

IPv6 Readiness Report

citigroup.com — citigroup.com



Scan to verify

Category: Banking • Generated: 04 Jul 2026, 22:39 MYT • Last Checked: 04 Jul 2026, 03:03 MYT • Verification ID: f2e7caa5-8268-4945-bd38-c2ee2d8e1579

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

Audit trail: <https://ipv6.my6.my/audit/f2e7caa5-8268-4945-bd38-c2ee2d8e1579>

<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>
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IPv4 ADDRESSES
104.94.222.171
104.96.178.165

Network Information (WHOIS / RDAP)

IPv4 Network	
Organization	Akamai Technologies, Inc.
Country	US
ASN	AS33905
ASN Name	AKAMAI-AMS - Akamai International B.V., NL
Network (CIDR)	104.64.0.0/10

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	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	104.94.222.171, 104.96.178.165
2	HTTP over IPv4	PASS	HTTP (port 80) responds over IPv4 — 366ms TTFB.
3	HTTPS over IPv4	PASS	HTTPS (port 443) responds over IPv4 — 1238ms TTFB.

Audit Trail & Evidence Record

Verification ID	f2e7caa5-8268-4945-bd38-c2ee2d8e1579
Domain	citigroup.com
Check Mode	Scheduled
Status	Completed
Started	04 Jul 2026, 03:03:23 MYT
Finished	04 Jul 2026, 03:03:32 MYT
Test Node Profile	dual stack
Engine Version	2.0.0
MGv6C Version	1.0.0
Audit URL	https://ipv6.my6.my/audit/f2e7caa5-8268-4945-bd38-c2ee2d8e1579

Integrity Verification

✓ INTEGRITY VERIFIED	
Algorithm	hmac-sha256-v1
Root Hash	cf917194f7cafcefb5405fca847ce5a706cf2032f91522c11f1703675b8ffbaa
http_headers	99c9dba1a6e84ac649f34f58f6aa8f6de1924cbcfca92687c9d3517fabfe4b9
dns_responses	5c8f4441bf74374bd09e94cc4ce7eae165a6239da4d1d7433dc4a9bdd4f9f4d8
tls_handshake	0b9050454590acb1b7faea7d34cf891bab9e057596579cbb29058b514ee9f738
connectivity_log	9d72a59f94ae1cef86eebdd3e553e773221c28938c032ee6d8374a1777dce8c
dns_resolution_times	858d490dee0f4922e02808b8a1506d3da0b463f14771e40d071b31876f2b7ece

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	45.35	47.78	22.57	52.27	-22.8
Google	IPv4	34.44	36.41	36.71	45.32	+2.3
Google	IPv6	39	79.57	33.51	40.14	-5.5
Cloudflare	IPv4	17.63	19.08	24.49	27.03	+6.9
Cloudflare	IPv6	46.37	53.6	29.41	32.42	-17

DNS Evidence

A

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 64440
;; flags: qr rd ra; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
citigroup.com. 3600 IN A 104.96.178.165
citigroup.com. 3600 IN A 104.94.222.171
```

DS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 4426
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
com. 897 IN SOA a.gtld-servers.net. nstld.verisign-grs.com. 1783105396 1800 900 604800 900
```

MX

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 59879
;; flags: qr rd ra; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
citigroup.com. 1800 IN MX 5 mx-b.mail.citi.com.
citigroup.com. 1800 IN MX 5 mx-a.mail.citi.com.
```

NS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 31704
;; flags: qr rd ra; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
citigroup.com. 3600 IN NS ns1.nsroot1.com.
citigroup.com. 3600 IN NS ns2.nsroot2.com.
```

TXT

```
;; Truncated, retrying in TCP mode.
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 25175
;; flags: qr rd ra; QUERY: 1, ANSWER: 16, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
citigroup.com. 3600 IN TXT "google-site-verification=W1oZvZ4pAy7ASU5vtQdbeLvsM-BLaTkQUKHKEfkKw8"
citigroup.com. 3600 IN TXT "google-site-verification=a5KdIF5qvy8oEnlloMUPZkvHZiN39w_Sc_wqWtJZDI"
citigroup.com. 3600 IN TXT "google-site-verification=aFfLeCV8R5d0_bwkfnkyLB-RaRNaZ_vYRC_yM_z6r5M"
citigroup.com. 3600 IN TXT "google-site-verification=fFBk708T6VrNiFf8tgKZCw8vLZRvagtVZL-EnvQc0zY"
citigroup.com. 3600 IN TXT "google-site-verification=jyExexYbISL-RPnkFRcw-mDH_aR3jJH71dDGXCnvAUQ"
citigroup.com. 3600 IN TXT "cisco-ci-domain-verification=4ff6832706517f60b04d042675c64a5525964fb03e1eb52365349b8b765063df"
citigroup.com. 3600 IN TXT "paloaltonetworks-site-verification=3882d978b07397802d48b9068f445c4de7b6e8fc234da8251d8d77cc0e055342"
citigroup.com. 3600 IN TXT "v=spf1 a:1._spf.citigroup.com a:2._spf.citigroup.com include:spf-00123c01.pphosted.com redirect=ext1._spf.citigroup.com"
citigroup.com. 3600 IN TXT "postman-domain-verification=b0973f7c46e67edf55bb3d7f0de30d91ae3c1329d2512ad912375d873557ec111f5e79af0d3e0903d8ff7cf1ebfb3c9e219bbdf12203912f850ab59087acee"
citigroup.com. 3600 IN TXT "MS=ms92288257"
citigroup.com. 3600 IN TXT "MS=617A9E7598377F278D9D3B8CEBB893E897E4391D"
citigroup.com. 3600 IN TXT "facebook-domain-verification=2amqbcg7cv6hq0dxq4tf107b3y0zn"
citigroup.com. 3600 IN TXT "globalsign-domain-verification=5333822B44304398DE567C2747872C29"
citigroup.com. 3600 IN TXT "webexdomainverification.9L49J=8ea68d0a-1e43-4ae8-9f61-f0dc3alba394"
citigroup.com. 3600 IN TXT "google-site-verification=B2RTefeDQDD6q_djOf22I7ncFCBM1hs00uR29V5rbbo"
citigroup.com. 3600 IN TXT "google-site-verification=Lu5ecxuGzVLD5x0gdMcF244K0FnquxCegkBP8DUuBY"
```

AAAA

```
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 28182
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
citigroup.com. IN SOA ns1.nsroot1.com. hostmaster.citi.com. 2021103826 3600 300 2419200 3600
```

RRSIG

```
ns1.nsroot1.com. hostmaster.citi.com. 2021103826 3600 300 2419200 3600
```

DNSKEY

```
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 15014
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
citigroup.com. IN SOA ns1.nsroot1.com. hostmaster.citi.com. 2021103826 3600 300 2419200 3600
```

DNSSEC_VALIDATION

```
; unsigned answer
citigroup.com. IN SOA ns1.nsroot1.com. hostmaster.citi.com. 2021103826 3600 300 2419200 3600
```



```

D37nrZ0STDI5ohgYwHtHL+Ixtf8Gh4jpEK7Aff/z0WNYCIQDzC0KHCrC0oJ2J3tt8
JdZJ4401rkcxmMNEiVzX7ZGQAB1AJR0Q4f67MHvgfMZJCaoGGUBx9Nf0AIBP3Jn
fVU3LhnYAAABnXUyjKUAQAQDAEYwRAIgmWw5fM3VYA7sM96/eb0d4h1yLGRovdcu
aGn40Xye30oCIB10SVDBNy0X0yiofFz0qYF68tfq5ZBALbqLweg02VMA0GC5qG
S1b3DQEBcUAA4IBAQAwbGZY+co0slIuqJ7NjYycn70gfWfFMkvgY0YgkFpbD1
7buB0uIHA41w2Yw5+XcK3qCKuJmLbLs7q06LNGbkjRw1xBEXEM8I3x9wN6FRKG7n
YEM0i0i70KC+WLaMXL7vfywuQEKgbFBGowIpJ54qmCG44TLdwnIe9p2J096CcRzJ
DDNoscwpP+2J8+SIYU0yAKppTLt2GCIKUWJercqLog+1kGbpw+Re093RZ5r7+btB
Q3M9yG+H+iPyyXeB0IwL0uo1Cww1BYzvBeyx0mpVb48KpyG+d7itFvW6mn2wR3bN
AjMLxY4Mv8v0XdzsvXAQ6YSGKr0pEhu6j5WwJHN4
-----END CERTIFICATE-----
i s:C = US, 0 = DigiCert Inc, CN = DigiCert EV RSA CA G2
i:C = US, 0 = DigiCert Inc, OU = www.digicert.com, CN = DigiCert Global Root G2
a:PKKEY: rsaEncryption, 2048 (bit); sigalg: RSA-SHA256
v:NotBefore: Jul 2 12:42:50 2020 GMT; NotAfter: Jul 2 12:42:50 2030 GMT
-----BEGIN CERTIFICATE-----
MIIFPDCCBCSgAwIBAgIQAwPH++IILXysKc0a3uyIDANBgkqhkiG9w0BAQsFADBh
MQswCQYDVQQGEwJVUzEVMBMGA1UEChMMRGlnaUNlcnQgSW5jMRkwFwYDVoLExB3
d3cuZGlnaW50cnQuY29tMSAwHgYDVoQDEEdEwdpQ2VydCBHbG9iYWwUm9vdCBH
MjAeFw0yMDA3MDIxMjQyNTBhFw0zMDA3MDIxMjQyNTBhMEQxCzAJBgNVBAYTALVT
MRUwEwYDVoQKEwEaWdpQ2VydCBjbmMxHjAcBgNVBAMTFURpZ2LDXJ0IEVWIFJT
Q5BDQ5BHMjCCASiWdQYJKoZIhvcNAQEBBQADggEPADCCAQcCggEBAK0eZsx/neTr
f4MXJz0R2fJTIDfn8AwUAu7hy4gI0vp708LAAHx2h3bbf8wL+pGM5xaJK9ffDDCD
63FqqFBqE9eTmo3RkgQhLu55a04LsXRLcK6crk000dj donybmhrfGrtBqYvbRat
xenkv0Sg4fRhRL4wYh4dnW0LVRGhbt1G5Q19zm9CqMLq7LUdAE+6d3a5++ppfG
cnWlMbEveCLHPAnbL+/iKauQpQU1Mi+wEBnjE5tK8Q778naXnF+DsedQJ7NEi+b
QoonTHEz9ryeEcUHuQTv7nApa/zCqes5LXn1pMs4LZJ3SVgbkTLj+RbBov/uiwTX
tkBEWawvZH8CAwEAAaOCAGswggIHMB0GA1UdDgQWBRRqTLC/mGidw3sgddRZAXLI
ZpIyBjAfBgNVHSMGDAWgBR0ILQgJXm427mD/r6uRLtBhePOTA0BgNVH08BAf8E

```

HTTP Response Evidence

IPv4 HTTP (port 80)

HTTP Status	403
Connected IP	104.94.222.171
Connect Time	233.1 ms
TTFB	477.06 ms
Total Time	477.1 ms

Response Headers:

```
[
  "HTTP/1.1 403 Forbidden",
  "Server: AkamaiGHost",
  "Mime-Version: 1.0",
  "Content-Type: text/html",
  "Content-Length: 363",
  "Expires: Fri, 03 Jul 2026 19:03:30 GMT",
  "Cache-Control: max-age=0, no-cache, no-store",
  "Pragma: no-cache",
  "Date: Fri, 03 Jul 2026 19:03:30 GMT",
  "Connection: close"
]
```

IPv4 HTTPS (port 443)

HTTP Status	403
Connected IP	104.94.222.171
Connect Time	180.98 ms
TTFB	741.01 ms
Total Time	741.06 ms

Response Headers:

```
[
  "HTTP/1.1 403 Forbidden",
  "Server: AkamaiGHost",
  "Mime-Version: 1.0",
  "Content-Type: text/html",
  "Content-Length: 363",
  "Expires: Fri, 03 Jul 2026 19:03:31 GMT",
  "Cache-Control: max-age=0, no-cache, no-store",
  "Pragma: no-cache",
  "Date: Fri, 03 Jul 2026 19:03:31 GMT",
  "Connection: close"
]
```

Connectivity Test Evidence

Test	Result
TCP Connect IPv4 → port 80	301 0.184436 0.378637
TCP Connect IPv4 → port 443	301 0.175833 0.726712

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
```