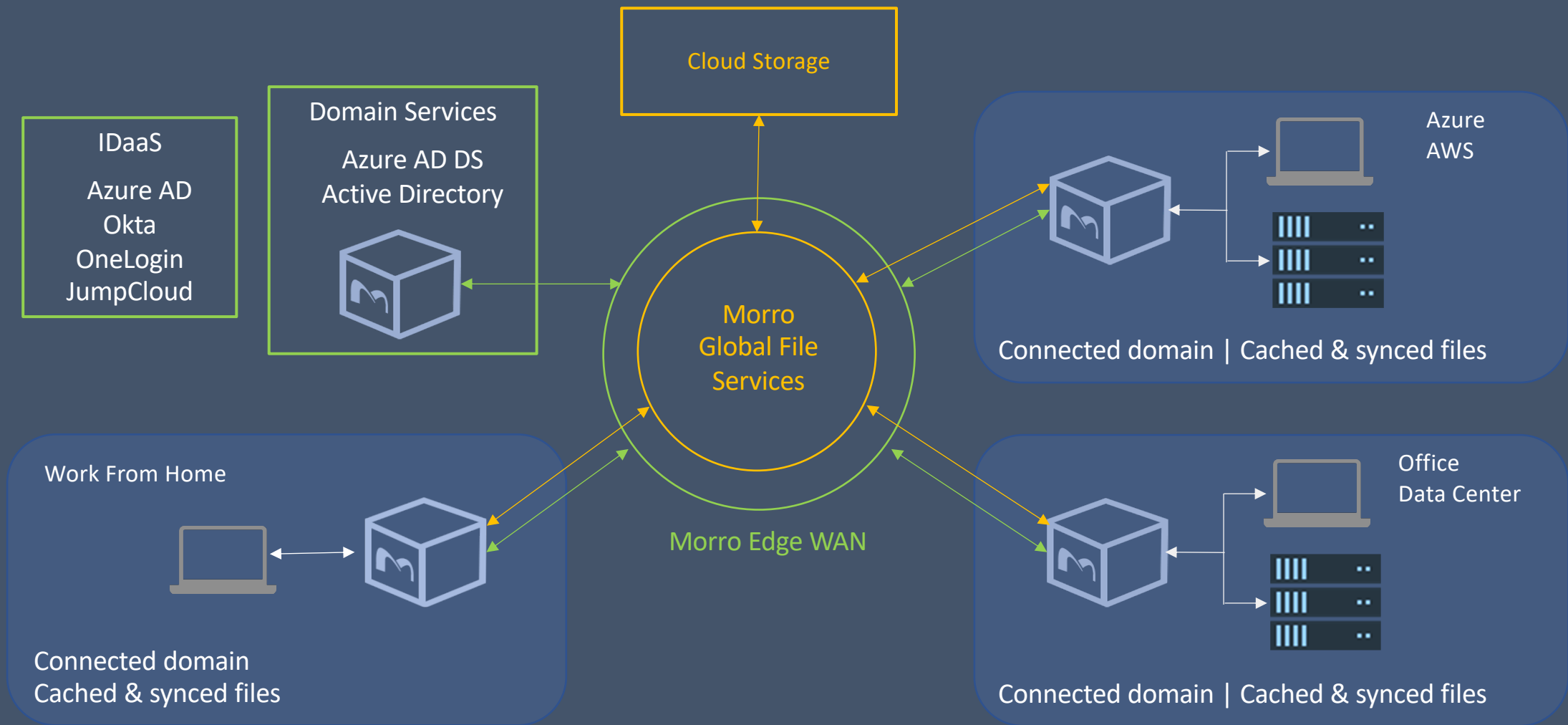




SMB Authentication with Azure AD

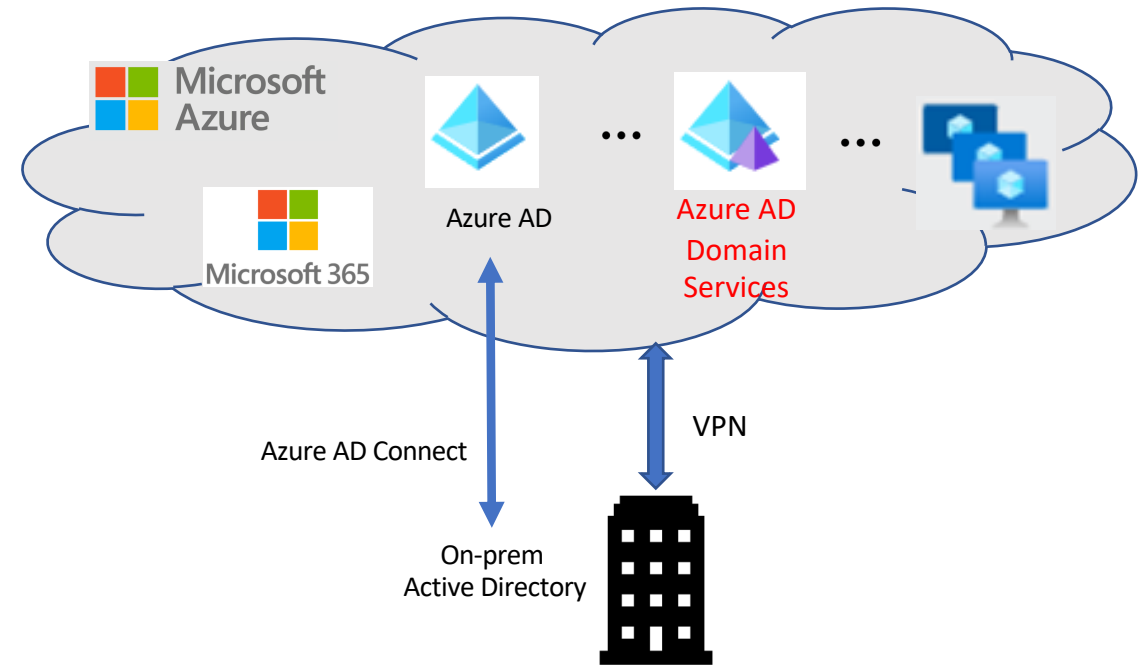
For Hybrid and Cloud-Only
Organizations



Morro Global File Services

What is Azure AD Domain Services?

- Hybrid organizations that have both cloud and on-prem workloads may synchronize identity information from an on-prem AD DS to an Azure AD tenant with Azure AD Connect (not needed for cloud-only organizations)
- Azure AD sync credentials (one-way) to Azure AD DS to provide identity services to SMB (Morro CacheDrive) and lift-and-shift on-prem applications
- Azure AD DS provides the same AD functions
 - domain join, LDAP, Kerberos/NTLM authentication, Group Policy
 - not supported: DFS
 - AAD DS is a stand-alone domain, not an extension of an on-prem domain
- Azure AD DS is a managed service:
 - no need to patch software updates
 - high availability with pair of redundant servers
 - \$108 per month for up to 25,000 object count



Morro SMB Authentication Modes

- Morro Users (cloud-based directory)
- LDAP
 - OpenLDAP with SMB Extension
 - JumpCloud
- Microsoft
 - Windows Server Active Directory
 - Azure AD
 - Azure AD Domain Services
- IDaaS
 - Okta
 - OneLogin

Morro SMB Authentication

Auth Mode	SSO Share Access	Cloud-Based	DFS Support	CacheDrive WAN Connection
Morro Users	yes	cloud		Internet
Windows Server AD	yes	on-prem/cloud	yes (*3)	(*4)
Azure AD Domain Services	yes	cloud		(*4)
OpenLDAP	yes	cloud/on-prem		Internet
JumpCloud	yes	cloud		Internet
Azure AD	Yes (*1)	cloud		(*4)
Okta	yes (*1)	cloud		(*4)
OneLogin	yes (*2)	cloud		Internet

(*1) SSO requires Azure AD DS integration.

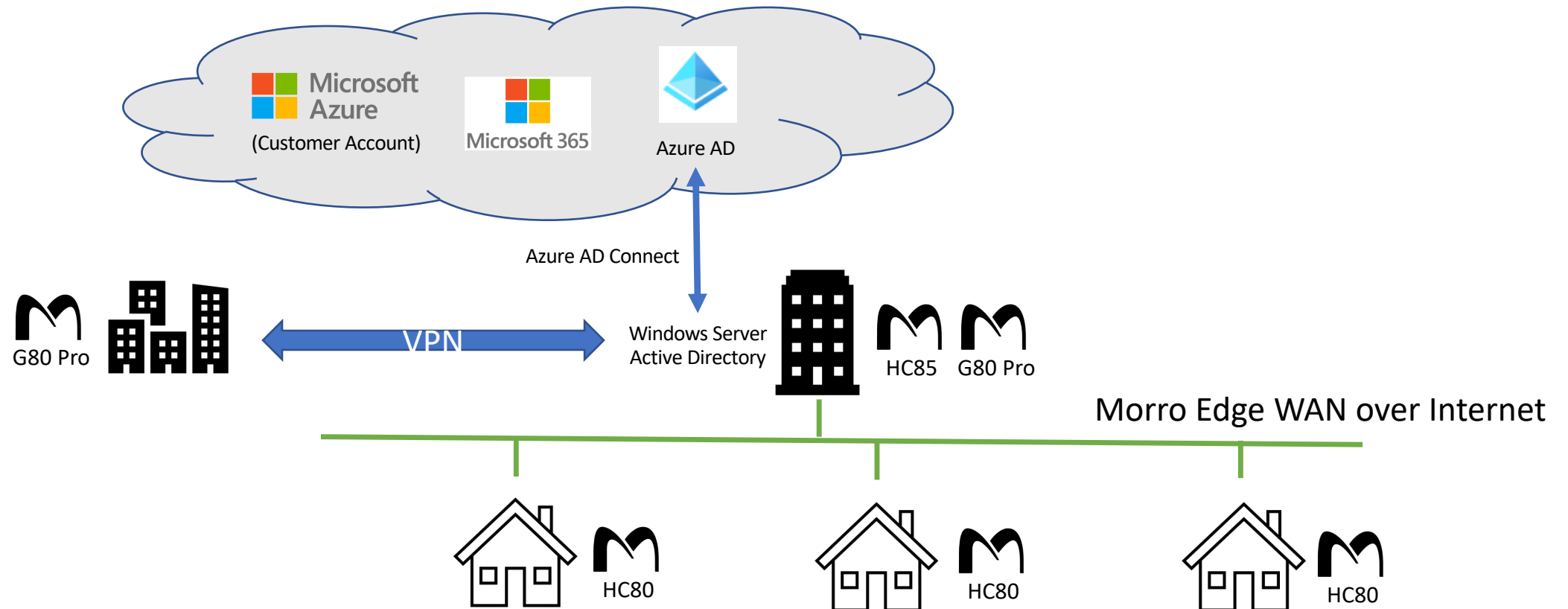
(*2) SSO requires LDAP integration

(*3) PC needs to join domain. CacheDrive supports specifying “Hostname-in-LAN” for other auth modes.

(*4) CacheDrive connects to domain for authentication using LAN, VPN, or Morro Edge WAN, and uses Internet for cloud storage data flow.

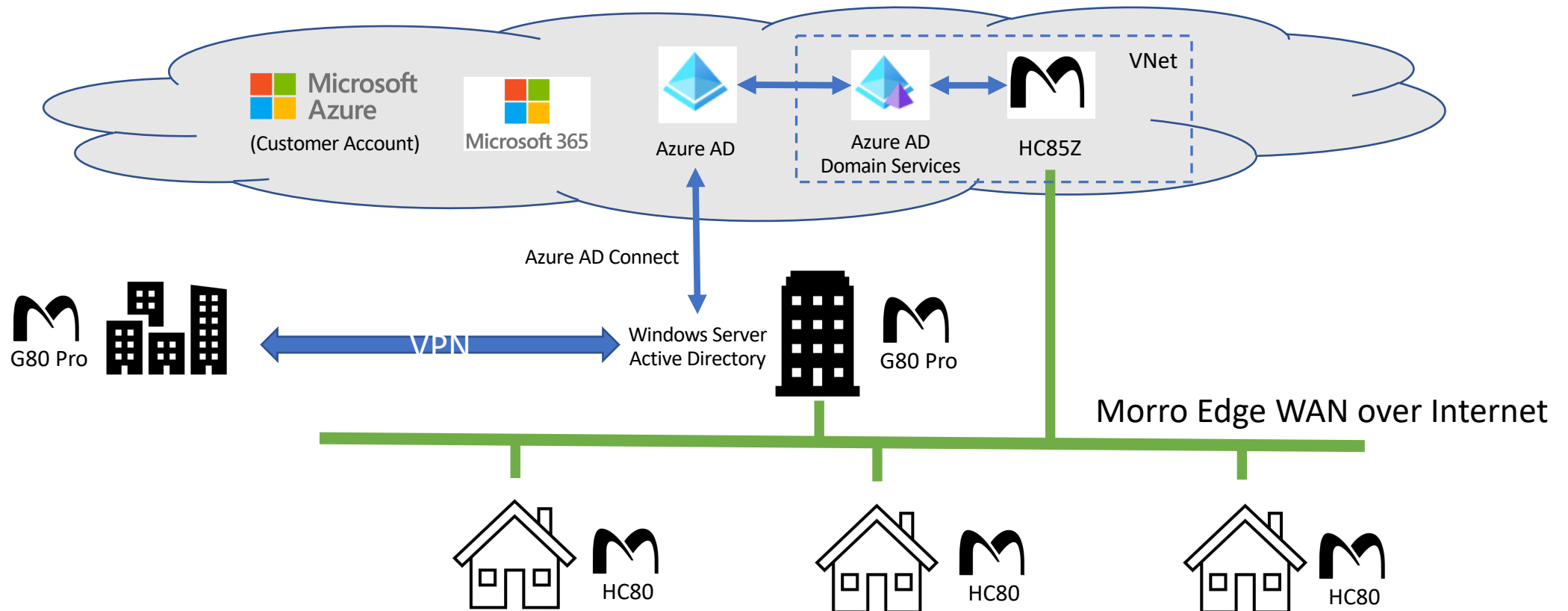
On-Prem AD (SSO)

- Deploy G80 (G80 Pro) in the domain
- Morro Edge WAN connects HC80 at remote sites without VPN to domain



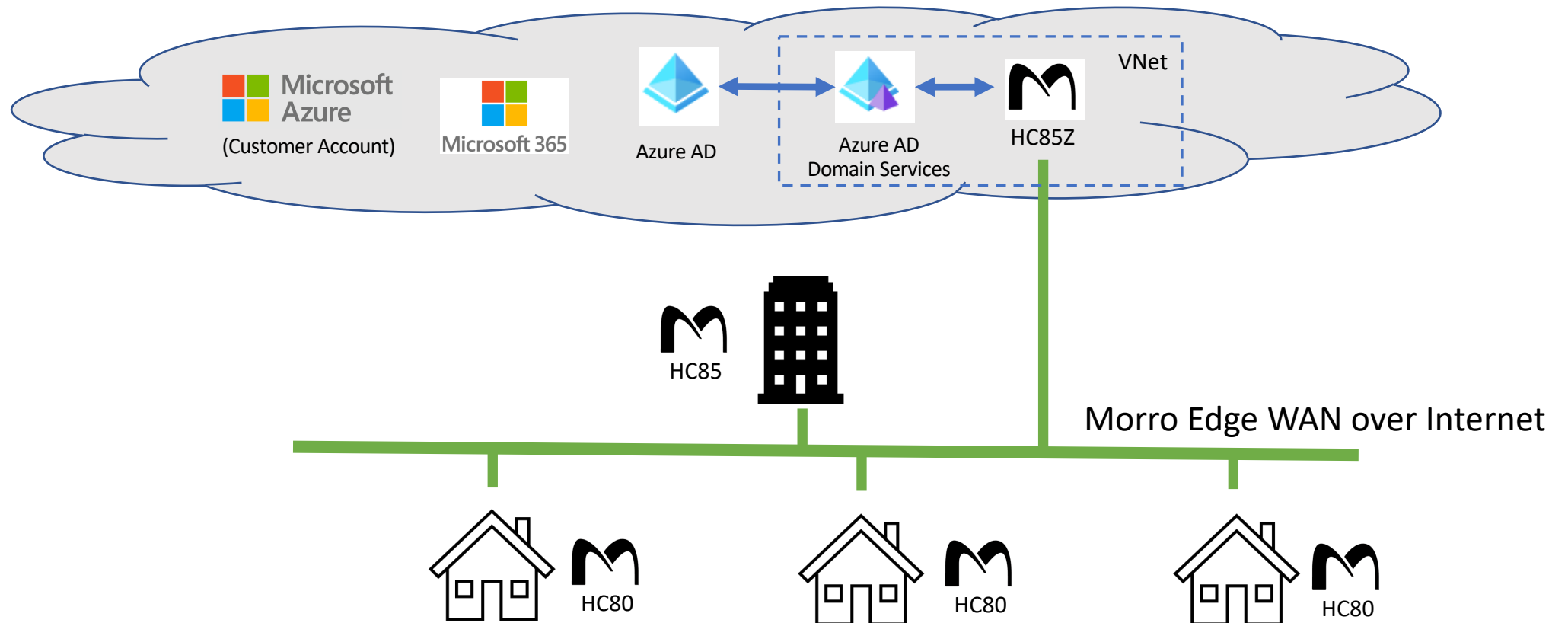
On-Prem AD w/ AAD DS (SSO)

- Sync on-prem AD to AAD with Azure AD Connect (free, no VPN needed)
- Sync AAD with AAD DS
- Morro Edge WAN connects HC80 to AAD DS



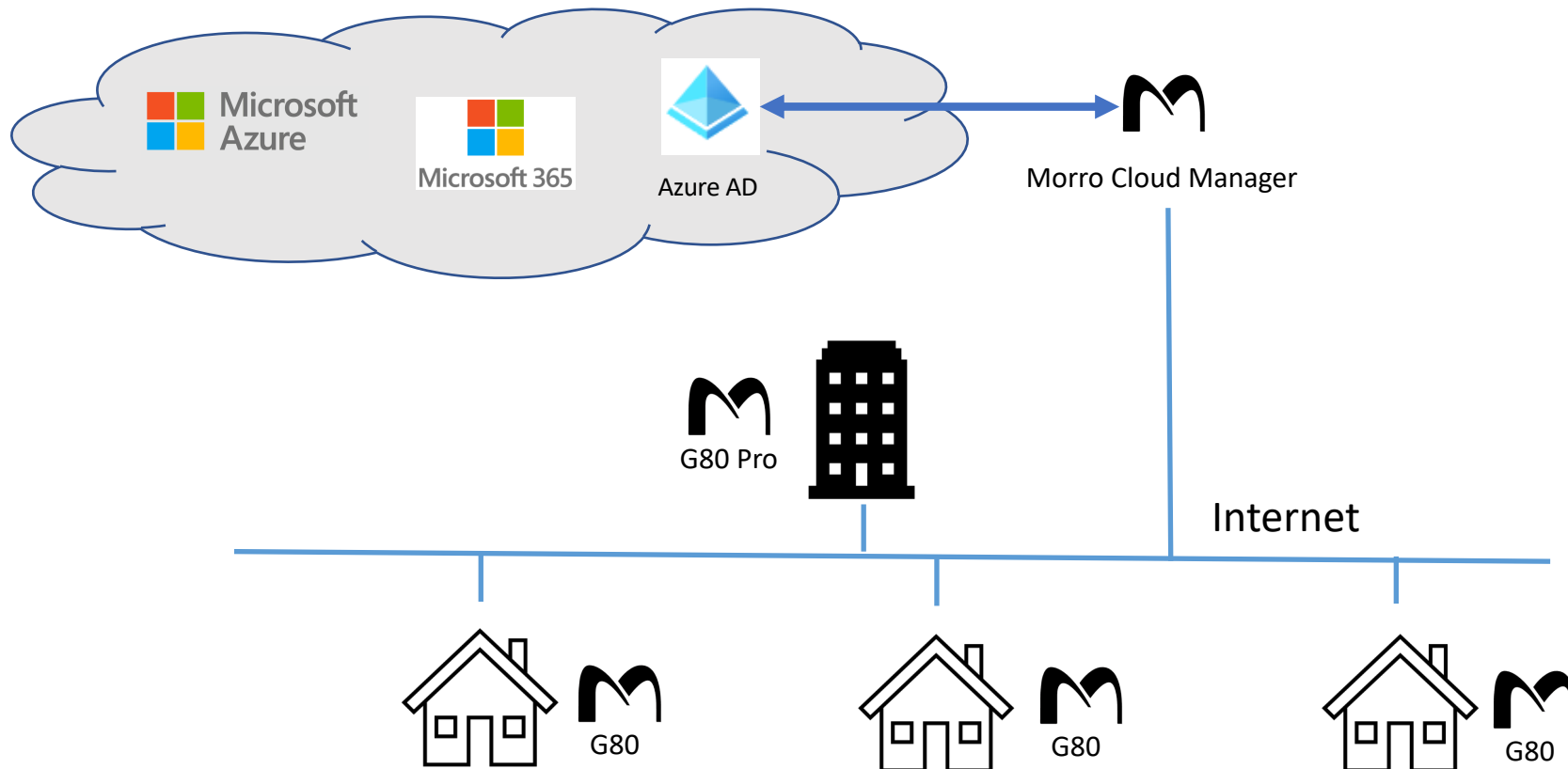
Azure AD + Azure AD DS (SSO)

- Sync AAD with AAD DS
- Morro Edge WAN connects HC80 to AAD DS for Single-Sign-On



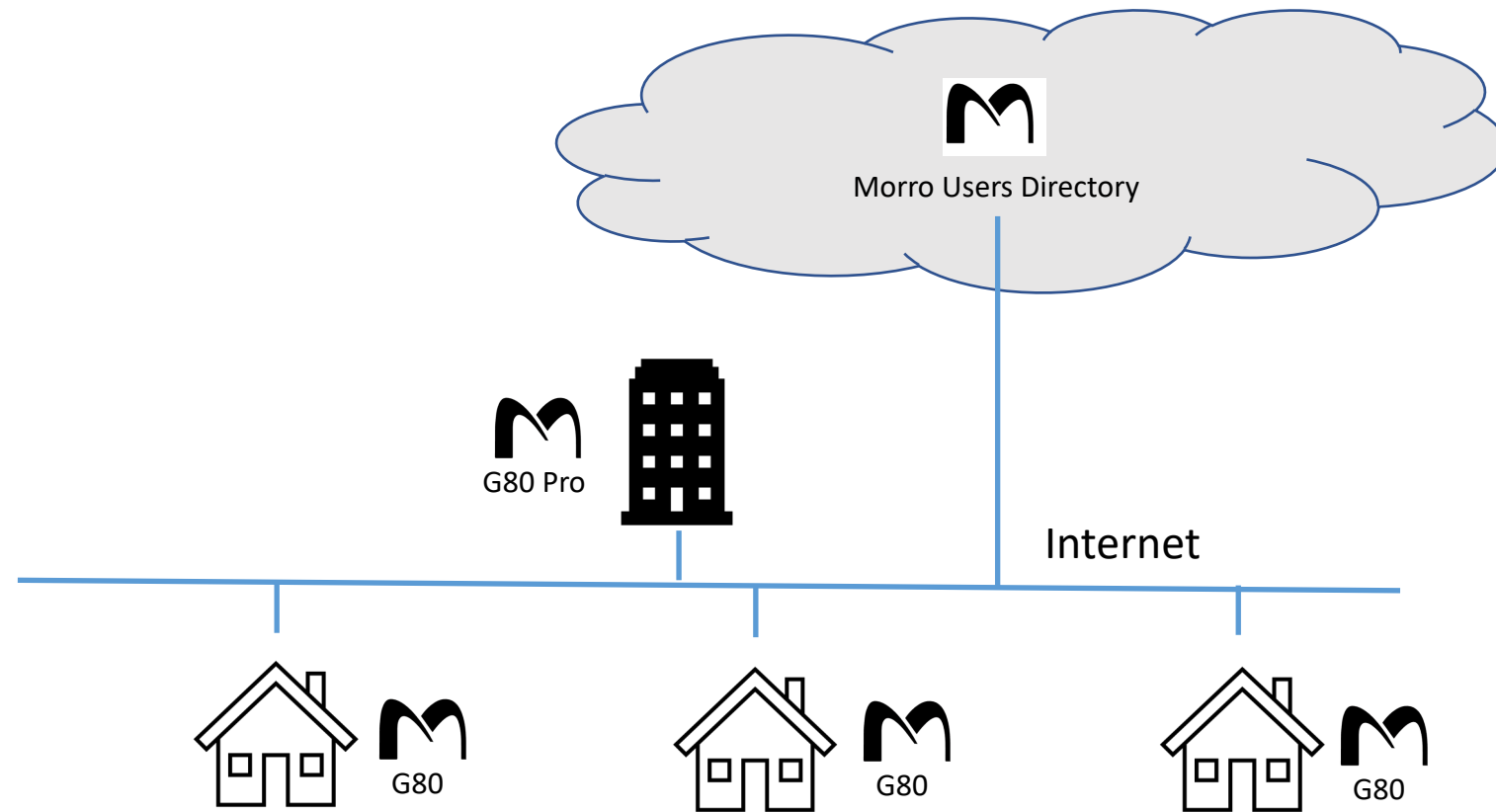
Azure AD (Non-SSO)

- Users login on MCM with AAD credentials to register
- Users authenticated on CacheDrive with AAD credentials



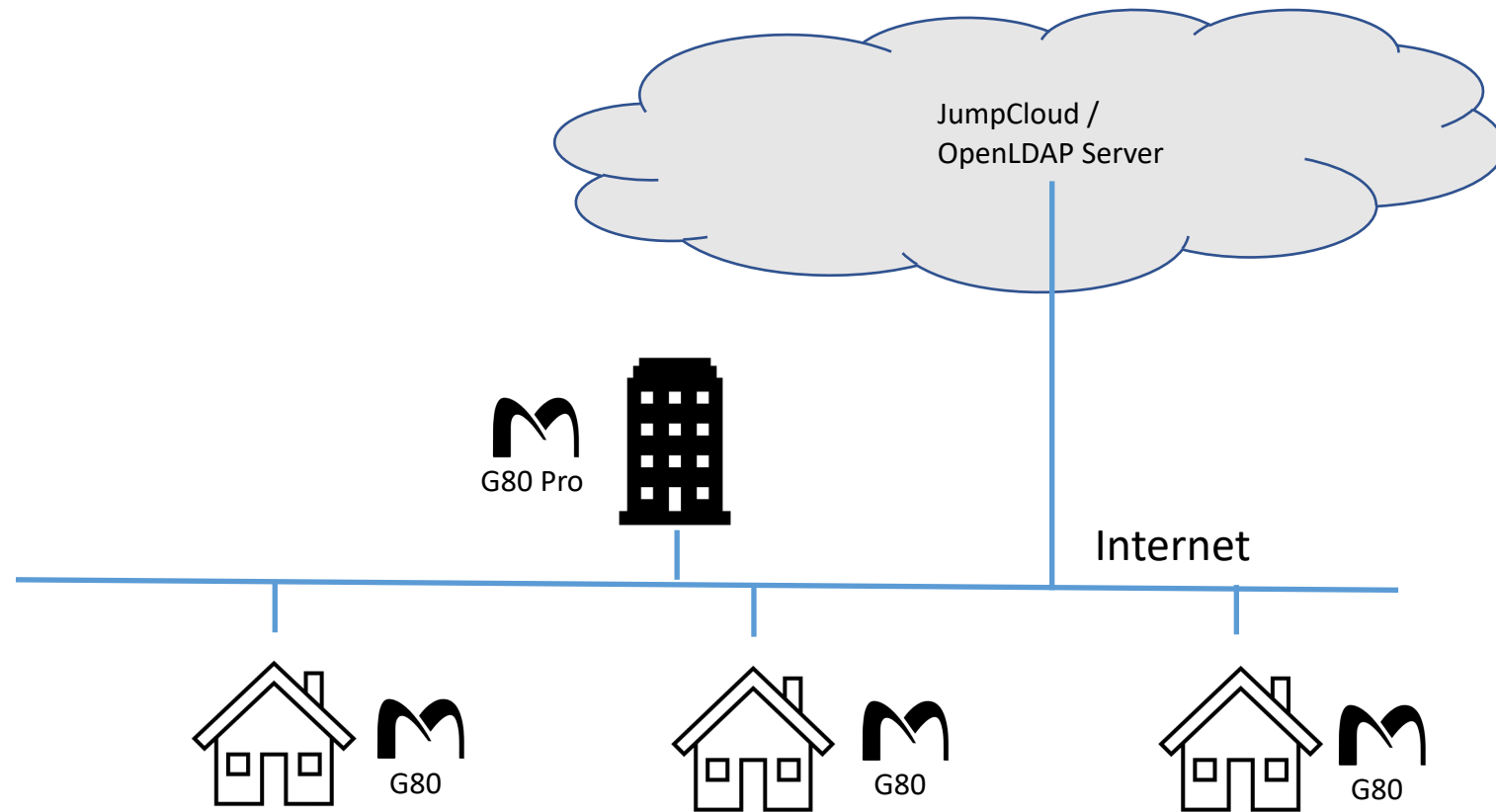
Morro Users Directory (SSO)

- Morro CacheDrives authenticate users with the cloud-based Morro Users Directory



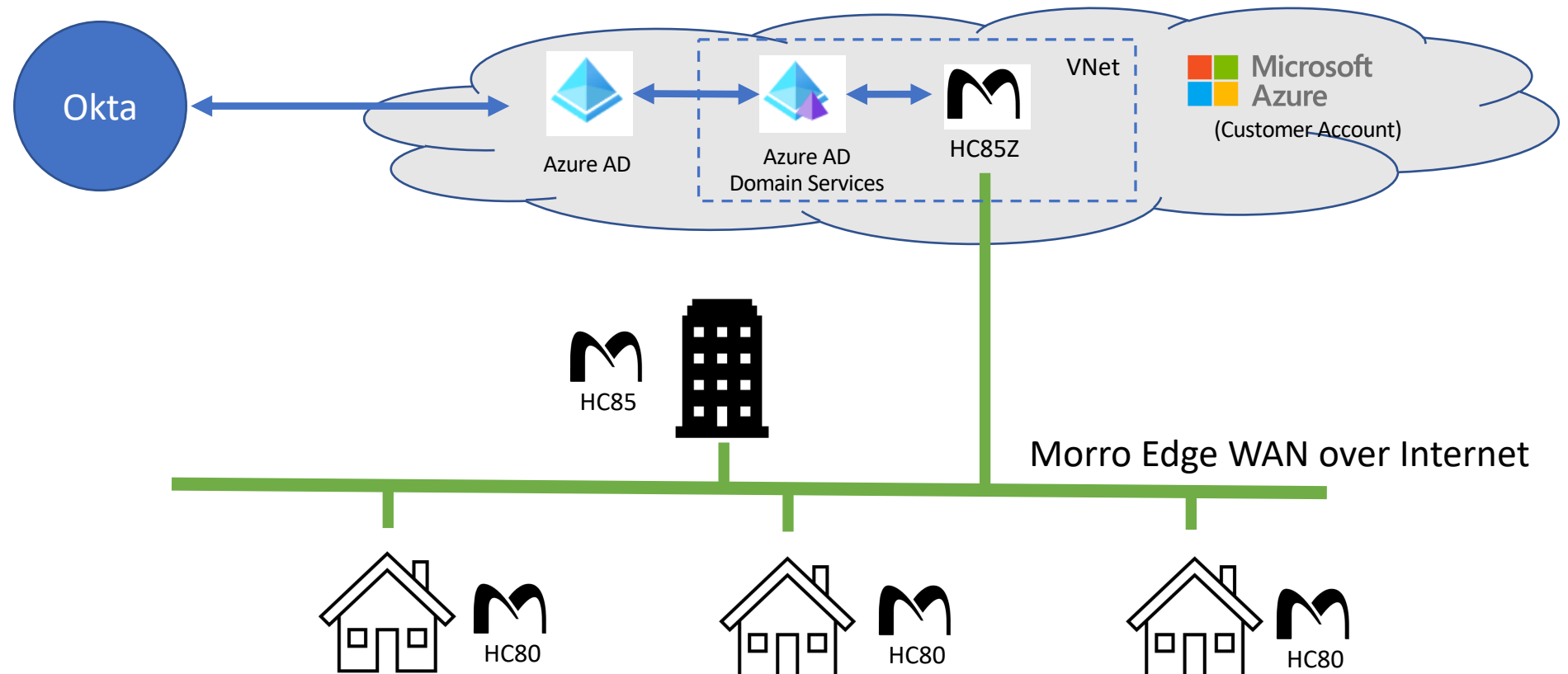
OpenLDAP / JumpCloud (SSO)

- Morro CacheDrives authenticate users with the cloud-based OpenLDAP / JumpCloud Server



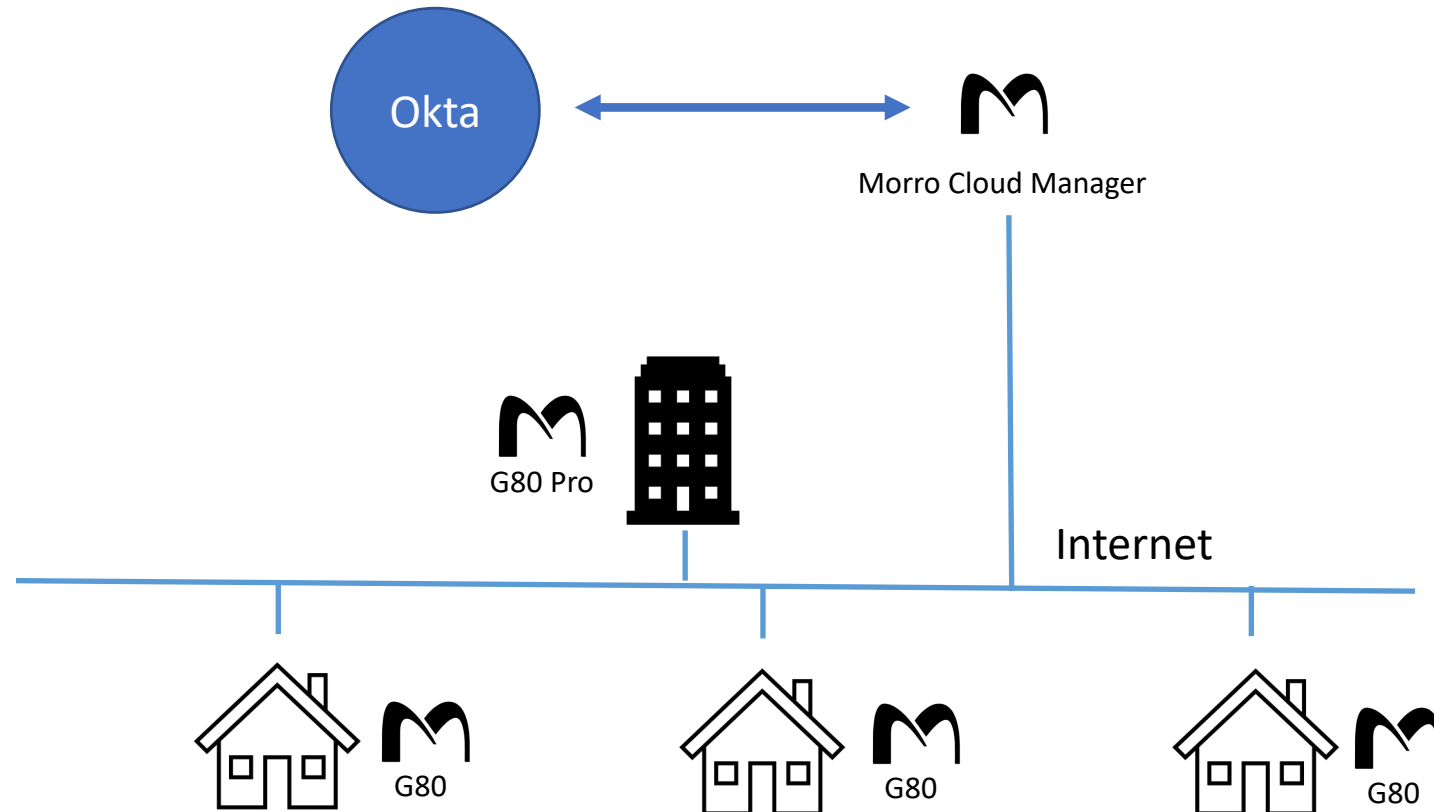
Okta + Azure AD DS (SSO)

- Sync Okta with AAD
- Sync AAD with AAD DS
- Morro Edge WAN connects HC80 to AAD DS for Single-Sign-On



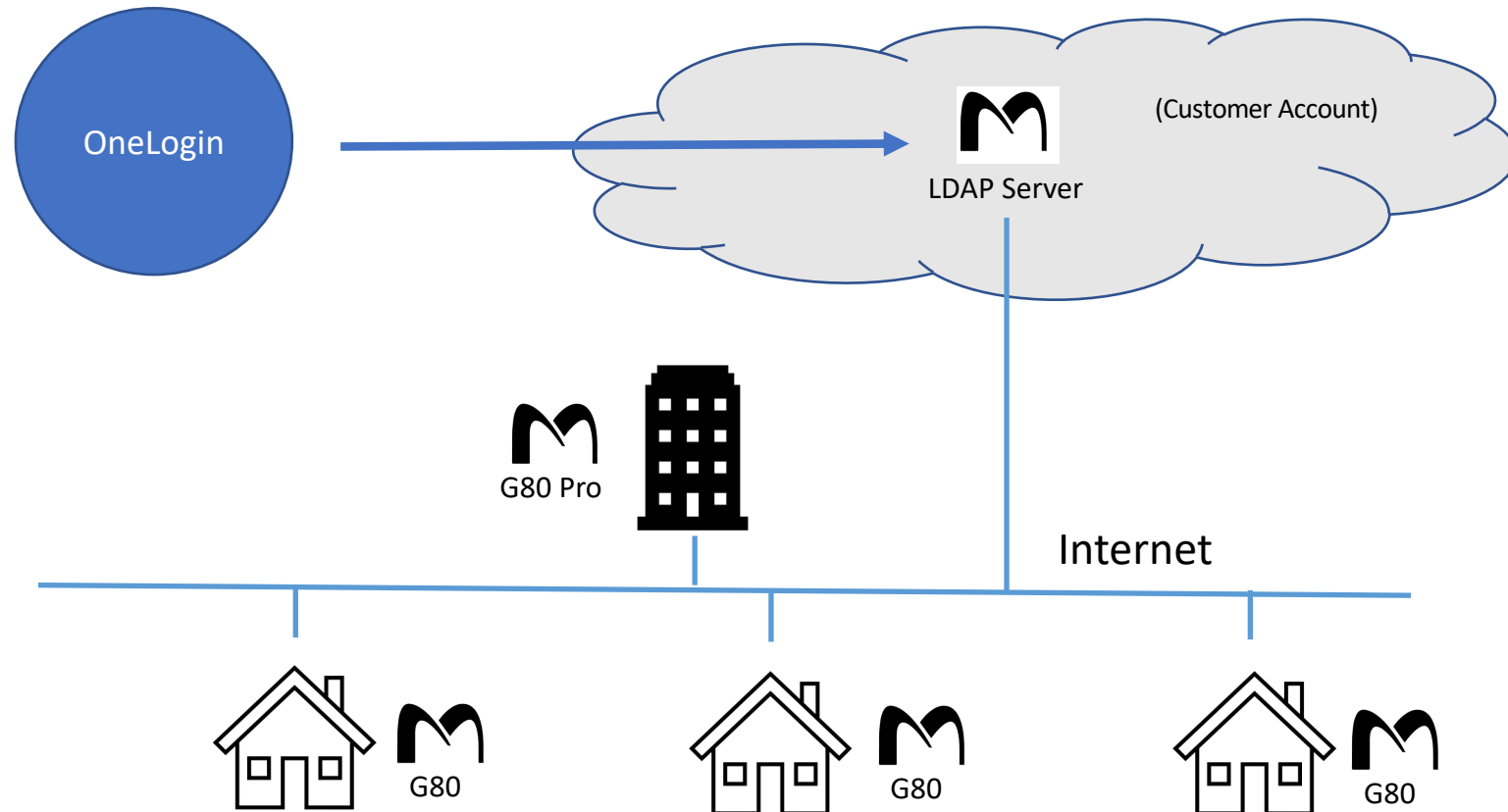
Okta (Non-SSO)

- Users login on MCM with Okta credentials to register
- Users authenticated on CacheDrive with Okta credentials



OneLogin + LDAP (SSO)

- Sync OneLogin to Morro LDAP Server deployed in customer cloud
- Morro CacheDrives authenticate with the LDAP Server



OneLogin (Non-SSO)

- Users login on MCM with OneLogin credentials to register
- Users authenticated on CacheDrive with OneLogin credentials

