IPv6 Readiness Report

ambilan.mypolycc.edu.my — ambilan.mypolycc.edu.my

Scan to verify

Category: Education • Generated: 02 Nov 2026, 03:49 MYT • Last Checked: 08 Aug 2026, 18:17 MYT • Verification ID: 2105eefa-faef-4ac1-97a5-1724aa5d4e97
Report generated from National IPv6 Readiness Monitor — https://ipv6.my6.my
Audit trail: https://ipv6.my6.my/audit/2105eefa-faef-4ac1-97a5-1724aa5d4e97

✗
Non-Compliant
MGv6C-1.0

15%
No IPv6 Support

IPV6-ONLY READINESS
Website: ✗ **Not Ready**
DNS: ✗ **Not Ready**
Email: ✗ **Not Ready**

IPV4 ADDRESSES
`103.42.206.181`

Network Information (WHOIS / RDAP)

	IPv4 Network
Organization	MAMPU_PDSA2
Country	MY
ASN	AS141201
ASN Name	JDN-AS-MY - Jabatan Digital Negara (JDN), MY
Network (CIDR)	103.42.206.240/29

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%) — 0 / 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**	FAIL	DNSSEC validation failed or zone is unsigned.
5	**Reverse DNS (PTR)**	FAIL	No PTR record found.
6	**DS Record at Parent**	FAIL	No DS record at parent.
7	**RRSIG Valid**	FAIL	No valid RRSIG found.

#	CHECK	RESULT	DETAIL
8	**Signing Algorithm**	INFO	No DNSKEY record found.

Email Services (25%) — 0 / 6

#	CHECK	RESULT	DETAIL
1	**MX Record Exists**	FAIL	No MX record found in DNS.
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**	FAIL	No SPF record found.
6	**DKIM Selector**	INFO	No common DKIM selector found.
7	**DMARC Record**	FAIL	No DMARC record found.

IPv4 Baseline (15%) — 3 / 3

#	CHECK	RESULT	DETAIL
1	**A Record**	PASS	103.42.206.181
2	**HTTP over IPv4**	PASS	HTTP (port 80) responds over IPv4 — 38ms TTFB.
3	**HTTPS over IPv4**	PASS	HTTPS (port 443) responds over IPv4 — 35ms TTFB.

Audit Trail & Evidence Record

Verification ID	2105eefa-faef-4ac1-97a5-1724aa5d4e97
Domain	ambilan.mypolycc.edu.my
Check Mode	Manual
Status	Completed
Started	08 Aug 2026, 18:17:11 MYT
Finished	08 Aug 2026, 18:17:14 MYT
Test Node Profile	dual stack
Engine Version	2.0.0
MGv6C Version	1.0.0
Audit URL	https://ipv6.my6.my/audit/2105eefa-faef-4ac1-97a5-1724aa5d4e97

Integrity Verification

✓ **INTEGRITY VERIFIED**

Algorithm	hmac-sha256-v1
Root Hash	f70c06a91158b2ca2315ea6af135a7e13132e2f54100bee57084b5106f887288
http_headers	c9db0f0714f2c014de80370fc65221bc94cccc6c32805aeaead27be176034cfb
dns_responses	7258926db4839a3f7d31a2a2da3c35b0d95673d690f849d0efd35400884e454b
tls_handshake	c593fe47272d14202f78c94674aea4409b7e9e9abf90a294878566e3a2fdeb5c
connectivity_log	3064d30f519672b86bfc8db4685c7d7fe8c2da628d977bb45750672b3e62d1fd
dns_resolution_times	d564d5895d801f437bade78ee5e37c3a40d091191fba205b894ded3a63893af5

Test Node Identity

Os	Linux srv1440888 6.8.0-136-generic #136-Ubuntu SMP PREEMPT_DYNAMIC Wed Jul 1 21:53:05 UTC 2026 x86_64
Hostname	srv1440888
Php Version	8.3.33
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	25.9	32.76	22.32	22.67	-3.6
Google	IPv4	45.4	166.35	40.65	168.65	-4.8
Google	IPv6	88.52	155.48	40.7	160.36	-47.8
Cloudflare	IPv4	24.31	26.66	25.33	33.57	+1
Cloudflare	IPv6	31.89	54.66	23.14	32.98	-8.8

DNS Evidence

A

```
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 19339
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
ambilan.mypolycc.edu.my. 14399 IN A 103.42.206.181
```

DS

```
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 59876
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
mypolycc.edu.my. 3599 IN SOA ns1.mypolycc.edu.my. admin.dnsvault.net. 2604270001 10800 3600 604800 86400
```

MX

```
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 46376
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
mypolycc.edu.my. 3599 IN SOA ns1.mypolycc.edu.my. admin.dnsvault.net. 2604270001 10800 3600 604800 86400
```

NS

```
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 55127
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
mypolycc.edu.my. 3599 IN SOA ns1.mypolycc.edu.my. admin.dnsvault.net. 2604270001 10800 3600 604800 86400
```

TXT

```
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 34334
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
mypolycc.edu.my. 3599 IN SOA ns1.mypolycc.edu.my. admin.dnsvault.net. 2604270001 10800 3600 604800 86400
```

AAAA

```
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 2253
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
mypolycc.edu.my. 3599 IN SOA ns1.mypolycc.edu.my. admin.dnsvault.net. 2604270001 10800 3600 604800 86400
```

RRSIG

```

```

DNSKEY

```
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 19601
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1
```

```
;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
mypolycc.edu.my.□3599□IN□SOA□ns1.mypolycc.edu.my. admin.dnsvault.net. 2604270001 10800 3600 604800 86400
```

DNSSEC_VALIDATION

```
;; resolution failed: ncache nxrrset
; negative response, unsigned answer
; ambilan.mypolycc.edu.my. 3599□IN□\-SOA□;-$NXRRSET
; mypolycc.edu.my. SOA ns1.mypolycc.edu.my. admin.dnsvault.net. 2604270001 10800 3600 604800 86400
```

TLS Handshake Evidence

IPV4 Connection

IP Used	103.42.206.181
IP Version	4

```
depth=2 OU = GlobalSign ECC Root CA - R5, O = GlobalSign, CN = GlobalSign
verify return:1
depth=1 C = BE, O = GlobalSign nv-sa, CN = GlobalSign ECC OV SSL CA 2018
verify return:1
depth=0 C = MY, ST = PUTRAJAYA, L = PUTRAJAYA, O = JABATAN PENDIDIKAN POLITEKNIK DAN KOLEJ KOMUNITI, CN = *.mypolycc.edu.my
verify return:1
CONNECTED(00000010)
---
Certificate chain
 0 s:C = MY, ST = PUTRAJAYA, L = PUTRAJAYA, O = JABATAN PENDIDIKAN POLITEKNIK DAN KOLEJ KOMUNITI, CN = *.mypolycc.edu.my
   i:C = BE, O = GlobalSign nv-sa, CN = GlobalSign ECC OV SSL CA 2018
   a:PKEY: id-ecPublicKey, 384 (bit); sigalg: ecdsa-with-SHA384
   v:NotBefore: Apr 24 02:46:23 2026 GMT; NotAfter: Nov  9 02:46:23 2026 GMT
-----BEGIN CERTIFICATE-----
MIIFMTCCBLegAwIBAgIMSS2BxcpWPsZee6F7MAoGCCqGSM49BAMDMFAxCzAJBgNV
BAYTAkJFMRkwFwYDVQQKExBHbG9iYWxTaWduIG52LXNhMSYwJAYDVQQDEx1HbG9i
YWxTaWduIEVDQyBPViBTU0wgQ0EgMjAxODAeFw0yNjA0MjQwMjQ2MjNaFw0yNjEx
MDkwMjQ2MjNaMIGMMQswCQYDVQQGEwJNWTESMBAGA1UECBMJUFVUUkFKQVlBMRIw
EAYDVQQHEwlQVVRSQUpBWUExOTA3BgNVBAoTMEpBQkFUQU4gUEVORElESUtBTiBQ
T0xJVEVLTklLIERBTiBLT0xFSiBLT01VTklUSTEaMBgGA1UEAwwRKi5teXBvbHlj
Yy5lZHUubXkwdjAQBgcqhkjOPQIBBgUrgQQAIgNiAARvUuHMYKe+YQ5YztXiblQz
ltY3GAimwn8CHY0/kjin43gjgBqN0ap28gpfN9lJkUD/XNV6EYAEKS59FBtZvMoT
1aqOPhcw9bDIQIV5bhGCFXq4QwNE5vbt12vY7yN6HrKjggMbMIIDFzAOBgNVHQ8B
Af8EBAMCB4AwDAYDVR0TAQH/BAIwADCBjgYIKwYBBQUHAQEEgYEwfzBEBggrBgEF
BQcwAoY4aHR0cDovL3NlY3VyZS5nbG9iYWxzaWduLmNvbS9jYWNlcnQvZ3NlY2Nv
dnNzbGNhMjAxOC5jcnQwNwYIKwYBBQUHMAGGK2h0dHA6Ly9vY3NwLmdsb2JhbHNp
Z24uY29tL2dzZWNjb3Zzc2xjYTIwMTgwVgYDVR0gBE8wTTBBBgkrBgEEAaAyARQw
NDAyBggrBgEFBQcCARYmaHR0cHM6Ly93d3cuZ2xvYmFsc2lnbi5jb20vcmVwb3Np
dG9yeS8wCAYGZ4EMAQICMC0GA1UdEQQmMCSCESoubXlwb2x5Y2MuZWR1Lm15gg9t
eXBvbHljYy5lZHUubXkwHQYDVR0lBBYwFAYIKwYBBQUHAwEGCCsGAQUFBwMCMB8G
A1UdIwQYMBaAFFh7jnUq/mGAqpBAAa7W6AdGbj9IMB0GA1UdDgQWBBTHBBkQU6Jg
bsHfxxMSIRdlEJufuDCCAX4GCisGAQQB1nkCBAIEggFuBIIBagFoAHUAyzj3FYl8
hKFEX1vB3fvJbvKaWc1HCmkFhbDLFMMUWOcAAAGdvWGkJQAABAMARjBEAiAjginR
8N0Bpw4XMi3pIpjRsJayiO2UHxQU1jQ+euP8DgIgem5MG23z3nwfqScvly26UTcv
HpzY/xRBW0nhrJiY+wgAdwCvZ4g7V7BO3Y+m2X72LqjrgQrHcWDwJF5V1gwv54WH
OgAAAZ29YaUIAAAEAwBIMEYCIQDrZPwmuZoTvTzz75JbJAJjr2ws7kW82HIpvb1K
8WvlTAIhAOeGAYNjfqDLhInLczYkDDBVSF+2U45GCsLkz0hv6DbBAHYAwjF+V0UZ
o0XufzjespBB68fCIVoiv3/Vta12mtkOUs0AAAGdvWGltgAABAMARzBFAiBaZl1L
bItSe6RH/NuKchDRPhNkUhaj5NQbvheVEcXJ3AIhAMU0QdPxFg2DO0U6JTrCT4aR
A20bbQg99PrAlixbbcOjMAoGCCqGSM49BAMDA2gAMGUCMD5mj6REw6o/YePLOEjo
TOaUPKoQrnlEGFvnhZsb0/R/Jx2h2hE1wOpA5BUUkmxjdgIxAMQtujpUy8fSSH1f
r9yPkPLUtZOXRn21Wj/d4A72lRT17DlleWPEojGtmUKzaEHl9A==
-----END CERTIFICATE-----
 1 s:C = BE, O = GlobalSign nv-sa, CN = GlobalSign ECC OV SSL CA 2018
   i:OU = GlobalSign ECC Root CA - R5, O = GlobalSign, CN = GlobalSign
   a:PKEY: id-ecPublicKey, 384 (bit); sigalg: ecdsa-with-SHA384
   v:NotBefore: Nov 21 00:00:00 2018 GMT; NotAfter: Nov 21 00:00:00 2028 GMT
-----BEGIN CERTIFICATE-----
MIIDAjCCAomgAwIBAgINAe5fIpVCSQX5AZGo3DAKBggqhkjOPQQDAzBQMSQwIgYD
VQQLExtHbG9iYWxTaWduIEVDQyBSb290IENBIC0gUjUxEzARBgNVBAoTCkdsb2Jh
bFNpZ24xEzARBgNVBAMTCkdsb2JhbFNpZ24wHhcNMTgxMTIxMDAwMDAwWhcNMjgx
MTIxMDAwMDAwWjBQMQswCQYDVQQGEwJCRTEZMBcGA1UEChMQR2xvYmFsU2lnbiBu
di1zYTEmMCQGA1UEAxMdR2xvYmFsU2lnbiBFQ0MgT1YgU1NMIENBIDIwMTgwdjAQ
BgcqhkjOPQIBBgUrgQQAIgNiAATDoRGNZSPhluG7q6bQA11PTe0ZD/xx44QlFam1
BM4eLeN+wfgwalsbkjzARCM9si/fnQeKNtKAlgNmNOHTmV3VfwGbocj6+22HVWZu
VeX/VeIGoWh1u7Lja/NDE7RsXaCjggEpMIIBJTAOBgNVHQ8BAf8EBAMCAYYwEgYD
VR0TAQH/BAgwBgEB/wIBADAdBgNVHQ4EFgQUWHuOdSr+YYCqkEABrtboB0ZuP0gw
HwYDVR0jBBgwFoAUPeYpSJvqB8ohREom3m7e0oPQn1kwPgYIKwYBBQUHAQEEMjAw
MC4GCCsGAQUFBzABhiJodHRwOi8vb2NzcDIuZ2xvYmFsc2lnbi5jb20vcm9vdHI1
MDYGA1UdHwQvMC0wK6ApoCeGJWh0dHA6Ly9jcmwuZ2xvYmFsc2lnbi5jb20vcm9v
dC1yNS5jcmwwRwYDVR0gBEAwPjA8BgRVHSAAMDQwMgYIKwYBBQUHAgEWJmh0dHBz
Oi8vd3d3Lmdsb2JhbHNpZ24uY29tL3JlcG9zaXRvcnkvMAoGCCqGSM49BAMDA2cA
MGQCMC4lzZGQw5mpNZBmztq8huxKf9/tRUJ5yLI4q6YU+i2fjF2FRBNA64EBmljA
7dkSOwIwL9qYB0APhsLmV0LhknrzHZVvtqzg7NQaIV18BEIDZQgK3gjxYzADjHSH
5uk4mCdW
-----END CERTIFICATE-----
---
Server certificate
subject=C = MY, ST = PUTRAJAYA, L = PUTRAJAYA, O = JABATAN PENDIDIKAN POLITEKNIK DAN KOLEJ KOMUNITI, CN = *.mypolycc.edu.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 2503 bytes and written 389 bytes
Verification: OK
---
New, TLSv1.3, Cipher is TLS_AES_128_GCM_SHA256
Server public key is 384 bit
Secure Renegotiation IS NOT supported
Compression: NONE
Expansion: NONE
No ALPN negotiated
Early data was not sent
Verify return code: 0 (ok)
---
DONE
```

HTTP Response Evidence

IPv4 HTTP (port 80)

HTTP Status	200
Connected IP	103.42.206.181
Connect Time	18.07 ms
TTFB	46.93 ms
Total Time	47.01 ms

Response Headers:


```
{
    "0": "HTTP/1.1 302 Found",
    "1": "Cache-Control: no-cache",
    "2": "Content-length: 0",
    "3": "Location: https://ambilan.mypolycc.edu.my/",
    "5": "HTTP/1.1 200 OK",
    "6": "Content-Length: 1079",
    "7": "Content-Type: text/html",
    "8": "Last-Modified: Mon, 06 Apr 2026 06:26:35 GMT",
    "9": "Accept-Ranges: bytes",
    "10": "ETag: \"723168518ec5dc1:0\"",
    "11": "Server: Microsoft-IIS/10.0",
    "12": "X-Powered-By: ASP.NET",
    "13": "Date: Sat, 08 Aug 2026 10:15:19 GMT"
}
```


IPv4 HTTPS (port 443)

HTTP Status	200
Connected IP	103.42.206.181
Connect Time	9.5 ms
TTFB	36.22 ms
Total Time	36.25 ms

Response Headers:


```
[
    "HTTP/1.1 200 OK",
    "Content-Length: 1079",
    "Content-Type: text/html",
    "Last-Modified: Mon, 06 Apr 2026 06:26:35 GMT",
    "Accept-Ranges: bytes",
    "ETag: \"723168518ec5dc1:0\"",
    "Server: Microsoft-IIS/10.0",
    "X-Powered-By: ASP.NET",
    "Date: Sat, 08 Aug 2026 10:15:19 GMT"
]
```


Connectivity Test Evidence

Test	Result
TCP Connect IPv4 → port 80	302 0.009994 0.021346
TCP Connect IPv4 → port 443	200 0.006234 0.038357

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
fd7a:115c:a1e0::1136:5807 dev tailscale0 proto kernel metric 256 pref medium
fe80::/64 dev eth0 proto kernel metric 256 pref medium
fe80::/64 dev tailscale0 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
```