

IPv6 Readiness Report

mmu.edu.my — mmu.edu.my




Scan to verify

Category: Education • Generated: 04 Jul 2026, 22:12 MYT • Last Checked: 04 Jul 2026, 03:50 MYT • Verification ID: 3442d15a-ce9c-488b-83aa-d1c60914ecaa

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

Audit trail: <https://ipv6.my6.my/audit/3442d15a-ce9c-488b-83aa-d1c60914ecaa>

 Partially Compliant <small>MGv6C-1.0</small>	73% Partial Support	IPv6-ONLY READINESS Website: ✓ Ready DNS: ✓ Ready Email: ✗ Not Ready
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IPv6 ADDRESSES
2a02:e980:b3::dc
2a02:e980:b5::dc

IPv4 ADDRESSES
45.60.13.220
45.60.15.220

Network Information (WHOIS / RDAP)

	IPv6 Network	IPv4 Network
Organization	IMPERVA-MNT	Incapsula Inc
Country	US	US
ASN	AS19551	AS19551
ASN Name	INCAPSULA - Incapsula Inc, US	INCAPSULA - Incapsula Inc, US
Network (CIDR)	2a02:e980::/32	45.60.0.0/16

Web Services (35%) 7 / 8			
#	CHECK	RESULT	DETAIL
1	AAAA Record	PASS	2a02:e980:b3::dc, 2a02:e980:b5::dc
2	Globally Routable IPv6	PASS	All addresses are globally routable.
3	HTTP over IPv6	PASS	HTTP (port 80) responds over IPv6 — 37ms TTFB.
4	HTTPS over IPv6	PASS	HTTPS (port 443) responds over IPv6 — 121ms TTFB.
5	IPv6-Only Reachability	PASS	Site is fully reachable via IPv6-only.
6	TLS Certificate Valid (IPv6)	PASS	Certificate valid — issued by C = BE, O = GlobalSign nv-sa, CN = GlobalSign Atlas R46 DV TLS CA 2026 Q2, expires Oct 1 18:42:27 2026 GMT
7	Dual-Stack (IPv4 + IPv6)	PASS	Domain has both A and AAAA records.
8	HTTP/3 (QUIC)	FAIL	No HTTP/3 support 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.

#	CHECK	RESULT	DETAIL
7	RRSIG Valid	FAIL	No valid RRSIG found.
8	Signing Algorithm	INFO	No DNSKEY record found.

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%) 3 / 3

#	CHECK	RESULT	DETAIL
1	A Record	PASS	45.60.13.220, 45.60.15.220
2	HTTP over IPv4	PASS	HTTP (port 80) responds over IPv4 — 657ms TTFB.
3	HTTPS over IPv4	PASS	HTTPS (port 443) responds over IPv4 — 1079ms TTFB.

Audit Trail & Evidence Record

Verification ID	3442d15a-ce9c-488b-83aa-d1c60914ecaa
Domain	mmu.edu.my
Check Mode	Manual
Status	Completed
Started	04 Jul 2026, 03:50:16 MYT
Finished	04 Jul 2026, 03:50:24 MYT
Test Node Profile	dual stack
Engine Version	2.0.0
MGv6C Version	1.0.0
Audit URL	https://ipv6.my6.my/audit/3442d15a-ce9c-488b-83aa-d1c60914ecaa

Integrity Verification

✓ INTEGRITY VERIFIED	
Algorithm	hmac-sha256-v1
Root Hash	84e51e5ede825b78b0995fe72dfb87015e6e302a7661ed7b4eefe548af6c5965
http_headers	9a6c88f54887547517d39b633179d0866eb466d6130384c1e07d9d8d0c47467b
dns_responses	6d3d83d02ed559c4e430a4135a2c8fec1f5753c62c8c7aa66ed4443e14ec0fdf
tls_handshake	2f8e804fa865668d669651550f324ffb1fa3b968071cdae503f40adfce1a8e68
connectivity_log	61a58780ad253f9fb1f27eab53c4ba278eed4aab55243a449cb2d7ebd0b85cf4
dns_resolution_times	2b7d14cd0309f77f0f2a7d4f7f2196acc35b80156d5f47329baea3ebc9c140f1

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	8.3.32
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	9	22.62	11.46	23.02	+2.5
Google	IPv4	18.76	19.27	18.96	19.98	+0.2
Google	IPv6	19.18	32.65	29.86	31.04	+10.7
Cloudflare	IPv4	8.86	20.19	9.81	20.18	+1
Cloudflare	IPv6	11.8	24.13	21.11	28.66	+9.3

DNS Evidence

A

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 16659
;; flags: qr rd ra; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
mmu.edu.my. 3600 IN A 45.60.13.220
mmu.edu.my. 3600 IN A 45.60.15.220
```

DS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 8389
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
edu.my. 2978 IN SOA e.nic.my. hostmaster.nic.my. 2026052757 1800 900 604800 3600
```

MX

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 53895
;; flags: qr rd ra; QUERY: 1, ANSWER: 4, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
mmu.edu.my. 3600 IN MX 10 ext-mail-1.mmu.edu.my.
mmu.edu.my. 3600 IN MX 10 ext-mail-2.mmu.edu.my.
mmu.edu.my. 3600 IN MX 20 ext-mail-3.mmu.edu.my.
mmu.edu.my. 3600 IN MX 20 ext-mail-4.mmu.edu.my.
```

NS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 20313
;; flags: qr rd ra; QUERY: 1, ANSWER: 3, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
mmu.edu.my. 3600 IN NS ns1.a0.impervasecuredns.net.
mmu.edu.my. 3600 IN NS ns1.a2.impervasecuredns.net.
mmu.edu.my. 3600 IN NS ns1.a1.impervasecuredns.net.
```

TXT

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 20613
;; flags: qr rd ra; QUERY: 1, ANSWER: 5, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
mmu.edu.my. 3600 IN TXT "rovag_verification_token=68B2530FEA434E38AB72A93A484425BD"
mmu.edu.my. 3600 IN TXT "globalsign-domain-verification=A4747BBDA8198FD217FDCCF0F90C29"
mmu.edu.my. 3600 IN TXT "globalsign-domain-verification=0CHR2oEfzwiTfjQtJ3jn4WrkNenDjhyXk_iDMRscd"
mmu.edu.my. 3600 IN TXT "globalsign-domain-verification=4EF9CC38CBA8724615D4907A5F316AC2"
mmu.edu.my. 3600 IN TXT "v=spf1 include:spf.protection.outlook.com include:one.zoho.com ip4:203.106.60.32/28 ip4:203.106.61.32/28 ip4:203.106.62.32/28 ip4:203.106.63.32/28 -all"
```

AAAA

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 57943
;; flags: qr rd ra; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
mmu.edu.my. 3600 IN AAAA 2a02:e980:b5::dc
```

```
mmu.edu.my. 3600 IN AAAA 2a02:e980:b3::dc
```

RRSIG

```
ns1.a0.impervasecuredns.net. hostmaster.mmu.edu.my. 2026061602 14400 3600 1209600 86400
```

DNSKEY

```
;; Got answer:
;; ->HEADER<- opcode: QUERY, status: NOERROR, id: 2748
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
mmu.edu.my. 3595 IN SOA ns1.a0.impervasecuredns.net. hostmaster.mmu.edu.my. 2026061602 14400 3600 1209600 86400
```

DNSSEC_VALIDATION

```
; unsigned answer
mmu.edu.my. 3595 IN SOA ns1.a0.impervasecuredns.net. hostmaster.mmu.edu.my. 2026061602 14400 3600 1209600 86400
```


TLS Handshake Evidence

IPV4 Connection

IP Used	45.60.13.220
IP Version	4

```

depth=2 C = BE, O = GlobalSign nv-sa, CN = GlobalSign Root R46
verify return:1
depth=1 C = BE, O = GlobalSign nv-sa, CN = GlobalSign Atlas R46 DV TLS CA 2026 Q2
verify return:1
depth=0 CN = imperva.com
verify return:1
CONNECTED(00000010)
---
Certificate chain
 0 s:CN = imperva.com
  i:C = BE, O = GlobalSign nv-sa, CN = GlobalSign Atlas R46 DV TLS CA 2026 Q2
  a:PKKEY: rsaEncryption, 2048 (bit); sigalg: RSA-SHA256
  v:NotBefore: Jul  3 18:42:27 2026 GMT; NotAfter: Oct  1 18:42:27 2026 GMT
-----BEGIN CERTIFICATE-----
MIIIVTCCBqWgAwIBAgIQAdGjZR8f06MlsY1v+3YgTANBgkqhkiG9w0BAQsFADBZ
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AxMmR2xvYmFsU2lnbiBBdGxhcysNSNDYGRFYgVExTIENBIDIwMjYgUTIwHhcnMjYw
IzAzMTg0MjYzWhcnMjYwMDAxMTg0MjYzI3WjAwMRQwEgYDVQDDAtpbXB1cnZlMnV
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bmQUy29tLm15ggtnaXRuLmNvbS5teYITKi5hZHN0b3JlLnRtLmNvbS5teYIOK15t
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aW1wZXJ2Y55jb22CDcoubW1lLmVkdS5teYITKi51bmlma55teYIUki5zZXJ2aWw1
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ejjbaAccVs7fPTzn+mht6B8PwL95lc+dUg0UH4wDQYjK0ZiHvcNAQELBQADggIB
ACTSKUjYt48+rHIE2w50tamB1r3dE005vMSWrm7X18ztcRXHISrpL5eTCPXV8ge
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/74tsxHTekEjXgDAKXfP98By610h0UBgM7vVwgcMiRwVSwi6EbdUFnXoRC6ZGYgU
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4Ba1lXndfYRRNuEV+q4zD88pMu0gyyK27940jJ/dzJ2e2dLRVtbAqSHlq0P+LAok
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/RsfgXwoMZmTLRpVDYFESUMA4D3a8GEXJ1uwD0+9o5J/SMio05F6r7STEh6uk2fv
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sz+zij+4sWexXATiqHnWlQDkQfatv/RlwtC/4RzKMEb7EpoSrKQCAtA4Shc+6LRK
efVdAtS3eJgvMnEo7ND9AC7SyQ9sh7Mp6X47pTLGsmE
-----END CERTIFICATE-----
 1 s:C = BE, O = GlobalSign nv-sa, CN = GlobalSign Atlas R46 DV TLS CA 2026 Q2
  i:C = BE, O = GlobalSign nv-sa, CN = GlobalSign Root R46
  a:PKKEY: rsaEncryption, 4096 (bit); sigalg: RSA-SHA384
  v:NotBefore: Jan 21 02:59:58 2026 GMT; NotAfter: Jan 21 00:00:00 2028 GMT
-----BEGIN CERTIFICATE-----
MIIGtCCBGmgAwIBAgIRAIUVA9p8GXzCwsWrxGtXkEwDQYjK0ZiHvcNAQEMBOAw
RjELMAkGA1UEBhMCQkUxGTAXBgNVBA0TEEdsb2JhbFNPZ242bnYtc2ExHDAAAgBNV
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EwpkdIzP0tTN+WszBYTBHUoSbjXWkXEDX5agp/HyV06CTD10HWSwIs2S24unNNYm
fPjws7lQnzacY22wZUVbEv5z2qVCYehEe09I1terhDovZtyWQdsGZPUmaBnUTE/
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Y29tLm15gg4qLnRtb2R2LmNvbS5teYIRKi5maWJlcmFpbC5jb20ubXmCDioudG1y
bmQUy29tLm15ggtnaXRuLmNvbS5teYITKi5hZHN0b3JlLnRtLmNvbS5teYIOK15t
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cy5wM55jb20ubXmCEyouYXBpZ2F0ZS50bS55jb20ubXmCDioudW5pZmkuY29tLm15
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ZXQvZ292Lm15ghEqLnRtZ2xvYmFsLmNvbS5teYIMKi50YWIuY29tLm15gg9maWJl
cmFpbC5jb20ubXmCEiouZw5nYWdlLnRtLmNvbS5teYILdG1jY55jb20ubXmCECcu
ZXB0dy50bS55jb20ubXmCDioudG1vbmUuY29tLm15gg0qLnRtZHMUy29tMA4GA1Ud
DwEB/wQEAwIFoDATBgNVHSUEDDAGBgRgEgFBQcDATAAdBgNVHQ4EFgQUpubcsMvV
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c2l0b3J5LzAMBgNVHRMBAf8EAjAAMIgGgBggrBgEFBQcBAQSBKzCBkDBBBggRgEF
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yTNaZeHQswFzF8DIxwL3AAAAbnyLKVAAAQADEgRgIhAPqePxHP3TDmbmgCVV0iP
cv46JMZITUmBo3Jhi0vUnpwcAiEAgR+x1o70TEK8iAXF2W9IJraE662yiEoV4NZ
DV302/8AdgDCMX5RRRmJReS/ON6yKEHrX8IhWiK/f9W1rXaa2Q5S4AAAZ8pSiVp
AAEAwBHMEUCIQDiuUfPQcF5cxyX96wDwGK++7MwBLJNHVU8I6h0WHD/JgIgb45h
ejjbaAccVs7fPTzn+mht6B8PwL95lc+dUg0UH4wDQYjK0ZiHvcNAQELBQADggIB
ACTSKUjYt48+rHIE2w50tamB1r3dE005vMSWrm7X18ztcRXHISrpL5eTCPXV8ge
oEIUgI1EYhLlSmh+S+qZKM7PmX7gMAXRiAkaPAtIL9ZyGQFZfJtftfy1LzjHzCp
/74tsxHTekEjXgDAKXfP98By610h0UBgM7vVwgcMiRwVSwi6EbdUFnXoRC6ZGYgU
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-----END CERTIFICATE-----

```



```

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-----END CERTIFICATE-----
1 s:C = BE, 0 = GlobalSign nv-sa, CN = GlobalSign Atlas R46 DV TLS CA 2026 Z2
i:C = BE, 0 = GlobalSign nv-sa, CN = GlobalSign Root R46
a:PKKEY: rsaEncryption, 4096 (bit); sigalg: RSA-SHA384
v:NotBefore: Jan 21 02:59:58 2026 GMT; NotAfter: Jan 21 00:00:00 2028 GMT
-----BEGIN CERTIFICATE-----
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```


HTTP Response Evidence

IPv4 HTTP (port 80)

HTTP Status	400
Connected IP	45.60.13.220
Connect Time	163.81 ms
TTFB	499.74 ms
Total Time	499.79 ms

Response Headers:

```
[
  "HTTP/1.1 400 Bad Request",
  "Content-Type: text/html",
  "Cache-Control: no-cache, no-store",
  "Connection: close",
  "Content-Length: 868",
  "X-Info: 51-24505621-0 NNNY RT(1783108222754 0) q(0 0 0 -1) r(1 -1) b3 U6",
  "Set-Cookie: visid_incap_2990630=qAMPhC5LSBaew5AXvfVRU34SSGoAAAAAQUIPAAAAAAB7YDA/jbk0ISRaLwn+0jz; expires=Fri, 02 Jul 2027 22:38:02 GMT; HttpOnly; path=/; Domain=.mmu.edu.my",
  "Set-Cookie: incap_ses_569_2990630=xP0+FFr4dTCQuSnelX7LB34SSGoAAAAAPWu49R1zqC5jOVJKlPKXu==; path=/; Domain=.mmu.edu.my"
]
```

IPv6 HTTP (port 80)

HTTP Status	400
Connected IP	2a02:e980:b3::dc
Connect Time	7.91 ms
TTFB	30.43 ms
Total Time	30.49 ms

Response Headers:

```
[
  "HTTP/1.1 400 Bad Request",
  "Content-Type: text/html",
  "Cache-Control: no-cache, no-store",
  "Connection: close",
  "Content-Length: 876",
  "X-Info: 53-126945661-0 NNNY RT(1783108222409 0) q(0 0 0 -1) r(0 -1) b3 U6",
  "Set-Cookie: visid_incap_2990630=34Zx53+VSEmLtxzmfiqNln0SSGoAAAAAQUIPAAAAAAB7YDA/jbk0ISRaLwn+0jz; expires=Sat, 03 Jul 2027 15:55:13 GMT; HttpOnly; path=/; Domain=.mmu.edu.my",
  "Set-Cookie: incap_ses_795_2990630=mWEsWsvMe3i+xipyVWgIC30SSGoAAAAAdAUeczRTEl3jc5bf/xUMDQ==; path=/; Domain=.mmu.edu.my"
]
```

IPv4 HTTPS (port 443)

HTTP Status	200
Connected IP	45.60.15.220
Connect Time	170.17 ms
TTFB	715.43 ms
Total Time	715.54 ms

Response Headers:

```
{
  "0": "HTTP/2 301",
  "1": "date: Fri, 03 Jul 2026 19:50:23 GMT",
  "2": "server: Apache",
  "3": "x-frame-options: SAMEORIGIN",
  "4": "content-security-policy: frame-ancestors 'self';",
  "5": "location: https://www.mmu.edu.my/",
  "6": "content-type: text/html; charset=iso-8859-1",
  "7": "set-cookie: visid_incap_2990630=aSgrm2JeTsaT7lybbwR5Wn8SSGoAAAAAQUIPAAAAAAB9mRzrSSaDqMoapZEig4t0; expires=Fri, 02 Jul 2027 22:35:01 GMT; HttpOnly; path=/; Domain=.mmu.edu.my; Secure; SameSite=None",
  "8": "set-cookie: nlnbi_2990630=2D54H2daPgFjBRGZFJgT7gAAACrDqq6HXhLz6WMjbs33akz; HttpOnly; path=/; Domain=.mmu.edu.my; Secure; SameSite=None",
  "9": "set-cookie: incap_ses_569_2990630=QmK0ey4ALDGyuyneLX7LB38SSGoAAAAAQ6WwBOT9t9+D+ojoIvgRqA==; path=/; Domain=.mmu.edu.my; Secure; SameSite=None",
  "10": "strict-transport-security: max-age=31536000",
  "11": "x-cdn: Imperva",
}
```

```

"12": "x-iinfo: 53-29933977-29934040 NNNY CT(174 178 0) RT(1783108223255 166) q(0 0 0 -1) r(0 2) U6",
"14": "HTTP/2 200",
"15": "date: Fri, 03 Jul 2026 19:50:23 GMT",
"16": "server: Apache",
"17": "x-frame-options: SAMEORIGIN",
"18": "content-security-policy: frame-ancestors 'self';",
"19": "last-modified: Fri, 03 Jul 2026 09:12:30 GMT",
"20": "accept-ranges: bytes",
"21": "content-length: 91660",
"22": "vary: Accept-Encoding",
"23": "cache-control: max-age=0, no-cache, no-store, must-revalidate",
"24": "pragma: no-cache",
"25": "expires: Mon, 29 Oct 1923 20:30:00 GMT",
"26": "content-type: text/html; charset=UTF-8",
"27": "set-cookie: visid_incap_2990630=HNR04YogQ82NqfXNnpAfHx0SSGoAAAAAQUIPAAAAAACbw39d4znoP7ZqLqf6mJ0E; expires=Sat, 03 Jul 2027 16:41:53 GMT; HttpOnly; path=/; Domain=.mmu.edu.my; Secure; SameSite=None",
"28": "set-cookie: incap_ses_1671_2990630=8f/HNIEyHr4SzkNQZYwF38SSGoAAAAAYLxarfRGj4DN6wiTJPDhkQ==; path=/; Domain=.mmu.edu.my; Secure; SameSite=None",
"29": "strict-transport-security: max-age=31536000",
"30": "x-cdn: Imperva",
"31": "x-iinfo: 13-15919127-15919129 NNNY CT(5 12 0) RT(1783108223699 5) q(0 0 0 0) r(0 0) U6"
}
    
```

IPv6 HTTPS (port 443)

HTTP Status	200
Connected IP	2a02:e980:b5::dc
Connect Time	12.96 ms
TTFB	79.33 ms
Total Time	79.43 ms

Response Headers:

```

{
  "0": "HTTP/2 301",
  "1": "date: Fri, 03 Jul 2026 19:50:22 GMT",
  "2": "server: Apache",
  "3": "x-frame-options: SAMEORIGIN",
  "4": "content-security-policy: frame-ancestors 'self';",
  "5": "location: https://www.mmu.edu.my/",
  "6": "content-type: text/html; charset=iso-8859-1",
  "7": "set-cookie: visid_incap_2990630=yDRj2ImXtvK4xoM2tN0F9X0SSGoAAAAAQUIPAAAAAADfZRVwh7x1FWdcp7Zy9mYg; expires=Sat, 03 Jul 2027 15:55:13 GMT; HttpOnly; path=/; Domain=.mmu.edu.my; Secure; SameSite=None",
  "8": "set-cookie: nlbi_2990630=0yAQH81VZRGaNeBfJgT7gAAAAAm6Dk4T6VG/LgIyy0wbbiG; HttpOnly; path=/; Domain=.mmu.edu.my; Secure; SameSite=None",
  "9": "set-cookie: incap_ses_795_2990630=2eUZAowk0V8MxypyVWgIC30SSGoAAAAA0EiP1IoIbynoPvmlBNK52g==; path=/; Domain=.mmu.edu.my; Secure; SameSite=None",
  "10": "strict-transport-security: max-age=31536000",
  "11": "x-cdn: Imperva",
  "12": "x-iinfo: 48-73207485-73207492 NNNY CT(10 13 0) RT(1783108222440 10) q(0 0 0 -1) r(0 0) U6",
  "14": "HTTP/2 200",
  "15": "date: Fri, 03 Jul 2026 19:50:22 GMT",
  "16": "server: Apache",
  "17": "x-frame-options: SAMEORIGIN",
  "18": "content-security-policy: frame-ancestors 'self';",
  "19": "last-modified: Fri, 03 Jul 2026 09:12:30 GMT",
  "20": "accept-ranges: bytes",
  "21": "content-length: 91660",
  "22": "vary: Accept-Encoding",
  "23": "cache-control: max-age=0, no-cache, no-store, must-revalidate",
  "24": "pragma: no-cache",
  "25": "expires: Mon, 29 Oct 1923 20:30:00 GMT",
  "26": "content-type: text/html; charset=UTF-8",
  "27": "set-cookie: visid_incap_2990630=dqsnG2GgQWYjQRtDnS8EXgSSGoAAAAAQUIPAAAAAAB/N0o1hfWdaWmj7N0dkSuA; expires=Sat, 03 Jul 2027 15:39:43 GMT; HttpOnly; path=/; Domain=.mmu.edu.my; Secure; SameSite=None",
  "28": "set-cookie: incap_ses_1132_2990630=ITHuTPa8JFmeZVBLmqy1D34SSGoAAAAA1xuNs8l6Xft3VBX3RAAQtw==; path=/; Domain=.mmu.edu.my; Secure; SameSite=None",
  "29": "strict-transport-security: max-age=31536000",
  "30": "x-cdn: Imperva",
  "31": "x-iinfo: 4-18459486-18459488 NNNY CT(4 10 0) RT(1783108222479 6) q(0 0 0 0) r(0 0) U6"
}
    
```

Connectivity Test Evidence

Test	Result
TCP Connect IPv4 → port 80	400 0.164290 0.495474
TCP Connect IPv6 → port 80	400 0.007544 0.026958
TCP Connect IPv4 → port 443	301 0.164590 0.668289
TCP Connect IPv6 → port 443	301 0.007487 0.049187

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
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
```