

# IPv6 Readiness Report

tm.com.my — tm.com.my



Scan to verify

Category: Telco • Generated: 04 Jul 2026, 22:22 MYT • Last Checked: 04 Jul 2026, 03:20 MYT • Verification ID: 8c0b68a6-52c0-4eee-bc38-8cdbfe1aa582

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

Audit trail: <https://ipv6.my6.my/audit/8c0b68a6-52c0-4eee-bc38-8cdbfe1aa582>

<p><b>X</b></p> <p><b>Non-Compliant</b></p> <p>MGv6C-1.0</p>	<p><b>55%</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>✓ Ready</b></p> <p>Email: <b>✓ Ready</b></p>
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IPv4 ADDRESSES
45.60.243.95
45.60.245.95

## Network Information (WHOIS / RDAP)

IPv4 Network	
Organization	Incapsula Inc
Country	US
ASN	AS19551
ASN Name	INCAPSULA - Incapsula Inc, US
Network (CIDR)	45.60.0.0/16

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

**Email Services** (25%) 6 / 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>PASS</b>	SMTP port 25 responds over IPv6.
4	<b>STARTTLS over IPv6</b>	<b>PASS</b>	STARTTLS supported over IPv6.
5	<b>SPF Record</b>	<b>PASS</b>	SPF record found.
6	<b>DKIM Selector</b>	<b>INFO</b>	DKIM selector found: selector1_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>	45.60.243.95, 45.60.245.95
2	<b>HTTP over IPv4</b>	<b>PASS</b>	HTTP (port 80) responds over IPv4 — 705ms TTFB.
3	<b>HTTPS over IPv4</b>	<b>PASS</b>	HTTPS (port 443) responds over IPv4 — 1351ms TTFB.

### Audit Trail & Evidence Record

Verification ID	8c0b68a6-52c0-4eee-bc38-8cdbfe1aa582
Domain	tm.com.my
Check Mode	Scheduled
Status	Completed
Started	04 Jul 2026, 03:20:09 MYT
Finished	04 Jul 2026, 03:20:18 MYT
Test Node Profile	dual stack
Engine Version	2.0.0
MGv6C Version	1.0.0
Audit URL	https://ipv6.my6.my/audit/8c0b68a6-52c0-4eee-bc38-8cdbfe1aa582

### Integrity Verification

<b>✓ INTEGRITY VERIFIED</b>	
Algorithm	hmac-sha256-v1
Root Hash	feeb8d551eedf5878352ecd969e4abe1074fc8d298a1704fd4ffa5a98a8a33e
http_headers	e7c8f0181b33c82754ade72cf2b98fd625372b5115f52d3147b115cb9bec0821
dns_responses	8a0aa9dbb7f671595dd8a65b17542607a35ac137b87187910edd2aa59ae5e077
tls_handshake	1b25ddc131a4dc4318e6570c1834770736c8e1f8abb9e4e70f97f467f2f0e
connectivity_log	83565a9c46f3eb67c4498be17b7d961d0211957746e56d35b8b390303f8a6871
dns_resolution_times	10620af1c904dc06929a390940c871e8332885bc4e452704cd31cfdded96b787f

### 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	24.94	26.78	28.55	32.51	+3.6
Google	IPv4	41.05	45.34	30.2	37.88	-10.9
Google	IPv6	23.97	43.93	28.12	44.9	+4.2
Cloudflare	IPv4	31.36	32.14	26.8	27.95	-4.6
Cloudflare	IPv6	41.64	53.81	32.66	47.06	-9



## DNS Evidence

### A

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 15499
;; flags: qr rd ra; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
tm.com.my. 3600 IN A 45.60.245.95
tm.com.my. 3600 IN A 45.60.243.95
```

### DS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 33191
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
com.my. 2565 IN SOA e.nic.my. hostmaster.nic.my. 2026052750 1800 900 604800 3600
```

### MX

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 28049
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
tm.com.my. 3600 IN MX 0 tm-com-my.mail.protection.outlook.com.
```

### NS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 6128
;; flags: qr rd ra; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
tm.com.my. 600 IN NS ns1.a0.impervasecuredns.net.
tm.com.my. 600 IN NS ns1.a1.impervasecuredns.net.
```

### TXT

```
;; Truncated, retrying in TCP mode.
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 64519
;; flags: qr rd ra; QUERY: 1, ANSWER: 18, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
tm.com.my. 3600 IN TXT "duo_sso_verification=UD34ryS98rcFdedGX0g0cmRfwTgmFXuwichIyssfBEzTFyq5BqV5K33B064eaQMR"
tm.com.my. 3600 IN TXT "_vr7ujha7e28bd7okjrjracvxd672wkc8"
tm.com.my. 3600 IN TXT "ciscoidomainverification=63e9147605a8ea67068b37c3a802e723bbabde3c92f55095c1f3801bc30d45"
tm.com.my. 3600 IN TXT "wso2-domain-verification:UGjWnCsE1L3vi!B%SH"
tm.com.my. 3600 IN TXT "_globalsign-domain-verification=ssIAFFIwD-vhiqu-nBkdrphWpIvLbmYrKLZiadTLin"
tm.com.my. 3600 IN TXT "_dlz50laed3mj9xdyl2548kugfdx45m"
tm.com.my. 3600 IN TXT "google-gws-recovery-domain-verification=63950237"
tm.com.my. 3600 IN TXT "_yyvdq2wb2295u44afm2z3wsg0d05dbe"
tm.com.my. 3600 IN TXT "_globalsign-domain-verification=6sxj0c0yZKTfb6JyUJ7g6DAfdvBX6UnXjYC5MgYvN0"
tm.com.my. 3600 IN TXT "Dynatrace-site-verification=5a22bfb7-da1d-4dba-932c-532f758f3d62__5lpgn1qk9gab4ej8gm5egvgrfk"
tm.com.my. 3600 IN TXT "pardot974753=c759fc3f459803b9ed2f894c0a6670da63ec180c68ffb73c41e19e62d7f04fa3"
tm.com.my. 3600 IN TXT "N9qcNsBnZZ7a+N/603ss+q7/T67ZBfctUR6JK845Iuh2m296Ag65MJFJsMrkMP9c5LP0HAMMyAxTHbjU7s4j0="" ""
tm.com.my. 3600 IN TXT "v=spf1 mx a ip4:58.27.27.2/32 ip4:58.26.47.33/32 ip4:58.26.47.41/32 ip4:58.26.47.39/32 ip4:58.27.27.10/32 ip4:58.27.27.8/32 ip4:49.236.195.140/32 ip4:202.188.145.10/32 ip4:202.188.145.11/32 ip4:202.188.145.12/32 ip4:58.27.122.10/32 ip4:58.27.122.11/32 ip4:"":58.27.122.12/32 ip4:35.214.19.57 ip4:35.214.38.249 ip4:35.214.97.123" " ip4:157.119.111.130 ip4:157.119.108.26 ip4:35.224.181.242/32 ip4:104.154.135.219" "/32 ip4:130.211.155.13/32 ip4:130.211.161.53/32 ip4:35.202.123.80/32 ip4:35.225.127.100/32 ip4:202.188.145.6/32 ip4:58.27.122.7/32 include:aspmx.pardot.com include:spf.protection.outlook.com -all"
tm.com.my. 3600 IN TXT "google-site-verification=IxPhEBLgrUUmmbfLM_HhaIDnmTKwBBkyGhRyahWig2s"
tm.com.my. 3600 IN TXT "_globalsign-domain-verification=2h6CKgdUGgGurkGubGuk55rzCKLB-Tsnstxux2RqQINHs"
tm.com.my. 3600 IN TXT "_mlq09g86tktdumfnnszlik5bh7yclhh"
tm.com.my. 3600 IN TXT "globalsign-domain-verification=C861AE5247ACC7D4A916E6387D340209"
```

```
tm.com.my. 3600 IN TXT "globalsign-domain-verification=07870BE96435B5AC65A8AADEE5F226E9" ""
```

#### AAAA

```
;; Got answer:
;; ->HEADER<- opcode: QUERY, status: NOERROR, id: 2450
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
tm.com.my. 596 IN SOA ns1.a0.impervasecuredns.net. tmdnsadmin.tm.com.my. 2013025394 3600 600 604800 600
```

#### RRSIG

```
ns1.a0.impervasecuredns.net. tmdnsadmin.tm.com.my. 2013025394 3600 600 604800 600
```

#### DNSKEY

```
;; Got answer:
;; ->HEADER<- opcode: QUERY, status: NOERROR, id: 28007
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
tm.com.my. 596 IN SOA ns1.a0.impervasecuredns.net. tmdnsadmin.tm.com.my. 2013025394 3600 600 604800 600
```

#### DNSSEC\_VALIDATION

```
; unsigned answer
tm.com.my. 596 IN SOA ns1.a0.impervasecuredns.net. tmdnsadmin.tm.com.my. 2013025394 3600 600 604800 600
```





```

TpiBELyxYpplnKWr1XbaxCaHZu6bE+/oSmmgWvqU4XgUwai0piSd8tAmGYWLSr00
1VENr0ILQnwQie5GFwm9jFHuXQ8+dNMR6qzi0VYP0QARLiCiBtL0HmsGi6TTZ43E
4ZMUz23u3IPnSs/NXDH1jYgfx4hRsM6upM06t83V5LmcBcZkZSAGk+/Mv5FB5P3
nKqH2/8WBwwU0Jq80owYwWdZJG0LLiXVvafHEDId2jpwIwKzJ4EuBilM8wkoVzSZ
xjHzTRzaJ0wnQpS1pFA+LLVZ/t8vT7FKFqu4RJNf7hnjiSTsHIvhnUSHFjLSBdAv
w85qgFWZugi+zTj8B/x0tvedsiJvctFJobFJwSsaBILle2n2KrA2C0KXVHkg2aq
jBpijMJ7Ju00f5bxjCu06epLlWIDAQABoAIBVTCCAVEwDgYDR0PAQH/BAQDAgGG
MBMGA1UdJQoMMMAoGCCsGAQUFBwMBMBMGA1UdEwEB/wQIMAYBAf8CAQAwHQYDR00
BBYEFHkf0+deh84+16zXRFVgF0rv50hFMB8GA1UdIwQYMBaAFANc30Bh6jMsKbV
l0I2lkn/BZksMHsGCCsGAQUFBwEBBG8wbTAUBgggBgEFBQcwAYYiaHR0cDovL29j
c3AuZ2xvYmFsY2lnbi5jb20vc9vdHI0NjA7BggrBgEFBQcwAoYvaHR0cDovL3Nl
Y3VyZS5nbG9iYWxzalwduLmNvbS9jYWNlcnQvc9vdHI0Ni5jcnQwNgYDR0fBC8w
LTAr0CmgJ4YLaHR0cDovL2NybC5nbG9iYWxzalwduLmNvbS9yb290cjQ2LmNybDAh
BgNVHSAEGjAYMAgGBmeBDAECATAMBgorBgEEAaAyCgEDMA0GCsGSIb3DQEBAUA
A4ICAQBkNmXsZ7DAkdPyA0cuhir1CooxdI6btQ05f0fHxA13t6L0sxCmM0I0gW0Z
8B3IUM1yRkzgpqzYcmYw7BuNM4q5EF1rUnuI4JrcjgbA6NtaMCo4ikpdwYtHMDt
ogJjnjqPsVaIxzk6rgRRw6n3Am6WtDKvA/w3dFa2PI7QgXDYynVc8wSghx7VQe
0UwbKaIkEH3DsJS/swcLiUs24SdzswKXb47woAk9eqg7emr+n8m3U7shp2oA0Dz
6nSBfr7M8+l+Ni+rL9Nq4l0GKFPFS4prNGpzn04e0ACRHIqR184m4AISI f5Gvb5
IVsLokuf+n4VZtKkS5/zTqCzjIocv3Kt+gKK7SofZXh/MdiT+LAJFmVQfs2zLD7X
b01s00eduII1U0UKLfQUWMU9x4hNJPTTRm8Ln5xrdCqg+ftgAWYxPp//xTQqzJg2
nzY7YPDVhA4x5pd0ZKmS5bBQL/f+ypg2RjqGiq6bN0o4XmMorMxiNonoM0km/U
ngz5USDc+3btW9z/0IiSYRUB5WBvsd6XtykVlCmVZDhyijVMFK8WCzzYGG4ubu2B
/sY9pU6dYEqYJ0BGsBhLPPY0Zs226oWbVGMmND0YrAgAeYhMhuEYe4fkmW8WI9va
3G400AhwL6QLYMO5dC5wSjH0lsLWzMQr4RKLuwQ7SIUdLlHoQ==
-----END CERTIFICATE-----
2 s:C = BE, 0 = GlobalSign nv-sa, CN = GlobalSign Root R46

```



## HTTP Response Evidence

### IPv4 HTTP (port 80)

HTTP Status	200
Connected IP	45.60.243.95
Connect Time	318.19 ms
TTFB	1317.24 ms
Total Time	1317.45 ms

#### Response Headers:

```
{
  "0": "HTTP/1.1 301 Moved Permanently",
  "1": "Location: https://tm.com.my/",
  "2": "Content-Length: 0",
  "3": "Connection: close",
  "5": "HTTP/2 200",
  "6": "content-type: text/html; charset=UTF-8",
  "7": "server: envoy",
  "8": "date: Fri, 03 Jul 2026 19:20:16 GMT",
  "9": "cache-control: must-revalidate, no-cache, private",
  "10": "content-language: en",
  "11": "x-content-type-options: nosniff",
  "12": "x-frame-options: SAMEORIGIN",
  "13": "expires: Sun, 19 Nov 1978 05:00:00 GMT",
  "14": "content-security-policy: report-uri /report-csp-violation; upgrade-insecure-requests",
  "15": "x-xss-protection: 1",
  "16": "strict-transport-security: max-age=1000",
  "17": "from-origin: same",
  "18": "referrer-policy: no-referrer-when-downgrade",
  "19": "vary: Accept-Encoding",
  "20": "x-cacheable: NO:Not Cacheable",
  "21": "x-varnish: 3235437",
  "22": "age: 0",
  "23": "x-varnish-cache: MISS",
  "24": "x-cache-hits: 0",
  "25": "accept-ranges: bytes",
  "26": "x-envoy-upstream-service-time: 342",
  "27": "set-cookie: visid_incap_2937950=DcBetlZ5TriweBNqMYvPW8LSGoAAAAAQIPAAAAAABaf3b6rr0x7It0Hua9Zv1M; expires=Fri, 02 Jul 2027 22:41:04 GMT; HttpOnly; path=/; Domain=tm.com.my",
  "28": "set-cookie: incap_ses_611_2937950=bJ3/PKP0egqALILWX7V6CG8LSGoAAAAAGQdaoImgBMJA0+9FY/CTIA==; path=/; Domain=tm.com.my",
  "29": "x-cdn: Imperva",
  "30": "x-iinfo: 52-114219707-114218091 pNNN RT(1783106415471 167) q(0 0 0 -1) r(5 5) U6"
}
```

### IPv4 HTTPS (port 443)

HTTP Status	200
Connected IP	45.60.243.95
Connect Time	160.25 ms
TTFB	1077.2 ms
Total Time	1077.27 ms

#### Response Headers:

```
{
  "HTTP/2 200",
  "content-type: text/html; charset=UTF-8",
  "server: envoy",
  "date: Fri, 03 Jul 2026 19:20:17 GMT",
  "cache-control: must-revalidate, no-cache, private",
  "content-language: en",
  "x-content-type-options: nosniff",
  "x-frame-options: SAMEORIGIN",
  "expires: Sun, 19 Nov 1978 05:00:00 GMT",
  "content-security-policy: report-uri /report-csp-violation; upgrade-insecure-requests",
  "x-xss-protection: 1",
  "strict-transport-security: max-age=1000",
  "from-origin: same",
  "referrer-policy: no-referrer-when-downgrade",
  "vary: Accept-Encoding",
  "x-cacheable: NO:Not Cacheable",
  "x-varnish: 1184808",
}
```

```

"age: 0",
"x-varnish-cache: MISS",
"x-cache-hits: 0",
"accept-ranges: bytes",
"x-envoy-upstream-service-time: 417",
"set-cookie: visid_incap_2937950=TNv8RLg6QiuJum0dlwh3G3ALSGoAAAAAQIPAAAAADgMj3gg53irPwm0Lp4i1LH; expires=Fri, 02 Jul 2027 22:41:04 GMT; HttpOnly; path=/; Domain=.tm.com.my",
"set-cookie: incap_ses_611_2937950=WedtJBjm7j2AMolWX7V6CHALSGoAAAAAHxPHKUCbVpF8uNRh6iYMqw==; path=/; Domain=.tm.com.my",
"x-cdn: Imperava",
"x-iinfo: 52-114220118-114218091 pNNN RT(1783106416469 177) q(0 0 0 -1) r(6 6) U6"
    ]
    
```

### Connectivity Test Evidence

Test	Result
TCP Connect IPv4 → port 80	301 0.158123 0.316597
TCP Connect IPv4 → port 443	200 0.158198 0.985401

### Test Node Network Evidence

Node Profile	dual stack
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### Egress Connectivity

IPv4 Egress	unreachable
IPv6 Egress	unreachable

### 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
    
```