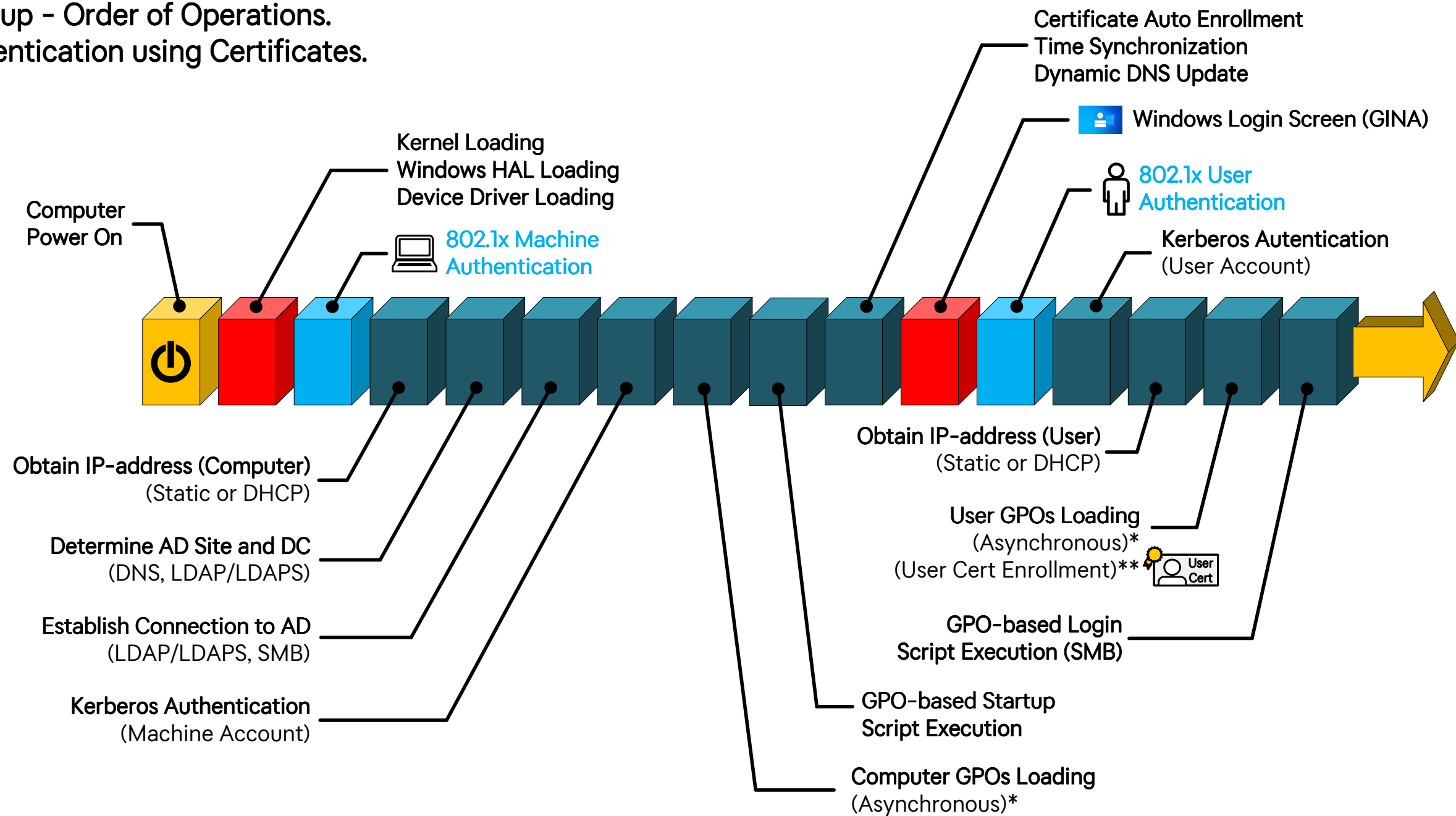


# Windows Startup - Order of Operations. Network Authentication using Certificates.



\*Asynchronous = GPOs are loaded continuously, the computer can continue the startup process without waiting for all GPOs to finish loading.

\*\*User Cert Enroll = Because User Certificate Enrollment takes place AFTER the user has logged in for the first time, the user's first-time **network authentication** will fail.

- If using standard EAP-TLS for both machine/user authentication = network connection fails completely at user login and no network access is given at all.
- If using TEAP with EAP-Chaining and EAP-TLS for both machine/user authentication = Machine access will be granted (scenario "User Failed and Machine Succeeded") as only a Machine certificate is presented to RADIUS server. You must trigger a new User Network Authentication to perform a proper authentication and authorization of the user.

- = Key Windows OS features
- = 802.1x (EAP) Authentication
- = Components requiring network access