

Active Directory Badge Import

User Guide

(Refer to the CA4K Help File for complete details)

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MUST READ - VERY IMPORTANT NOTES:

- 1) Configuring AD Badge Import requires an experienced Active Directory Administrator with the ability to create Active Directory attributes and to use the Active Directory tools.
- 2) To use the AD Badge Import, it must be enabled and configured under System Settings>System-wide settings>LDAP tab.
- 3) The AD Badge Import settings are on the bottom half of the LDAP screen.
- 4) Prior to configuring and performing the AD Badge Import function, you must determine if you will have the physical Access Control badge number or you will be using a unique employee number as a temporary placeholder. There are multiple notes on the following pages regarding this.
- 5) To perform an AD Badge Import, it requires an Active Directory credential with Read Permissions to user data and related data.
- 6) New AD users or AD users that are deleted, will not sync immediately. They will sync at the configured interval time (Daily midnight or Weekly Sunday night) or after a manual synchronization.
- 7) An AD Administrator has the option to create additional Active Directory attributes such as Badge, Facility Code, Access Groups and any others needed.
- 8) If a Badge attribute is not created in Active Directory, the employeeid attribute in Active Directory will automatically be mapped to the Badge field in the CA4K.

AD Badge Import Overview

The main function of the AD Badge Import is to auto enroll (synchronize) person's detail and badge numbers from Active Directory to the CA4K software.

The AD Badge Import feature requires an experienced Active Directory Administrator to configure the Active Directory settings. It will be required for the AD Administrator to populate the required AD fields that need to be mapped to the CA4K fields. The Administrator will also have the option to create additional AD attributes such as Badge, Facility Code, Access Groups and any others that is needed for their application.

Steps to configure AD Badge Import

Perform the following steps to configure the AD Badge Import.

Enable AD Users Integration

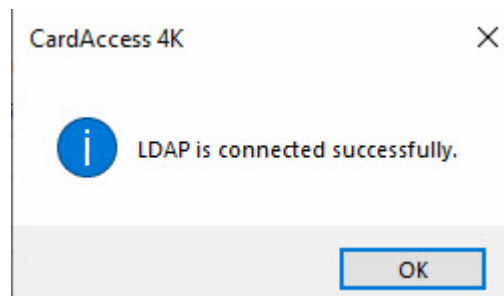
Upon enabling the AD Users Integration feature, you must configure and verify the LDAP path.

1. Select **Enable AD Users Integration**.
2. Configure the **LDAP Network Path** (bottom half of the page).



The screenshot shows a configuration window titled "Active Directory Integration". It contains a checkbox labeled "Enable AD Users Integration" which is checked. Below this is a "Network Path:" label followed by a text input field containing "LDAP://TS.com". To the right of the input field is a button labeled "Verify Path". Below the input field, there is a hint text that reads "Exp: LDAP://192.168.1.1".

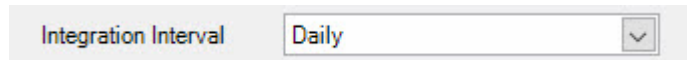
3. Click **Verify Path**. Verify a message box displays LDAP is connected successfully.



Integration Interval

The **Integration Interval** options are **Daily at midnight** or **Weekly on Sunday night at midnight**. In addition to scheduled synchronizations, you can also perform a manual synchronization at any time by clicking the **Sync AD Now** button.

4. Configure the **Integration Interval** to Daily. This should be the default setting.

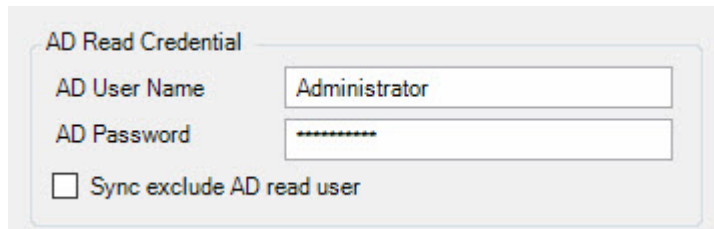
A screenshot of a web form element. It consists of a label 'Integration Interval' followed by a dropdown menu. The dropdown menu is currently set to 'Daily' and has a small downward arrow icon on its right side.

Integration Interval	Daily
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AD Read Credential

On the AD Badge Import screen, you must enter an Active Directory credential that has Read access to the user fields in AD including user data and other related data.

5. Provide an Active Directory credential that has READ permissions to the Users data in the Active Directory Database.

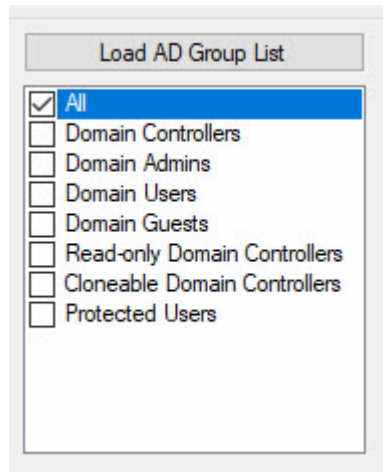
A screenshot of a web form titled 'AD Read Credential'. It contains two text input fields: 'AD User Name' with the value 'Administrator' and 'AD Password' with masked characters '*****'. Below these fields is a checkbox labeled 'Sync exclude AD read user' which is currently unchecked.

AD Read Credential	
AD User Name	Administrator
AD Password	*****
<input type="checkbox"/> Sync exclude AD read user	

Load AD Group List

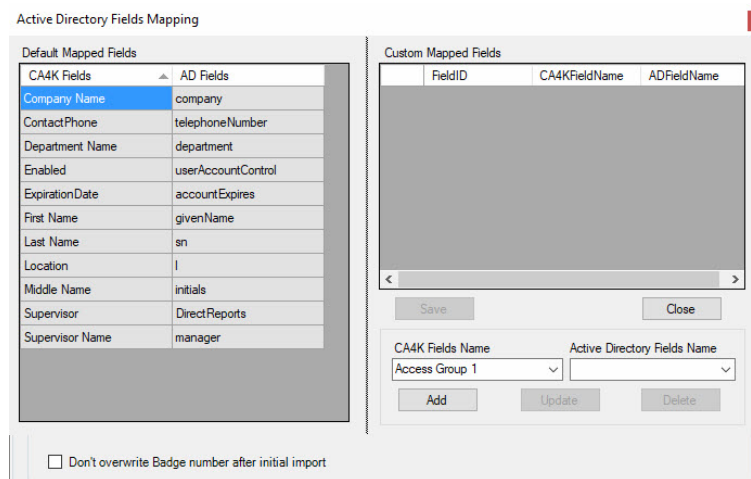
The Load AD Group List box will provide the ability to select an Active Directory group or All groups. These group are Global Security groups in Active Directory.

- Click the Load AD Group List button. The AD Group List will display.
- Select the “All” selection. This should be the default selection.



AD Fields Map

The **Active Directory Fields Mapping** screen contains all the controls to map AD attributes to the corresponding CA4K fields.



Note: The left side of the screen displays all the default mappings. The right side of the screen provides you the ability to create additional mappings.

Note: The fields below are mapped by default and display on the left side of the screen:

FirstName
LastName
MiddleName
Enabled
Department
Company
Supervisor
Location
SupervisorID
Phone
Lastupdated

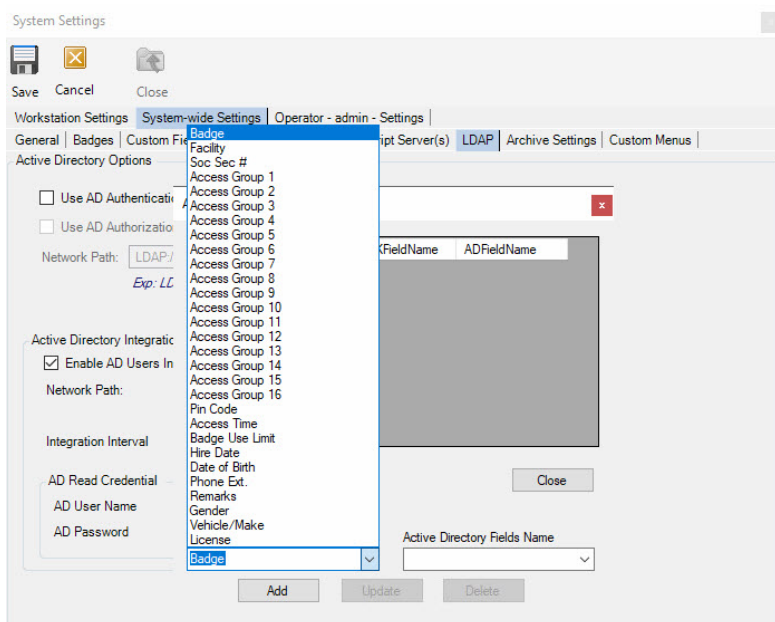
Very Important Notes:

- If the Active Directory Administrator creates an AD Badge attribute, it must be mapped to the CA4K Badge field in the mapping screen. If it is not, the AD employeeid attribute will automatically be mapped and synced to the CA4K badge field. The purpose of this functionality is to use a temporary Badge number if the physical badge number is not known at initial configuration. IF YOU MAP A CUSTOM BADGE FIELDS, THE BADGE ATTRIBUTE IN ACTIVE DIRECTORY MUST CONTAIN A BADGE NUMBER OR ELSE THE USER WILL NOT IMPORT INTO CA4K.
- If a Facility Code attribute is not created and mapped by the Active Directory Administrator, the CA4K will default the Facility Code to 0.
- If any other fields are being used for the AD Import such as an Access Group, the Active Directory Administrator must also create these additional AD attributes for mapping to the associated CA4K fields.
- Using the selection boxes on the bottom right, you can create all the necessary mappings (AD fields to CA4K fields) needed for your application.

CA4K Fields Name drop-down list

The CA4K Fields Name drop-down list will display all the available CA4K fields that can be mapped to an AD field. The CA4K fields mapped by default will not display in this list.

8. Click the down arrow on the **CA4K Fields Name** box.
9. Select the CA4K Field you wish to map and click the **Add** button.



Active Directory Fields Name (Attributes) drop-down list

The Active Directory Fields Name drop-down list will display all the available Active Directory attributes that are exposed and can be mapped.

10. Click the down arrow on the **Active Directory Fields Name** box.
11. Select the Active Directory Field (Attribute) you wish to map and click the **Add** button. For our demonstration, we will map badge and facility.

Active Directory Fields Mapping

Default Mapped Fields

CA4K Fields	AD Fields
Company Name	company
ContactPhone	telephoneNumber
Department Name	department
Enabled	userAccountControl
ExpirationDate	accountExpires
First Name	givenName
Last Name	sn
Location	I
Middle Name	initials
Supervisor	DirectReports
Supervisor Name	manager

Custom Mapped Fields

FieldID	CA4KFieldName	ADFieldName
1	Badge	badge
2	Facility	facility

Save Close

CA4K Fields Name: Access Group 1

Active Directory Fields Name: badge, description, employeeid, facility, iscriticalsystemobject, lastlogoff, logonhours, msmqdigests, msmqsigncertificates, name, telephonenumber, whencreated

☐ Don't overwrite Badge number after initial import

Do Not Overwrite Badge Number option.

Note: On initial setup, the AD Administrator might not have the physical badge numbers. In this case, they will use the AD **employeeid** attribute as a temporary unique badge number.

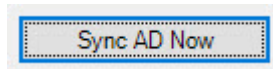
12. Do not select the **Don't overwrite Badge number after initial import** option.

☐ Don't overwrite Badge number after initial import

Sync AD Now

The Sync AD Now button provides the ability to perform a manual synchronization.

13. Upon creating your mappings, click the **Sync AD Now** button to manually synchronize the Active Directory users with the CA4K Badgeholders.



Log Files for Troubleshooting

After every AD Badge Import, a Log file will be created in the **Import\Log folder** every time the background AD synchronization is executed by the Data pump Service. The File name will be **ADImport_XXXXX.txt**. This log file should be viewed for any errors that might have occurred. In addition to this log file, there will also be a file created under the PROCESSED folder. The file in the processed folder will display all the records that came over from Active Directory.

14. Upon performing an Active Directory synchronization, view the ADImport Log file for errors.

Note: The example log file below contains errors.

```
ADImport_13052019_113735_Log.txt - Notepad
File Edit Format View Help
5/13/2019 11:37:35 AM : Start processing ...C:\Program Files (x86)\CardAccess4K\Import\ADImport.txt
5/13/2019 11:37:35 AM : 1 - Raw data : Built-in account for administering the computer/domain|||||True|9/7/2018 8:49:40 PM|||c49
5/13/2019 11:37:35 AM : Input string was not in a correct format.
5/13/2019 11:37:35 AM : 1 - Raw data :
5/13/2019 11:37:35 AM : Error: Minimum first 4 fields are required. (Badge|Facility|LName|FName)
5/13/2019 11:37:35 AM : 1 - Raw data : Built-in account for guest access to the computer/domain|||||False|9/7/2018 8:49:40 PM|||
5/13/2019 11:37:35 AM : Input string was not in a correct format.
5/13/2019 11:37:35 AM : 1 - Raw data :
5/13/2019 11:37:35 AM : Error: Minimum first 4 fields are required. (Badge|Facility|LName|FName)
5/13/2019 11:37:35 AM : 1 - Raw data : mkelly|||||True|9/7/2018 8:49:41 PM|||fb5ffc6f-80ed-460f-8f3e-79248dbd8587|58097|||0|||
5/13/2019 11:37:35 AM : Input string was not in a correct format.
5/13/2019 11:37:35 AM : 1 - Raw data :
5/13/2019 11:37:35 AM : Error: Minimum first 4 fields are required. (Badge|Facility|LName|FName)
5/13/2019 11:37:35 AM : 1 - Raw data : Key Distribution Center Service Account|||||False|9/7/2018 8:53:59 PM|||ea9448ca-4170-4bf
5/13/2019 11:37:35 AM : Input string was not in a correct format.
5/13/2019 11:37:35 AM : 1 - Raw data :
5/13/2019 11:37:35 AM : Error: Minimum first 4 fields are required. (Badge|Facility|LName|FName)
5/13/2019 11:37:35 AM : 1 - Raw data : mbalan|Balan|Marco|||||True|9/10/2018 7:38:08 PM|||e6a599e4-69ca-427c-81e0-b11cc6172ac6|||
5/13/2019 11:37:35 AM : Input string was not in a correct format.
5/13/2019 11:37:35 AM : 1 - Raw data :
5/13/2019 11:37:35 AM : Error: Minimum first 4 fields are required. (Badge|Facility|LName|FName)
5/13/2019 11:37:35 AM : 1 - Raw data : 55555|Tester|AD|||||True|1/10/2019 9:30:20 PM|||1be7605a-bcf0-45cd-822d-58f20f1c089f|||0||
5/13/2019 11:37:35 AM : Imported Successfully
5/13/2019 11:37:35 AM : 1 - Raw data :
5/13/2019 11:37:35 AM : Error: Minimum first 4 fields are required. (Badge|Facility|LName|FName)
5/13/2019 11:37:35 AM : 1 - Raw data : 0|0|||||False|b11d900e-abdc-41ce-9cf4-98a4600a3cc1|||9/10/2018 7:36:55 PM
5/13/2019 11:37:35 AM : Badge cannot be zero
5/13/2019 11:37:35 AM : 1 - Raw data :
5/13/2019 11:37:35 AM : Error: Minimum first 4 fields are required. (Badge|Facility|LName|FName)
```

THE END