

# IPv6 Readiness Report

ukm.my — ukm.my



Scan to verify

Category: Education • Generated: 13 Jun 2026, 19:22 MYT • Last Checked: 13 Jun 2026, 01:00 MYT • Verification ID: 047df6b6-b29a-483a-a7e7-ef0b131e9642

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

Audit trail: <https://ipv6.my6.my/audit/047df6b6-b29a-483a-a7e7-ef0b131e9642>

<p><b>X</b></p> <p><b>Non-Compliant</b></p> <p>MGv6C-1.0</p>	<p><b>32%</b></p> <p><b>No IPv6 Support</b></p>	<p><b>IPv6-ONLY READINESS</b></p> <p>Website: <b>X Not Ready</b></p> <p>DNS: <b>X Not Ready</b></p> <p>Email: <b>X Not Ready</b></p>
--	---	--

<p><b>IPv4 ADDRESSES</b></p> <p>103.219.237.14</p>
--

## Network Information (WHOIS / RDAP)

IPv4 Network	
Organization	UNIVERSITI KEBANGSAAN MALAYSIA
Country	MY
ASN	AS135496
ASN Name	UKM-AS-AP - UNIVERSITI KEBANGSAAN MALAYSIA, MY
Network (CIDR)	103.219.236.0/23

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	<b>Signing Algorithm</b>	<b>INFO</b>	No DNSKEY record found.

**Email Services** (25%) 4 / 6

#	CHECK	RESULT	DETAIL
1	<b>MX Record Exists</b>	<b>PASS</b>	MX record found.
2	<b>MX Server Has IPv6</b>	<b>PASS</b>	MX server has AAAA record.
3	<b>SMTP Reachable via IPv6</b>	<b>FAIL</b>	SMTP is not reachable over IPv6.
4	<b>STARTTLS over IPv6</b>	<b>FAIL</b>	STARTTLS not available over IPv6.
5	<b>SPF Record</b>	<b>PASS</b>	SPF record found.
6	<b>DKIM Selector</b>	<b>INFO</b>	DKIM selector found: google._domainkey
7	<b>DMARC Record</b>	<b>PASS</b>	DMARC record found.

**IPv4 Baseline** (15%) 3 / 3

#	CHECK	RESULT	DETAIL
1	<b>A Record</b>	<b>PASS</b>	103.219.237.14
2	<b>HTTP over IPv4</b>	<b>PASS</b>	HTTP (port 80) responds over IPv4 — 90ms TTFB.
3	<b>HTTPS over IPv4</b>	<b>PASS</b>	HTTPS (port 443) responds over IPv4 — 116ms TTFB.

### Audit Trail & Evidence Record

Verification ID	047df6b6-b29a-483a-a7e7-ef0b131e9642
Domain	ukm.my
Check Mode	Scheduled
Status	Completed
Started	13 Jun 2026, 00:59:47 MYT
Finished	13 Jun 2026, 01:00:10 MYT
Test Node Profile	dual stack
Engine Version	2.0.0
MGv6C Version	1.0.0
Audit URL	https://ipv6.my6.my/audit/047df6b6-b29a-483a-a7e7-ef0b131e9642

### Integrity Verification

<b>✓ INTEGRITY VERIFIED</b>	
Algorithm	hmac-sha256-v1
Root Hash	c60c3bcbed3cb5075a130f00d9559c4015c0d1563adee6aa29b77239230abbd2
http_headers	e7761a43ea3acd1158eafeeeb34244179ece1f65f320f20724f7656414a1704
dns_responses	2c42061c611d38e40de8b44ac9b407529757e3bf8a8fdeccff415ffd1ebd6410
tls_handshake	32052d0270ae51daedea433c2471757db270a1c07c835c68fae4f2009a12270f
connectivity_log	64601ed2f7ee9afcea6ecb6d00d604a50689a644a8a9a0044d8aa7c7d92e9a7b
dns_resolution_times	accd075c70756189521f3eb37695401029e4c107d8d6905d98a2b94aa00fd162

### 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	20.66	24.41	11.54	19.15	-9.1
Google	IPv4	32.02	42.02	32.73	34.9	+0.7
Google	IPv6	43.55	44.16	39.68	44.24	-3.9
Cloudflare	IPv4	34.59	37.88	32.76	38.36	-1.8
Cloudflare	IPv6	30.34	57.21	33.51	50.97	+3.2



## DNS Evidence

### A

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 22544
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
ukm.my. 0000864000IN0A0103.219.237.14
```

### DS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 34271
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
my. 000035790IN0S0A0e.nic.my. hostmaster.nic.my. 2026046676 1800 900 604800 3600
```

### MX

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 2826
;; flags: qr rd ra; QUERY: 1, ANSWER: 5, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
ukm.my. 0000864000IN0MX05 ALT2.ASPMX.L.GOOGLE.COM.
ukm.my. 0000864000IN0MX010 ASPMX2.GOOGLEMAIL.COM.
ukm.my. 0000864000IN0MX010 ASPMX3.GOOGLEMAIL.COM.
ukm.my. 0000864000IN0MX01 ASPMX.L.GOOGLE.COM.
ukm.my. 0000864000IN0MX05 ALT1.ASPMX.L.GOOGLE.COM.
```

### NS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 12142
;; flags: qr rd ra; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 3

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
ukm.my. 0000864000IN0NS0dns1.ukm.my.
ukm.my. 0000864000IN0NS0dns2.ukm.my.
```

### TXT

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 25503
;; flags: qr rd ra; QUERY: 1, ANSWER: 6, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
ukm.my. 0000864000IN0TXT0"google-site-verification=Nx-3VrBzA7q00XPaouxzTWRwHmA08RehgZhh4yrF06U"
ukm.my. 0000864000IN0TXT0"MS=1394E7C154EB8B4D57F869DFE6998030FCE213FB"
ukm.my. 0000864000IN0TXT0"KxM7BzX015q8k8mQ+8Ebb70vAkYv5o2sY30dsc0sK/U="
ukm.my. 0000864000IN0TXT0"v=spf1 a:smtp.ukm.my include:_spf.google.com include:_spf.brevo.com include:_spf.ps.publicknowledgeproject.org ~all"
ukm.my. 0000864000IN0TXT0"google-site-verification=vRaL7svRL_SSrqW_I7eCJlI0KBKV0e04cPkz1YKqTY"
ukm.my. 0000864000IN0TXT0"brevo-code:ed12f0b80d894445ef0715485137c221"
```

### AAAA

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 11908
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
ukm.my. 000035790IN0S0A0dns1.ukm.my. server.ukm.edu.my. 2026060402 7200 1800 1209600 86400
```

**RRSIG**

```
dns1.ukm.my. server.ukm.edu.my. 2026060402 7200 1800 1209600 86400
```

**DNSKEY**

```
;; Got answer:
;; ->HEADER<<- opcode: QUERY, status: NOERROR, id: 34146
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
ukm.my. 3579 IN SOA dns1.ukm.my. server.ukm.edu.my. 2026060402 7200 1800 1209600 86400
```

**DNSSEC\_VALIDATION**

```
; unsigned answer
ukm.my. 86379 IN SOA dns1.ukm.my. server.ukm.edu.my. 2026060402 7200 1800 1209600 86400
```



TLS Handshake Evidence

IPV4 Connection

IP Used	103.219.237.14
IP Version	4

```
depth=2 C = GB, O = Sectigo Limited, CN = Sectigo Public Server Authentication Root R46
verify return:1
depth=1 C = GB, O = Sectigo Limited, CN = Sectigo Public Server Authentication CA OV R36
verify return:1
depth=0 C = MY, ST = Selangor, O = UNIVERSITI KEBANGSAAN MALAYSIA, CN = *.ukm.my
verify return:1
CONNECTED(00000010)
---
Certificate chain
0 s:C = MY, ST = Selangor, O = UNIVERSITI KEBANGSAAN MALAYSIA, CN = *.ukm.my
i:C = GB, O = Sectigo Limited, CN = Sectigo Public Server Authentication CA OV R36
a:PKKEY: rsaEncryption, 2048 (bit); sigalg: RSA-SHA256
v:NotBefore: Dec 5 00:00:00 2025 GMT; NotAfter: Jan 4 23:59:59 2027 GMT
-----BEGIN CERTIFICATE-----
MIIHIDCCBYigAwIBAgIQYj+7p3Lld41b/zISSU1fUDANBqkqkiG9w0BAQsFADBg
MQswCQYDVQQGEwJH0jEYMBYGA1UEChMPU2VjdGlnbyBMaWlpdGVkMTcwNQYDVQ
EY5TZWN0aWdvIFB1YmxyYyBTZXJ2ZXIgaGVudG9wVudG9wYXRpb24gOEGT1YgUjM2
MB4XDTE1MTIwNTAwMDAwMzF5LjE5OTYyZDZlMjE0VjE0MDEwMDAwMDAwMDAwMDAw
ETAPBgNVBAGTCFNBG9wVudG9wVudG9wYXRpb24gOEGT1YgUjM2MB4XDTE1MTIwNTAw
QU4gTUFMQUVlTSUEwVudG9wVudG9wYXRpb24gOEGT1YgUjM2MB4XDTE1MTIwNTAw
AA0CAQ8AMIIBCgKCAQEA1XF5/kfiIm0t99Ijq8LzHiJDrI+DgiDZmqYJP7JCOUL
qhZROgVED9Ey9qjZ2qAAC1DZzDRUth8mDOPcPEkbQ3lF6Ild21UJ4B7rqSuFr
lBYIbbu0CTXi1Y4YByHDERHnmb0MzLxjL5sJTYpZMPF3jVNynnbu2Avfpta6uDKG
5LXVDPh9VZ7tRnG49u1YtU3KWE1jAz72Lm7nxp74n5c4EoffNphfwKjjfxh7g8Hx
FH/B3t1+NftAMLtv87We0JQx6QAvDgzEHdpJ2ze+jkLxwUuNehMTpCTZR0CLIXz
u0wTE+dHzTSQJfmoDyrbcuHdJe/5De+FYsHdHItow1IDAQAB04IDWDCALQwHwYD
VR0jBBgwFoAU42Z0u3BojSxdTg6mSo+bNyKcgpIwHQYDVRR0BBYEFDee20Ik16Sh
QcE8kubPGJl8vd+3MA4GA1UdDwEB/wQEAwIFoDAMBGNVHRMBAf8EAJAAMB0GA1Ud
J0QMQwQCcGAUQFBwMBBgRgEBFBQcDAjBKBGwNHSAEQzBBMDUDGCsGAUQBSjEB
AgEDBDA1MCMGCCsGAUQFBwIBFhdodHRwczovL3N1Y3R3p28uY29tL0NQZuAIBGZn
gQwBAGIwVAYDVRR0fBE0wSzbJ0EegRYZDaHR0cDovL2Nybc5zZWNoaWdvLmNvbS9T
ZWN0aWdvUHVibGljU2VydmlVYQXV0aGVudG9wYXRpb250QU9UWjM2LmNybDBCBHAI
KwYBBQUHAQEEdB2ME8GCCsGAUQFBzACHkNodHRwOi8vY3J0LmN1Y3R3p28uY29t
L1N1Y3R3p29QdWJsaWNTZXJ2ZXJlbnR0ZW50aWNoLmN1Y3R3p28uY29tL1MCMG
CCsGAUQFBzABhhdodHRwOi8vb2Nzc5zZWNoaWdvLmNvbTAbBgNVHREEFDAsgggg
LnVr55teYIGdWtLm15MIIBjYQYKKwYBBAhwQIEAgSAX0EggF5AAXAdgBgTJqv
en93XwHUBvYSDciZ6wscffjJUHV6+hd305eLyQAAAZru3tISAAAEAwBHMEUCIDBr
iMoCaykV2LINRgh8U0a9S19t+V/Lhob8NHJX0AY6A1EA4VUeHimzDjCL4M2Izpf
xa20gPz9GPqLoK2EoUwL3IAfgCOykcLrN5q86IGsKR6hLdG/h/Gv5U+JeabTuQC
SPp6AAAAZru3tSaAaGAAUAAUfUdTWQDAECwR0IAhAK+arkCd19FQw8vXCGkzDf
JfL7yGBLxZ43HK6rb/yRAiAM6mwXoQziQGA1pv9zhY/hEbL8BZPbL13m0f139Bo
ZgB9AFubD0GLLJZcqJWyKDo3ZBKdugIPdqH0wEIOCGUPO5ZAAABmu7e0boACAAA
BQAAAJLKBAMARjBEA1B2e7aJpLmN0uN3dfm8KvgNuWzIgyLzWgwLZ0dZwzERAIG
NrrjCkA0HJ3XiLHn5xb5vEH75rKfZeRa90pIMhI2keswDQYJKoZIhvcNAQELBQAD
ggGBAJXm4o47+iQF31RqNjwVLERZ0BS+OkwVyyUxwv4sSxyzFN5sEdApyHyMQ8B
VH24eIrZ0i+r+sHDrG0stR3+f3Vc4ZkhENzYUTChH1G9k3Z8NmAyyBfjVU9qUMLH+
f77GIYzbaMRN12450/PRMuAooZF3T8t0w9j5L0P7dfrbUrw2X/f1gphw4H1vI
QR8I2ZJdmsAjiuJdBeXVPI4YyVU50SECPw60A0m60FCUFDmi31IjdrDHR4VZGA
vLWNSIM7ik0K3aytKEFYTC8RaYFPX9j1H0K79AHarMCCNDfkwIMpwxQHPw0LH
pInLh09Wly96z+Je+WyrV506xC/6u5gMMw/sja/8dXWICYZrZGrh/Id0NyGuFF17An
7P6o7K0zmpImY3Cezr5jbxrh9b3NN+AkV9FePpqKq8B1/XI6nXh5BbLk6CKeyLR9
lBvz+td3gFbmGLRbEZxwR7q1CUZp0B9okjt9CsArKtdAlfa6RXXMCW60xey9Wq5
rcijYA=
-----END CERTIFICATE-----
1 s:C = GB, O = Sectigo Limited, CN = Sectigo Public Server Authentication CA OV R36
i:C = GB, O = Sectigo Limited, CN = Sectigo Public Server Authentication Root R46
a:PKKEY: rsaEncryption, 3072 (bit); sigalg: RSA-SHA384
v:NotBefore: Mar 22 00:00:00 2021 GMT; NotAfter: Mar 21 23:59:59 2036 GMT
-----BEGIN CERTIFICATE-----
MIIGTDCBDSgAwIBAgIQLBo8duLD3d3/GRsxiQrtcTANBqkqkiG9w0BAQwFADBf
MQswCQYDVQQGEwJH0jEYMBYGA1UEChMPU2VjdGlnbyBMaWlpdGVkMTYwNAYDVQ
EY1TZWN0aWdvIFB1YmxyYyBTZXJ2ZXIgaGVudG9wVudG9wYXRpb24gUm9vdCB5NDYw
HhcNMjE1MDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAwMDAw
MBYGA1UEChMPU2VjdGlnbyBMaWlpdGVkMTcwNQYDVQDEY5TZWN0aWdvIFB1Ymxy
YyBTZXJ2ZXIgaGVudG9wVudG9wYXRpb24gOEGT1YgUjM2MIIBoANBqkqkiG9w0B
AQEFAA0CA8AMIIBigKAYEApkMtj3R06j0f0fceI0MS2B7K+TyMeGcv2B05AVc3j
lyt76tVHIu/nNe22W/RJXX9rWUD/2GE6GF5x0V4bsY7K3IeJ8E7+KzG/TGboySfD
u+F52jq0BbY62ofhYjMeiAbLI02+FqwHeM8UirUtcX8b2RCx3F58TB0NHVccAXZC
FygZndZCeXxjca7pJJ20LLUnXtcXcjAE1vY4WvBReW0W6mkeZyNgdmpTcF55Y+s
yy6Lte5Zocji9J9NlnReox2RWVYExpAlChZ4gqN+ZpVSIQ0HborVfBbKyhdZyEx
gZgNSntBRwxqIzJeP3hYd4Zuh01vk+/uP3nwDk09p5q/j7naXNCsVesNrhPypaB
WRK066nKfPRPi9m9kIOhMdYfS8giFRTcdgL24Yc1lj7ecAK9trh0VbjwouJ4WH+x
bt47u68ZFD/ac55I0DNHkCpaPruj6e9Rmr7K46wZDAYXuEaqB7tGG/jd6JAA+H2
```

```

044CV98NRsU213f1kScIZntNagMBAAGjggGBMIIBFTAfBgNVHSMEGDAWgBRWc1hk
LfmsGrASKgRieaFAFYghSTAdBgNVH04EFgQU42Z0u3Boj5xdTg6mSo+bnYKcgpIw
DgYDVR0PAAQ/BAQDAgGGMBIGAIUdEwEB/wQIMAYBAf8CAQAwHQYDVR0LBBYwFAYI
KwYBBQUHAWEGCCsGAQUFBwMCMBSGA1UdIAQUMBIwBgYEVR0gADAIbgZngQwBAGIw
VAYDVR0fBE0wSzBjOeEgRYZDaHR0cDovL2NybzC5zZWNOaWdvLmNvbS9TZWNOaWdv
UHVibGljU2VydmlVYQXV0aGVudGljYXRpb255b290UjQ2LmNybDcBhAYIKwYBBQUH
AQEEeDB2ME8GCCsGAQUFBzAChkNodHRwOi8vY3J0LnNlY3RlZ28uY29tL1NlY3Rl
Z290dWJsaWNTZXJ2ZXJkdXR0ZW50aWNoZGlvdjV3b3RSNDYucDdjMCMGCCsGAQUF
BzABhdodHRwOi8vb2NzcC5zZWNOaWdvLmNvbTANBgkqhkiG9w0BAQwFAAOCAGEA
BZXDWHWC3cubb/e1I1kz181PFiK/ZUoH09ufmV0rc50bYH/XKkWUexSPqRkWKFKr
7r80uG+p7VNB8rifX6uopqKAgsvZtZs7iAFw04To6vNcxeBt1Eush3cQ4b8nbQR
MQLChgEAqwhuXp9P48T4QEBSksYav7+aFjNySsLYLPzNqVM3RNwvBdvp6vgDtGwc
xLKQZVuuNViaoYyls8swhxDeSHKpRdxRauTLZ+pl+wGvy0pnrLEJGSz9m0Emfbod
e/XopR2NGqaHJ6bIjyxPu6UtyQGI26E7UAeozACRHz06Nx2jTAY9E6NeB6XuobE
wLK025ZRmvgLcURG1BrV24tGHHTgxCe8M3oGLpUSMTKQ2dkgLjZVyt+gKdFtWELZ
MuRdi+X3XsrR8LFz+aLUiDRfQqhmw3RxxjIyVKvuu9UPYYInsvxYmFnUSEm+2q1z/
iPUry+xDY9MC6+IhLeKT094VKdFVp7LXH42+wwU+17LRoLQ2mK2N/nBLVBwaIhib
QXw4VYKwB86Bc6e56iqsc94KEgD/U4VsjmgfhK+Xp4NM+VYzTTa3QeV3p8x0M0cw
q1p8oZFA+0Bcz3FYWpDiE5j0NWKlw9hXsTyPY/HeZUV59aksKS0SRSmDfe8WJDPX
58uB9/7Lud0G3x0pxQAcffP0ayKavNwDTw4UfJ34cEw=
-----END CERTIFICATE-----
2 s:C = GB, O = Sectigo Limited, CN = Sectigo Public Server Authentication Root R46
i:C = US, ST = New Jersey, L = Jersey City, O = The USERTRUST Network, CN = USERTrust RSA Certification Authority
a:PKKEY: rsaEncryption, 4096 (bit); sigalg: RSA-SHA384
v:NotBefore: Mar 22 00:00:00 2021 GMT; NotAfter: Jan 18 23:59:59 2038 GMT
-----BEGIN CERTIFICATE-----
MIIGLTCCBH2gAwIBAgIRANJ/u8HeNZ55Fq1hSVhgmcQwDQYJKoZIhvcNAQEMBQAw

```



## HTTP Response Evidence

### IPv4 HTTP (port 80)

HTTP Status	200
Connected IP	103.219.237.14
Connect Time	15.06 ms
TTFB	87.15 ms
Total Time	87.35 ms

#### Response Headers:

```
{
  "0": "HTTP/1.1 301 Moved Permanently",
  "1": "Date: Fri, 12 Jun 2026 17:00:09 GMT",
  "2": "Location: http://www.ukm.my/portalukm",
  "3": "Cache-Control: max-age=604800",
  "4": "Expires: Fri, 19 Jun 2026 17:00:09 GMT",
  "5": "Connection: close",
  "6": "Content-Type: text/html; charset=UTF-8",
  "8": "HTTP/1.1 301 Moved Permanently",
  "9": "Date: Fri, 12 Jun 2026 17:00:09 GMT",
  "10": "Location: https://www.ukm.my/portalukm/",
  "11": "Cache-Control: max-age=604800",
  "12": "Expires: Fri, 19 Jun 2026 17:00:09 GMT",
  "13": "Connection: close",
  "14": "Content-Type: text/html; charset=iso-8859-1",
  "16": "HTTP/1.1 200 OK",
  "17": "Date: Fri, 12 Jun 2026 17:00:09 GMT",
  "18": "Vary: Accept-Encoding, Cookie, User-Agent",
  "19": "Cache-Control: max-age=3, must-revalidate",
  "20": "Cache-Control: max-age=604800",
  "21": "Expires: Fri, 19 Jun 2026 17:00:09 GMT",
  "22": "Content-Type: text/html; charset=UTF-8",
  "23": "Transfer-Encoding: chunked",
  "24": "Strict-Transport-Security: max-age=31536000"
}
```

### IPv4 HTTPS (port 443)

HTTP Status	200
Connected IP	103.219.237.14
Connect Time	14.36 ms
TTFB	121.31 ms
Total Time	121.67 ms

#### Response Headers:

```
{
  "0": "HTTP/1.1 301 Moved Permanently",
  "1": "Date: Fri, 12 Jun 2026 17:00:10 GMT",
  "2": "Cache-Control: max-age=604800",
  "3": "Expires: Fri, 19 Jun 2026 17:00:10 GMT",
  "4": "Connection: close",
  "5": "Content-Type: text/html; charset=UTF-8",
  "6": "Location: https://www.ukm.my/portalukm",
  "7": "Strict-Transport-Security: max-age=31536000",
  "9": "HTTP/1.1 301 Moved Permanently",
  "10": "Date: Fri, 12 Jun 2026 17:00:10 GMT",
  "11": "Cache-Control: max-age=604800",
  "12": "Expires: Fri, 19 Jun 2026 17:00:10 GMT",
  "13": "Connection: close",
  "14": "Content-Type: text/html; charset=iso-8859-1",
  "15": "Location: https://www.ukm.my/portalukm/",
  "16": "Strict-Transport-Security: max-age=31536000",
  "18": "HTTP/1.1 200 OK",
  "19": "Date: Fri, 12 Jun 2026 17:00:10 GMT",
  "20": "Vary: Accept-Encoding, Cookie, User-Agent",
  "21": "Cache-Control: max-age=3, must-revalidate",
  "22": "Cache-Control: max-age=604800",
  "23": "Expires: Fri, 19 Jun 2026 17:00:10 GMT",
  "24": "Content-Type: text/html; charset=UTF-8",
  "25": "Transfer-Encoding: chunked",
  "26": "Strict-Transport-Security: max-age=31536000"
}
```

```
}

```

### Connectivity Test Evidence

Test	Result
TCP Connect IPv4 → port 80	301 0.004502 0.011364
TCP Connect IPv4 → port 443	301 0.004411 0.027065

### 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
```