

IPv6 Readiness Report

kpwkm.gov.my — kpwkm.gov.my



Scan to verify

Category: Government • Generated: 13 Jun 2026, 18:40 MYT • Last Checked: 13 Jun 2026, 00:53 MYT • Verification ID: fb7aed59-b77a-4a51-acc1-5ec57febee0

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

Audit trail: <https://ipv6.my6.my/audit/fb7aed59-b77a-4a51-acc1-5ec57febee0>

<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>103.8.146.72</p>
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Network Information (WHOIS / RDAP)

IPv4 Network	
Organization	PCN
Country	MY
ASN	AS141201
ASN Name	JDN-AS-MY - Jabatan Digital Negara (JDN), MY
Network (CIDR)	103.8.146.2/31

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	103.8.146.72
2	HTTP over IPv4	PASS	HTTP (port 80) responds over IPv4 — 495ms TTFB.
3	HTTPS over IPv4	PASS	HTTPS (port 443) responds over IPv4 — 446ms TTFB.

Audit Trail & Evidence Record

Verification ID	fb7aed59-b77a-4a51-acc1-5ec57febeea0
Domain	kpwkm.gov.my
Check Mode	Scheduled
Status	Completed
Started	13 Jun 2026, 00:53:03 MYT
Finished	13 Jun 2026, 00:53:40 MYT
Test Node Profile	dual stack
Engine Version	2.0.0
MGv6C Version	1.0.0
Audit URL	https://ipv6.my6.my/audit/fb7aed59-b77a-4a51-acc1-5ec57febeea0

Integrity Verification

✓ INTEGRITY VERIFIED	
Algorithm	hmac-sha256-v1
Root Hash	13fe03c9445384d7625e98474497d82866fde028c749fd07e918f0e68b79a3e7
http_headers	89da2dfd3cd6f441b4a8ae5818c0b21f90b93e07876398939fc66c5c082b0e72
dns_responses	d9e7e693ffec2d7d164573366e9a2e9553aaca068c4ebaa9753c87db350874c9
tls_handshake	188e47ceac69aa65bcf38d01c8840e09bd7f0b6b10cfc95d34b879463b5f0534
connectivity_log	9aaa25b99085c8c947b2f49b007108cef2774068db53502b81cead99ff0e947c
dns_resolution_times	679fbd4950c5d5cb11c6e1cfeade75f5dc62d88de1f4080cd45fbb7db883734

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	18.17	21.11	22.46	23.44	+4.3
Google	IPv4	30.36	44.72	32.78	38.99	+2.4
Google	IPv6	53.31	53.77	33.69	43.22	-19.6
Cloudflare	IPv4	20.5	23.14	8.4	8.92	-12.1
Cloudflare	IPv6	22.43	73.1	28.31	575.16	+5.9

DNS Evidence

A

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 29650
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
kpwkm.gov.my. 3600 IN A 103.8.146.72
```

DS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 8372
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
kpwkm.gov.my. 3600 IN DS 65014 8 2 057173FCF68566094F2443139D86073B73AC0AC38D4A76E01F3F636C B9B12E88
kpwkm.gov.my. 3600 IN DS 65014 8 1 59D3D53974DF738F157049AA7D328F9CF42663CD
```

MX

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 11718
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 5, AUTHORITY: 0, ADDITIONAL: 1

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

NS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 24982
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
kpwkm.gov.my. 38400 IN NS dns2.gitn.net.my.
kpwkm.gov.my. 38400 IN NS dns1.gitn.net.my.
```

TXT

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 58596
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 5, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
kpwkm.gov.my. 3600 IN TXT "MS=ms63759743"
kpwkm.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"
kpwkm.gov.my. 3600 IN TXT "MS=ms23818117"
kpwkm.gov.my. 3600 IN TXT "google-site-verification=vmANLSB2sqQArHRXk1ldXWZWEHLjEkcDGguNKI64Sno"
kpwkm.gov.my. 3600 IN TXT "google-site-verification=PrKT4DPbpyTUNxjEM-wmruJqaCErMix7_foEYyLAL7A"
```

AAAA

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 39456
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
kpwkm.gov.my. 3600 IN SOA dns1.gitn.net.my. root.dns1.gitn.net.my. 2026042009 10800 3600 172800 38400
```

RRSIG

```
dns1.gitn.net.my. root.dns1.gitn.net.my. 2026042009 10800 3600 172800 38400
SOA 8 3 38400 20260712125127 20260612115127 62478 kpwkm.gov.my. f1Z8QAZRpL+r5odK/H8RKXX7/yBNaiR04t56tKev1hd2JYf82uh0dA0i
LQNP+l+rMuL2bgMiQT0sn2Q7IdUBvHrDuRGWqWPvT8ip1Z0Ay4ZzryeGq LrzrLQldkZHqNAqhoYJP2aviW6eHry2tnx+lLj+5ZbLUMGRHvcu5qGti 0R0=
```

DNSKEY

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 47000
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
;; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
kpwkm.gov.my. 38367 IN DNSKEY 256 3 8 AwEAAbpiwM/2mmyvorKqtdWIPfvAKelhR3UDATMuTuVK3WUis8rFtNCK r6rKxTfeugqhk3rv6FgsGzJKEheSHKAbiBVWnbnwY3EhLak0nyFjQZW3
/OYMfkzFKz4s0YuuoMCWeMZovZews0GCKaZ3BiQLGfavQkKfPu+luZj Ku9suQ5V
kpwkm.gov.my. 38367 IN DNSKEY 257 3 8 AwEAAAdGcyhq4b0ZK+0K5GSS1lgVYSRMMk8rPGKrPAwyUCkovP//dnVoo t8sa9H1G+U+Z2gYk66mjG8DNIcm/zG9Ns879/JkV8fVo0lVoMvd4j6TB
KSGAbWPmyGrpEhcdUwKT5eQhBf9DSAAeEeNx8l00bKrIMXuQbPJTixqaT y00pTIbofLAusBXiNiLUjoXT9fHnvDoQB4TlYrCYexePorYEui/bTU
NpDxz2xpsfMr+QU4h73FfQckw+k/WvDozXsu2Zx2k67aW+FvAVTkeW2 lw0JSB4MK+u0xbgbvzoADGB+mQi8hSAPK9aELJyIJKDnDinh22ZL79f kqsn5CUQP18=
```

DNSSEC_VALIDATION

```
; fully validated
kpwkm.gov.my. 38367 IN SOA dns1.gitn.net.my. root.dns1.gitn.net.my. 2026042009 10800 3600 172800 38400
kpwkm.gov.my. 38367 IN RRSIG SOA 8 3 38400 20260712125127 20260612115127 62478 kpwkm.gov.my. f1Z8QAZRpL+r5odK/H8RKXX7/yBNaiR04t56tKev1hd2JYf82uh0dA0i
LQNP+l+rMuL2bgMiQT0sn2Q7IdUBvHrDuRGWqWPvT8ip1Z0Ay4ZzryeGq LrzrLQldkZHqNAqhoYJP2aviW6eHry2tnx+lLj+5ZbLUMGRHvcu5qGti 0R0=
```



```

MIICzCCAZGgAwIBAgISEdK7ujNu1LzmJGjFDYQdm0hDMAoGCCqGSM49BAMDMEYx
CzAJBgNVBAYTAKJFMRkwFwYDVQQKEXBHbG9iYwxtaWduIG52LXNhMRwwGgYDVQQD
EXNhbg9iYwxtaWduIFJvb3QgRTQ2MB4XDTE5MDMyMDAwMDAwMFoXDTQ2MDMyMDAw
MDAwMFowRjELMAKGA1UEBhMCQkUGTAXBgNVBAAoTEEdsb2JhbFNPZ24gbnYtc2Ex
HDAaBgNVBAMTE0dsb2JhbFNPZ24gUm9vdCBFNdydja0BgcqhkjOPQIBBggqQQAA
IqNiAAScDrHPT+ieUndINPqLRqetMhkytAepJ8qUuwzSChDH2omwLwxwEwkBjtjq
R+q+soArzfwoDdusvKSGN+lwCAB16pMley5SnCNoIwZD7JIvU4Tb+0cUB+hfLGdd
yXqBPCCjQjBAMA4GA1UdDwEB/wQEAwIBhjAPBgNVHRMBAf8EBTADAQH/MB0GA1Ud
DgQWBBOxCpCptsad0kRLgLWi5h+xEk8bLTAKBggqhkjOPQDAwNoADB1AJEA31S0
7Zvvi5QCkxeCmb6zniz2C5GMn0oUsfZkvLtoURMMA/cVi4RguYv/Uo7njLwcaJ8
+RHUjE7AwHCFUyqqx0LMV87H0IA\0Qx5v5zLi/altP+CAezNIm8BZ/3Hobui3A=
-----END CERTIFICATE-----
---
Server certificate
subject=C = MY, ST = Putrajaya, L = Putrajaya, O = "KEMENTERIAN PEMBANGUNAN WANITA, KELUARGA DAN MASYARAKAT", CN = *.kpwkm.gov.my
issuer=C = BE, O = GlobalSign nv-sa, CN = GlobalSign ECC OV SSL CA 2018
---
No client certificate CA names sent
Peer signing digest: SHA384
Peer signature type: ECDSA
Server Temp Key: X25519, 253 bits
---
SSL handshake has read 3096 bytes and written 378 bytes
Verification: OK
---
New, TLSv1.3, Cipher is TLS_AES_128_GCM_SHA256
Server public key is 384 bit

```

HTTP Response Evidence

IPv4 HTTP (port 80)

HTTP Status	200
Connected IP	103.8.146.72
Connect Time	24.89 ms
TTFB	418.78 ms
Total Time	418.92 ms

Response Headers:

```
{
  "0": "HTTP/1.1 308 Permanent Redirect",
  "1": "Connection: close",
  "2": "Location: https://kpwkm.gov.my/",
  "3": "Server: Caddy",
  "4": "Date: Fri, 12 Jun 2026 16:53:38 GMT",
  "6": "HTTP/2 200",
  "7": "alt-svc: h3=\":443\": ma=2592000",
  "8": "content-security-policy: default-src 'self'; script-src 'self' 'unsafe-inline' 'unsafe-eval' blob: *; img-src 'self' data: *; style-src 'self' 'unsafe-inline' *; connect-src 'self' *; font-src 'self' data: *; frame-src 'self' *; object-src 'none'; media-src 'self' *",
  "9": "content-type: text/html; charset=UTF-8",
  "10": "permissions-policy: geolocation=(),midi=(),sync-xhr=(),microphone=(),camera=(),magnetometer=(),gyroscope=(),fullscreen=(self),payment=()",
  "11": "set-cookie:
_csrf=53c49b99adf08c778d85db1449b11ba6ecb44248b303c0e0d18e9d8078b23103a%3A2%3A%7B%3A0%3B%3A5%3A%22_csrf%22%3B%3A1%3B%3A32%3A%223Hg3ChXoaTs8PUKURPPLvMjauExNwCVZ%22%3B%7D; path=/; secure; HttpOnly; SameSite=Lax",
  "12": "strict-transport-security: max-age=63072000; includeSubDomains; preload",
  "13": "via: 0.0 Caddy",
  "14": "x-content-type-options: nosniff",
  "15": "x-frame-options: ALLOW FROM https://ai-chatbot.dynaweb4.work",
  "16": "x-xss-protection: 1; mode=block",
  "17": "date: Fri, 12 Jun 2026 16:53:38 GMT"
}
```

IPv4 HTTPS (port 443)

HTTP Status	200
Connected IP	103.8.146.72
Connect Time	14.56 ms
TTFB	468.34 ms
Total Time	468.38 ms

Response Headers:

```
[
  "HTTP/2 200",
  "alt-svc: h3=\":443\": ma=2592000",
  "content-security-policy: default-src 'self'; script-src 'self' 'unsafe-inline' 'unsafe-eval' blob: *; img-src 'self' data: *; style-src 'self' 'unsafe-inline' *; connect-src 'self' *; font-src 'self' data: *; frame-src 'self' *; object-src 'none'; media-src 'self' *",
  "content-type: text/html; charset=UTF-8",
  "permissions-policy: geolocation=(),midi=(),sync-xhr=(),microphone=(),camera=(),magnetometer=(),gyroscope=(),fullscreen=(self),payment=()",
  "set-cookie: _csrf=ec6cfae1aab339f951dfd5bf28c210b8ad11449bc3f606b4d690b47e8267bb7da%3A2%3A%7B%3A0%3B%3A5%3A%22_csrf%22%3B%3A1%3B%3A32%3A%22KbqVLLbgSon6zgN-MPkkh853dhsr_KTh%22%3B%7D; path=/; secure; HttpOnly; SameSite=Lax",
  "strict-transport-security: max-age=63072000; includeSubDomains; preload",
  "via: 0.0 Caddy",
  "x-content-type-options: nosniff",
  "x-frame-options: ALLOW FROM https://ai-chatbot.dynaweb4.work",
  "x-xss-protection: 1; mode=block",
  "date: Fri, 12 Jun 2026 16:53:39 GMT"
]
```

Connectivity Test Evidence

Test	Result
TCP Connect IPv4 → port 80	308 0.011381 0.021827
TCP Connect IPv4 → port 443	200 0.015080 0.471492

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
```