



Dynamic User Import Module (DUIM)

Overview

This technical note details how to configure the Dynamic User Import Module (DUIM) feature of the Inner Range Inception controller.

Introduction

The Dynamic User Import Module (DUIM) feature allows Inception controllers to automatically import files containing user data from a Windows network share folder, by polling for new files at a regular interval and importing the user data into Inception's database. The interface and functionality are similar to the Inner Range Integriti software's DUIM feature, so users of the other software may be familiar with the process.

DUIM can be used to import new users and/or update the settings of existing users. Deleting users with DUIM is not possible, however a user can be enabled or disabled by updating its "User Cancelled" field.

Successfully processed user data files are deleted from the share folder; files that fail to import are either deleted or moved to a subfolder of the user's choice.

DUIM supports the same csv file format as the one used for bulk user importing in the Import CSV dialog on the Manage Users page.

Setting up the Network Share Folder

In order to set up DUIM, you will need to set up a Windows network share folder and set up a user account with full read and write access permissions for the folder. If you need assistance with this step, consult a guide on how to set up a Windows network share, or contact your network administrator.

Once you have set up the network share folder and the necessary user permissions, note down the full network share folder path (e.g. \\EXAMPLE-PC\TestShare) and the username and password of the Windows user account whose permissions will be used to access the network share (including the domain or workgroup if applicable). This information will be needed in order to set up DUIM for Inception.

Configuring DUIM

To configure DUIM, go to the **[Configuration > General > System]** page in the Inception web interface. Tick the “Enable Dynamic User Import Module (DUIM)” checkbox and enter the location of the Network Share folder you set up in the previous step. Enter the username and password you will use to access the network share folder. If you are on a workgroup or domain, make sure to include it as part of the username.


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Enable Dynamic User Import Module (DUIM)
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Network Share Location

Network Share Username

Network Share Password

Next, specify a subfolder where files that fail to import will be moved into. This should be a subfolder of the folder specified in the Network Share Location, not the absolute path. You can also choose to leave the folder name field empty, and the failed files will be deleted instead. **NOTE:** The “Import Failure” subfolder should be the name of a folder that already exists; the DUIM service will fail to move import failure files if the folder does not exist.

Set the Scan Interval time to control how often the DUIM service will poll for new files in the network share folder.

The Filename Mask field can be used to filter which files the DUIM service will process based on their filenames. You can use the wildcard character (*) to match a range of filenames, for example: a filename mask of “example_*.csv” will match any .csv files whose names start with “example_”. The default option of an empty filename mask will cause the DUIM service to process all files with a .csv extension.

Network Share Subfolder for Import Failures (optional)

Scan Interval for New Files

Filename Mask (optional)

Set the Credential Template and Fob Template for imported users if you are planning to include card or fob credential data in your imported user data files. If you do not need to import card or fob data, these can be left blank.

Credential Template for Imported Users

Fob Template for Imported Users

Click the Save button to apply the new system settings. The DUIM service should now start running and will begin automatically importing user data files placed into the network share folder.

Custom Column Mapping

When importing files either manually or through the DUIM service where some column names for the supplied .csv files do not directly correspond to the exact Inception column names, the Custom Column Mapping option under the DUIM configuration allows other column names to be used as a substitute.

Without the Custom Column mapping, the user property names are accepted if they map to an Inception user property. For example, the properties Email Address, Name, Notes and Security PIN that would be accepted in an imported .csv file would be set up like this:

	A	B	C	D
1	Name	Notes	Security PIN	Email Address
2	Installer		1234	installer@innerrange.com
3	John Smith		3456	
4	Mary Doe		2345	john.smith@innerrange.com
5	API Tester	No API Key used to test	9999	apitest@innerrange.com

Under the DUIM Custom Column Mappings under **[Configuration > General > System]**, different column names can be specified. When pressing the 'Add Items' button, all user property column names you wish to replace can be selected. Then, under the 'Alternate Column Name' section, a new column name can be specified to be imported into that user property.

Custom Column Mapping

User Property	Alternate Column Name
Email Address	Email
Name	Full Name
Notes	Description
Security PIN	Access PIN

Add Items

Remove Selected Items

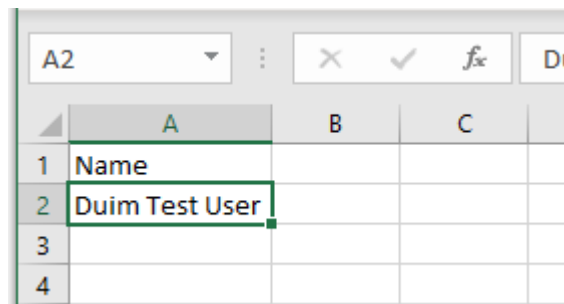
With the Custom Column mapping shown, the column names are replaced by the specified Alternate Column Name and will be imported into the specified user properties:

	A	B	C	D
1	Full Name	Description	Access PIN	Email
2	Installer		1234	installer@innerrange.com
3	John Smith		3456	
4	Mary Doe		2345	john.smith@innerrange.com
5	API Tester	No API Key used to test	9999	apitest@innerrange.com

Note that these Custom Column mappings are explicit replacements for the original user property column names, meaning that if there is a column with the original user property name it will not be imported to that property.

Placing user data files in the DUIM share folder

To test that the DUIM service is working properly, copy a small example user data file into the network share folder to make sure it imports successfully. A sample user data file can be made in Excel by adding a Name header column and entering a sample name, and then exporting the file as a CSV (Comma delimited) file.



	A	B	C
1	Name		
2	Duim Test User		
3			
4			

After you have created the sample user data file, copy it into the DUIM network share folder. You can wait until the next time the DUIM service runs (determined by the Scan Interval) or you can quickly disable and re-enable DUIM in the System Settings page and save the settings in order to trigger an import immediately.

If the file import completes successfully, you should see that the file has disappeared from the folder and “Duim Test User” has appeared in the list of users on the Manage Users page. If the file remains in the folder, it may indicate an issue with the DUIM configuration. See the troubleshooting section for information on fixing common problems.

Troubleshooting

Files are not being imported from the Network Share folder

Check Inception’s System Messages on the System Overview page to see detailed descriptions of any DUIM import errors that have occurred. Most common DUIM errors fall into one of the following categories:

- **Failed to import file**

This message indicates that there was a problem while processing a csv file from the DUIM share. This error is usually caused by invalid user data in the csv file. The message will contain the name of the file, a description of the error (such as invalid column header, invalid data types, duplicate user names, etc.) and the line number at which the error was located if applicable.

Fix the errors in the file and try importing it again. If you specified a folder for failed imports in the DUIM settings, you will be able to find the file in the

For more help on formatting user data for csv import, see the Import CSV dialog on the Manage Users page.

- **Network Share Path access failure**

This message indicates that there was a problem accessing the network share due to one of several reasons:

- Connection Failure

The operation failed because Inception could not reach the server or PC where the network share folder is hosted. Check that your Inception controller and your server are both connected to the local network and that there are no connectivity problems.

- Authentication Failure

The network share is available, but your username and password could not be used to access the network share path. Make sure that the domain or workgroup is included in the username if applicable, and check that the user account has full read and write permissions for the DUIM network share folder.

- Read/Write/Delete Access Denied

The user account you used for DUIM configuration does not have sufficient permission to read or modify the contents of the DUIM share folder. Make sure the user account has full read and write access enabled for the DUIM network share folder.

- File or Path Not Found

The DUIM network share path you specified could not be found. Check that the folder path has been entered correctly and that the syntax is correct.

- Import Failure Subfolder Doesn't Exist

The DUIM service could not move a failed file into the subfolder you specified. Make sure that the subfolder has been created on the network share.

- Reason Unknown

The DUIM service has failed for an unknown reason. Contact Inner Range for support if the problem persists.