r8IWKIMzxLPv5Kt3ePKcUdvkBU/smqjSczTzSjIoR5QQA6lN1ZRSnuHIWCvh
JELtkYnTAH41QJ6SAW066GrrUESwN/cgZzL4JLEqz1Y=
-----END CERTIFICATE-----
2 s:C = GB, O = Sectigo Limited, CN = Sectigo Public Server Authentication Root R46
i:C = US, ST = New Jersey, L = Jersey City, O = The USERTRUST Network, CN = USERTrust RSA Certification Authority
a:PKKEY: rsaEncryption, 4096 (bit); sigalg: RSA-SHA384
v:NotBefore: Mar 22 00:00:00 2021 GMT; NotAfter: Jan 18 23:59:59 2038 GMT
-----BEGIN CERTIFICATE-----
MIIGLTCCBH2gAwIBAgIRANJ/u8HeNZ55Fq1hSVhgmcQwDQYJKoZIhvcNAQEMBQAw
gYgx CzAJBgNVBAYTALVTMRMwEQYDVQVQIEwp0ZXcgSmVyc2V5MRQwEgYDVQOHewtK
ZXJzZXkgQ2l0eTEeMBwGA1UEChMVVGVhLlFVTRVJUUVlVTVCB0ZXR3b3JrMS4wLWY0
VQ0DEyVU0VSU0VHJ1c3Q0U1NBIEIENlcnRpZmljYXRpb24gQXV0aG9yaXR5X5MB4XD0TIX
MDMyMjYwMDAwMFoXD0TMDExODIzNTk1OVowXzELMAKGA1UEBhMCR0IXGDABGbnV

```

HTTP Response Evidence

IPv4 HTTP (port 80)

HTTP Status	0
Connected IP	
Connect Time	0 ms
TTFB	0 ms
Total Time	8002.7 ms
Error	Failed to connect to melaka.gov.my port 80 after 8002 ms: Timeout was reached

IPv4 HTTPS (port 443)

HTTP Status	200
Connected IP	1.9.133.68
Connect Time	4.87 ms
TTFB	23.1 ms
Total Time	23.12 ms

Response Headers:

```
[
  "HTTP/1.1 200 OK",
  "Date: Fri, 06 Mar 2026 09:09:03 GMT",
  "Server: Apache",
  "Upgrade: h2",
  "Last-Modified: Wed, 03 Dec 2025 04:53:59 GMT",
  "ETag: \"267-6450500247fe8\"",
  "Accept-Ranges: bytes",
  "Vary: Accept-Encoding",
  "Content-Type: text/html",
  "Transfer-Encoding: chunked"
]
```

Connectivity Test Evidence

Test	Result
TCP Connect IPv4 → port 80	000 0.000000 0.000000
TCP Connect IPv4 → port 443	200 0.006903 0.031463

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
```