


# IPv6 Readiness Report

bpmb.com.my — bpmb.com.my

Category: Banking • Generated: 20 Apr 2026, 21:25 MYT • Last Checked: 07 Mar 2026, 01:00 MYT • Verification ID: afefbe43-a5c2-4bd6-b97d-f4803e24e06c

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

Audit trail: <https://ipv6.my6.my/audit/afefbe43-a5c2-4bd6-b97d-f4803e24e06c>

|   |   |   |
|---|---|---|
| <br><b>Non-Compliant</b><br><small>MGv6C-1.0</small> | <br><b>43%</b><br><b>Partial Support</b> | <b>IPV6-ONLY READINESS</b><br>Website: <span style="color: red;">✗ Not Ready</span><br>DNS: <span style="color: green;">✓ Ready</span><br>Email: <span style="color: red;">✗ Not Ready</span> |
|---|---|---|

|                                       |
|---------------------------------------|
| <b>IPV4 ADDRESSES</b><br>45.127.5.124 |
|---------------------------------------|

## Network Information (WHOIS / RDAP)

| IPv4 Network   |   |
|----------------|---|
| Organization   | Exabytes Cloud Sdn.Bhd.                       |
| Country        | MY  |
| ASN            | AS46015                                       |
| ASN Name       | EXABYTES-AS-AP Exa Bytes Network Sdn.Bhd., MY |
| Network (CIDR) | 45.127.4.0/22                                 |

| Web Services (35%) <span style="float: right;">0 / 8</span> |                                     |                                       |  |
|---|-------------------------------------|---------------------------------------|--|
| #   | CHECK                               | RESULT                                | DETAIL   |
| 1   | <b>AAAA Record</b>                  | <span style="color: red;">FAIL</span> | No AAAA record found in DNS.   |
| 2   | <b>Globally Routable IPv6</b>       | <span style="color: red;">FAIL</span> | IPv6 address is not globally routable.                               |
| 3   | <b>HTTP over IPv6</b>               | <span style="color: red;">FAIL</span> | HTTP is not accessible over IPv6.                                    |
| 4   | <b>HTTPS over IPv6</b>              | <span style="color: red;">FAIL</span> | HTTPS is not accessible over IPv6.                                   |
| 5   | <b>IPv6-Only Reachability</b>       | <span style="color: red;">FAIL</span> | Site is not reachable when limited to IPv6-only.                     |
| 6   | <b>TLS Certificate Valid (IPv6)</b> | <span style="color: red;">FAIL</span> | TLS certificate is invalid, expired, or hostname mismatch over IPv6. |
| 7   | <b>Dual-Stack (IPv4 + IPv6)</b>     | <span style="color: red;">FAIL</span> | Domain is IPv6-only or IPv4-only.                                    |
| 8   | <b>HTTP/3 (QUIC)</b>                | <span style="color: red;">FAIL</span> | No HTTP/3 support detected.  |

| DNS & DNSSEC (25%) <span style="float: right;">3 / 5</span> |                                    |  |   |
|---|------------------------------------|--|---|
| #   | CHECK                              | RESULT                                   | DETAIL  |
| 1   | <b>NS Has AAAA Record</b>          | <span style="color: green;">PASS</span>  | Nameserver has IPv6 address.                  |
| 2   | <b>NS Reachable via IPv6</b>       | <span style="color: green;">PASS</span>  | Nameserver is reachable via IPv6 on port 53.  |
| 3   | <b>NS Answers Queries via IPv6</b> | <span style="color: green;">PASS</span>  | DNS queries answered over IPv6.               |
| 4   | <b>DNSSEC Validated</b>            | <span style="color: red;">FAIL</span>    | DNSSEC validation failed or zone is unsigned. |
| 5   | <b>Reverse DNS (PTR)</b>           | <span style="color: red;">FAIL</span>    | No PTR record found.                          |
| 6   | <b>DS Record at Parent</b>         | <span style="color: red;">FAIL</span>    | No DS record at parent.                       |
| 7   | <b>RRSIG Valid</b>                 | <span style="color: red;">FAIL</span>    | No valid RRSIG found.                         |
| 8   | <b>Signing Algorithm</b>           | <span style="color: purple;">INFO</span> | No DNSKEY record found.                       |

**Email Services** (25%) 3 / 6

| # | CHECK                          | RESULT      | DETAIL                            |
|---|--------------------------------|-------------|-----------------------------------|
| 1 | <b>MX Record Exists</b>        | <b>PASS</b> | MX record found.                  |
| 2 | <b>MX Server Has IPv6</b>      | <b>FAIL</b> | MX server has no IPv6 address.    |
| 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> | No common DKIM selector found.    |
| 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> | 45.127.5.124                                      |
| 2 | <b>HTTP over IPv4</b>  | <b>PASS</b> | HTTP (port 80) responds over IPv4 — 391ms TTFB.   |
| 3 | <b>HTTPS over IPv4</b> | <b>PASS</b> | HTTPS (port 443) responds over IPv4 — 413ms TTFB. |

## Audit Trail & Evidence Record

|                   |  |
|-------------------|--|
| Verification ID   | afefbe43-a5c2-4bd6-b97d-f4803e24e06c                           |
| Domain            | bpmb.com.my  |
| Check Mode        | Manual   |
| Status            | Completed  |
| Started           | 07 Mar 2026, 01:00:12 MYT                                      |
| Finished          | 07 Mar 2026, 01:00:18 MYT                                      |
| Test Node Profile | dual stack   |
| Engine Version    | 2.0.0  |
| MGv6C Version     | 1.0.0  |
| Audit URL         | https://ipv6.my6.my/audit/afefbe43-a5c2-4bd6-b97d-f4803e24e06c |

## Integrity Verification

|                             |  |
|-----------------------------|--|
| ✓ <b>INTEGRITY VERIFIED</b> |  |
| Algorithm                   | hmac-sha256-v1   |
| Root Hash                   | c9bf56502adc4d83b7de4b047eea8419c311cf3d437f6d8aa3f56d1796da0ca4 |
| http_headers                | 91f7d9061186650026b3cfc3f2df7b66d66b84f9438f367d8fd26648f2ea950d |
| dns_responses               | d7da40d683d67cb73110157eb635e3b0aa5ae34e5baa8ad5ef9abdfda039bb85 |
| tls_handshake               | 9c19227580882f123d413be71e5f8032ec3e40ac8512fb747110c3c65f0303a7 |
| connectivity_log            | 39db5d628182e1d8f0290f2bf314a81b277f36d7363593bf8c7b91ef788a128c |
| dns_resolution_times        | 26bccf7097d5cccd6e49d86c07b3ac09cc6c9d60a839fabf187c44b4fd972b9f |

## 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   | 32.19      | 48.86      | 26.82         | 29.42         | -5.4       |
| Google     | IPv4      | 28.89      | 36.63      | 25.2          | 26.88         | -3.7       |
| Google     | IPv6      | 22.27      | 27.83      | 29.46         | 32.85         | +7.2       |
| Cloudflare | IPv4      | 20.11      | 22.3       | 7.99          | 8.3           | -12.1      |
| Cloudflare | IPv6      | 17.6       | 23.37      | 28.31         | 32.39         | +10.7      |



## DNS Evidence

### A

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 22965
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
bpmb.com.my. 300 IN A 45.127.5.124
```

### DS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 15422
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; AUTHORITY SECTION:
com.my. 1800 IN SOA b.nic.my. hostmaster.nic.my. 2026018479 1800 900 604800 3600
```

### MX

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 65195
;; flags: qr rd ra; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
bpmb.com.my. 172 IN MX 0 mx1.hc1258-10.ap.iphmx.com.
bpmb.com.my. 172 IN MX 0 mx2.hc1258-10.ap.iphmx.com.
```

### NS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 59576
;; flags: qr rd ra; QUERY: 1, ANSWER: 4, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
bpmb.com.my. 3600 IN NS dns4.cloudns.net.
bpmb.com.my. 3600 IN NS dns7.cloudns.net.
bpmb.com.my. 3600 IN NS dns3.cloudns.net.
bpmb.com.my. 3600 IN NS dns8.cloudns.net.
```

### TXT

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 7559
;; flags: qr rd ra; QUERY: 1, ANSWER: 7, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
bpmb.com.my. 3600 IN TXT "MS=ms92526255"
bpmb.com.my. 3600 IN TXT "v=spf1 a:esa1.hc1258-10.ap.iphmx.com a:esa2.hc1258-10.ap.iphmx.com include:mailrelay.ticloud.com include:spf.protection.outlook.com -all"
bpmb.com.my. 3600 IN TXT "MS=ms20888647"
bpmb.com.my. 3600 IN TXT "/4kdzTafpTgiL0Y1+AG+zbc65ir4lD4/hoQIwp1Kxmjatmhl+67eMrjHHFiAXoHoKVzDbEMCZ4FrC6gXNhMKLA=="
bpmb.com.my. 3600 IN TXT "MS=7C1EDC828D2D9CC1B4059C025C3D40B010C1EE32"
bpmb.com.my. 3600 IN TXT "google-site-verification=3q00QxVy4tcR2S1Nf1wwrABIE7kSE7hVxMh2uaMHZLc"
bpmb.com.my. 3600 IN TXT "duo_sso_verification=Vcro3Ivnc8WPpArewAjpgv0peED1BvZ0URsWv2aQE0E76JLWbdvMPNsQRLjxa5Vhu"
```

### AAAA

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 63465
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; AUTHORITY SECTION:
bpmb.com.my. 491 IN SOA dns3.cloudns.net. support.cloudns.net. 2026022301 7200 1800 1209600 3600
```

**RRSIG**

```
dns3.cloudns.net. support.cloudns.net. 2026022301 7200 1800 1209600 3600
```

**DNSKEY**

```
;; Got answer:  
;; ->HEADER<<- opcode: QUERY, status: NOERROR, id: 21340  
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1  
  
;; OPT PSEUDOSECTION:  
; EDNS: version: 0, flags:; udp: 512  
;; AUTHORITY SECTION:  
bpmb.com.my. IN SOA dns3.cloudns.net. support.cloudns.net. 2026022301 7200 1800 1209600 3600
```

**DNSSEC\_VALIDATION**

```
; unsigned answer  
bpmb.com.my. IN SOA dns3.cloudns.net. support.cloudns.net. 2026022301 7200 1800 1209600 3600
```









HTTP Response Evidence

IPv4 HTTP (port 80)

|              |              |
|--------------|--------------|
| HTTP Status  | 200          |
| Connected IP | 45.127.5.124 |
| Connect Time | 8.92 ms      |
| TTFB         | 364.71 ms    |
| Total Time   | 364.81 ms    |

Response Headers:

```
{
  "0": "HTTP/1.1 301 Moved Permanently",
  "1": "Date: Fri, 06 Mar 2026 09:00:16 GMT",
  "2": "Content-Type: text/html",
  "3": "Content-Length: 162",
  "4": "Connection: keep-alive",
  "5": "Location: https://bpmb.com.my/",
  "6": "Content-Security-Policy: default-src 'self'; script-src 'self' 'unsafe-inline' 'unsafe-eval' https://cdn.jsdelivr.net https://static.userback.io https://www.google-analytics.com https://ajax.googleapis.com https://www.googletagmanager.com; connect-src 'self' https://api.wpcodex.com https://api.userback.io https://apisnippets.wpcodex.com https://www.google-analytics.com; img-src 'self' data: https://ps.w.org https://s.w.org; style-src 'self' 'unsafe-inline' https://cdn.jsdelivr.net https://static.userback.io; font-src 'self' data: https://cdn.jsdelivr.net https://static.userback.io; worker-src 'self' blob:;",
  "7": "X-Frame-Options: SAMEORIGIN",
  "8": "X-Content-Type-Options: nosniff",
  "9": "X-XSS-Protection: 1; mode=block",
  "10": "Server: Prometheus",
  "11": "Pre-Cognitive-Push: Enabled",
  "12": "Quantum-Flux-Capacity: Omega",
  "14": "HTTP/2 301",
  "15": "date: Fri, 06 Mar 2026 09:00:17 GMT",
  "16": "content-type: text/html; charset=UTF-8",
  "17": "location: https://www.bpmb.com.my/",
  "18": "x-redirect-by: WordPress",
  "19": "content-security-policy: default-src 'self'; script-src 'self' 'unsafe-inline' 'unsafe-eval' https://cdn.jsdelivr.net https://static.userback.io https://www.google-analytics.com https://ajax.googleapis.com https://www.googletagmanager.com; connect-src 'self' https://api.wpcodex.com https://api.userback.io https://apisnippets.wpcodex.com https://www.google-analytics.com; img-src 'self' data: https://ps.w.org https://s.w.org; style-src 'self' 'unsafe-inline' https://cdn.jsdelivr.net https://static.userback.io; font-src 'self' data: https://cdn.jsdelivr.net https://static.userback.io; worker-src 'self' blob:;",
  "20": "x-frame-options: SAMEORIGIN",
  "21": "x-content-type-options: nosniff",
  "22": "x-xss-protection: 1; mode=block",
  "23": "server: Prometheus",
  "24": "pre-cognitive-push: Enabled",
  "25": "quantum-flux-capacity: Omega",
  "26": "strict-transport-security: max-age=63072000; includeSubDomains; preload",
  "27": "cache-control: public, no-cache",
  "28": "referrer-policy: strict-origin-when-cross-origin",
  "29": "x-grid-cache-ttl: 1",
  "30": "x-grid-cache: MISS",
  "31": "alt-svc: h3=\":443\"; ma=86400",
  "33": "HTTP/2 200",
  "34": "date: Fri, 06 Mar 2026 09:00:17 GMT",
  "35": "content-type: text/html; charset=UTF-8",
  "36": "vary: Accept-Encoding",
  "37": "link: <https://www.bpmb.com.my/wp-json/>; rel=\\\"https://api.w.org/\\\"",
  "38": "link: <https://www.bpmb.com.my/wp-json/wp/v2/pages/2>; rel=\\\"alternate\\\"; title=\\\"JSON\\\"; type=\\\"application/json\\\"",
  "39": "content-security-policy: default-src 'self'; script-src 'self' 'unsafe-inline' 'unsafe-eval' https://cdn.jsdelivr.net https://static.userback.io https://www.google-analytics.com https://ajax.googleapis.com https://www.googletagmanager.com; connect-src 'self' https://api.wpcodex.com https://api.userback.io https://apisnippets.wpcodex.com https://www.google-analytics.com; img-src 'self' data: https://ps.w.org https://s.w.org; style-src 'self' 'unsafe-inline' https://cdn.jsdelivr.net https://static.userback.io; font-src 'self' data: https://cdn.jsdelivr.net https://static.userback.io; worker-src 'self' blob:;",
  "40": "x-frame-options: SAMEORIGIN",
  "41": "x-content-type-options: nosniff",
  "42": "x-xss-protection: 1; mode=block",
  "43": "server: Prometheus",
  "44": "pre-cognitive-push: Enabled",
  "45": "quantum-flux-capacity: Omega",
  "46": "strict-transport-security: max-age=63072000; includeSubDomains; preload",
  "47": "cache-control: public, no-cache",
  "48": "referrer-policy: strict-origin-when-cross-origin",
  "49": "x-grid-cache-ttl: 1",
  "50": "x-grid-cache: UPDATING",
  "51": "alt-svc: h3=\":443\"; ma=86400"
}
```

IPv4 HTTPS (port 443)

|             |     |
|-------------|-----|
| HTTP Status | 200 |
|-------------|-----|

|                     |              |
|---------------------|--------------|
| <b>Connected IP</b> | 45.127.5.124 |
| <b>Connect Time</b> | 4.86 ms      |
| <b>TTFB</b>         | 379.04 ms    |
| <b>Total Time</b>   | 379.11 ms    |

**Response Headers:**

```
{
  "0": "HTTP/2 301",
  "1": "date: Fri, 06 Mar 2026 09:00:17 GMT",
  "2": "content-type: text/html; charset=UTF-8",
  "3": "location: https://www.bpmb.com.my/",
  "4": "x-redirect-by: WordPress",
  "5": "content-security-policy: default-src 'self'; script-src 'self' 'unsafe-inline' 'unsafe-eval' https://cdn.jsdelivr.net https://static.userback.io https://www.google-analytics.com https://ajax.googleapis.com https://www.googletagmanager.com; connect-src 'self' https://api.wpcodex.com https://api.userback.io https://apisnippets.wpcodex.com https://www.google-analytics.com; img-src 'self' data: https://ps.w.org https://s.w.org; style-src 'self' 'unsafe-inline' https://cdn.jsdelivr.net https://static.userback.io; font-src 'self' data: https://cdn.jsdelivr.net https://static.userback.io; worker-src 'self' blob:;",
  "6": "x-frame-options: SAMEORIGIN",
  "7": "x-content-type-options: nosniff",
  "8": "x-xss-protection: 1; mode=block",
  "9": "server: Prometheus",
  "10": "pre-cognitive-push: Enabled",
  "11": "quantum-flux-capacity: Omega",
  "12": "strict-transport-security: max-age=63072000; includeSubDomains; preload",
  "13": "cache-control: public, no-cache",
  "14": "referrer-policy: strict-origin-when-cross-origin",
  "15": "x-grid-cache-ttl: 1",
  "16": "x-grid-cache: MISS",
  "17": "alt-svc: h3=\":443\"; ma=86400",
  "19": "HTTP/2 200",
  "20": "date: Fri, 06 Mar 2026 09:00:17 GMT",
  "21": "content-type: text/html; charset=UTF-8",
  "22": "vary: Accept-Encoding",
  "23": "link: <https://www.bpmb.com.my/wp-json/>; rel=\\\"https://api.w.org/\\\"",
  "24": "link: <https://www.bpmb.com.my/wp-json/wp/v2/pages/2>; rel=\\\"alternate\\\"; title=\\\"JSON\\\"; type=\\\"application/json\\\"",
  "25": "content-security-policy: default-src 'self'; script-src 'self' 'unsafe-inline' 'unsafe-eval' https://cdn.jsdelivr.net https://static.userback.io https://www.google-analytics.com https://ajax.googleapis.com https://www.googletagmanager.com; connect-src 'self' https://api.wpcodex.com https://api.userback.io https://apisnippets.wpcodex.com https://www.google-analytics.com; img-src 'self' data: https://ps.w.org https://s.w.org; style-src 'self' 'unsafe-inline' https://cdn.jsdelivr.net https://static.userback.io; font-src 'self' data: https://cdn.jsdelivr.net https://static.userback.io; worker-src 'self' blob:;",
  "26": "x-frame-options: SAMEORIGIN",
  "27": "x-content-type-options: nosniff",
  "28": "x-xss-protection: 1; mode=block",
  "29": "server: Prometheus",
  "30": "pre-cognitive-push: Enabled",
  "31": "quantum-flux-capacity: Omega",
  "32": "strict-transport-security: max-age=63072000; includeSubDomains; preload",
  "33": "cache-control: public, no-cache",
  "34": "referrer-policy: strict-origin-when-cross-origin",
  "35": "x-grid-cache-ttl: 1",
  "36": "x-grid-cache: HIT",
  "37": "alt-svc: h3=\":443\"; ma=86400"
}
```

**Connectivity Test Evidence**

| Test                        | Result                |
|-----------------------------|-----------------------|
| TCP Connect IPv4 → port 80  | 301 0.002319 0.005578 |
| TCP Connect IPv4 → port 443 | 301 0.001920 0.439772 |

---

### Test Node Network Evidence

---

|              |            |
|--------------|------------|
| Node Profile | dual stack |
|--------------|------------|

### 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
```