Microsoft Azure





Azure Verified Modules Community Call

Monday 26th October
16:00 UK | 12:00 EDT | 09:00 PDT | 21:30 IST | 03:00 AEDT

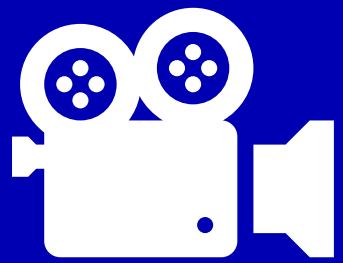
aka.ms/AVM/CommunityCall



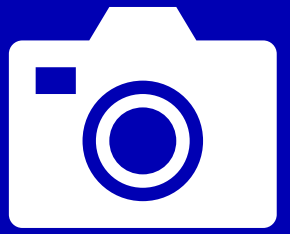
This meeting is being recorded

When you join this event, your name, email address and/or phone number may be viewable by other session participants in the attendee list. By joining, you're agreeing to this experience.

Also, this event will be recorded and shared publicly with others, including Microsoft's global customers, partners, employees, and service providers. The recording may include your name and any questions you submit to Q&A.









It’s great to be back 👋

What we'll cover today

Telemetry and Usage Update

AVMs move to engineering

- New team member's introductions
- Module tiering plans

What we've been working on

- Burning issues and PRs down
- Owner Metadata revamp and validation
- AI & Agentic enhancements
- AVM.Authoring PowerShell Module
- ModTM removal and replacement
- Specification updates and changes

Semester plans (Oct 26 until March 27)

- Overview
- Bicep Dependabot
- azurerm to azapi

Community pre-submitted Q&As

Q&A + Close





Telemetry & Usage Update



Telemetry & Usage of AVM

All-time AVM deployments (since Jul 2024 · Terraform modtm since No...

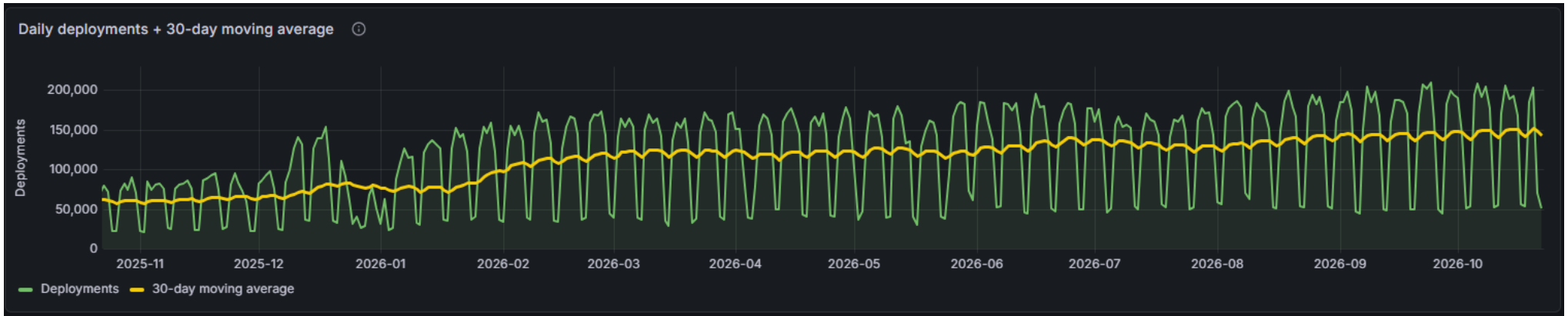
59,524,300

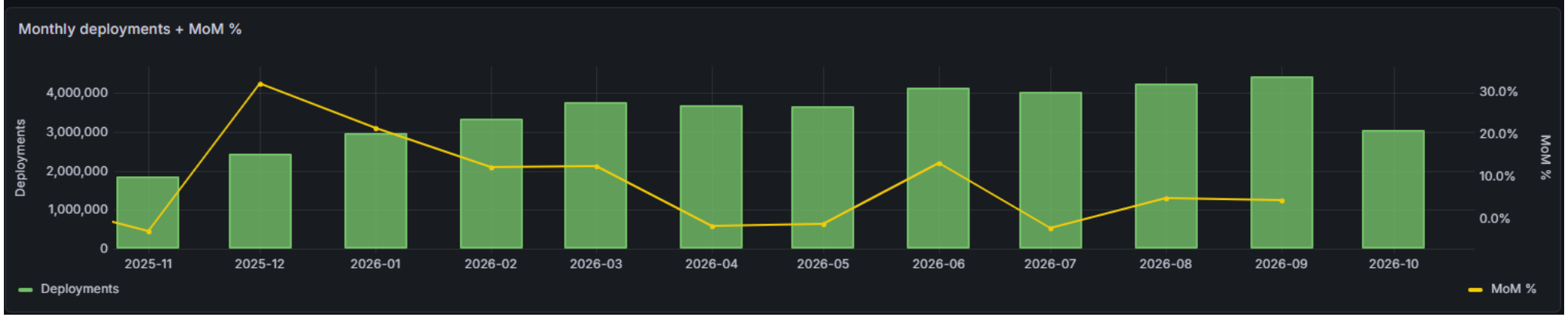
MoM % (last completed month)

4.5%

YoY % (last completed month)

53.6%





Data as of 22nd October 2026



AVM is now owned by Azure Engineering

aka.ms/AVM/Blog



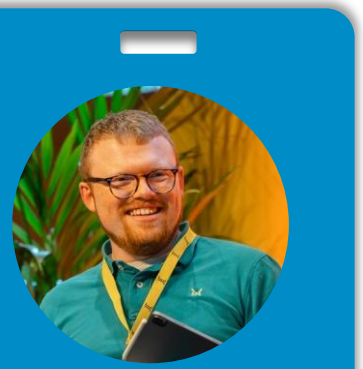
Checkout the blog!

aka.ms/AVM/Blog



A huge thank you to all of you who consume, use, advocate, report issues, submit PRs, maintain or own an AVM module or have been involved in the core team 👍 🥰

Meet the engineering team



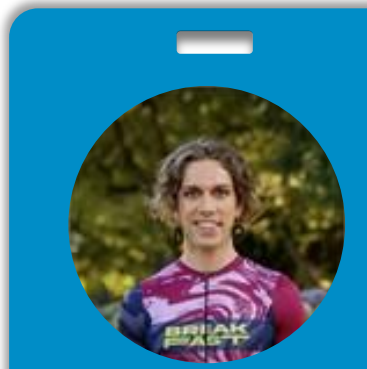
Jack Tracey
(He/Him)
Product Manager
@jtracey93

Microsoft



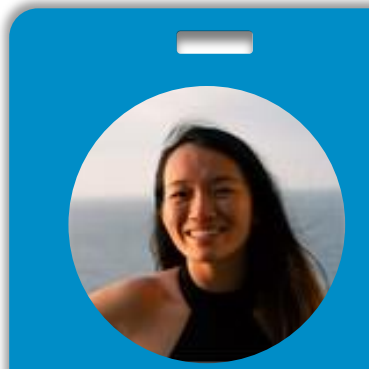
Jared Holgate
(He/Him)
Software Engineer
@jaredfholgate

Microsoft



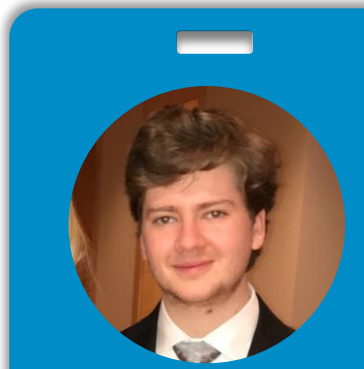
Andy Jordan
(They/Them)
Software Engineer
@andyleejordan

Microsoft



Mya Schmitz
(She/Her)
Software Engineer
@myaschmitz

Microsoft



Jacob Coates
(He/Him)
Software Engineer
@thomascoats

Microsoft

Folks in the AVM Core Team are still very much involved (Alexander Sehr, Erika Gressi, Kris Baranek, Chris Sidebotham, René Hézser, etc.) + many amazing Microsoft FTE module owners across various organizations 💙



Module Tiering

Planned for early 2027 | Tiers describe who owns and maintains a module, not its quality!

Tier 1 · Core

Owned by the AVM Core Team

- Owned directly by the AVM engineering team
- Maintained alongside the AVM specifications, framework and CI
- AVM engineering team owns the module in both Bicep and Terraform

Tier 2 · Maintained

Owned by Microsoft FTEs or teams

- Owned by Microsoft full-time employees or teams
- Includes Azure engineering teams owning modules for their own services – i.e. Azure Migrate own ALZ + Sub Vending
- **This is today's ownership model**

Tier 3 · Future idea

Vetted external owners

- An idea, not a commitment
- Not considered before the second half of calendar year 2027
- Think MVPs, Azure Expert MSP/Frontier Partner etc.
- **Would you use a Tier 3 module?**

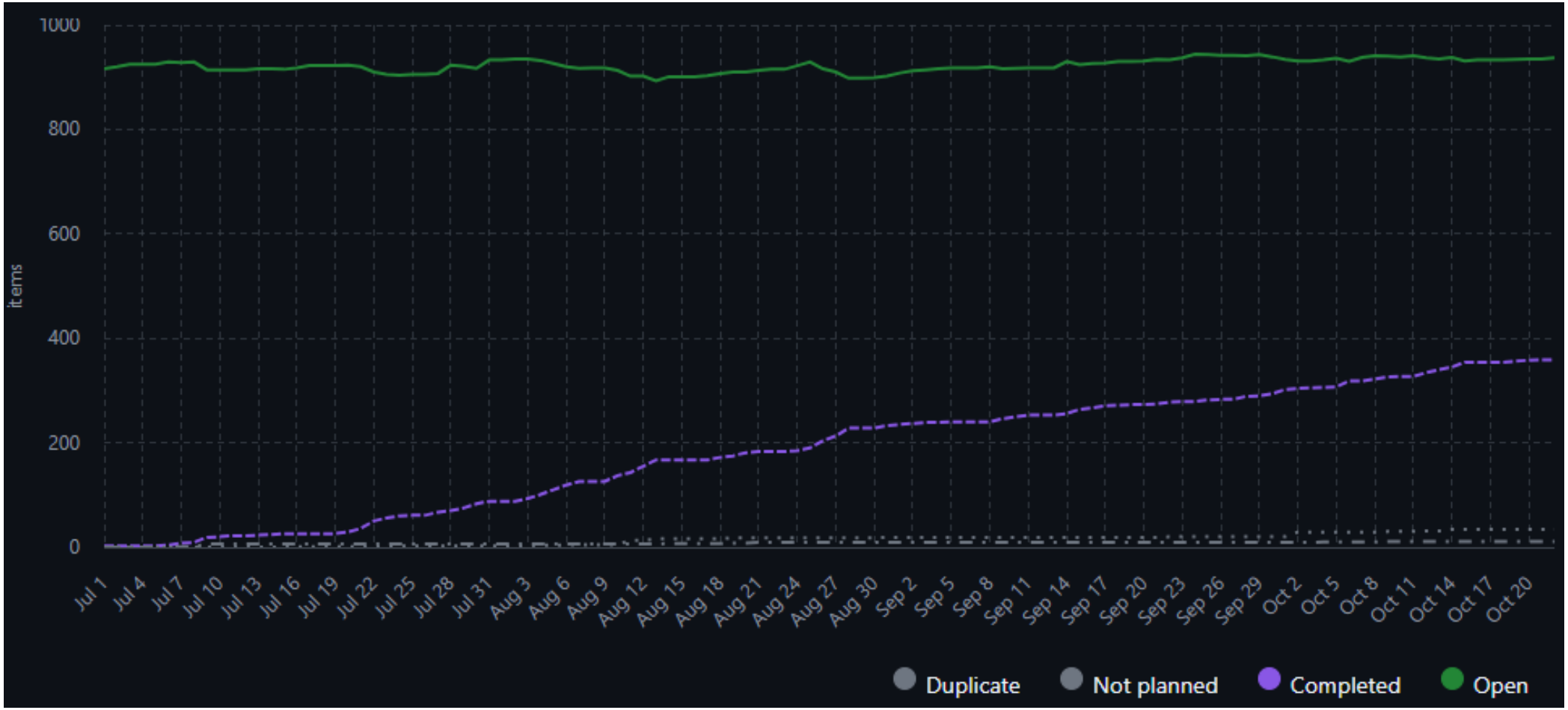
Same bar in every tier: every module is built to the same AVM specifications and passes the same CI checks.
Initial tier classifications aren't published yet; the current ownership model applies until tiering lands.

What we've been working on





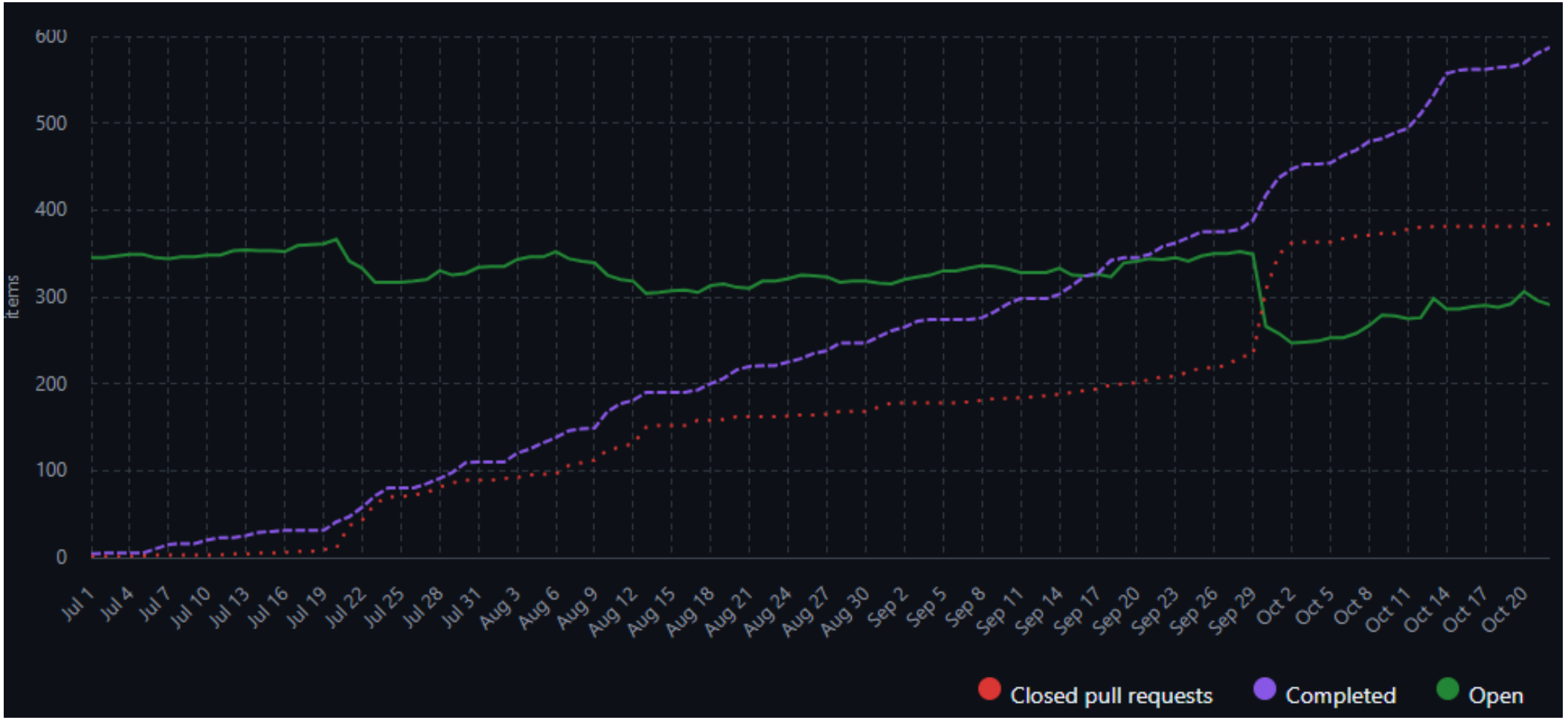
Burning issues down



Data as of 22nd October 2026



Burning pull requests down



Data as of 22nd October 2026

Owner Metadata Revamp & Validation



bicep-registry-modules / avm / ptn / network / private-link-private-dns-zones / **metadata.json**

jaredfholgate and Copilot fix(telemetry): backfill unique Bicep module prefixes (#7403) 063eb89

Code Blame 9 lines (9 loc) · 525 Bytes · Raw

```
{
  "$schema": "https://raw.githubusercontent.com/Azure/azure-verified-modules-tools/main/src/Avm.Authoring/Resources/Schemas/v1/avm-module-metadata.schema.json",
  "moduleDisplayName": "Private Link Private DNS Zones",
  "moduleDescription": "AVM Pattern Module for Private Link Private DNS Zones",
  "telemetryIdPrefix": "46d3xbcp.ptn.98cabd6",
  "alternativeTelemetryIdPrefixes": ["46d3xbcp.ptn.network-privatelinkprivatednszones"],
  "canonicalType": "network/private-link-private-dns-zones",
  "owners": ["jtracey93"]
}
```

terraform-azurerm-avm-ptn-network-private-link-private-dns-zones / **metadata.json**

3 people feat(metadata): add approved module metadata (#205) dc79

Code Blame 10 lines (10 loc) · 444 Bytes · Raw

```
{
  "$schema": "https://raw.githubusercontent.com/Azure/azure-verified-modules-tools/main/src/Avm.Authoring/Resources/Schemas/v1/avm-module-metadata.schema.json",
  "moduleDisplayName": "Private Link Private DNS Zones",
  "moduleDescription": "AVM Pattern Module for Private Link Private DNS Zones",
  "canonicalType": "network/private-link-private-dns-zones",
  "owners": [
    "jtracey93"
  ],
  "telemetryIdPrefix": "46d3xtrf.ptn.234b330"
}
```

Docs



AI Updates

Add the AVM LLMS.txt to all your agents, skills & instructions files

aka.ms/avm/llms

Always-current map of the AVM site for AI agents

- Follows the **llmstxt.org** standard
- Helps agents navigate the AVM site & get links to raw markdown versions of our pages – as token-efficient as possible
- Auto-generated by the Hugo build whenever the site updates, so it's always up to date

AVM Terraform skills, agent & copilot-instructions have been updated

Skills + Agent + Instructions

Working together for AI-assisted module authoring

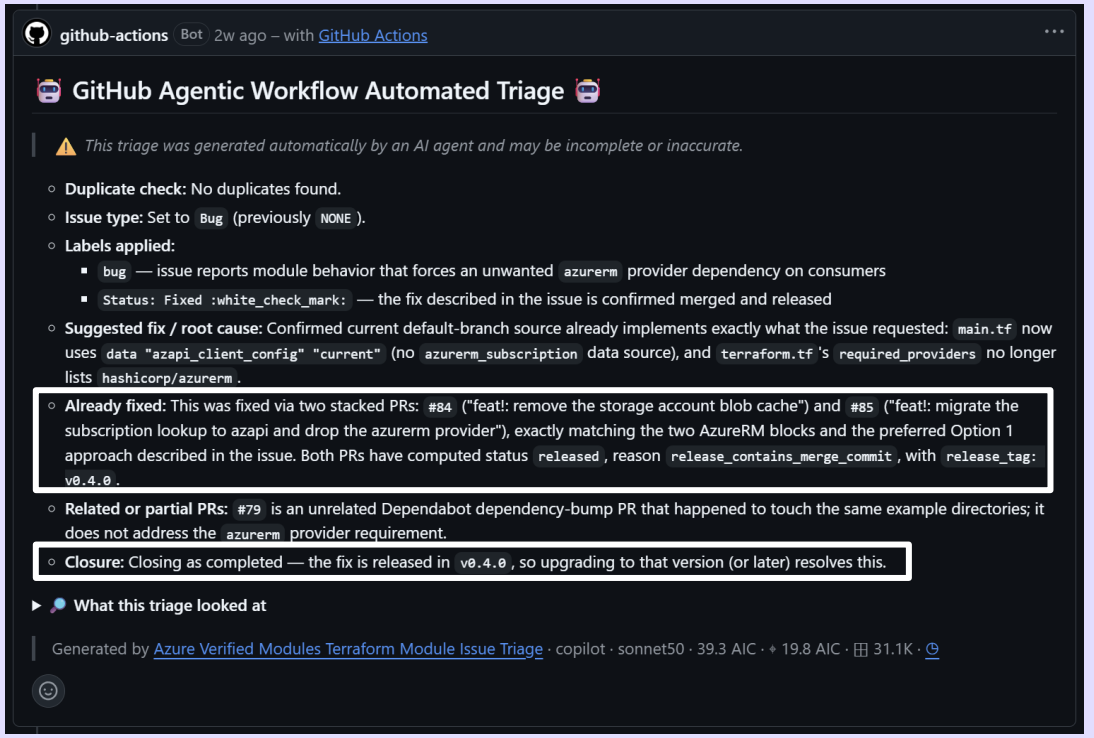
- Lots of improvements over the past few months – thanks to community contributors like **Lester March** for PRs suggesting updates
- Skills, agents & copilot-instructions work together to make AI-assisted AVM Terraform module authoring straightforward
- Find them in **github.com/Azure/azure-verified-modules-managed-files** → **terraform/root/.github**

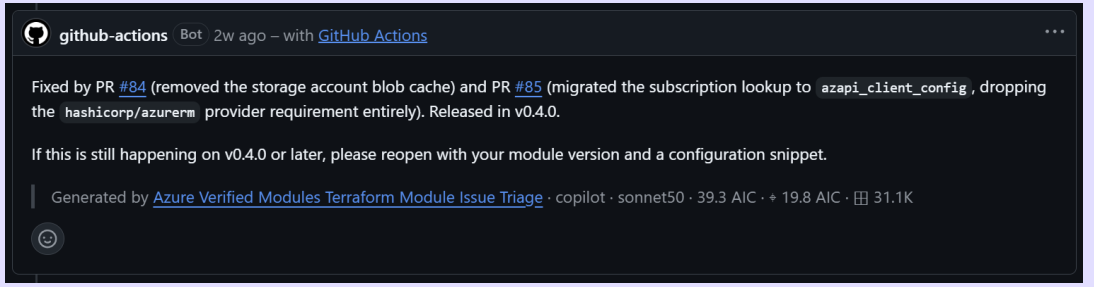


Agentic Workflows for Terraform Repos

How it works

- New issues in all AVM Terraform modules get triaged automatically
  - Also runs when issues are reopened
- Applies labels and links related PRs
- Closes duplicates and issues that are already fixed
- Posts one summary comment
  - Each closure gets a second comment detailing the reason
- Read-only, with capped writes





terraform-azapi-avm-utl-sku-finder issue #83



AVM.Authoring PowerShell Module

One tool to rule them all!

Simplification

One set of tooling for both Bicep and Terraform, allowing sharing of both code and processes

Clean up

Remove multiple bespoke tools and scripts from the Bicep and Terraform stacks.

bicep docs

Added the `bicep docs generate` command as a native bicep command to generate docs from a template

Same commands across Bicep and Terraform

avm init

New module scaffolding, including folders, files, and metadata.json

avm pre-commit

Formatting, docs generation, file management, etc

avm pr-check

Linting, static analysis, file validation, Well Architected Framework policy checks, etc

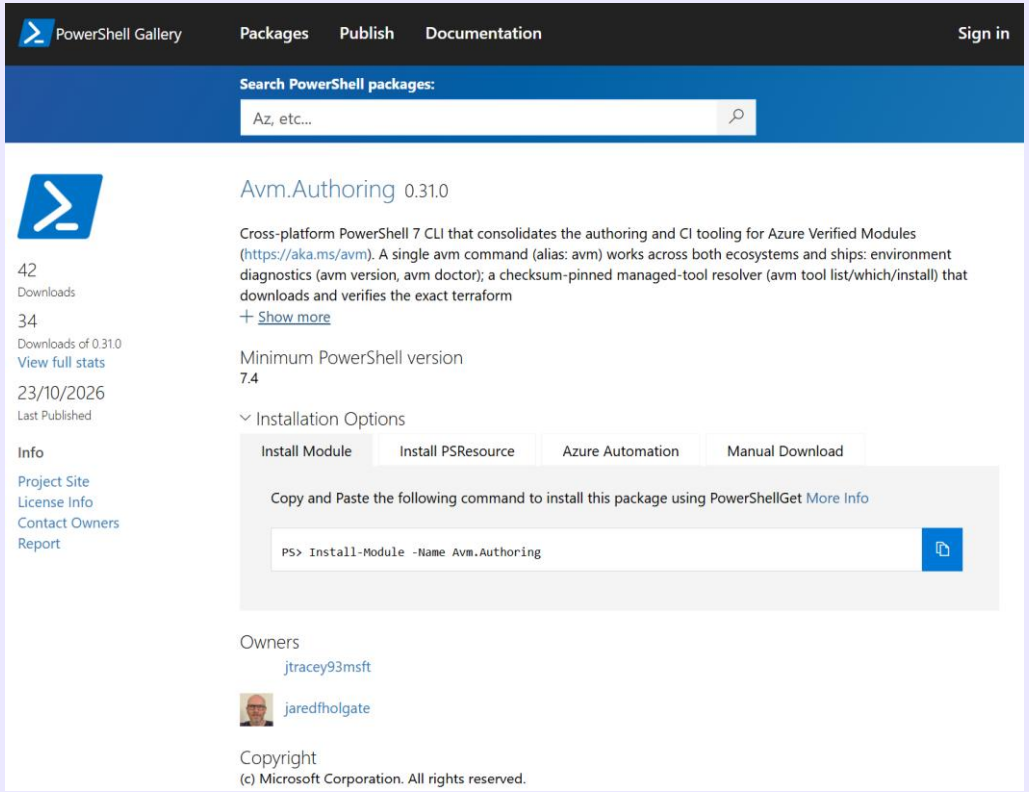
avm test [unit | intn | e2e]

Run the unit, integration, or e2e tests



AVM.Authoring in practice

PowerShell Gallery



aka.ms/avm/authoring

AVM command help

```
❯ avm
Avm.Authoring CLI

Usage: avm <verb> [<args>]

Available verbs:
  pre-commit            Validate metadata, then run the fast pre-commit gauntlet (terraform: sync, check convention, transform, format,
  pr-check              Run the full PR gauntlet (metadata, sync, format, transform, lint, check policy, check convention, test, docs).
  test unit             Run Bicep Pester or Terraform unit tests (tests/unit).
  test integration      Run Bicep ARM validate/what-if or Terraform integration tests.
  test e2e              Deploy isolated Bicep examples or run Terraform e2e tests.
  init                  Initialize a local Bicep module, or create and set up a Terraform module repository (resumable).
  version               Print module, runtime and OS version info.
  upgrade               Upgrade Avm.Authoring to the latest PowerShell Gallery version.
  doctor                Diagnose the local environment.
  tool list             List managed tools and their install status.
  tool which            Show the cached path for a managed tool.
  tool install          Download and verify a managed tool into the cache.
  context               Classify the current directory as a Bicep or Terraform module.
  metadata validate     Validate root or child module metadata against the shared schema.
  metadata show         Read and validate an existing module metadata.json file.
  metadata initialize   Create metadata.json without overwriting an existing file.
  format                Format the current module via the resolved engine.
  lint                  Lint the current module via the resolved engine.
  test                  Build Bicep sources or validate Terraform examples and warn about module coverage.
  test cleanup          Resume unfinished Bicep test cleanup from a saved state file.
  register-features     Ensure required Azure features are registered in a selected test subscription.
  docs                  Generate or refresh README docs via the resolved engine.
  docs export-notes     Extract an existing Bicep README Notes section into README.notes.md once.
  sync                  Sync managed files from the AVM governance source (terraform).
  transform             Compile Bicep main.json or apply Terraform mapotf transforms to the current module.
  check policy          Run the pinned AVM policy bundles (APRL, AVMSEC) with conftest.
  check convention      Run the built-in AVM convention rules against the current module.
```

aka.ms/avm/authoring/docs



Terraform Telemetry | ModTM Removal & Replacement

Telemetry alignment

Align Bicep and Terraform telemetry

Use a consistent telemetry approach across Bicep and Terraform modules with empty deployments.

Simplify telemetry infrastructure

Remove hosted telemetry infrastructure and rely on ARM deployments.

Removal & replacement

Deprecate ModTM provider

Remove and deprecate the modtm provider. This extra dependency has been tricky for some customers.

Future Goal: Transparent telemetry

Continuing to review and refine. Ultimate goal to have a transparent telemetry solution that does not show in Terraform plan or ARM deployments



Workflow and test environment updates

Test environment: migrated

Ephemeral environment

We have migrated to a new test environment that we replace every 90 days.

Automated bootstrapping

We automate the setup of the test tenant. It scales across multiple subscriptions.

Bicep E2E updates

We are updating tests to use the new environment, avoid naming collisions and add robust retries. This includes the addition of a naming utility module based on the Terraform module.

Workflows: planned changes

PR checks by default

All static analysis will run on fork and branch PRs.

Full test suite merge gate

Moving forward, we will require the full suite before PR merge, replacing the push-to-main workflow and aligning Bicep and Terraform.

Automated Terraform releases

We are automating today's manual releases. All inventory will release within 24 hours unless explicitly opted out, closing the gap between merged PRs and releases.



Spec Updates Since Dec 2025: By Theme

57 specifications updated since 1 December 2025 (last community call)

Telemetry — 3

Terraform modtm replaced by metadata-backed deployment telemetry; opt-out propagates; Bicep prefix defined.

SFR3 · SFR4 · BCPFR4

Metadata & ownership — 9

metadata.json and catalog sync become the source of truth for owners, names, labels, issue templates and reviewer routing.

SNFR8 · SNFR20 · SNFR23 · RMNFR1 · PMNFR1 · UMNFR1 · BCPNFR15 · SNFR3 · SNFR9

TFLint v1 — 15

Enforcement links renamed to TFLint v1 rule names (avm_interface_*, avm_terraform_*); requirements themselves unchanged.

RMFR7 · TFFR1–TFFR8 · TFNFR10 · TFNFR23 · TFNFR25 · TFNFR27 · TFNFR39 · TFNFR40

AzAPI migration — 11

Examples move from AzureRM to AzAPI; parent_id replaces resource-group inputs; ARM ID validation added.

TFFR9 · TFRMFR1 · TFRMNFR2 · RMFR3 · SNFR2 · SNFR26 · TFNFR11 · TFNFR12 · TFNFR34 · TFNFR36 · TFNFR38

Ordering & MAPOTF — 6

MAPOTF replaces avmfix for variable, output and block ordering; new alphabetical output-order SHOULD; nullability clean-up clarified.

TFNFR8 · TFNFR15 · TFNFR20 · TFNFR21 · TFNFR26 · TFNFR41

Other updates — 13

Bicep deterministic deployment names, Avm.Authoring test tooling, stricter variable types, wording fixes.

BCPFR6 · BCPFR7 · BCPNFR24 · TFNFR5 · TFRMNFR1 · TFNFR18 · TFNFR17 · TFNFR7 · TFNFR29 · SNFR22 · BCPNFR22 · BCPRMNFR4 · SNFR12

Full list of everything that's changed, with diff links, on the AVM website: azure.github.io/Azure-Verified-Modules/specs/module-specs/#what-changed-recently



Semester Plans

October 2026 to March 2027



Where AVM is heading next

Our focus areas for October 2026 to March 2027 (Current Semester)

Path to v1

Bicep and Terraform modules heading to v1

Bicep — Spec-aligned test coverage and version pinning to v1

Terraform — Expanded TFLint and module testing coverage

Key dependency for Terraform v1
Moving resource modules from azurerm to azapi

Destination: AVM framework v1 and modules permitted to go v1

Keeping pace with Azure

Modules evolve with Azure service changes and retirements

Retirements | Shared interfaces

Automation and DevEx

Faster, smoother contribution and release workflows

Dependabot | Release automation

FINOS CCC support

Modules examples added aligned to open FINOS CCC

FINOS COMMON CLOUD CONTROLS

Innersourcing

Guidance and potential tooling to adopt AVM in an inner-sourcing approach, if required

*Plans are indicative and may change



Bicep Dependabot

Proposed approach: native Bicep commands with optional Dependabot automation

Bicep update discovery

- `bicep outdated` lists newer versions as a table or JSON.
- `bicep update` applies an exact version across matching references.
- Bicep handles configuration and edits, with or without Dependabot.

Dependabot integration

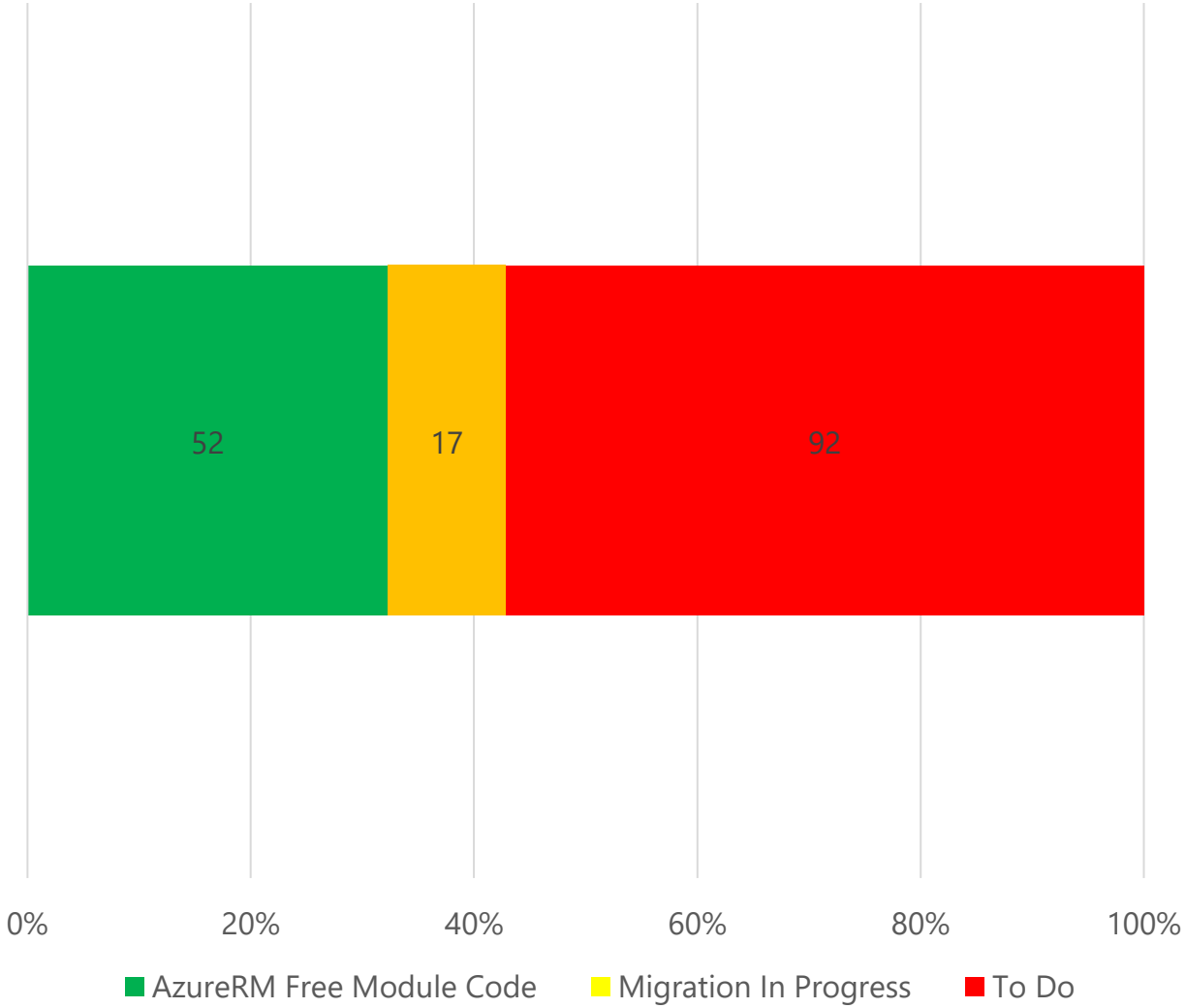
- Separate opt-ins for modules, resource API versions and the CLI pin.
- One shared updater image uses the native Bicep commands.
- Resource API update policy remains open.

Proposed rollout

Experimental CLI commands first, then Dependabot for modules and CLI pins. Resource support follows the policy decision.



`Azurerm` to `azapi`



- 54 modules now AzureRM-free in module code, with 17 modules having open migration PRs.

- NSG and Application Insights released; VM, Key Vault and Container Apps Environment progressing - together representing ~1M monthly downloads.

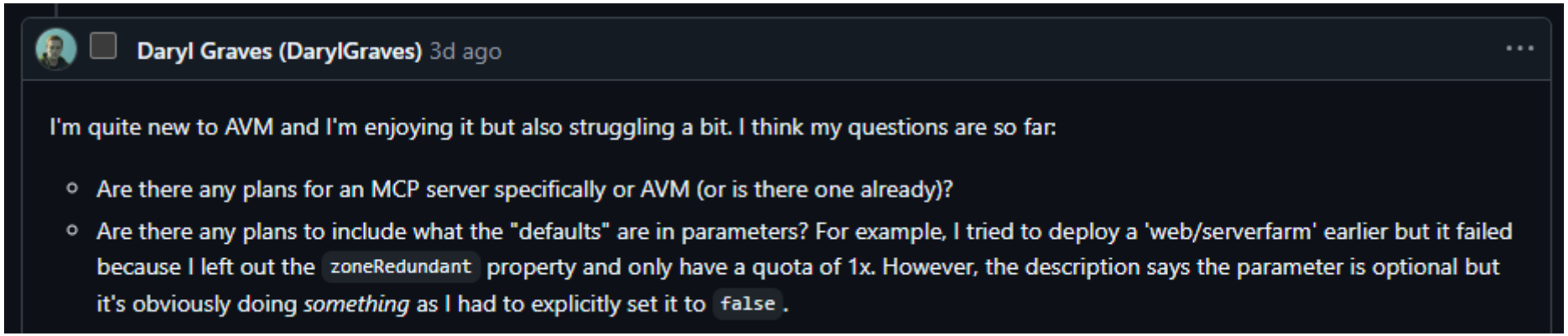
- Zero-destroy, zero-replacement testing methodology

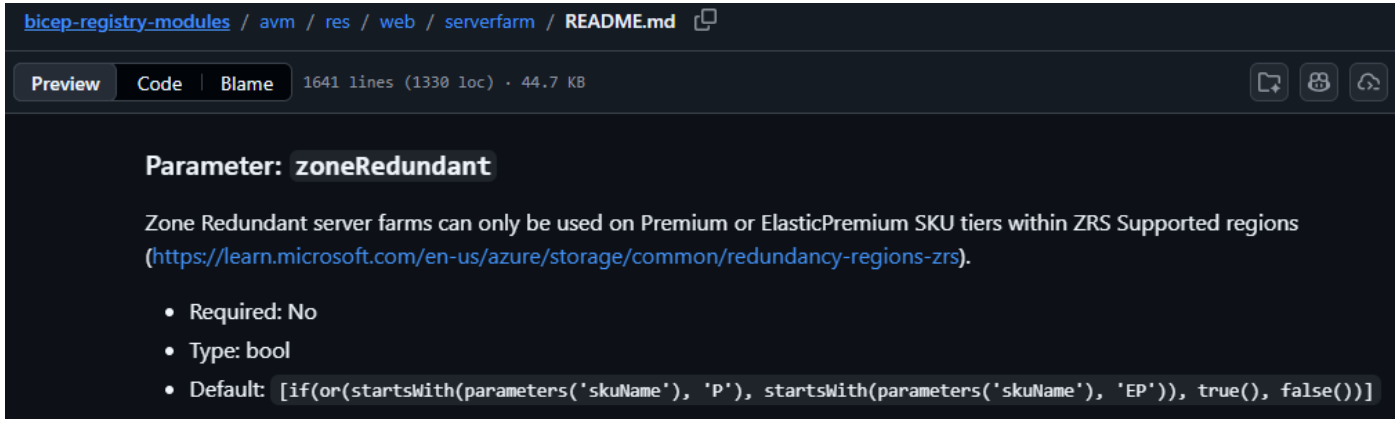


Community Pre-Submitted Questions & Topics



From Azure/Azure-Verified-Modules #3079







Come say hi to Jack if attending OSFF NYC 2026

Microsoft Azure

Thank You

The next community call will be in February/March 2027

Stay tuned to aka.ms/AVM for announcements!

