

Device Authentication for TelePresence Video Communication Server

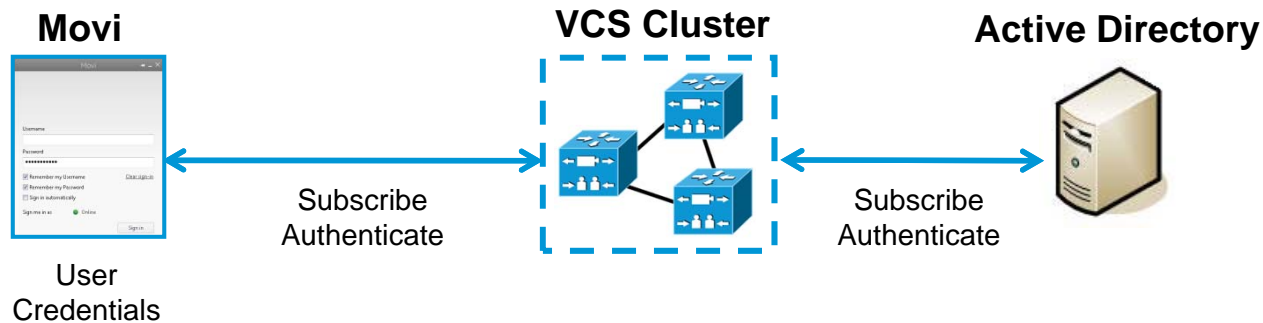
Presenter:

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Device Authentication

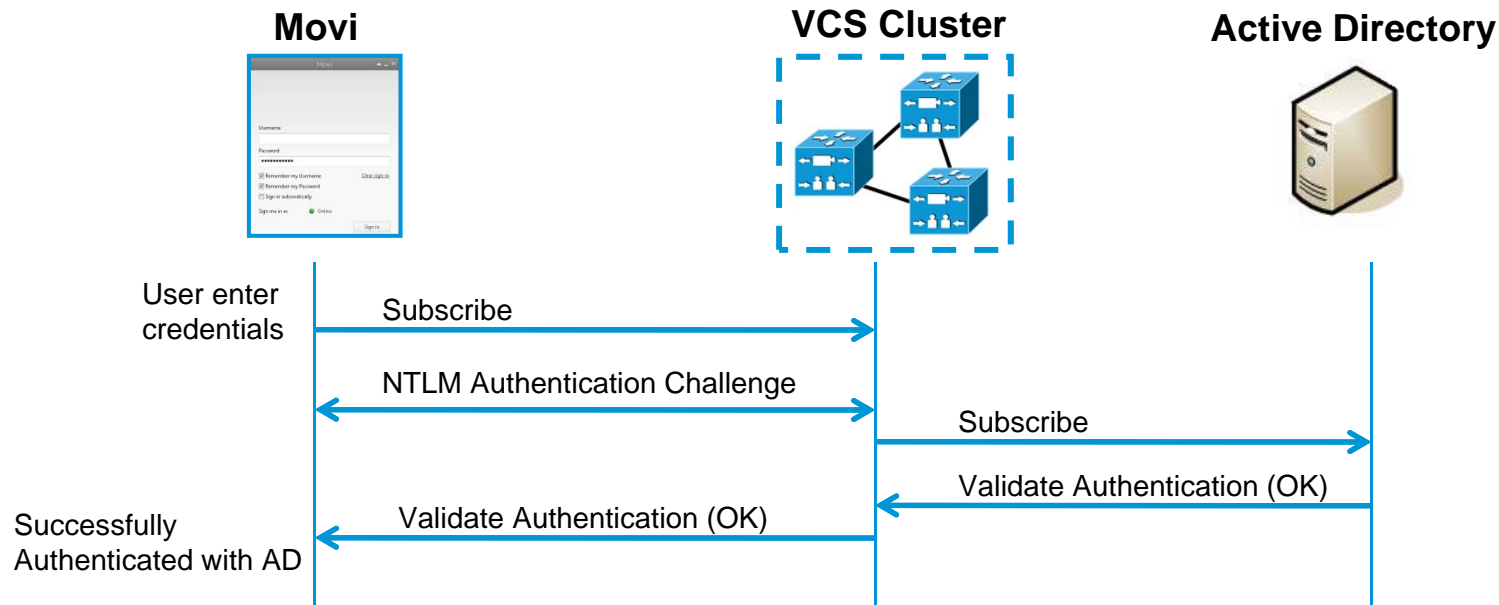
- VCS Authentication via LDAP/Active Directory Service
 - ✓ Secure Authentication (and no H.350 schema needed on AD server)
 - ✓ Increased User Provisioning Efficiency

Rapid User Authentication through standard Active



Authentication via Active Directory Service

- VCS Authentication via Active Directory Service
 - ✓ Secure Authentication
 - ✓ Increased User Provisioning Efficiency
- Supports NTLM (NT LAN Manager) for Movi authentication
 - ✓ Movi desktop requires NTLMv2



Authentication via Active Directory Service

- Setup
 - ✓ Configure AD details on VCS
 - ✓ VCS joins the AD domain
 - ✓ Configure with Command Line Interface (CLI) (available in 6.1)
 - ✓ Configure on Web interface (**new in X7.0**)
- SIP Signalling
 - ✓ VCS challenges Movi (4.2 or later) with NTLM challenge
- VCS using NTLM challenge requires direct connection to AD server
- Other endpoints may be authenticated utilizing H.350 or local database

AD/LDAP Authentication

- Support Web GUI for AD/LDAP Device Authentication configuration
VCS Configuration > Authentication > Devices > Active Directory Service

The screenshot displays the Cisco TelePresence Video Communication Server Control web GUI. The main navigation bar includes Status, System, VCS configuration, Applications, and Maintenance. The current page is titled "Active Directory Service" and shows the following configuration sections:

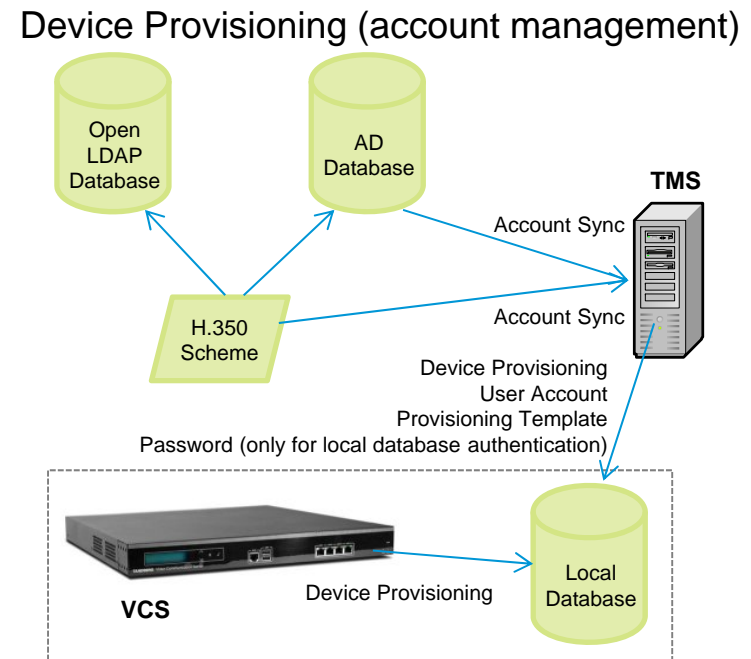
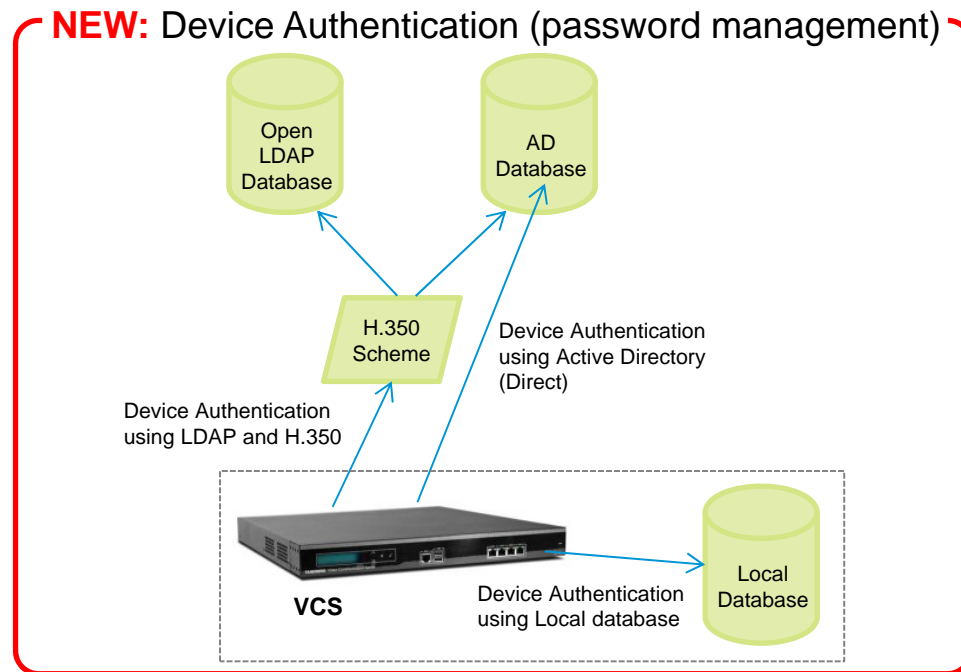
- Configuration:** Connect to Active Directory Service (Off), Domain (CISCOTP.COM), Workgroup (ciscotp), Secure channel mode (Auto), Encryption (TLS), and Clockskew (300 seconds).
- Domain Controller:** Address 1 (10.81.16.31), Address 2, Address 3, Address 4, and Address 5.
- Kerberos Key Distribution Center:** Address 1-5 and Port 1-5.
- Domain administrator credentials:** Username (VCSAdmin) and Password.

An information box states: "The AD domain administrator password. This must be supplied when attempting to join a domain." A status window on the right shows the following details:

Status (last updated: 03:11:11)	
State	Active
Domain status	Joined
ADS Domain Controller	10.81.16.13
ADS LDAP Connectivity	Active
ADS Domain Controller Connectivity	Active
Kerberos Key Distribution Center	10.81.16.13

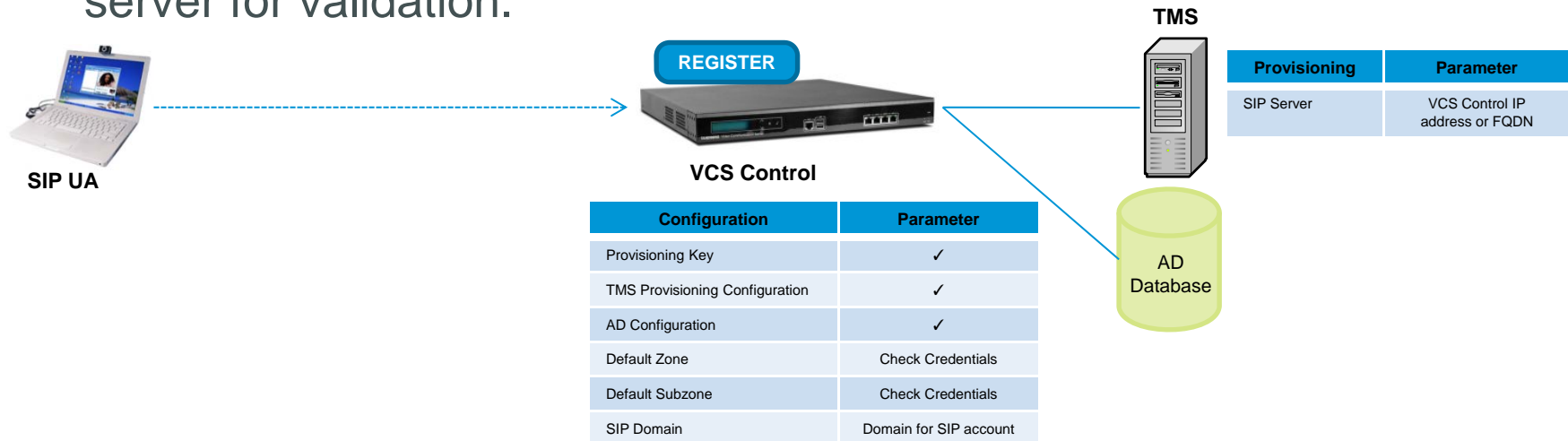
AD/LDAP Device Authentication

- Device Authentication for real time access to AD/LDAP service
 - ✓ Device Authentication with AD/LDAP integration provide single account credential (password) management
 - ✓ NTLM is used for all authentication when endpoint supports it and it is enabled – this includes authenticating device provisioning



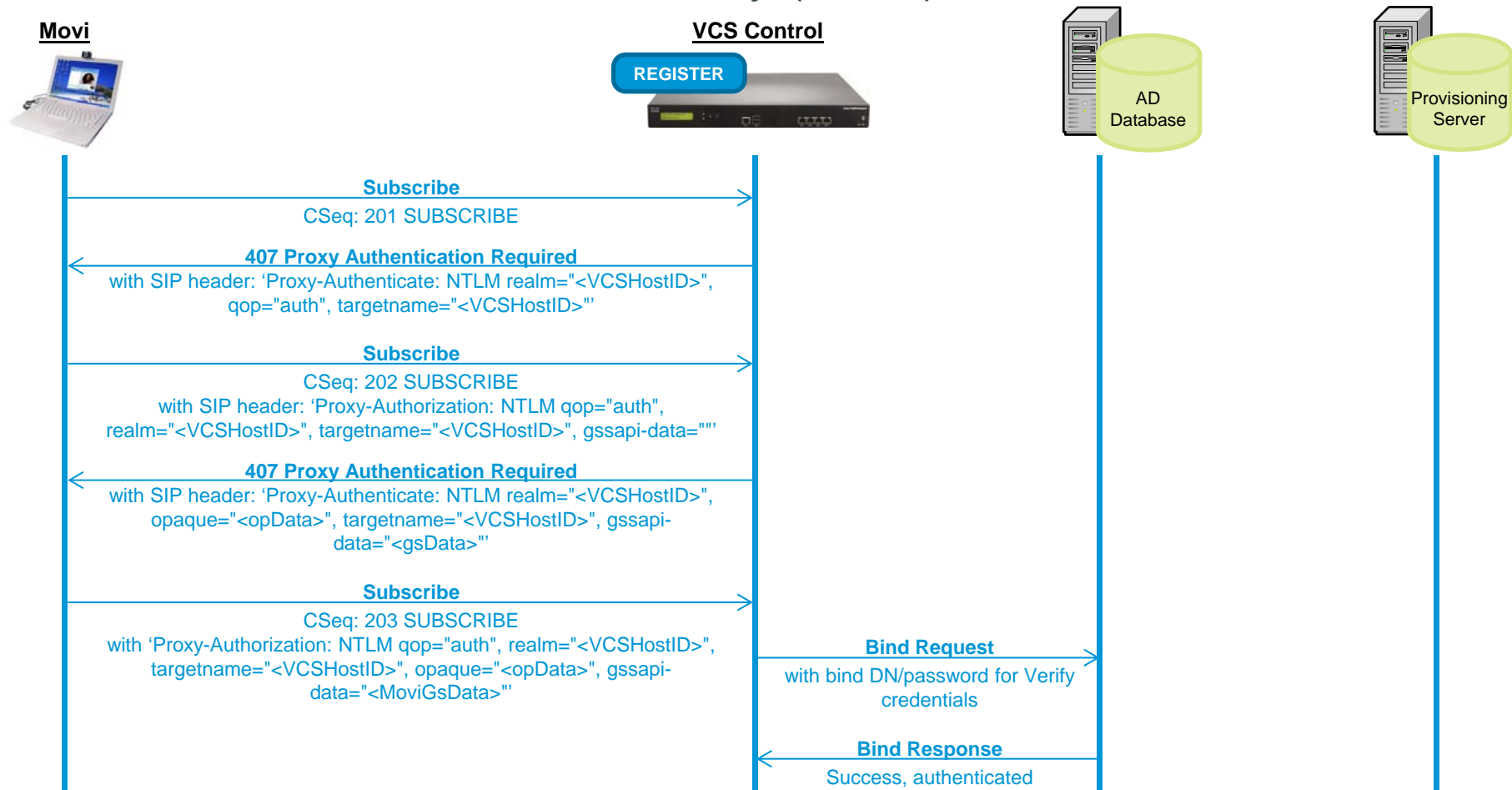
AD/LDAP Device Authentication

- VCS Control with Active Directory (direct) authentication
 - ✓ The SIP UA sends a request to the VCS Control and it challenges for authentication, sending the authentication details to the AD server for validation.



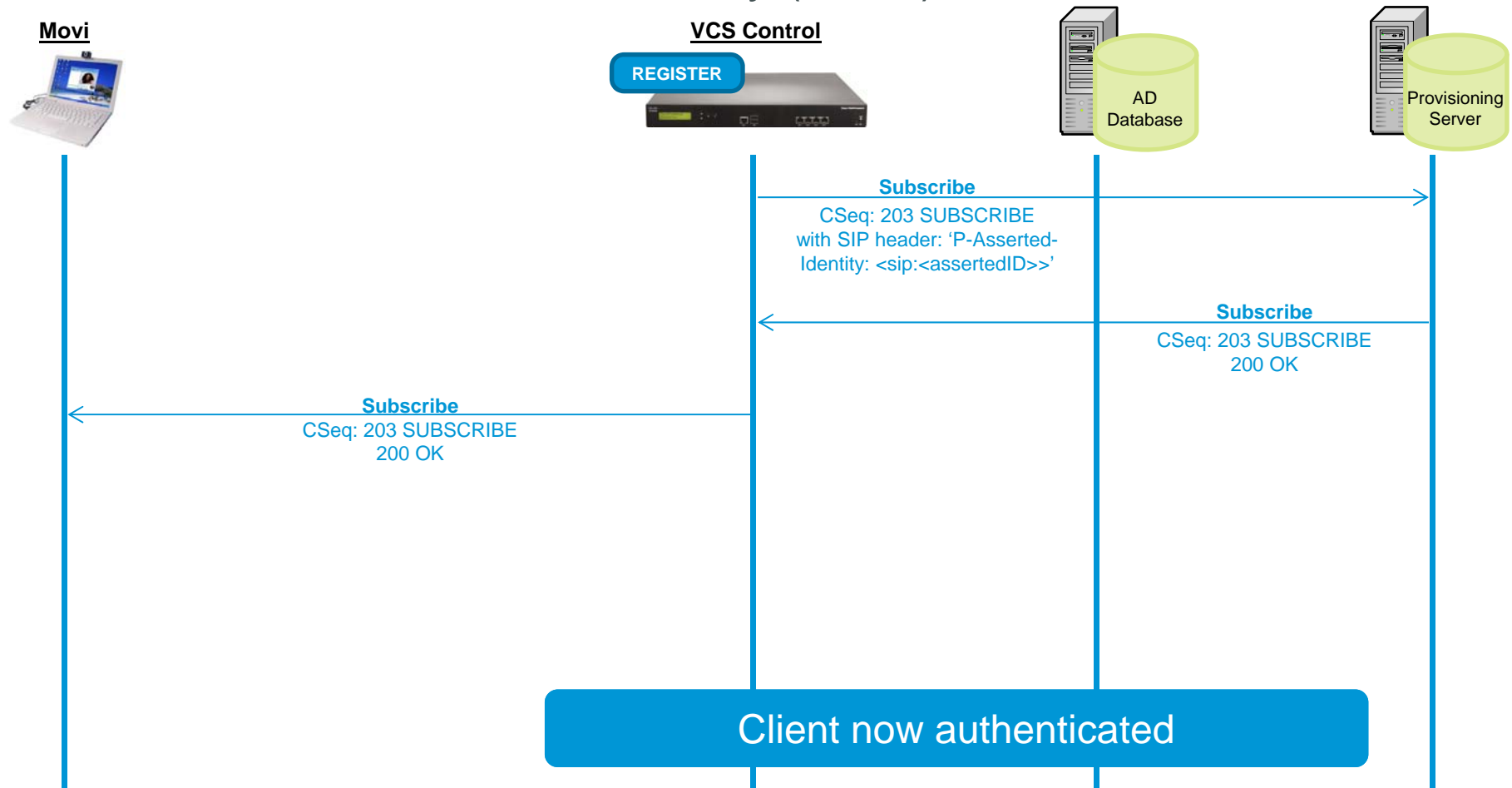
AD/LDAP Device Authentication

- VCS Control with Active Directory (direct) authentication



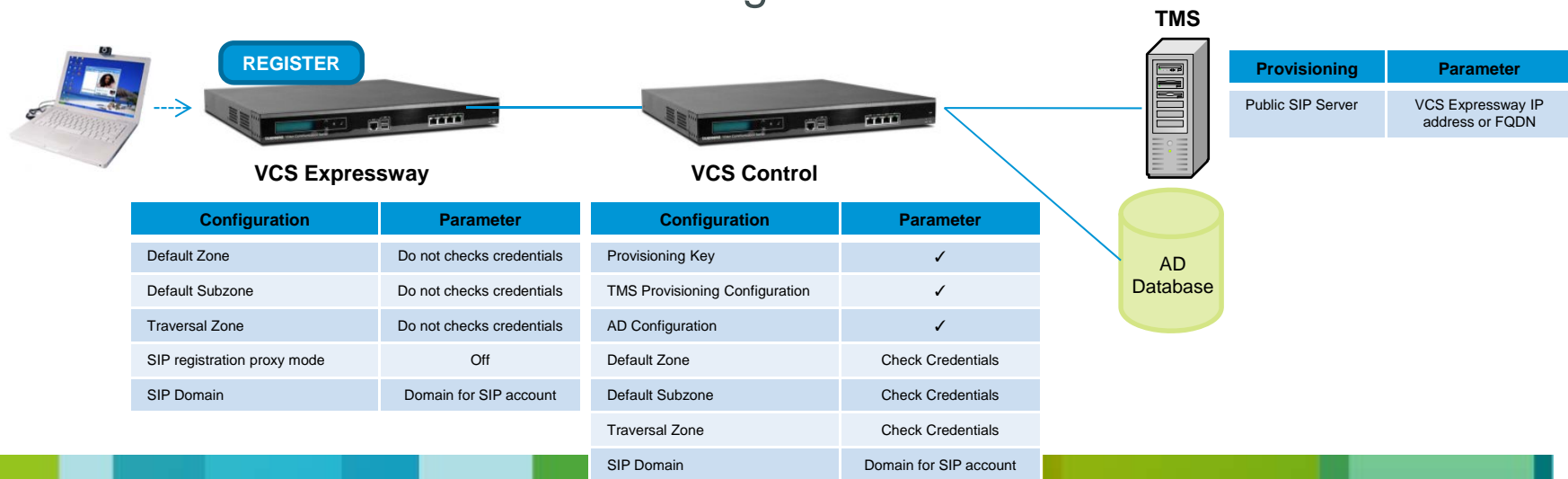
AD/LDAP Device Authentication

- VCS Control with Active Directory (direct) authentication



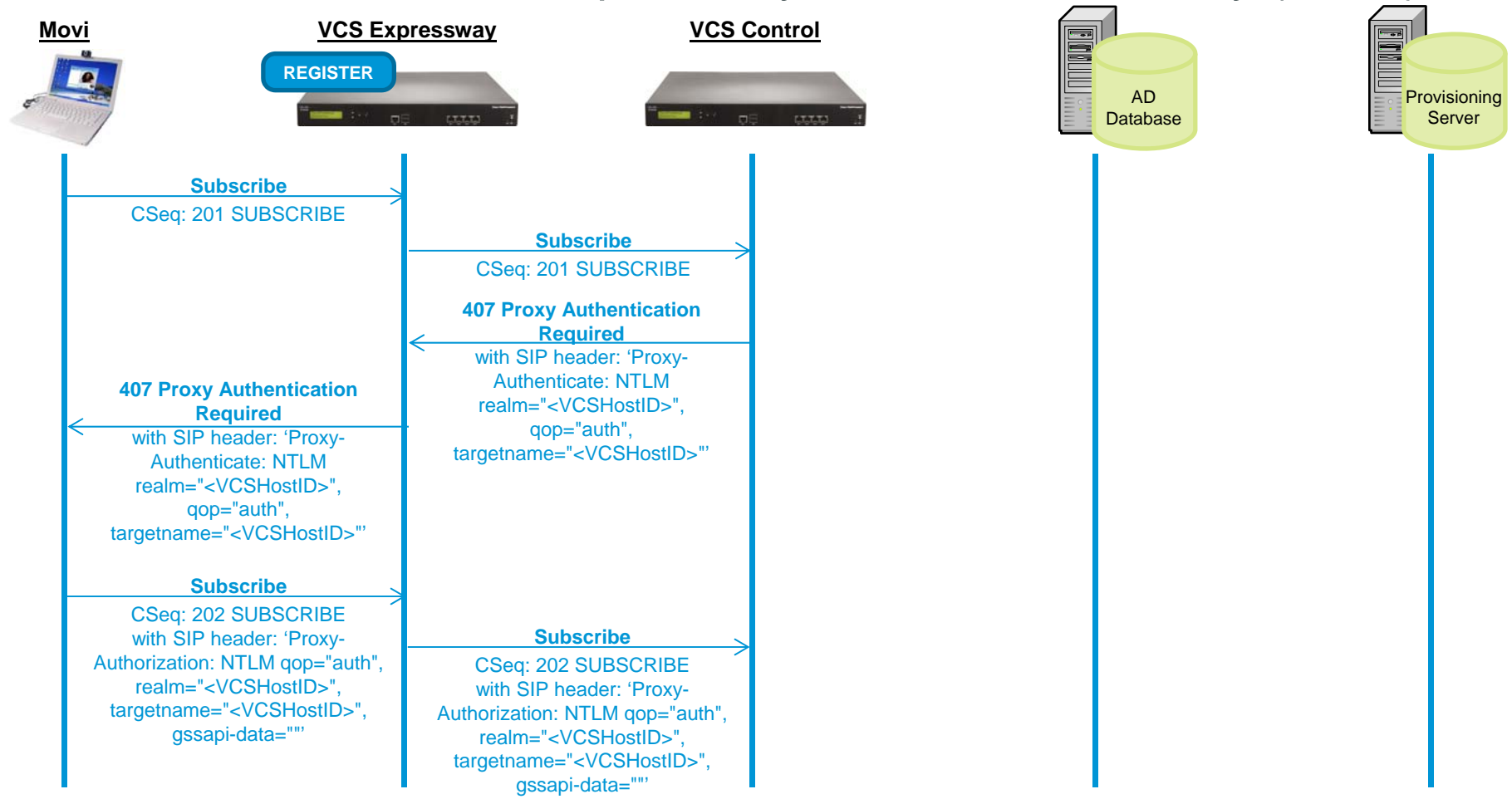
AD/LDAP Device Authentication

- VCS Control and VCS Expressway with Active Directory (direct) authentication on VCS Control
 - ✓ The SIP UA sends a request to the VCS Expressway, but authentication does not happen until the request gets sent to the VCS Control.
 - ✓ The registration takes place on the VCS Expressway, and as such is not authenticated. Provisioning requests, and call requests sent to the VCS Control will be challenged for authentication.



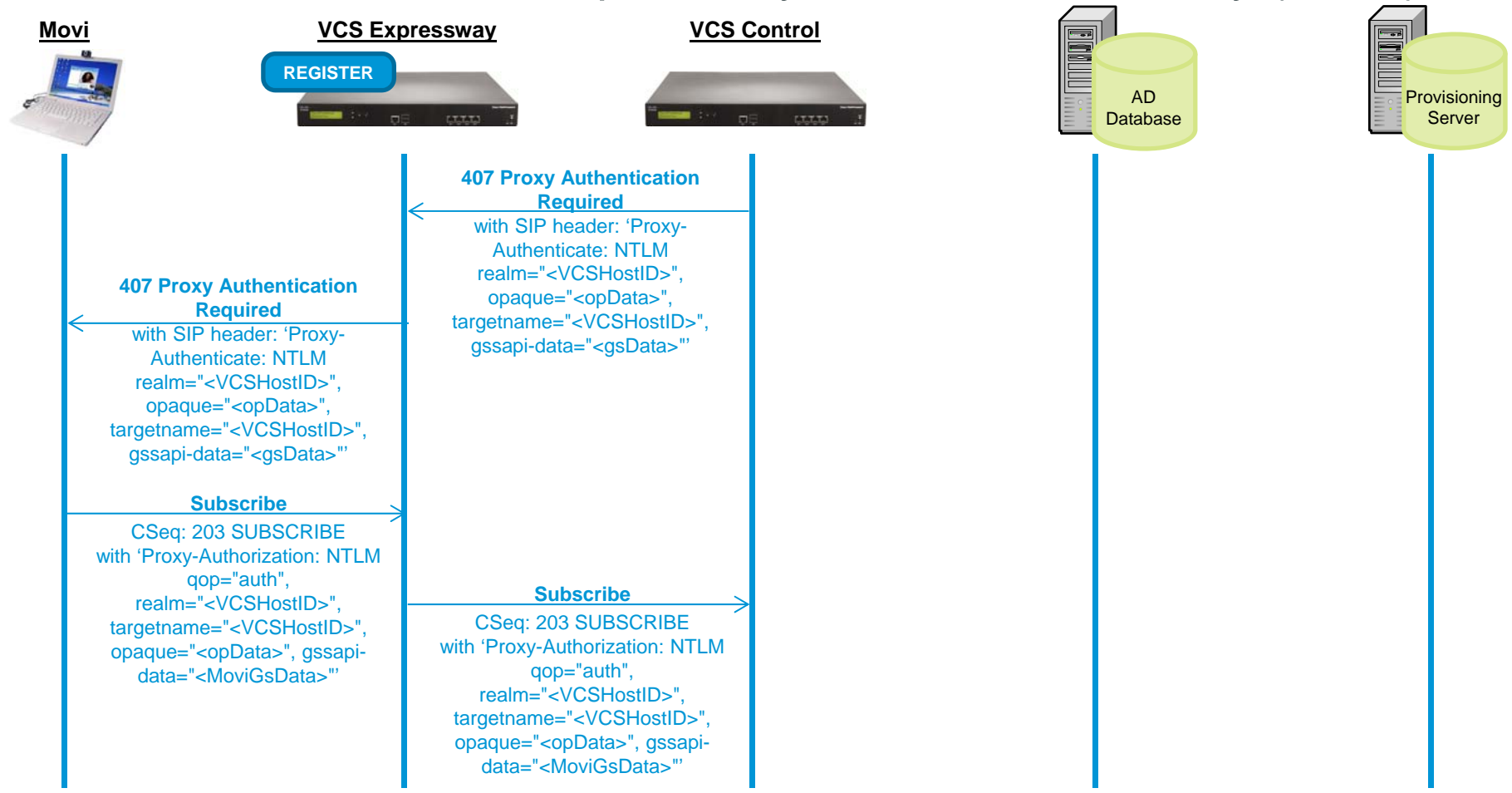
AD/LDAP Device Authentication

- VCS Control and VCS Expressway with Active Directory (direct)



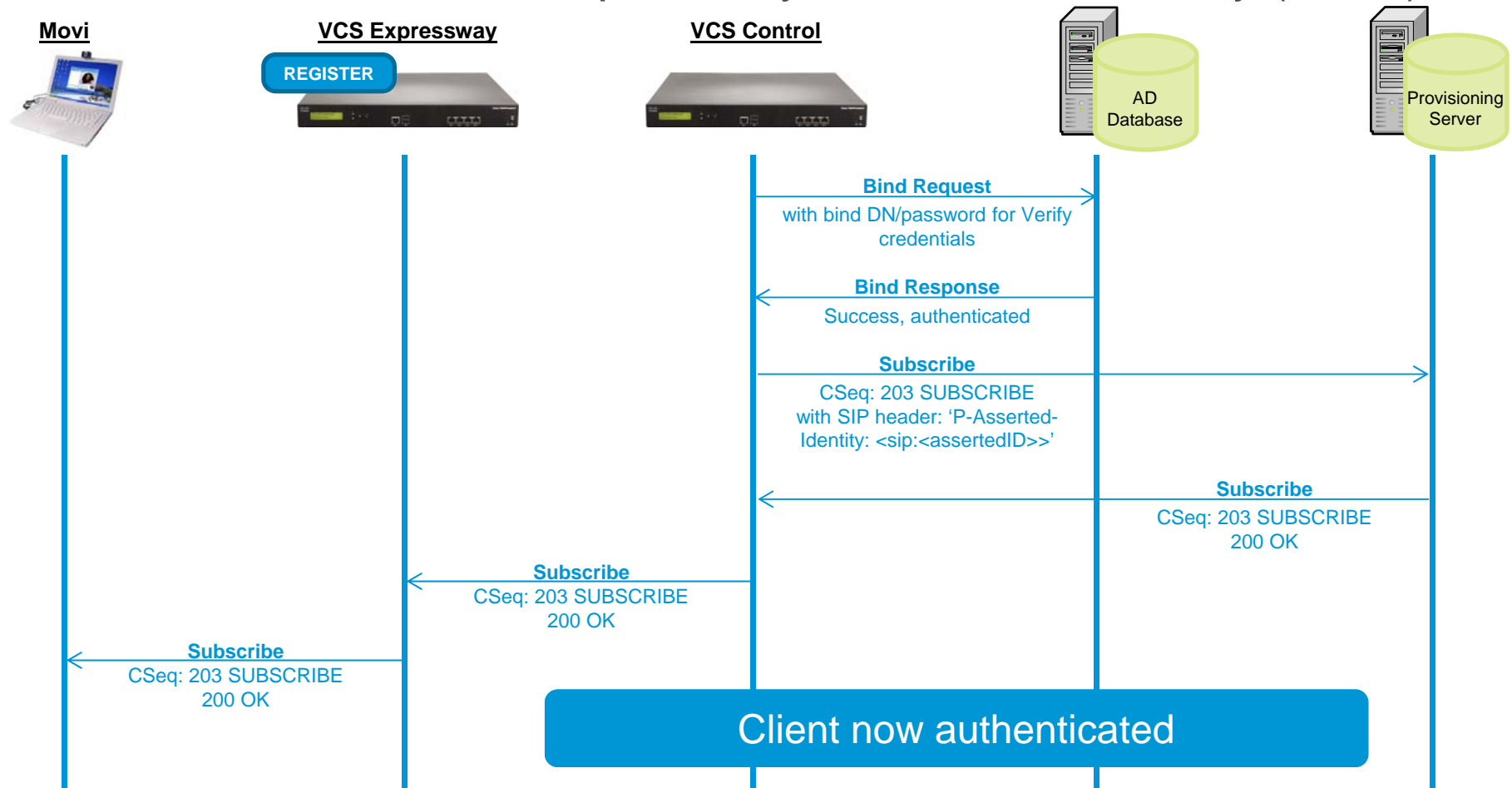
AD/LDAP Device Authentication

- VCS Control and VCS Expressway with Active Directory (direct)



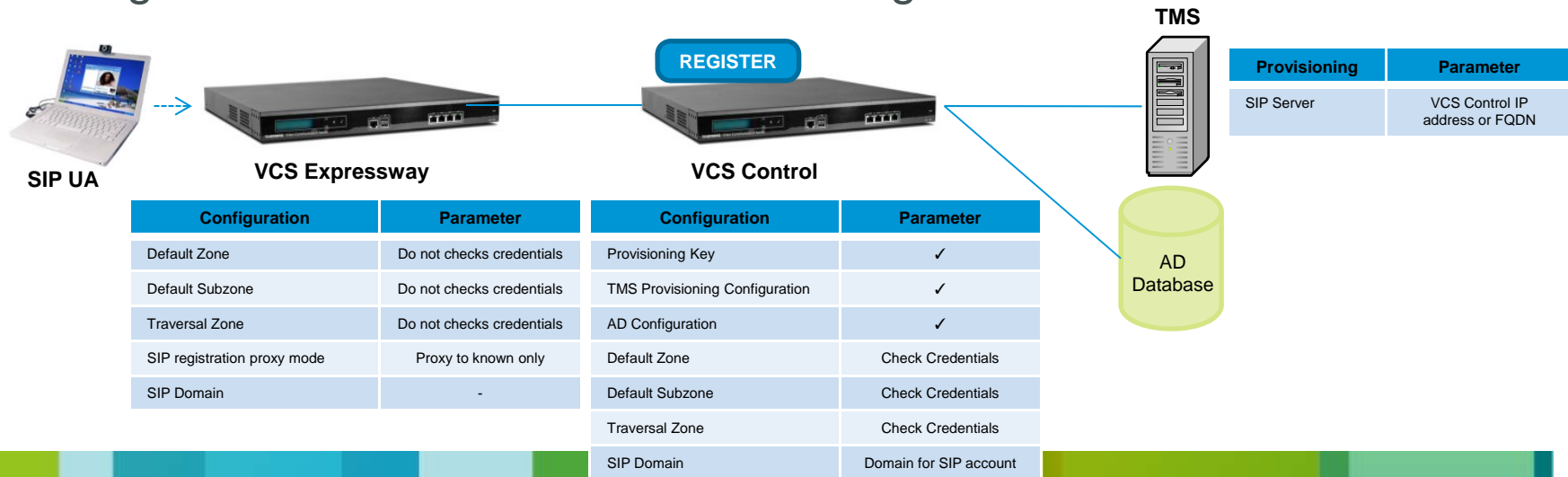
AD/LDAP Device Authentication

- VCS Control and VCS Expressway with Active Directory (direct)



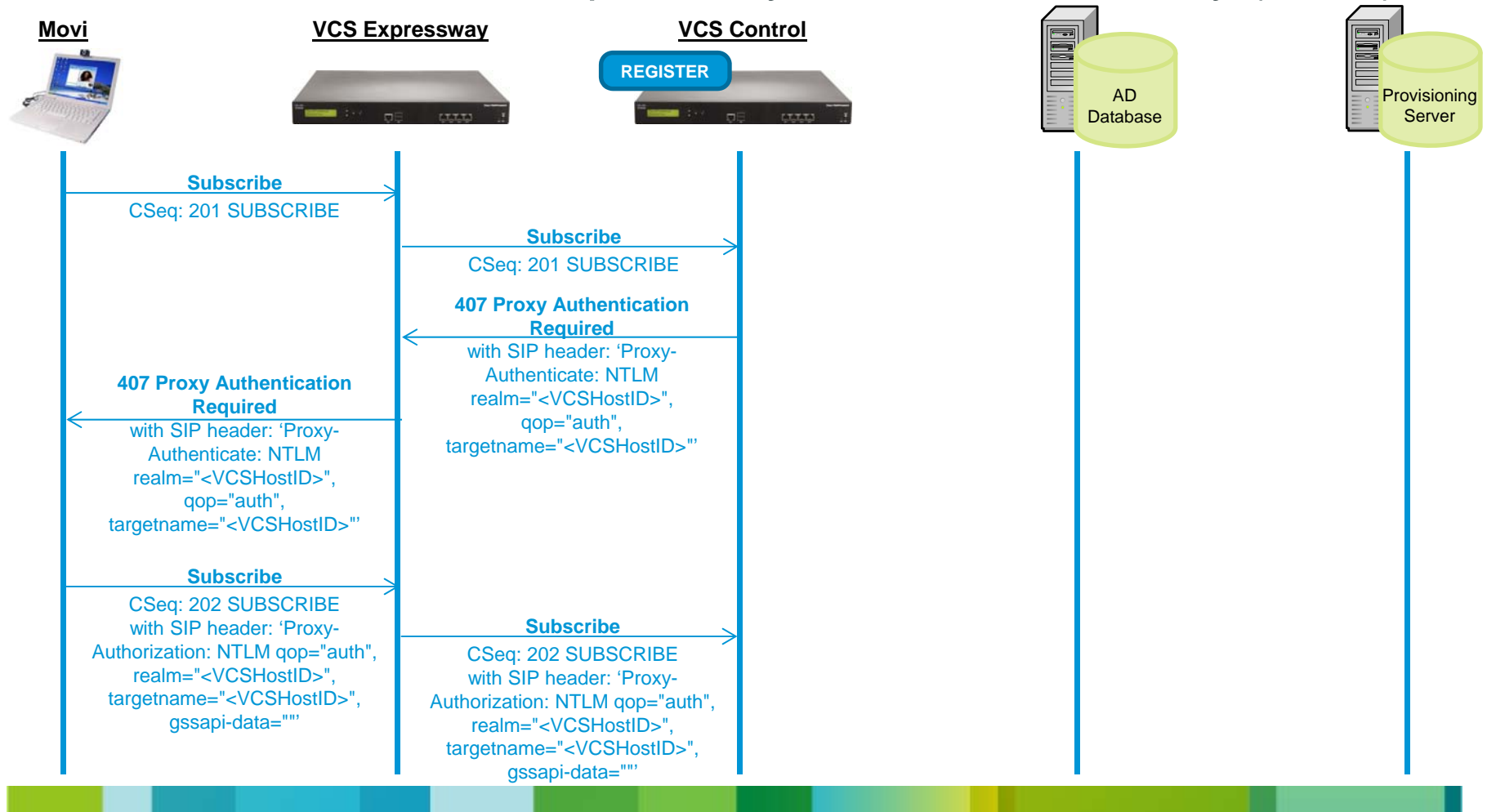
AD/LDAP Device Authentication

- VCS Control and VCS Expressway with Active Directory (direct) authentication for proxied registrations
 - ✓ The SIP UA sends a request to the VCS Expressway, but authentication does not happen until the request gets sent to the VCS Control.
 - ✓ With proxied registrations the registration will occur on the VCS Control and will be challenged for authentication. Proxying registrations results in media traversing the firewall in more cases.



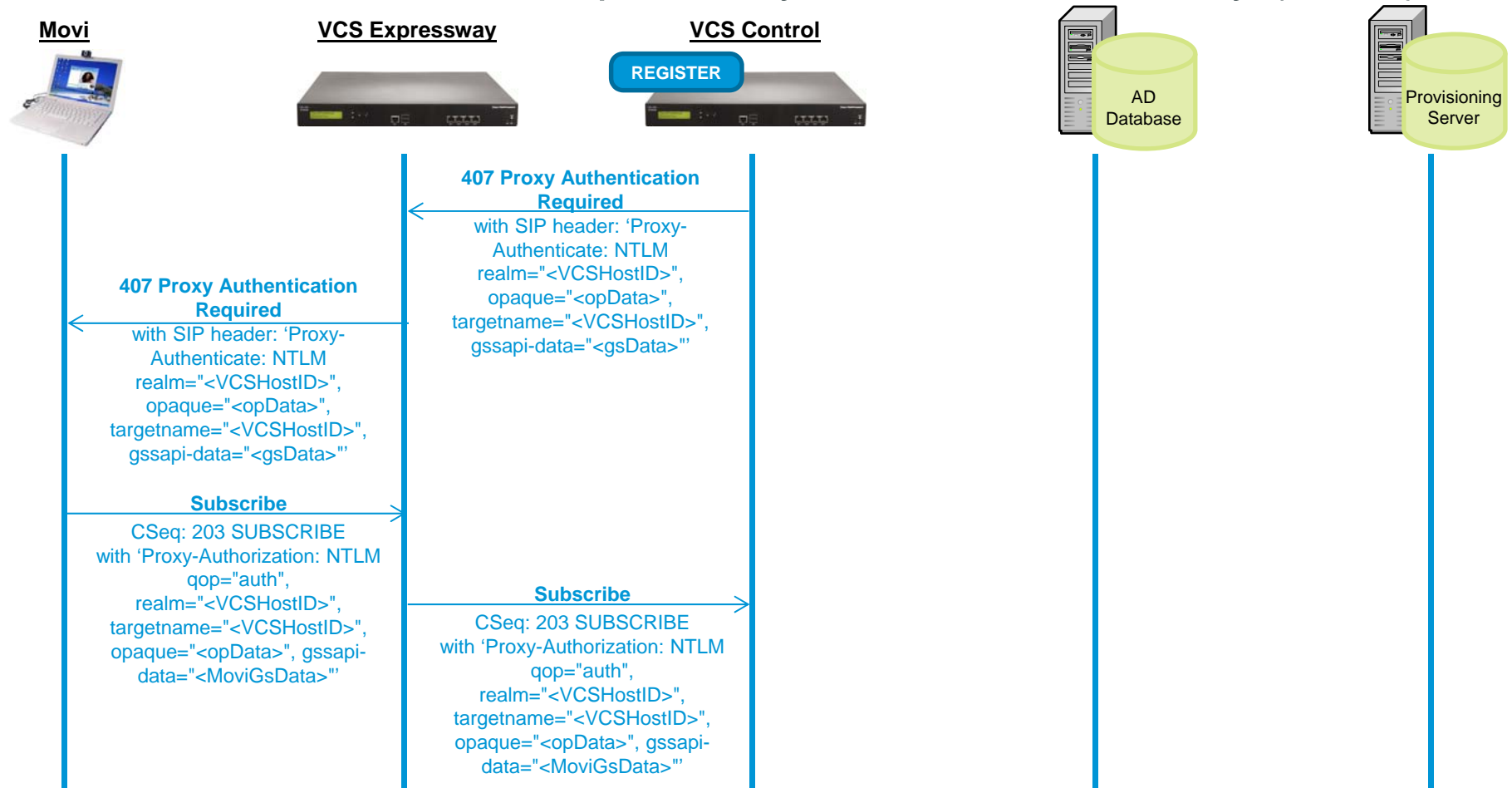
AD/LDAP Device Authentication

- VCS Control and VCS Expressway with Active Directory (direct)



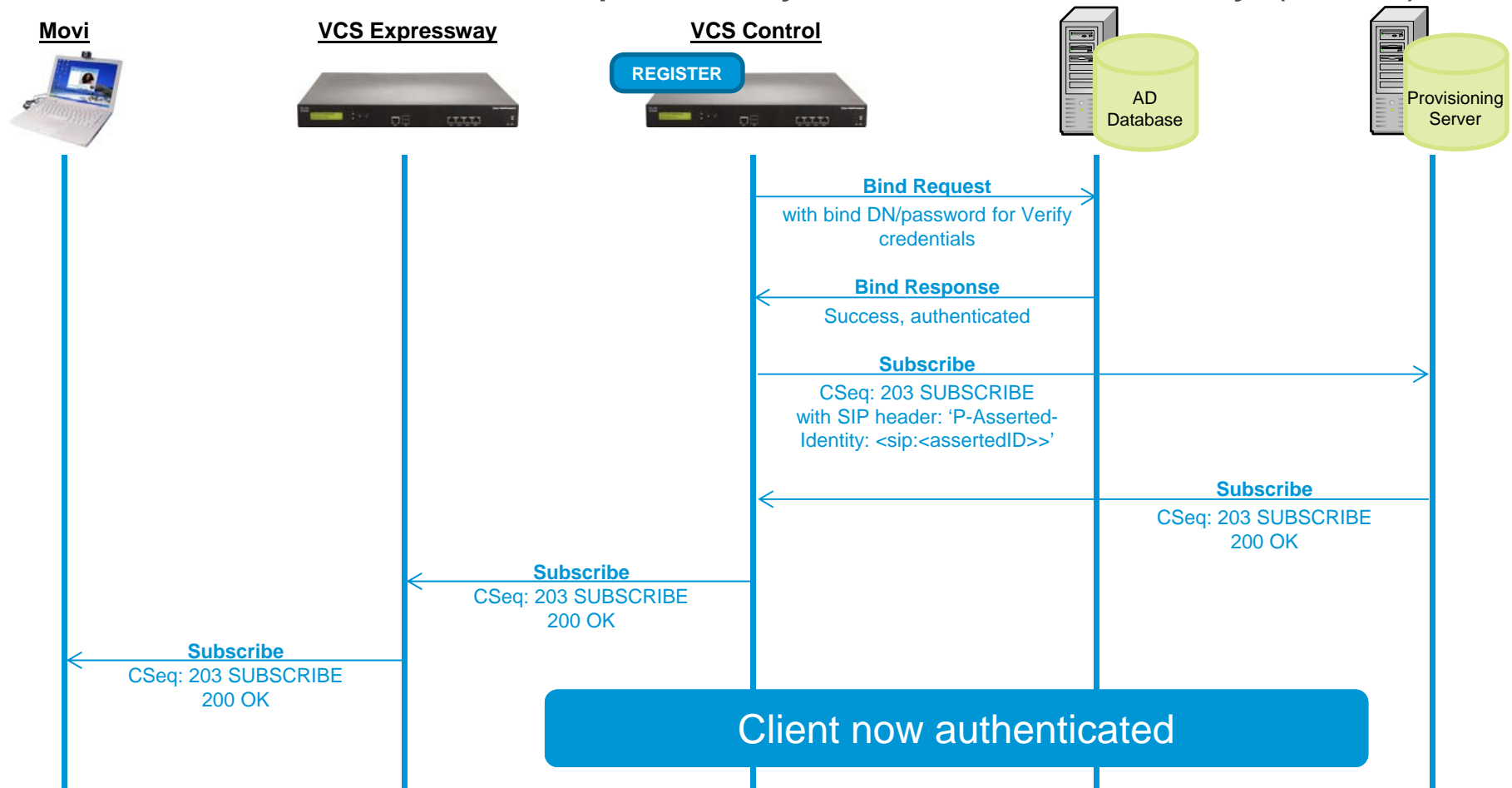
AD/LDAP Device Authentication

- VCS Control and VCS Expressway with Active Directory (direct)



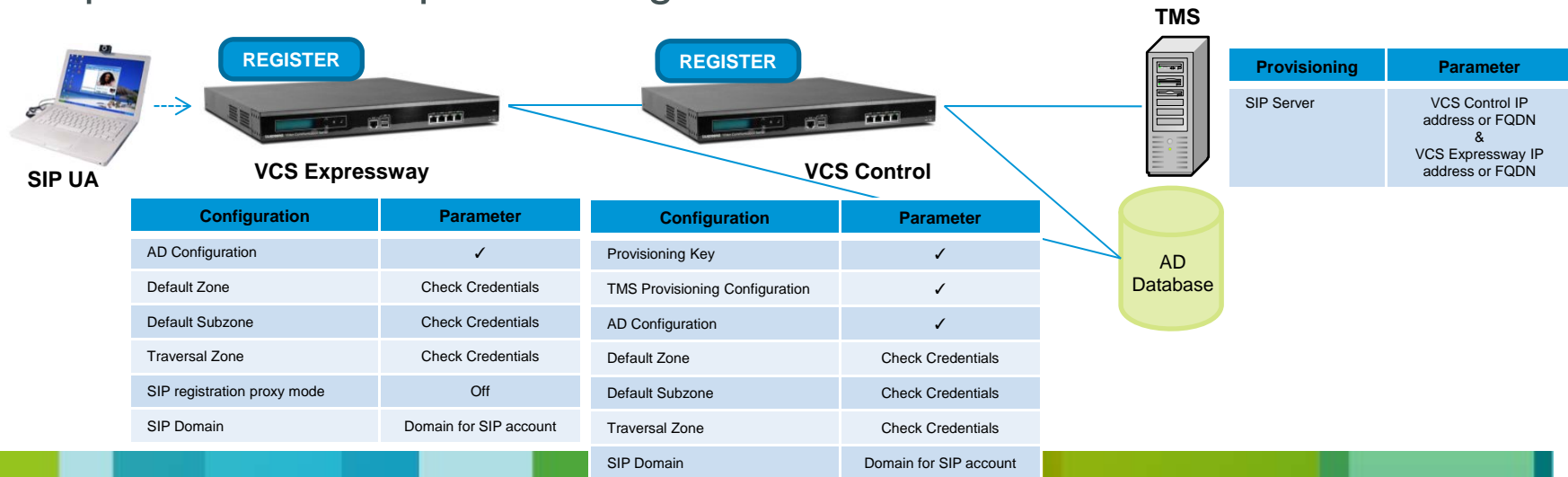
AD/LDAP Device Authentication

- VCS Control and VCS Expressway with Active Directory (direct)



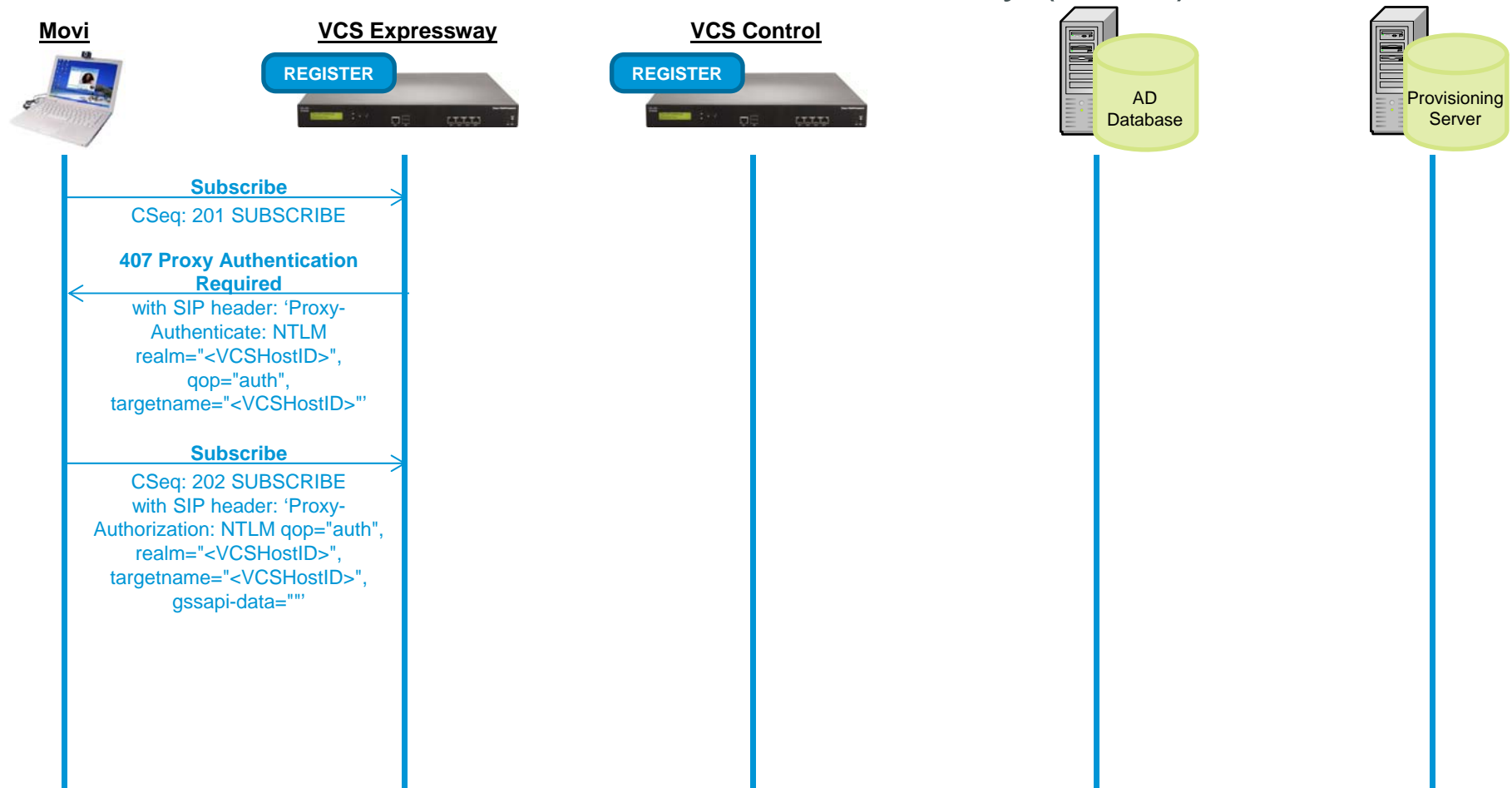
AD/LDAP Device Authentication

- VCS Control and VCS Expressway, each with Active Directory (direct) authentication
 - ✓ Both the VCS Expressway and the VCS Control can be configured to perform direct authentication against the AD server.
 - ✓ This example shows a subscribe for provisioning that is challenged using an AD (direct) authentication challenge by the VCS Expressway. It is then forwarded on to the VCS Control which in turn passes it to the provisioning server:



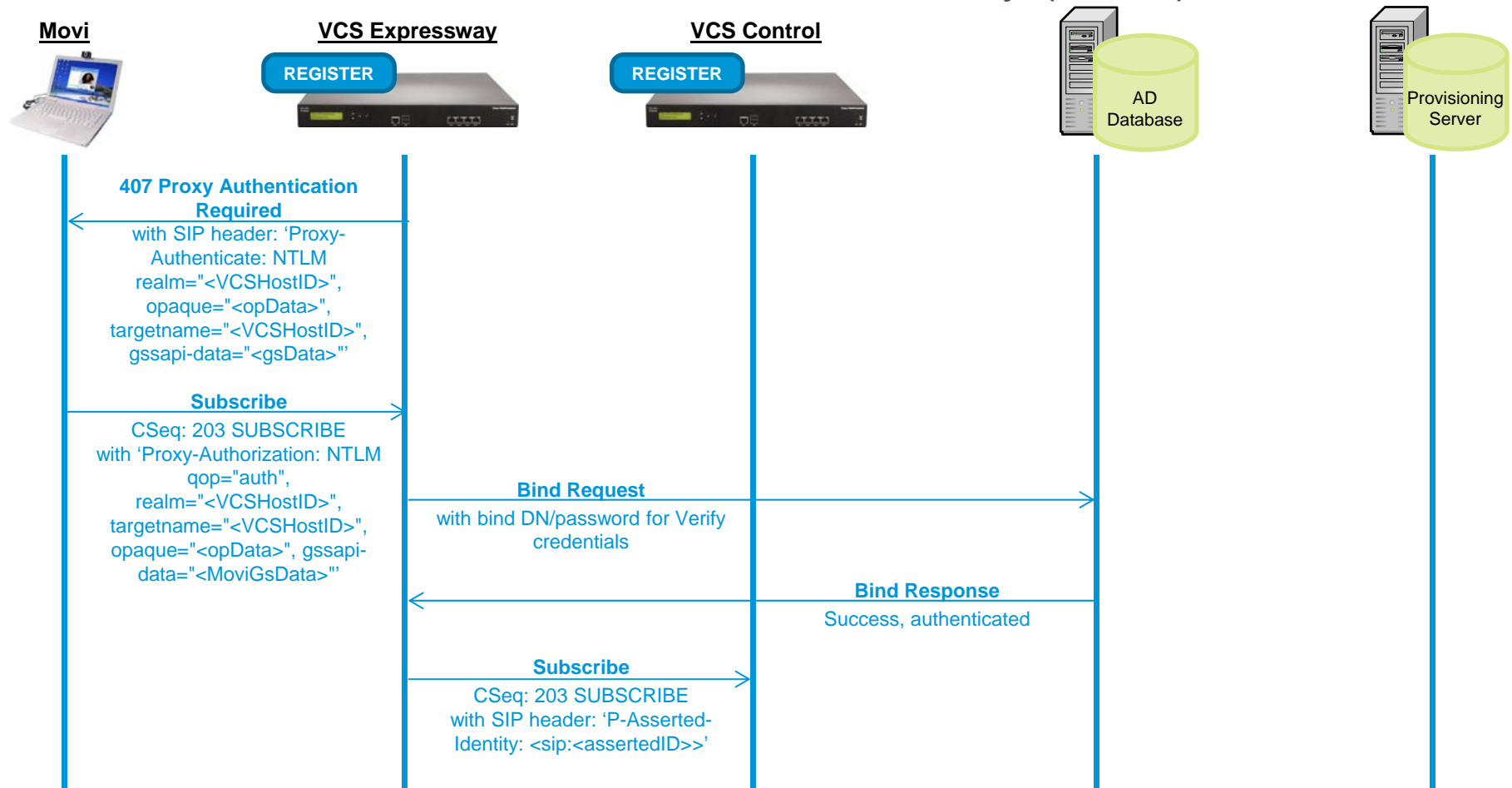
AD/LDAP Device Authentication

- VCSC and VCS-E, each with Active Directory (direct) authentication



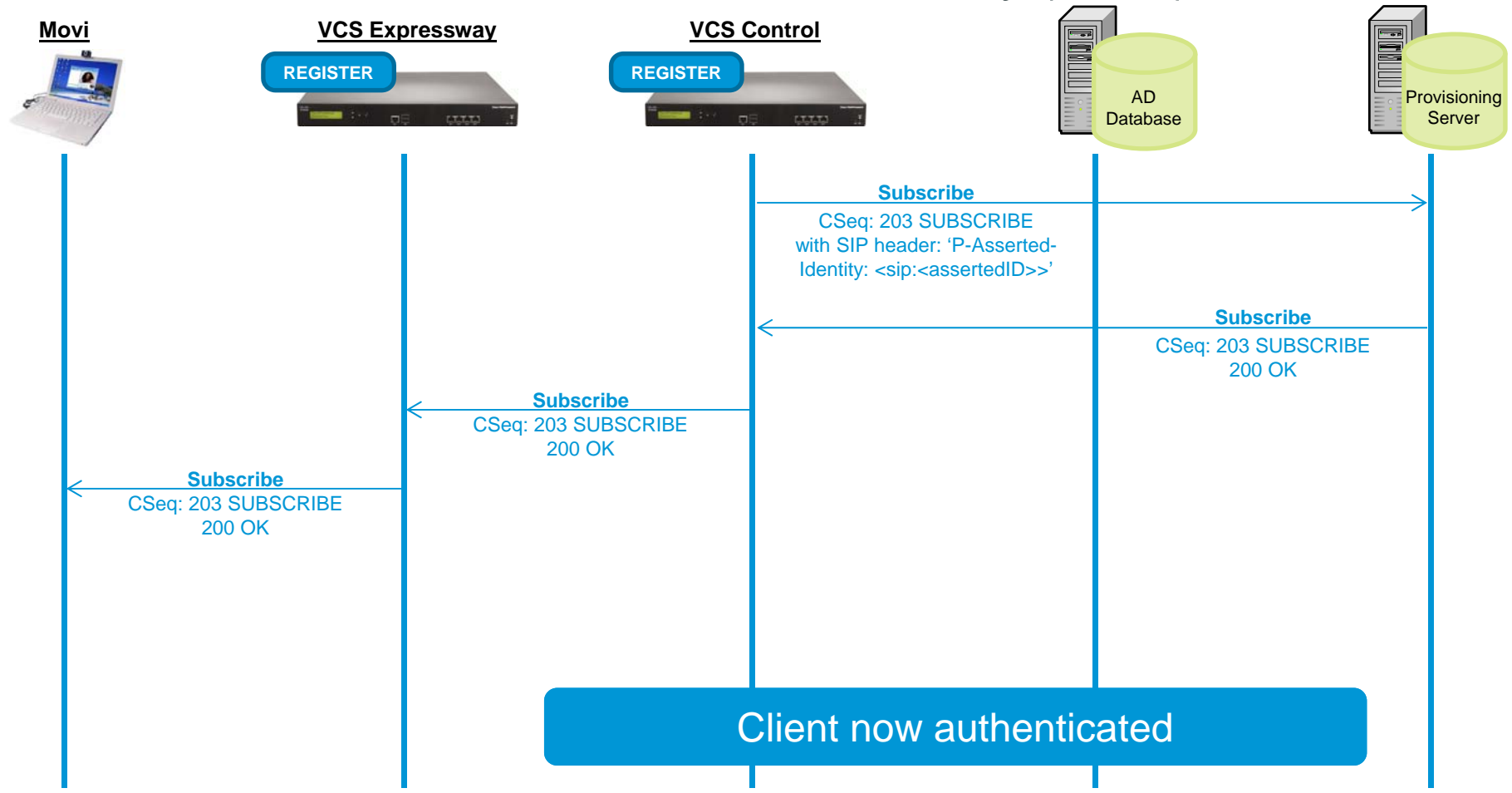
AD/LDAP Device Authentication

- VCSC and VCS-E, each with Active Directory (direct) authentication



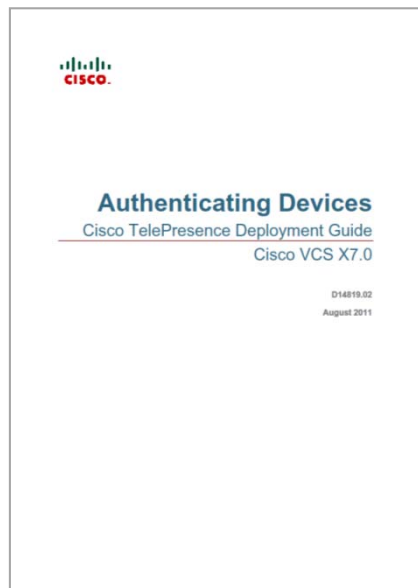
AD/LDAP Device Authentication

- VCSC and VCS-E, each with Active Directory (direct) authentication



Further reading

- www.cisco.com VCS Support
 - Read the release notes and administrator guide for any special instructions.
 - Read the cluster deployment guide to upgrade clusters or VCSs supporting Provisioning or Findme.
 - Cisco VCS Authenticating Devices Deployment Guide is available





Question?



