

IPv6 Readiness Report

klk.com.my — klk.com.my



Scan to verify

Category: Enterprise • Generated: 04 Jul 2026, 22:13 MYT • Last Checked: 04 Jul 2026, 03:45 MYT • Verification ID: aa520dd0-5db1-4fbe-ac38-e83269045808

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

Audit trail: <https://ipv6.my6.my/audit/aa520dd0-5db1-4fbe-ac38-e83269045808>

<p>X</p> <p>Non-Compliant</p> <p>MGv6C-1.0</p>	<p>28%</p> <p>No IPv6 Support</p>	<p>IPv6-ONLY READINESS</p> <p>Website: X Not Ready</p> <p>DNS: X Not Ready</p> <p>Email: X Not Ready</p>
--	---	--

<p>IPv4 ADDRESSES</p> <p>103.86.179.184</p>
--

Network Information (WHOIS / RDAP)

IPv4 Network	
Organization	Titan System Integration Sdn Bhd
Country	MY
ASN	AS136412
ASN Name	TSI-AS-AP - Titan System Integration Sdn Bhd, MY
Network (CIDR)	103.86.178.0/23

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	PASS	RRSIG signatures are current and valid.

#	CHECK	RESULT	DETAIL
8	Signing Algorithm	INFO	ECDSAP256SHA256

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	DKIM selector found: selector1_domainkey
7	DMARC Record	PASS	DMARC record found.

IPv4 Baseline (15%) 3 / 3

#	CHECK	RESULT	DETAIL
1	A Record	PASS	103.86.179.184
2	HTTP over IPv4	PASS	HTTP (port 80) responds over IPv4 — 536ms TTFB.
3	HTTPS over IPv4	PASS	HTTPS (port 443) responds over IPv4 — 23ms TTFB.

Audit Trail & Evidence Record

Verification ID	aa520dd0-5db1-4fbe-ac38-e83269045808
Domain	klk.com.my
Check Mode	Manual
Status	Completed
Started	04 Jul 2026, 03:45:55 MYT
Finished	04 Jul 2026, 03:45:59 MYT
Test Node Profile	dual stack
Engine Version	2.0.0
MGv6C Version	1.0.0
Audit URL	https://ipv6.my6.my/audit/aa520dd0-5db1-4fbe-ac38-e83269045808

Integrity Verification

✓ INTEGRITY VERIFIED	
Algorithm	hmac-sha256-v1
Root Hash	1f6d434672d468d6e9ebd44b6cdcaaf1347d22672e78fc7548ad626eb9375d62
http_headers	25d3fb486c58b6e0ced0ed550a87262db934a5544cf31e34a6c9ad855014049d
dns_responses	fa8b4f5a38c6f7cd3f1b0426619658979453b6241f54b4ae07578f7f25ba2961
tls_handshake	c9c2bda2cff55ee9c1ef85f82b838918915046aa43fafff62734f42b0e607580
connectivity_log	3e2f348a66806c00be75d85a4d0e47eb15da12825de0b216a6a119edd2999c0e
dns_resolution_times	69633f82bd52ad65c08c9ca99e7cf3103f52960a095eeeb18a1cad7a17996fff

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	9.98	10.88	8.24	10.58	-1.7
Google	IPv4	33.88	38.8	18.98	46.05	-14.9
Google	IPv6	32.2	37.42	21.49	29	-10.7
Cloudflare	IPv4	22.59	22.71	10.69	21.7	-11.9
Cloudflare	IPv6	48.38	49.89	49.27	232.6	+0.9

DNS Evidence

A

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 21400
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
klk.com.my. 00018000IN0A0103.86.179.184
```

DS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 57666
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
com.my. 00025690IN0S0A0e.nic.my. hostmaster.nic.my. 2026052755 1800 900 604800 3600
```

MX

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 2403
;; flags: qr rd ra; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
klk.com.my. 00018000IN0MX020 cluster9a.us.messagelabs.com.
klk.com.my. 00018000IN0MX010 cluster9.us.messagelabs.com.
```

NS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 56806
;; flags: qr rd ra; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
klk.com.my. 00018000IN0NS0ns1.hawkdns.net.
klk.com.my. 00018000IN0NS0ns2.hawkdns.net.
```

TXT

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 33184
;; flags: qr rd ra; QUERY: 1, ANSWER: 3, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
klk.com.my. 00018000IN0TXT0"sophos-domain-verification=9103d5822c987f6472b4010f55e2a25ad9682bcde515a30f7ca905f0e981aa47"
klk.com.my. 00018000IN0TXT0"sophos-domain-verification=203eeaeef6038923e349e1ac438caca72557026f3"
klk.com.my. 00018000IN0TXT0"v=spf1 ip4:203.115.199.31 include:spf.protection.outlook.com -all"
```

AAAA

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 28485
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
klk.com.my. 00090000IN0S0A0ns1.hawkdns.net. adm_1213443.whoisprotection.cc. 2026040305 14400 300 1209600 900
```

RRSIG

```
ns1.hawkdns.net. adm_1213443.whoisprotection.cc. 2026040305 14400 300 1209600 900
SOA 13 3 1800 20260716000000 20260625000000 46125 klk.com.my. 2xXiAC6jm7HFUGCaHLZXhJCQz4pPMrZAacNpz+8noYztnmw0UKvVest3 BgTNbXyViQBD6dKkAdoKMarWszWA==
```

DNSKEY

```
;; Got answer:  
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 33393  
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1  
  
;; OPT PSEUDOSECTION:  
; EDNS: version: 0, flags:; udp: 1232  
;; ANSWER SECTION:  
klk.com.my. 00898 IN DNSKEY 0257 3 13 q8h5ehMD+29iX7Ha7DBDC0WHldabYU2/UA1R8nSu6RZnvmZWB3qJGUo4 3RigkAYPGyLxoTR+XeVCYkufjPWN9w==
```

DNSSEC_VALIDATION

```
;; validating klk.com.my/SOA: no valid signature found  
; unsigned answer  
klk.com.my. 001798 IN SOA ns1.hawkdns.net. adm_1213443.whoisprotection.cc. 2026040305 14400 300 1209600 900  
klk.com.my. 001798 IN RRSIG SOA 13 3 1800 20260716000000 20260625000000 46125 klk.com.my. 2xXiaC6jm7HFUGCaHLZXHjCQz4pPMrZAacNpz+8noYztnmw0UKvVEST3  
BgTNbXyViqBdD6dKkAdoKMaRwsYzWA==
```



```

lfmSGrASKgRieaFAFYghSTAdBgNVHQ4EFgQU42Z0u3BojSxdTg6mSo+bNyKcgpIw
DgYDVR0PAAQH/BAQDAgGGMBIGA1UdEwEB/wQIMAYBAf8CAQAwHQYDVR0LBBYwFAYI
KwYBBQUHAWEGCCsGAQUFBwMCMBSGA1UdIAQUMBIwBgYEVR0gADAIgZngQwBAGIw
VAYDVR0fBE0wSzBjOeEgRYZDaHR0cDovL2Nybc5zZWNoaWdvLmNvbS9TZWNoaWdv
UHVibGljU2VydmlVYXV0aGVudG1jYXRpb255b290UjQ2LmNybDcBhAYIKwYBBQUH
AQEEeDB2ME8GCCsGAQUFBzACChkNodHRwOi8vY3J0LnNlY3RpZ28uY29tL1NlY3Rp
Z290dWJsawNTXjJ2ZjBdXRoZW50aWNoZG1vb1Jvb3RSNDYucDdjMCMGCSGAQUF
BzABhdodHRwOi8vb2Nzc5zZWNoaWdvLmNvbTANBgkqhkiG9w0BAQwFAAOCAGEA
BZXWdHWC3cubb/e1I1kzi81PFiK/ZUoH09ufmV0rc50bYH/XKkUexSPqRkKFKR
7r80uG+p7VNB8rifX6uopqKAgsvZtZsq7iAFw04To6vNcxeBt1Eush3cQ4b8nbQR
MQLChgEAqwhuXp9P48T4QEBSksYav7+aFjNySsLYLPzNqVM3RNwvBdvp6vgDtGwc
xLKQZVuuNVIAoyYls8swhxDeSHKpRdxRauTLZ+pl+wGvy0pnrLEJGSz9m0EmfboD
e/XopR2NGqHj6bIjyxPu6UtyGI26En7UAEozACrHz06Nx2jTAY9E6NeB6XuobE
wLK025ZRmvgLcURGIbrV24tGHHTgxCe8M3oGlpUSMTKQ2dkgLjZVYt+gKdFtWELZ
MuRdi+X3SsrR8LFz+aLUiDRfQqhmw3RxxjIyVKvvu9UPYY1nsvxYmFnUseM+2q1z/
iPUry+xDY9MC6+IhLeKT094VKdFVp7LXH42+wwU+17Ro1Q2mK2N/nBLVBwaIhib
QXw4VYKwB86Bc6e56iqsc94KEgD/U4VsjmgfhK+Xp4NM+VYzTTa3QeV3p8x0M0cw
q1p8oZFA+0Bcz3FYWpDIE5j0NwKlw9hXsTyPY/HeZUV59akskSOSRSMDfe8wJDPX
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/u8HeNZ5SFq1hSVhgmcQwDQYJKoZIhvcNAQEMBQAw
gYgxCAJBgNVBAYTALVTMRMwEQYDQVQIEwpOZXcgSmVyc2V5MRQwEgYDQVQHEwtK

```


HTTP Response Evidence

IPv4 HTTP (port 80)

HTTP Status	200
Connected IP	103.86.179.184
Connect Time	11.81 ms
TTFB	32.79 ms
Total Time	32.88 ms

Response Headers:

```
{
  "0": "HTTP/1.1 301 Moved Permanently",
  "1": "Server: nginx",
  "2": "Date: Fri, 03 Jul 2026 19:45:59 GMT",
  "3": "Content-Type: text/html; charset=iso-8859-1",
  "4": "Content-Length: 267",
  "5": "Connection: keep-alive",
  "6": "Location: https://klk.com.my/",
  "7": "Expires: Fri, 03 Jul 2026 19:46:59 GMT",
  "8": "Cache-Control: max-age=60",
  "9": "X-XSS-Protection: 1; mode=block",
  "10": "X-Content-Type-Options: nosniff",
  "11": "X-Nginx-Upstream-Cache-Status: MISS",
  "12": "X-Server-Powered-By: Engintron",
  "14": "HTTP/2 301",
  "15": "server: nginx",
  "16": "date: Fri, 03 Jul 2026 19:45:59 GMT",
  "17": "content-type: text/html; charset=iso-8859-1",
  "18": "content-length: 271",
  "19": "location: https://www.klk.com.my/",
  "20": "expires: Fri, 03 Jul 2026 19:46:59 GMT",
  "21": "cache-control: max-age=60",
  "22": "x-xss-protection: 1; mode=block",
  "23": "x-content-type-options: nosniff",
  "24": "x-nginx-upstream-cache-status: EXPIRED",
  "25": "x-server-powered-by: Engintron",
  "27": "HTTP/2 200",
  "28": "server: nginx",
  "29": "date: Fri, 03 Jul 2026 19:45:59 GMT",
  "30": "content-type: text/html; charset=UTF-8",
  "31": "vary: Accept-Encoding",
  "32": "link: <https://www.klk.com.my/>; rel=shortlink",
  "33": "referrer-policy: no-referrer-when-downgrade",
  "34": "expires: Fri, 03 Jul 2026 19:46:59 GMT",
  "35": "cache-control: max-age=60",
  "36": "x-xss-protection: 1; mode=block",
  "37": "x-content-type-options: nosniff",
  "38": "x-nginx-upstream-cache-status: HIT",
  "39": "x-server-powered-by: Engintron"
}
```

IPv4 HTTPS (port 443)

HTTP Status	200
Connected IP	103.86.179.184
Connect Time	6.56 ms
TTFB	25.98 ms
Total Time	26.02 ms

Response Headers:

```
{
  "0": "HTTP/2 301",
  "1": "server: nginx",
  "2": "date: Fri, 03 Jul 2026 19:45:59 GMT",
  "3": "content-type: text/html; charset=iso-8859-1",
  "4": "content-length: 271",
  "5": "location: https://www.klk.com.my/",
  "6": "expires: Fri, 03 Jul 2026 19:46:59 GMT",
  "7": "cache-control: max-age=60",
  "8": "x-xss-protection: 1; mode=block",
  "9": "x-content-type-options: nosniff",
}
```

```

"10": "x-nginx-upstream-cache-status: EXPIRED",
"11": "x-server-powered-by: Engintron",
"13": "HTTP/2 200",
"14": "server: nginx",
"15": "date: Fri, 03 Jul 2026 19:45:59 GMT",
"16": "content-type: text/html; charset=UTF-8",
"17": "vary: Accept-Encoding",
"18": "link: <https://www.klk.com.my/>; rel=shortlink",
"19": "referrer-policy: no-referrer-when-downgrade",
"20": "expires: Fri, 03 Jul 2026 19:46:59 GMT",
"21": "cache-control: max-age=60",
"22": "x-xss-protection: 1; mode=block",
"23": "x-content-type-options: nosniff",
"24": "x-nginx-upstream-cache-status: HIT",
"25": "x-server-powered-by: Engintron"
}
    
```

Connectivity Test Evidence

Test	Result
TCP Connect IPv4 → port 80	301 0.001848 0.005891
TCP Connect IPv4 → port 443	301 0.001819 0.021796

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
    
```