Gemini AD synchronization function for ADFS

Steps of windows service synchronization from AD:

- Read the users from the given Active Directory Group.
- Read the Gemini users from Gemini application.
- Iterate through the users of AD group with following steps:

  - The service tries to find users from the Gemini user list with domain\ADFSUsername and ADFSSID.
  - **If not found**, it searches the Gemini user list again with concatenated username only (domain\ADFSUsername).
    - **If found** and the user is inactive, the function compares the SID of Gemini user and AD user.
      - **If they are equal**, the user will be activated again.
      - **If they differ**, the function tries to find a user with alternative username (domain\username_lastFiveNumbersOfSID)
        - **If found**, the user will be activated again
        - **If not found**, the function creates a new user with alternative username
    - **If not found**, the function tries to find a user with alternative username (domain\username_lastFiveNumbersOfSID)

If user is found, the function compares values of the Gemini user and AD user (FirstName, Email, etc.)

- If there is difference and the user can be updated based on a boolean value on the user (Field name: Lock User Data), then the user will be updated with actual values of the AD user.
- If there is no difference, the function takes the next AD user from the iteration.

If user is not found, the function creates a new user in Gemini.
If the function should create new Gemini user or update an existing, Gemini checks available licenses. If the license count enables creating a new user, it creates one. The following values will be filled on the Gemini user:
Username, Firstname, Surname, Email, ADFSSID, Active

After iterating through the AD users, if there are Gemini users not found in the AD group, that means these users are deleted from AD or AD group or are inactivated in AD. These users will be inactivated in Gemini's database.

If Gemini has a inactivated user and the same user exists in AD with a different SID, then on sync a new Gemini user will be created with alternative username like "domain\username_12345", using the last 5 characters from the new SID in AD. This behavior prevents the username conflict.

Example. The old John Smith in Gemini is not equal to the new John Smith user in AD since the SIDs differ, but the inactivated old user in Gemini seizes the domain\username, so Gemini makes up something unique as a username.

If the admin does not like the auto-generated result, the admin can alter users in Gemini and modify the data manually.