CONDIRECT-I-274 Password Vault support for outgoing Connect Direct for Windows transfers

Our proposal to the RFE is to use the **Logon Configuration Utility** (LCU) in batch mode, which leverages existing functionality and does not require any code change.

The user will provide an external command to retrieve the password. The password is then piped into LCU.bat in batch mode and stored securely (AES encrypted) in an LCU file (aka cddef.bin), which the CLI can use to connect to the CD server.

Ideally, the LCU is triggered after a password change to update the LCU file only once. Alternatively, this can be scheduled or called every time the CLI is called. This solution is already available in CDW 6.2.0.6_iFix002, 6.3.0.2_iFix002, 6.4.0.0 and later.

Below is a sample PowerShell script that demonstrates how the use of the LCU batch mode with the CLI. The sample simply prompts the user to enter credentials in step 1. When using a password vault, replace this with your code to retrieve the credentials from the vault. For example, it is possible to use the CyberArk REST API from PowerShell to retrieve the password. There are even PowerShell modules available that help the user to achieve this more easily, for example https://pspas.pspete.dev/about/.

```
# Settings
$CDDir = "C:\Program Files\IBM\Connect Direct v6.4.0"
$LCUFile = "${env:HOMEDRIVE}${env:HOMEPATH}cddef.bin"

# CD connection settings
$CDNodeName = "CDNODE"
$CDNodeIP = "127.0.0.1"
$CDNodePort = 1363

#---------------------------------------------------------------------
# Step 1: Get credentials
#---------------------------------------------------------------------
# This is just an example: prompt user to securely enter credentials
# Replace this with functionality to retrieve credentials, like from a password vault
$Cred = Get-Credential

#---------------------------------------------------------------------
# Step 2: Define connection settings for LCU
#---------------------------------------------------------------------
# Set node name/IP/port, user name/password
$CDConnection = @(
      "$CDNodeName"
      "$CDNodeIP"
      "$CDNodePort")
$CDConnection += $Cred.UserName
$CDConnection += `ConvertFrom-SecureString -AsPlainText -SecureString $Cred.Password`

#---------------------------------------------------------------------
# Step 3: Pipe connection settings into LCU to generate a cddef.bin file (Version 3)
```

```
#-------------------------------------------------------------------------
$CDConnection | & "$CDDir\Common Utilities\lcu.bat" -f"$LCUFile" -b -v3 >$null

#-------------------------------------------------------------------------
# Step 4: Run CLI using the generated cddef.bin file
#-------------------------------------------------------------------------
if (Test-Path -Path "$LCUFile" -PathType Leaf) {
      & "$CDDir\Common Utilities\Direct.exe" -f"$LCUFile"
}
```

Note : It is possible to use the CyberArk REST API from PowerShell to retrieve the password. There are even PowerShell modules available that help the user to achieve this more easily, for example:

https://pspas.pspete.dev/about/