


IPv6 Readiness Report

hiedumara.edu.my — hiedumara.edu.my

Category: Education • Generated: 23 Apr 2026, 18:13 MYT • Last Checked: 07 Mar 2026, 01:13 MYT • Verification ID: c32d2d6f-bad4-43cf-8c90-82264cf6a17d
Report generated from National IPv6 Readiness Monitor — <https://ipv6.my6.my>
Audit trail: <https://ipv6.my6.my/audit/c32d2d6f-bad4-43cf-8c90-82264cf6a17d>


Partially Compliant
MGv6C-1.0

65%

Partial Support

IPv6-ONLY READINESS

Website: ✓ **Ready**

DNS: ✓ **Ready**

Email: ✗ **Not Ready**

IPv6 ADDRESSES	IPv4 ADDRESSES
2606:4700:3035::6815:505f 2606:4700:3033::ac43:b126	104.21.80.95 172.67.177.38

Network Information (WHOIS / RDAP)

	IPv6 Network	IPv4 Network
Organization	Cloudflare, Inc.	Cloudflare, Inc.
Country	US	US
ASN	AS13335	AS13335
ASN Name	CLOUDFLARENET - Cloudflare, Inc., US	CLOUDFLARENET - Cloudflare, Inc., US
Network (CIDR)	2606:4700::/32	104.16.0.0/12

Web Services (35%) 8 / 8			
#	CHECK	RESULT	DETAIL
1	AAAA Record	PASS	2606:4700:3035::6815:505f, 2606:4700:3033::ac43:b126
2	Globally Routable IPv6	PASS	All addresses are globally routable.
3	HTTP over IPv6	PASS	HTTP (port 80) responds over IPv6 — 653ms TTFB.
4	HTTPS over IPv6	PASS	HTTPS (port 443) responds over IPv6 — 55ms TTFB.
5	IPv6-Only Reachability	PASS	Site is fully reachable via IPv6-only.
6	TLS Certificate Valid (IPv6)	PASS	Certificate valid — issued by C = US, O = Google Trust Services, CN = WE1, expires May 15 09:50:09 2026 GMT
7	Dual-Stack (IPv4 + IPv6)	PASS	Domain has both A and AAAA records.
8	HTTP/3 (QUIC)	PASS	Alt-Svc: h3 header 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	PASS	DNS queries answered 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	104.21.80.95, 172.67.177.38
2	HTTP over IPv4	PASS	HTTP (port 80) responds over IPv4 — 554ms TTFB.
3	HTTPS over IPv4	PASS	HTTPS (port 443) responds over IPv4 — 58ms TTFB.

Audit Trail & Evidence Record

Verification ID	c32d2d6f-bad4-43cf-8c90-82264cf6a17d
Domain	hiedumara.edu.my
Check Mode	Manual
Status	Completed
Started	07 Mar 2026, 01:13:24 MYT
Finished	07 Mar 2026, 01:13:33 MYT
Test Node Profile	dual stack
Engine Version	2.0.0
MGv6C Version	1.0.0
Audit URL	https://ipv6.my6.my/audit/c32d2d6f-bad4-43cf-8c90-82264cf6a17d

Integrity Verification

✓ INTEGRITY VERIFIED	
Algorithm	hmac-sha256-v1
Root Hash	c9d053b64d6f7465db4841da4d0b9dd65232c5b5b32c13a3b5ad2e42dd3c0339
http_headers	67593298b3a00dc4f8cd9437ae662613dd623980708eff355b96a56f4dbf5ac6
dns_responses	a5c32c9be9dc66d0c351019011fe4e047f031ded7768953d75c94133ce9739f6
tls_handshake	a81a430bd585bf59cf48e0e1fefc3c405272dfd5924d41207bbe4246355904df
connectivity_log	a29d274467bb53d1f0b5e0c6894d393ea3b01a2c7c6f0c97b02575280ba718ca
dns_resolution_times	bc7007addf8af507f20502fc0b4da028b7c9cab080b51fc3d7acb5d815afb536

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	8.78	17.33	6.96	8.02	-1.8
Google	IPv4	22.25	22.94	26.51	28.23	+4.3
Google	IPv6	31.25	32.84	21.92	30.34	-9.3
Cloudflare	IPv4	12.84	13.33	8.9	12.87	-3.9
Cloudflare	IPv6	18.07	34.06	22.1	33.99	+4

DNS Evidence

A

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 5395
;; flags: qr rd ra; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
hiedumara.edu.my. 300 IN A 172.67.177.38
hiedumara.edu.my. 300 IN A 104.21.80.95
```

DS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 6677
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; AUTHORITY SECTION:
edu.my. 1796 IN SOA b.nic.my. hostmaster.nic.my. 2026018482 1800 900 604800 3600
```

MX

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 29362
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; AUTHORITY SECTION:
hiedumara.edu.my. 1800 IN SOA fay.ns.cloudflare.com. dns.cloudflare.com. 2396581047 10000 2400 604800 1800
```

NS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 60805
;; flags: qr rd ra; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
hiedumara.edu.my. 21600 IN NS howard.ns.cloudflare.com.
hiedumara.edu.my. 21600 IN NS fay.ns.cloudflare.com.
```

TXT

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 57700
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; AUTHORITY SECTION:
hiedumara.edu.my. 1800 IN SOA fay.ns.cloudflare.com. dns.cloudflare.com. 2396581047 10000 2400 604800 1800
```

AAAA

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 19749
;; flags: qr rd ra; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
hiedumara.edu.my. 300 IN AAAA 2606:4700:3033::ac43:b126
hiedumara.edu.my. 300 IN AAAA 2606:4700:3035::6815:505f
```

RRSIG

```
fay.ns.cloudflare.com. dns.cloudflare.com. 2396581047 10000 2400 604800 1800
```

DNSKEY

```
;; Got answer:
```

```
;; ->HEADER<<- opcode: QUERY, status: NOERROR, id: 6077
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; AUTHORITY SECTION:
hiedumara.edu.my. 1800 IN SOA fay.ns.cloudflare.com. dns.cloudflare.com. 2396581047 10000 2400 604800 1800
```

DNSSEC_VALIDATION

```
; unsigned answer
hiedumara.edu.my. 1800 IN SOA fay.ns.cloudflare.com. dns.cloudflare.com. 2396581047 10000 2400 604800 1800
```



```

0i8va55wa2kuZ29vZy9nc3IxLmNydDAtBgNVHR8EJjAKMCKgIKAEhhxodHRwOi8v
Yy5wa2kuZ29vZy9yL2dzcjEuY3JsMBMGA1UdIAQMAowCAYGZ4EMAQIBMA0GCsG
S1b3D0EBCwUAA4IBAQAQYrSPBtYDh5bjP20BDwmkwlhIDDkic574y04tfzHpn+cJ
odID24Ssees06bDrarZ7C30ddLibZatoKivs3UL9xnELz4ct92vID24FfVbiI1hY
+5W6FoVhKwIP0GCBaM4C6uVdF5dTuSMVs/ZbzNnIdCp5Gmx5EjvEau8otR/Cs
kGN+hr/W5GvT1tMBjgWKZ114//emhA1JG1BbPzoLJQvyEotc03lXjTaCzv8mEbeb
8RqZ7a2CPsgrBuvTPBwcOMBmufEU88+FSBX6+7iP0i18b4Z00FqIwwMHfs/L6k1
vepuoxtGzi4CZ68zJpiq1UvSqTbFJjtbd4seiMHL
-----END CERTIFICATE-----
---
Server certificate
subject=CN = hiedumara.edu.my
issuer=C = US, O = Google Trust Services, CN = WE1
---
No client certificate CA names sent
Peer signing digest: SHA256
Peer signature type: ECDSA
Server Temp Key: X25519, 253 bits
---
SSL handshake has read 2839 bytes and written 398 bytes
Verification: OK
---
New, TLSv1.3, Cipher is TLS_AES_256_GCM_SHA384
Server public key is 256 bit
Secure Renegotiation IS NOT supported
Compression: NONE
Expansion: NONE
No ALPN negotiated

```

IPv6 Connection

IP Used	2606:4700:3035::6815:505f
IP Version	6

```

depth=2 C = US, O = Google Trust Services LLC, CN = GTS Root R4
verify return:1
depth=1 C = US, O = Google Trust Services, CN = WE1
verify return:1
depth=0 CN = hiedumara.edu.my
verify return:1
CONNECTED(00000010)
---
Certificate chain
0 s:CN = hiedumara.edu.my
  i:C = US, O = Google Trust Services, CN = WE1
  a:PKEY: id-ecPublicKey, 256 (bit); sigalg: ecdsa-with-SHA256
  v:NotBefore: Feb 14 08:51:43 2026 GMT; NotAfter: May 15 09:50:09 2026 GMT
-----BEGIN CERTIFICATE-----
MIIDtDCCA1mgAwIBAgIQHkZyR4U/f+kNnc1LzLsMzAKBggqhkJOPQDAjA7MQsw
CQYDVQQGEwJVUzEeMBwGA1UEChMVR29vZ2x1IFRydXN0IFNlcnZpY2VzMQwwCgYD
VQ0EwNXRTEwHhcNMjYwMjE0MDg1MTQzWWhcNMjYwNTE1MDk1MDA5WjAbMRkwFwYD
VQ0EExBoaWVkdW1hcmEuZWR1Lm15MFkwEwYHKoZIzj0CAQYIKoZIzj0DAQcDQgAE
IKIILUcmX7OL5d9nKU4qosXaOUFemv7YKNm0Ima4B2KcszSYHRDZyJib3G4x+
8WEhvKpWhsLqnKc5DEPX2qOCAI0wggJZMA4GA1UdDwEB/wQEAwIHgDATBgNVHSUE
DDAKBggrrBgEFBQcDATABBgNVHRMBAf8EAjAAMB0GA1UdDgQWBRRmn7QDFTsCFQR
07EehIErs6D+QDAfBgNVHSMEGDAwBSQd5I1Z8T/qMyp5nvZgHl7zJP50DBeggr
BgEFBQcBAQRSMFAwJwYIKwYBBQUHMAAGG2h0dHA6Ly9vLnBra5nb29nL3Mvd2Ux
L0hrWTA1BggrBgEFBQcwoAYZaHR0cDovL2kucGtpLmdvb2cvd2UxLmNydDAvBgNV
HREKDAmghBoaWVkdW1hcmEuZWR1Lm15ghIQlMhpZWR1bWfyYS5lZHUubXkwEwYD
VR0gBAwwCjAIBgZngQwBAGewNgYDVRF0FCB8wLTAroCmgJ4YlAHR0cDovL2MucGtp
Lmdvb2cvd2UxL2h4V2ZlVmVjX1I0LmNydDCAQ0GCisGAQQB1nkCBAIEgfUEgfIA
8AB2AA5XLLzrrqk+MxsmQez95Dfm8I9cTIL35GpJaxhxU4hAAABnFuQnQAAAQD
AECwRQIhAPbFmKjzdZijqACaNDIXJ4KHLb0EfvLxiKbFxeLbuX+7AiAK09nwX+XE
pUNZPXhbThlsXNQ08PQRcREDtH0hwBGQWAB2AEcm2neHXzs/DbezYdkprhrwqH
gBnRVVL76esp3fjDAAABnFuQnQAAAQDAECwRQIgLX5avxYkUk98kt0RM3CS9U7S
c0zdKfwbJL++k7AKpgCIQD+nhfkHNe0vgt6R6my6r0090FszQM/QMvcIvbeuNhk
ATAKBggqhkJOPQDAGNjADBGAIeA0hu5aA0ARI/M/GNu9pHjDmp3270/PhjEYyc/
5YzhmN8CIQDxwcbfIhXjv0GomqAcHeB7ob5hLV0i+vG3P17vKgKA==
-----END CERTIFICATE-----
1 s:C = US, O = Google Trust Services, CN = WE1
  i:C = US, O = Google Trust Services LLC, CN = GTS Root R4
  a:PKEY: id-ecPublicKey, 256 (bit); sigalg: ecdsa-with-SHA384
  v:NotBefore: Dec 13 09:00:00 2023 GMT; NotAfter: Feb 20 14:00:00 2029 GMT
-----BEGIN CERTIFICATE-----
MIICnzCCA1WgAwIBAgIQf/MZd5csIkp2FV0TttaF4zAKBggqhkJOPQDAAzBHM0sw
CQYDVQQGEwJVUzEiMCAgA1UEChMVR29vZ2x1IFRydXN0IFNlcnZpY2VzIExMQzEU
MBIGA1UEAxMLR1RTIFJvb3QgUjQwHhcNMjYwMjE0MDg1MTQzWWhcNMjYwNTE1MDk1
MDA5WjAbMRkwFwYDQgAwwCjAIBgZngQwBAGewNgYDVRF0FCB8wLTAroCmgJ4YlAHR0
cDovL2MucGtpLmdvb2cvd2UxL2h4V2ZlVmVjX1I0LmNydDCAQ0GCisGAQQB1nkCBAIE
gfUEgfIA8AB2AA5XLLzrrqk+MxsmQez95Dfm8I9cTIL35GpJaxhxU4hAAABnFuQnQ
AAAQDAECwRQIhAPbFmKjzdZijqACaNDIXJ4KHLb0EfvLxiKbFxeLbuX+7AiAK09nw
X+XE pUNZPXhbThlsXNQ08PQRcREDtH0hwBGQWAB2AEcm2neHXzs/DbezYdkprhrwq
H gBnRVVL76esp3fjDAAABnFuQnQAAAQDAECwRQIgLX5avxYkUk98kt0RM3CS9U7S
c0zdKfwbJL++k7AKpgCIQD+nhfkHNe0vgt6R6my6r0090FszQM/QMvcIvbeuNhk
ATAKBggqhkJOPQDAGNjADBGAIeA0hu5aA0ARI/M/GNu9pHjDmp3270/PhjEYyc/
5YzhmN8CIQDxwcbfIhXjv0GomqAcHeB7ob5hLV0i+vG3P17vKgKA==
-----END CERTIFICATE-----

```



```

"16": "HTTP/2 200",
"17": "date: Fri, 06 Mar 2026 09:13:31 GMT",
"18": "content-type: text/html; charset=UTF-8",
"19": "link: <https://hiedumara.edu.my/wp-json/>; rel=\"https://api.w.org/\"",
"20": "link: <https://hiedumara.edu.my/wp-json/wp/v2/pages/6459>; rel=\"alternate\"; title=\"JSON\"; type=\"application/json\"",
"21": "link: <https://hiedumara.edu.my/>; rel=shortlink",
"22": "nel: {\\"report_to\":\\"cf-nel\\",\\"success_fraction\\":0.0,\\"max_age\\":604800}",
"23": "x-litespeed-cache: hit",
"24": "server: cloudflare",
"25": "x-turbo-charged-by: LiteSpeed",
"26": "cf-cache-status: DYNAMIC",
"27": "report-to: {\\"group\\":\\"cf-nel\\",\\"max_age\\":604800,\\"endpoints\\":[{\\"url\\":\\"https://a.nel.cloudflare.com/report/v4?s=U5N5GG506QduyAEJseiwR2KweWgt%2Fqq0WIEx0UnqNnA%2BwxRbv5tUY%2FE0Fy2rDT9gqetiXGL1LC8fQKtL..."}]}",
"28": "cf-ray: 9d803eb31fedda4a-SIN",
"29": "alt-svc: h3=\\":443\\"; ma=86400"
    }
    
```

IPv4 HTTPS (port 443)

HTTP Status	200
Connected IP	104.21.80.95
Connect Time	7.35 ms
TTFB	46.31 ms
Total Time	46.36 ms

Response Headers:

```

[
  "HTTP/2 200",
  "date: Fri, 06 Mar 2026 09:13:32 GMT",
  "content-type: text/html; charset=UTF-8",
  "link: <https://hiedumara.edu.my/wp-json/>; rel=\"https://api.w.org/\"",
  "link: <https://hiedumara.edu.my/wp-json/wp/v2/pages/6459>; rel=\"alternate\"; title=\"JSON\"; type=\"application/json\"",
  "link: <https://hiedumara.edu.my/>; rel=shortlink",
  "nel: {\\"report_to\":\\"cf-nel\\",\\"success_fraction\\":0.0,\\"max_age\\":604800}",
  "x-litespeed-cache: hit",
  "server: cloudflare",
  "x-turbo-charged-by: LiteSpeed",
  "cf-cache-status: DYNAMIC",
  "report-to: {\\"group\\":\\"cf-nel\\",\\"max_age\\":604800,\\"endpoints\\":[{\\"url\\":\\"https://a.nel.cloudflare.com/report/v4?s=S6vZba0w4j4jYR4BnwGVdHImeePXpHJ850HTiyAgqzXpt225XF5mXC9%2FKJDx4qYFIJ7ukqFKbJUL%2F12q3..."}]}",
  "cf-ray: 9d803ebb4f9b9cde-SIN",
  "alt-svc: h3=\\":443\\"; ma=86400"
]
    
```

IPv6 HTTPS (port 443)

HTTP Status	200
Connected IP	2606:4700:3035::6815:505f
Connect Time	6.87 ms
TTFB	41.98 ms
Total Time	42.01 ms

Response Headers:

```

[
  "HTTP/2 200",
  "date: Fri, 06 Mar 2026 09:13:31 GMT",
  "content-type: text/html; charset=UTF-8",
  "link: <https://hiedumara.edu.my/wp-json/>; rel=\"https://api.w.org/\"",
  "link: <https://hiedumara.edu.my/wp-json/wp/v2/pages/6459>; rel=\"alternate\"; title=\"JSON\"; type=\"application/json\"",
  "link: <https://hiedumara.edu.my/>; rel=shortlink",
  "nel: {\\"report_to\":\\"cf-nel\\",\\"success_fraction\\":0.0,\\"max_age\\":604800}",
  "x-litespeed-cache: hit",
  "server: cloudflare",
  "x-turbo-charged-by: LiteSpeed",
  "cf-cache-status: DYNAMIC",
  "report-to: {\\"group\\":\\"cf-nel\\",\\"max_age\\":604800,\\"endpoints\\":[{\\"url\\":\\"https://a.nel.cloudflare.com/report/v4?s=yx1qnYQDKT89kRKjo7qYG%2Bb%2BHQUKTgk3FMBAaiHDZQsN1%2B44LWBQguBBk6t1f%2F0f50TxTmm56TgFhw..."}]}",
  "cf-ray: 9d803eb39f68fd83-SIN",
  "alt-svc: h3=\\":443\\"; ma=86400"
]
    
```

Connectivity Test Evidence

Test	Result
TCP Connect IPv4 → port 80	301 0.010064 0.034611
TCP Connect IPv6 → port 80	301 0.009576 0.487967
TCP Connect IPv4 → port 443	200 0.007270 0.056252
TCP Connect IPv6 → port 443	200 0.010023 0.060650

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
```