


IPv6 Readiness Report

citigroup.com — citigroup.com

Category: Banking • Generated: 20 Apr 2026, 21:25 MYT • Last Checked: 07 Mar 2026, 01:00 MYT • Verification ID: 0e7d74bf-d74b-406a-8369-57cf0bc685e2
 Report generated from National IPv6 Readiness Monitor — <https://ipv6.my6.my>
 Audit trail: <https://ipv6.my6.my/audit/0e7d74bf-d74b-406a-8369-57cf0bc685e2>

 Non-Compliant <small>MGv6C-1.0</small>	28% No IPv6 Support	IPv6-ONLY READINESS Website: X Not Ready DNS: X Not Ready Email: X Not Ready
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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, 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.
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 — 538ms TTFB.
3	HTTPS over IPv4	PASS	HTTPS (port 443) responds over IPv4 — 1246ms TTFB.

Audit Trail & Evidence Record

Verification ID	0e7d74bf-d74b-406a-8369-57cf0bc685e2
Domain	citigroup.com
Check Mode	Manual
Status	Completed
Started	07 Mar 2026, 01:00:18 MYT
Finished	07 Mar 2026, 01:00:29 MYT
Test Node Profile	dual stack
Engine Version	2.0.0
MGv6C Version	1.0.0
Audit URL	https://ipv6.my6.my/audit/0e7d74bf-d74b-406a-8369-57cf0bc685e2

Integrity Verification

✓ INTEGRITY VERIFIED	
Algorithm	hmac-sha256-v1
Root Hash	19b50c6906ff2e0ac3325ea54182a89f12ee8a0a5b1e7fc2f89e0981f6f459af
http_headers	085e22d3f7b3d29db722bafeea4098d2f3355a5c24292f4d879ecfc2a02fde5c
dns_responses	baf4c84cf3f3b1e0aab541852baa680d8357a92540544f1011f34b0a5c199c6a
tls_handshake	3216205789ee42bcd5d8ea6926c30bdb140ab3e3bb372a32efa75570c748e06b
connectivity_log	fa3f8e73e5d5f8948e97183d6354aedc2cb34c18e4badd921d6144413922737f
dns_resolution_times	0137989e1da3b35b491db3459b8d2e623628c1d993ba9d6a3755d5676e397363

Test Node Identity

Os	Linux srv1440888 6.8.0-101-generic #101-Ubuntu SMP PREEMPT_DYNAMIC Mon Feb 9 10:15:05 UTC 2026 x86_64
Hostname	srv1440888
Php Version	8.3.30
Server Ipv4	-
Server Ipv6	-

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	8.57	9.21	14.95	18.31	+6.4
Google	IPv4	17.31	19.34	32.45	38.79	+15.1
Google	IPv6	27.07	27.13	26.06	29.91	-1
Cloudflare	IPv4	23.28	30.17	9.7	22.1	-13.6
Cloudflare	IPv6	10.76	17.08	17.32	17.86	+6.6

DNS Evidence

A

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 47589
;; flags: qr rd ra; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
citigroup.com. 00106700IN00A00104.96.178.165
citigroup.com. 00106700IN00A00104.94.222.171
```

DS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 23405
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; AUTHORITY SECTION:
com. 00090000IN050A00a.gtld-servers.net. nstld.verisign-grs.com. 1772787596 1800 900 604800 900
```

MX

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 44710
;; flags: qr rd ra; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
citigroup.com. 00161700IN00MX05 mx-a.mail.citi.com.
citigroup.com. 00161700IN00MX05 mx-b.mail.citi.com.
```

NS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 23918
;; flags: qr rd ra; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
citigroup.com. 00360000IN00NS00ns2.nsroot2.com.
citigroup.com. 00360000IN00NS00ns1.nsroot1.com.
```

TXT

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 57271
;; flags: qr rd ra; QUERY: 1, ANSWER: 13, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
citigroup.com. 00360000IN00TXT00"paloaltonetworks-site-verification=3882d978b07397802d48b9068f445c4de7b6e8fc234da8251d8d77cc0e055342"
citigroup.com. 00360000IN00TXT00"v=spf1 a:1._spf.citigroup.com a:2._spf.citigroup.com include:spf-00123c01.pphosted.com redirect=ext1._spf.citigroup.com"
citigroup.com. 00360000IN00TXT00"facebook-domain-verification=2amqbctg7cv6hq0dxq4tf107b3y0zn"
citigroup.com. 00360000IN00TXT00"google-site-verification=a5KdIF5qvy8oEnllolMUPZkvHZiN39w_Sc_wqWtJZDI"
citigroup.com. 00360000IN00TXT00"google-site-verification=WloZvZ4pAy7ASU5vtQdbeLvsM-BLaTkQQUKHkEfkKW8"
citigroup.com. 00360000IN00TXT00"webexdomainverification.9L49J=8ea68d0a-1e43-4ae8-9f61-f0dc3a1ba394"
citigroup.com. 00360000IN00TXT00"cisco-ci-domain-verification=4ff6832706517f60b04d042675c64a5525964fb03e1eb52365349b8b765063d"
citigroup.com. 00360000IN00TXT00"postman-domain-verification=b0973f7c46e67edf55bb3d7f0de30d91ae3c1329d2512ad912375d873557ec111f5e579af0d3e0903d8ff7cf1efb3c9e219bbdf12203912f850ab59087acee"
citigroup.com. 00360000IN00TXT00"MS=ms92288257"
citigroup.com. 00360000IN00TXT00"MS=617A9E7598377F278D9D3B8CEBB893E897E4391D"
citigroup.com. 00360000IN00TXT00"google-site-verification=aFfLeCV8R5d0_bwkfnkyLB-RaRNaZ_vYRC_yM_z6rSM"
citigroup.com. 00360000IN00TXT00"google-site-verification=B2RTefeDQDD6q_djOf22I7ncFCBM1hs00uR29V5rbbo"
citigroup.com. 00360000IN00TXT00"globalsign-domain-verification=5333822B44304398DE567C2747872C29"
```

AAAA

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 36397
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1
```

```
;; OPT PSEUDOSECTION:  
; EDNS: version: 0, flags:; udp: 512  
;; AUTHORITY SECTION:  
citigroup.com. IN SOA ns1.nsroot1.com. hostmaster.citi.com. 2021102407 3600 300 2419200 3600
```

RRSIG

```
ns1.nsroot1.com. hostmaster.citi.com. 2021102407 3600 300 2419200 3600
```

DNSKEY

```
;; Got answer:  
;; ->HEADER<- opcode: QUERY, status: NOERROR, id: 11411  
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1  
  
;; OPT PSEUDOSECTION:  
; EDNS: version: 0, flags:; udp: 512  
;; AUTHORITY SECTION:  
citigroup.com. IN SOA ns1.nsroot1.com. hostmaster.citi.com. 2021102407 3600 300 2419200 3600
```

DNSSEC_VALIDATION

```
; unsigned answer  
citigroup.com. IN SOA ns1.nsroot1.com. hostmaster.citi.com. 2021102407 3600 300 2419200 3600
```



```
Gdz/yKDXoMzuNH13zf1stMiJisAa1gIhAPmRIoU25isKVt0jUKc6CGv0PgYpBHz
q45mwA60s4zoAHYASZybad4df0z8Nt7Nh25muFuvCoeAGdFVuvvp6ynd+MMAAAGa
MKjKTAABAMARzBFAiAJ7NVvYcGGWYmCOMhhBhVfyolDn9kYl1ggkYeLd3mMfgIh
AL502kXKUzK5yeD3VjmPoTxn3CYNA/z0c4L6pm6SD1DYMA0GCSqGSIb3DQEBcWUA
A4IBAQAETp7dYdEX9RiM8eDg4nsPeNL2GgBYGqrrhLIA+89NNuD8sxZnjTwK20/L
v0NPvcUtoVcRmB2NwbyniLG7eDQIJqu+XPR5pVppeTDV9QGxtPbiPdxMKXuYxwx
ob/sbskWRGb+is47tAIGYVn5J3U695/0/cNmHA1s6VK9D5TYRLu12po3+tkMmh
qpr5cNdIxxYR5PjBGM02XpvH4ojCD3k050h6KLjhdicjry1JwL5R66yCwWtRePvU
EcQ1YzMc8LxpD5PHZJQ8X3D+28gc1hc8jhYqjeQ527ofGMnPHqqZUgXp3F4qucPu
l22vR6VoYqNKP0CJyxZYGnkW3vLr
-----END CERTIFICATE-----
1 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-----
MIIFPDCCBCSgAwIBAgIQAWePH++IILXysKc0a3uyIDANBgkqhkiG9w0BAQsFADBh
MQswCQYDVQQGEwJVUzEVMBMGA1UEChMMRGlnaUNlcnQgSW5jMRkwFwYDVQQLExB3
d3cuZGlnaWwucnQuY29tMSAwHgYDVQ0EXdEaWdpQ2VydCBHbG9iYWwUm9vdCBH
MjAeFw0yMDA3MDIxMjQyNTBhFw0zMDA3MDIxMjQyNTBhMEQxCzAJBgNVBAYTALVT
MRUwEwYDVQQKEwEaWdpQ2VydCBjbmMxHjAcBgNVBAMTFURpZ2l2ZXJ0IEVWIFJT
Q5BDQ5BHMjCCASiWdQYJKoZIhvcNAQEBBQADggEPADCCAQoCggEBBAK0eZsx/neTr
f4MXJz0R2fJTIDfn8AwUAu7hy4gI0vp708LAAHx2h3bbf8wL+pGM5xaJK9ffDDCD
63FqqFBqE9eTmo3RkgQhLu55a04LsXRLcK6crk000dj donybmhrfGrtBqYvbRat
xenkv0Sg4f rhRL4wYh4dnW0LVRGhbt1G5Q19zm9CqMlq7LlUdAE+6d3a5++ppfG
cnWlmbEVEcLHPAnbL+/iKauQpQU1Mi+wEBnjE5tK8Q778naXnF+DsedQJ7NEi+b
QoonTHEz9ryeEcUHuQTv7nApa/zCqes5LXn1pMs4LZJ35VgbkTLj+RbBov/uiwTX
tkBEWawvZH8CAwEAAaOCAGswggIHMB0GA1UdDgQWBBRqTLC/mGidw3sgddRZAXLI
ZpIyBjAfBgNVHSMEGDAwBR0lLQgGjXm427mD/r6uRLtBhePOTA0BgNVH08BAf8E
```

HTTP Response Evidence

IPv4 HTTP (port 80)

HTTP Status	403
Connected IP	104.94.222.171
Connect Time	229.7 ms
TTFB	458.16 ms
Total Time	458.19 ms

Response Headers:

```
[
  "HTTP/1.1 403 Forbidden",
  "Server: AkamaiGHost",
  "Mime-Version: 1.0",
  "Content-Type: text/html",
  "Content-Length: 361",
  "Expires: Fri, 06 Mar 2026 09:00:25 GMT",
  "Cache-Control: max-age=0, no-cache, no-store",
  "Pragma: no-cache",
  "Date: Fri, 06 Mar 2026 09:00:25 GMT",
  "Connection: close"
]
```

IPv4 HTTPS (port 443)

HTTP Status	403
Connected IP	104.94.222.171
Connect Time	280.27 ms
TTFB	996.48 ms
Total Time	996.51 ms

Response Headers:

```
[
  "HTTP/1.1 403 Forbidden",
  "Server: AkamaiGHost",
  "Mime-Version: 1.0",
  "Content-Type: text/html",
  "Content-Length: 361",
  "Expires: Fri, 06 Mar 2026 09:00:27 GMT",
  "Cache-Control: max-age=0, no-cache, no-store",
  "Pragma: no-cache",
  "Date: Fri, 06 Mar 2026 09:00:27 GMT",
  "Connection: close"
]
```

Connectivity Test Evidence

Test	Result
TCP Connect IPv4 → port 80	301 0.262655 0.541816
TCP Connect IPv4 → port 443	301 0.275526 1.110055

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
76.13.221.0/24 dev eth0 proto kernel scope link src 76.13.221.142
```