For Hybrid Identity
Scenarios

Choosing the Right Azure AD Authentication Method for Hybrid Identity

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Why This Matters

 When syncing on-prem AD with Azure AD, how you authenticate users matters. Here are the 3 main hybrid identity options — and how to choose the right one.

Password Hash Synchronization (PHS)

√ Most popular and Microsoft-recommended

- Hash of the on-prem password is synced to Azure AD
- Easy setup via Azure AD Connect
- Supports cloud sign-in even if on-prem is down
- X May not meet strict compliance

Pass-Through Authentication (PTA)

For when hash sync isn't allowed

- Password checked against on-prem AD via secure agent
- Microsoft never stores password
- X Requires on-prem connectivity
- X Remote users can't log in if network is down

Federated Authentication (AD FS)

Best for large orgs or 3rd-party MFA

- Auth handled by your AD FS server
- Microsoft never sees passwords
- Supports smartcards, custom MFA
- X Complex to deploy & maintain
- X Still depends on on-prem availability

Visual Summary

Method

Microsoft Knows

Password?

Hash Only

PTA

PHS

No

No

AD FS

On-Prem Required?

No

Yes

Yes

Recommended For

Most orgs

Compliance-focused

orgs

Large/Custom MFA orgs

My Choice in Labs





In my hybrid identity lab, I chose **Password Hash Sync (PHS)** because:

It's easy to set up

Supports remote users

Doesn't require on-prem to be online

I'd recommend PHS unless compliance or 3rd-party auth requires otherwise.

Final Takeaway

