


IPv6 Readiness Report

jpm.gov.my — jpm.gov.my

Category: Government • Generated: 21 Apr 2026, 19:12 MYT • Last Checked: 07 Mar 2026, 01:05 MYT • Verification ID: 72af51fc-7b72-4379-93e7-499b192bbb14

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

Audit trail: <https://ipv6.my6.my/audit/72af51fc-7b72-4379-93e7-499b192bbb14>

 Non-Compliant <small>MGv6C-1.0</small>	52% Partial Support	IPV6-ONLY READINESS Website: ✗ Not Ready DNS: ✓ Ready Email: ✗ Not Ready
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IPV4 ADDRESSES 163.53.152.33
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Network Information (WHOIS / RDAP)

IPv4 Network	
Organization	GITN Sdn Bhd
Country	MY
ASN	AS17564
ASN Name	GITN-PCN-AS-AP GITN M Sdn. Bhd., MY
Network (CIDR)	163.53.152.0/22

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.
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	163.53.152.33
2	HTTP over IPv4	PASS	HTTP (port 80) responds over IPv4 — 1057ms TTFB.
3	HTTPS over IPv4	PASS	HTTPS (port 443) responds over IPv4 — 994ms TTFB.

Audit Trail & Evidence Record

Verification ID	72af51fc-7b72-4379-93e7-499b192bbb14
Domain	jpm.gov.my
Check Mode	Manual
Status	Completed
Started	07 Mar 2026, 01:04:37 MYT
Finished	07 Mar 2026, 01:05:12 MYT
Test Node Profile	dual stack
Engine Version	2.0.0
MGv6C Version	1.0.0
Audit URL	https://ipv6.my6.my/audit/72af51fc-7b72-4379-93e7-499b192bbb14

Integrity Verification

✓ INTEGRITY VERIFIED	
Algorithm	hmac-sha256-v1
Root Hash	0c1a2ae72ab85aa83ed4021a4f8280f9b939521fc2d1ad7e8079431126c2076a
http_headers	2c1b3b173c48448629d95859f3345b8f32e8099ede4cb1316f444c71e8122557
dns_responses	82c55fdeeed0d3bb4fe6ea6905329edd2549279e5c6692b3b283afcdfef6e97c4
tls_handshake	2ddb9e29bfb191a4864e862c6b1869e02579c12dafb006e045f23a3cb1723347
connectivity_log	882302ca9f26ded580d740c6c18b5872fe2a9035128c2bb400a10757530044b6
dns_resolution_times	9484563eb84bd26f7b6654f69d458f36a9974be2c0ea1c922a56d1b40aed2e00

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	6.85	6.89	20.16	25.1	+13.3
Google	IPv4	26	27.16	40.76	47.02	+14.8
Google	IPv6	31.92	43.06	31.45	38.01	-0.5
Cloudflare	IPv4	9.95	20.73	9.02	16.96	-0.9
Cloudflare	IPv6	17.18	17.96	25.97	29.95	+8.8

DNS Evidence

A

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 52544
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
jpm.gov.my. 00206910IN0A0163.53.152.33
```

DS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 401
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
jpm.gov.my. 00215770IN0DS045397 8 2 DFFB76262F77605E4F472844377A199AC6DBC9977FA3A06C74E14E02 7761104C
jpm.gov.my. 00215770IN0DS045397 8 1 6DF2CD12E570CE94210627155D1D2916CF721169
```

MX

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 60735
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 5, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
jpm.gov.my. 003000IN0MX010 alt4.aspmx.l.google.com.
jpm.gov.my. 003000IN0MX05 alt1.aspmx.l.google.com.
jpm.gov.my. 003000IN0MX05 alt2.aspmx.l.google.com.
jpm.gov.my. 003000IN0MX01 aspmx.l.google.com.
jpm.gov.my. 003000IN0MX010 alt3.aspmx.l.google.com.
```

NS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 5867
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
jpm.gov.my. 00216000IN0NS0dns1.gitn.net.my.
jpm.gov.my. 00216000IN0NS0dns2.gitn.net.my.
```

TXT

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 56254
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 5, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
jpm.gov.my. 0036000IN0TXT0"google-site-verification=8XdYmNxKC7W-HprL0irtuXLJ01GZG7D11jZ_2YamE8M"
jpm.gov.my. 0036000IN0TXT0"v=spf1 ip4:103.8.147.121/32 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"
jpm.gov.my. 0036000IN0TXT0"_globalsign-domain-verification=6k3A3Dc_NUc4z9DZH0qz1hUENGg6XKFXyRSGoP5VcK"
jpm.gov.my. 0036000IN0TXT0"google-site-verification=glxtToE_vHGVGvGNpRy86PbLsYyNteucfRDYDGiHxk"
jpm.gov.my. 0036000IN0TXT0"MS=F003800D590FF3AC5DE1A9A94649106908FDE7A1"
```

AAAA

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 21917
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; AUTHORITY SECTION:
jpm.gov.my. 0018000IN0S0A0dns1.gitn.net.my. root.dns1.gitn.net.my. 2026022767 10800 3600 604800 38400
```

RRSIG

```
dns1.gitn.net.my. root.dns1.gitn.net.my. 2026022767 10800 3600 604800 38400
SOA 8 3 38400 20260404222934 20260305212934 58173 jpm.gov.my. PM+mhGmZzFkjn0qXVbA0gDpdE9Elf5ukQDkBrJPtvCZtUuEzpXBi3Toa
Qfwb2lo5v5Tr5B94xHLoGZLMqez1jn0dmNkjdXGaadlc/U5v+m0Dvs80 g7MpzSjijb3gKoYxtKC4QLhLlyQe03zwwqDYIfewYNxAj0Jc6h592Izu 8+k=
```

DNSKEY

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 3632
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
;; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
jpm.gov.my. 21600 IN DNSKEY 257 3 8 AwEAAZqvK6mwPZIbl22uC1b8RdtpJw+6HiaG8zPzr1AQHF+KpEgJpkMt rDrs0j9TwVdtA+eXB2TXq8fgC2AaBroeS/PyC25D3QNNXq4pIDuPoFAL
xh9IERTgLB0d8SdvvMso0szMMcZid6BpMDRYCxJitf2GGcQd0d4M6q+H dI3ZC03VzV1fbKMqHbf2Hfxb/TFjgR9ohNs+9s2t2QW7oodoHvypSCBJ
GtKBZmke5SxH0ho1ySLRfU2Kd5SzF/IMeLZLVFgCCp18/Urcksker7f hmNekuW+2kE0HSUJ2Mx2/neb3UmyraLhdNf9hHntIXrjkbTSZaqm/Xc N/eNy3mDZtk=
jpm.gov.my. 21600 IN DNSKEY 256 3 8 AwEAAByHSImfk/8xMH6WhiGuICQLKdqway4wPgEGArFsbE2ThroTeTr6 VbGNfI+M6CRbndqBHArnzt/190ZLTbLgHkGduwRJM4ePTVgsqNasTuNS
jZ7mfTfoJ3r0+FxwU+QftjfE2L9aYLWjbaYxi12qh3/md6w5PY/k2V2g ZIHsw0Rn
```

DNSSEC_VALIDATION

```
; fully validated
jpm.gov.my. 21577 IN SOA dns1.gitn.net.my. root.dns1.gitn.net.my. 2026022767 10800 3600 604800 38400
jpm.gov.my. 21577 IN RRSIG SOA 8 3 38400 20260404222934 20260305212934 58173 jpm.gov.my. PM+mhGmZzFkjn0qXVbA0gDpdE9Elf5ukQDkBrJPtvCZtUuEzpXBi3Toa
Qfwb2lo5v5Tr5B94xHLoGZLMqez1jn0dmNkjdXGaadlc/U5v+m0Dvs80 g7MpzSjijb3gKoYxtKC4QLhLlyQe03zwwqDYIfewYNxAj0Jc6h592Izu 8+k=
```



```

Protocol : TLSv1.2
Cipher   : ECDHE-RSA-AES256-GCM-SHA384
Session-ID: 25657CD7700BD9D274FDA9F81C2B0A43FC9C72622F43DA4CF6A2F19E65D16D004
Session-ID-ctx:
Master-Key: 0443226C897823001195C4D591057EA8787F7698B49F841266D777D7A398D9A95F488C899D7D85063F819A501197723D
PSK identity: None
PSK identity hint: None
SRP username: None
TLS session ticket lifetime hint: 7200 (seconds)
TLS session ticket:
0000 - 6d 66 ab d9 b7 ba 7e 8b-39 9b 2b 19 3a bb 10 2f mf...~.9.+.:./
0010 - b1 55 4b c5 cf ee ef 4d-c7 b6 20 1e 96 e0 3e 6e .UK...M.. ...>n
0020 - 2e 1c 96 bd b2 f5 09 8e-97 7f 4f e7 31 f8 90 36 .....0.1..6
0030 - 77 44 08 e1 8d 60 e1 30-41 24 65 01 5a f4 da 4b wD...`0A$e.Z..K
0040 - 37 7b 8c d6 10 89 97 6d-7b 25 4b c5 47 ac 4e 3b 7{....m{%K.G.N;
0050 - 37 1d 47 5e f9 18 62 ef-9d a7 d3 be cd 10 e7 b6 7.G^..b.....
0060 - 42 a9 62 94 75 d8 e3 3f-a4 eb d7 01 1a 6c 2c 00 B.b.u..?.....l,.
0070 - 72 cf 32 14 40 11 15 c2-f5 15 85 86 38 29 4c d3 r.2.@.....8)L.
0080 - 54 e4 fe 54 f4 c2 4e ee-79 e0 22 08 3f d8 26 f5 T..T..N.y".?.&.
0090 - 12 e3 2f b7 f0 a8 b1 f1-b0 d1 41 55 49 bb 09 b9 ./.....AUI...
00a0 - e0 c6 04 17 2a 83 cd 24-f3 a1 59 ec 96 12 06 b9 ....*..$.Y.....
00b0 - 33 f5 78 7f a4 85 b6 29-00 fa 08 21 80 7a c3 2a 3.x.....)!!!.z.*

Start Time: 1772787908
Timeout : 7200 (sec)
Verify return code: 21 (unable to verify the first certificate)
Extended master secret: yes

```


HTTP Response Evidence

IPv4 HTTP (port 80)

HTTP Status	200
Connected IP	163.53.152.33
Connect Time	9.96 ms
TTFB	1073.9 ms
Total Time	1074.01 ms

Response Headers:

```
{
  "0": "HTTP/1.1 301 Moved Permanently",
  "1": "Location: https://jpm.gov.my:443/",
  "2": "Content-Length: 98",
  "3": "Content-Type: text/html",
  "5": "HTTP/2 301",
  "6": "server: nginx",
  "7": "date: Fri, 06 Mar 2026 09:05:09 GMT",
  "8": "content-type: text/html; charset=utf-8",
  "9": "set-cookie: 4d203aafa7c7cf48308dd3e84a143cd5=ceto9ae49rlg7elglvrrorsflb; path=/; HttpOnly",
  "10": "x-frame-options: SAMEORIGIN",
  "11": "referrer-policy: strict-origin-when-cross-origin",
  "12": "cross-origin-opener-policy: same-origin",
  "13": "expires: Wed, 17 Aug 2005 00:00:00 GMT",
  "14": "last-modified: Fri, 06 Mar 2026 09:05:09 GMT",
  "15": "cache-control: no-store, no-cache, must-revalidate, post-check=0, pre-check=0",
  "16": "location: https://jpm.gov.my/ms/",
  "17": "pragma: no-cache",
  "18": "strict-transport-security: max-age=63072000; includeSubdomains",
  "19": "x-frame-options: SAMEORIGIN",
  "20": "x-content-type-options: nosniff",
  "21": "set-cookie: cookiesession1=678B2885319159AD5802C36C5E813565;Expires=Sat, 06 Mar 2027 09:05:09 GMT;Path=/;HttpOnly",
  "23": "HTTP/2 200",
  "24": "server: nginx",
  "25": "date: Fri, 06 Mar 2026 09:05:10 GMT",
  "26": "content-type: text/html; charset=utf-8",
  "27": "vary: Accept-Encoding",
  "28": "set-cookie: 4d203aafa7c7cf48308dd3e84a143cd5=5dbk1o1cjosn70oi4nb8g4bo2u; path=/; HttpOnly",
  "29": "x-frame-options: SAMEORIGIN",
  "30": "referrer-policy: strict-origin-when-cross-origin",
  "31": "cross-origin-opener-policy: same-origin",
  "32": "expires: Wed, 17 Aug 2005 00:00:00 GMT",
  "33": "last-modified: Fri, 06 Mar 2026 09:05:10 GMT",
  "34": "cache-control: no-store, no-cache, must-revalidate, post-check=0, pre-check=0",
  "35": "pragma: no-cache",
  "36": "strict-transport-security: max-age=63072000; includeSubdomains",
  "37": "x-frame-options: SAMEORIGIN",
  "38": "x-content-type-options: nosniff"
}
```

IPv4 HTTPS (port 443)

HTTP Status	200
Connected IP	163.53.152.33
Connect Time	4.44 ms
TTFB	870.76 ms
Total Time	870.85 ms

Response Headers:

```
{
  "0": "HTTP/2 301",
  "1": "server: nginx",
  "2": "date: Fri, 06 Mar 2026 09:05:11 GMT",
  "3": "content-type: text/html; charset=utf-8",
  "4": "set-cookie: 4d203aafa7c7cf48308dd3e84a143cd5=0im8vvvdj0sp2pu60elmm8490m; path=/; HttpOnly",
  "5": "x-frame-options: SAMEORIGIN",
  "6": "referrer-policy: strict-origin-when-cross-origin",
  "7": "cross-origin-opener-policy: same-origin",
  "8": "expires: Wed, 17 Aug 2005 00:00:00 GMT",
  "9": "last-modified: Fri, 06 Mar 2026 09:05:11 GMT",
  "10": "cache-control: no-store, no-cache, must-revalidate, post-check=0, pre-check=0",
}
```

```

"11": "location: https://jpm.gov.my/ms/",
"12": "pragma: no-cache",
"13": "strict-transport-security: max-age=63072000; includeSubdomains",
"14": "x-frame-options: SAMEORIGIN",
"15": "x-content-type-options: nosniff",
"16": "set-cookie: cookiesession1=678B28850BC7067F703E6903038170B4;Expires=Sat, 06 Mar 2027 09:05:11 GMT;Path=/;HttpOnly",
"18": "HTTP/2 200",
"19": "server: nginx",
"20": "date: Fri, 06 Mar 2026 09:05:12 GMT",
"21": "content-type: text/html; charset=utf-8",
"22": "vary: Accept-Encoding",
"23": "set-cookie: 4d203aafa7c7cf48308dd3e84a143cd5=0om3pk0hndds3v25j45403h6a9; path=/; HttpOnly",
"24": "x-frame-options: SAMEORIGIN",
"25": "referrer-policy: strict-origin-when-cross-origin",
"26": "cross-origin-opener-policy: same-origin",
"27": "expires: Wed, 17 Aug 2005 00:00:00 GMT",
"28": "last-modified: Fri, 06 Mar 2026 09:05:12 GMT",
"29": "cache-control: no-store, no-cache, must-revalidate, post-check=0, pre-check=0",
"30": "pragma: no-cache",
"31": "strict-transport-security: max-age=63072000; includeSubdomains",
"32": "x-frame-options: SAMEORIGIN",
"33": "x-content-type-options: nosniff"
}
    
```

Connectivity Test Evidence

Test	Result
TCP Connect IPv4 → port 80	301 0.008761 0.014996
TCP Connect IPv4 → port 443	000 0.004923 0.000000

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
    
```