



Bulk Migration of SAS 9 Artifacts into SAS Viya

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Bulk Migration of SAS 9 Artifacts into SAS Viya

Agenda

- SAS EG Projects
- SAS DI Studio Jobs
- SAS Stored Processes
- SAS 9 Content Assessment modifySASCode
 - Bulk modification of hard coded paths found in SAS statements
 - FILE
 - FILENAME
 - INFILE
 - LIBNAME
 - XCOMMAND
 - %LET

Bulk Migration of SAS 9 Artifacts into SAS Viya


3 SAS 9 artifacts can be bulk imported into SAS Viya

SAS 9		SAS Viya
DI Studio Jobs	➡	SAS Studio Flows
Enterprise Guide Projects	➡	SAS Studio Flows
Visual Analytics Reports	➡	Visual Analytics Reports
OLAP Cubes	➡	SAS Jobs and SAS Visual Analytics Data Views
Relational Information Maps	➡	SAS Jobs
Stored Processes	➡	SAS Jobs

- SAS DI Studio Jobs
 - Become SAS Studio Flows
- SAS EG Projects
 - Become SAS Studio Flows
- SAS Stored Processes
 - Become Jobs

Bulk Migration of SAS 9 Artifacts into SAS Viya

Where do I get it – Download SAS 9 Content Assessment

 | SUPPORT 👤 🌐 📧 ☰ 🔍

SUPPORT / DOWNLOADS & HOT FIXES

SUPPORT

- Manage Tracks
- SAS Administrators
- Security Bulletins
- License Assistance
- Manage My Software Account
- Downloads & Hot Fixes
 - ↳ SAS System Software
 - ↳ SAS DataFlux Software
 - ↳ JMP Software
 - ↳ Mobile Device Software
 - ↳ Third Party Software
 - ↳ Additional Products
 - ↳ Hot Fixes
- Knowledge Base

All Downloads

Downloads

SAS 9 Content Assessment 2021.2.6

SAS® 9 Content Assessment is a collection of applications designed to examine the characteristics of your SAS® 9 system. Each application examines your SAS 9 system for relevant information, gathers key details, and produces results from each part of the assessment.

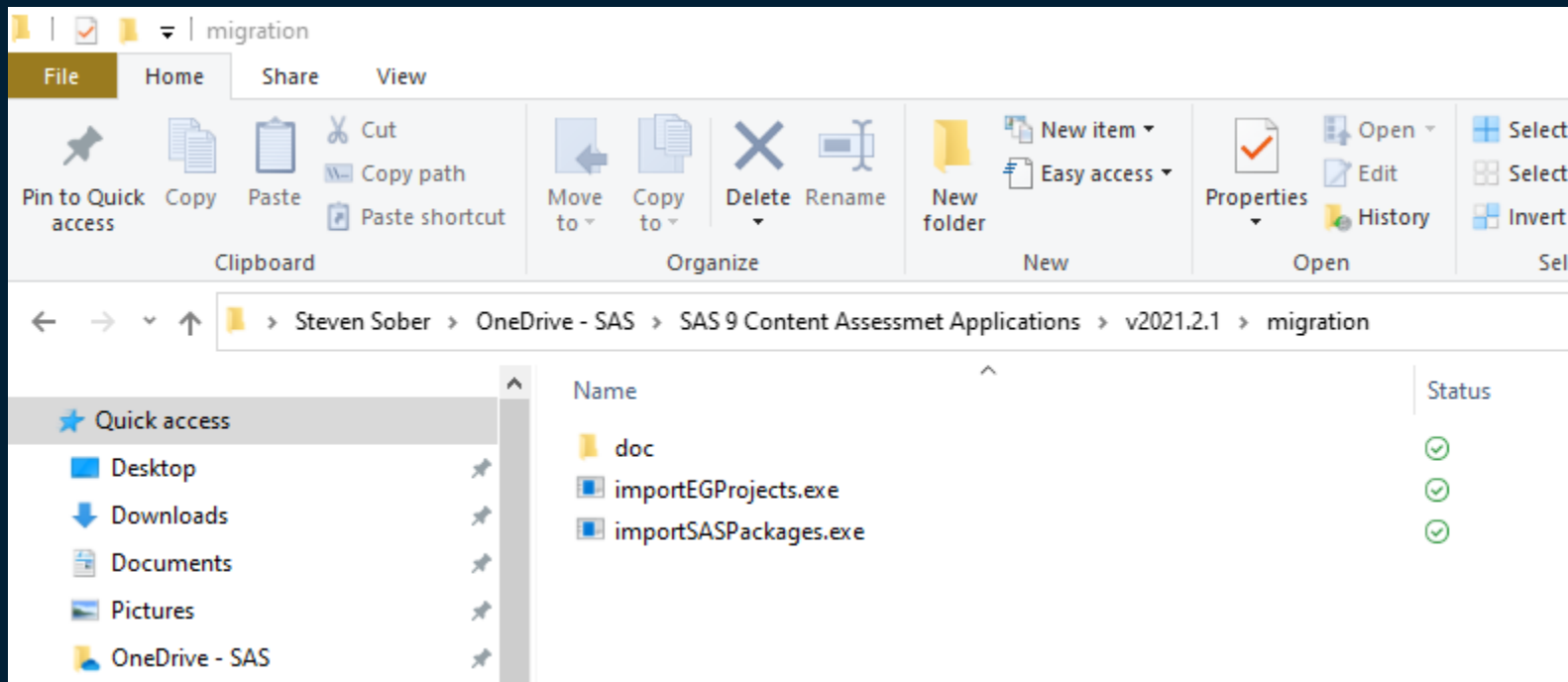
To begin the download process, select the item in the table below which best meets your needs.

SAS 9 Content Assessment 2021.2.6					
Platform	Description	Request Download	Size	Release Date	ReadME
64-bit enabled AIX	SAS 9 Content Assessment 2021.2.6 for AIX	SAS9ContentAssessment.2021.2.6.aix.tar	63.7 MB	2022-04	pdf
64-bit enabled Linux	SAS 9 Content Assessment 2021.2.6 for LAX	SAS9ContentAssessment.2021.2.6.lax.tgz	80.3 MB	2022-04	pdf
64-bit enabled Windows	SAS 9 Content Assessment 2021.2.6 for Windows	SAS9ContentAssessment.2021.2.6.win.zip	80.5 MB	2022-04	pdf

For questions you may have about this download, please [contact our Product Support Group](#)

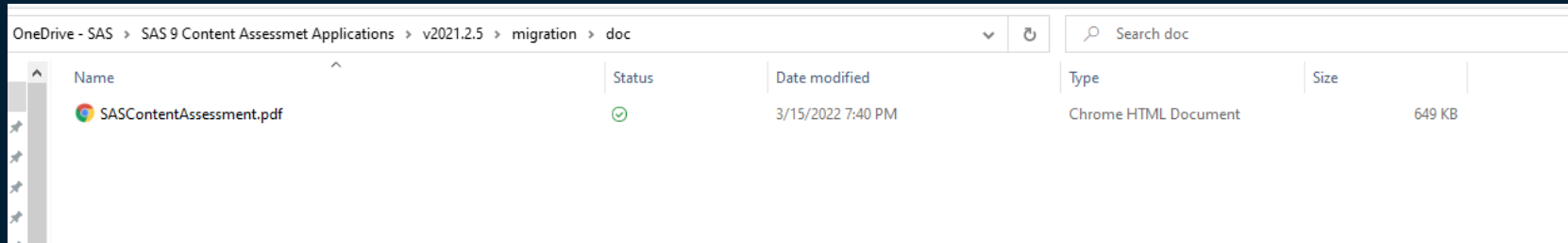
Bulk Migration of SAS 9 Artifacts into SAS Viya

Where do I get it – SAS 9 Content Assessment – Migration Folder





Bulk Migration of SAS 9 Artifacts into SAS Viya

Where do I get it – SAS 9 Content Assessment – Migration Folder



OneDrive - SAS > SAS 9 Content Assessmet Applications > v2021.2.5 > migration > doc

Search doc

Name	Status	Date modified	Type	Size
 SASContentAssessment.pdf		3/15/2022 7:40 PM	Chrome HTML Document	649 KB



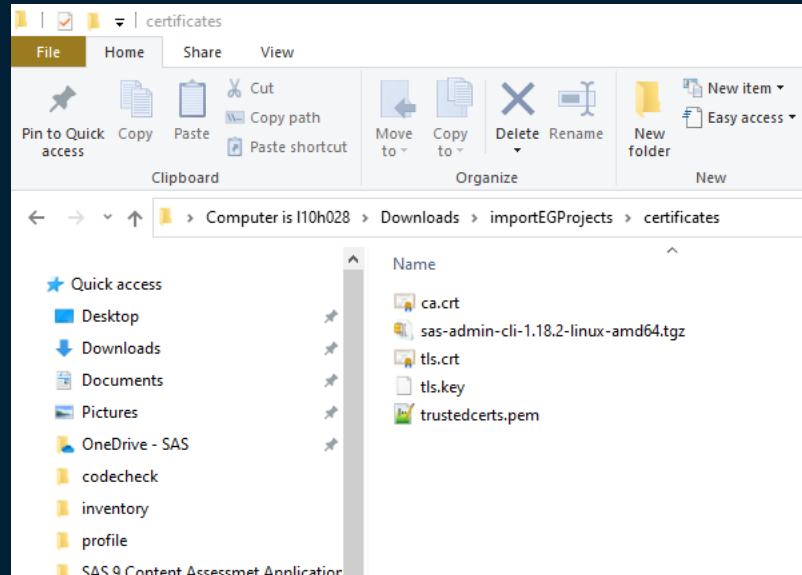
Bulk Migration of SAS 9 Artifacts into SAS Viya

Requirements



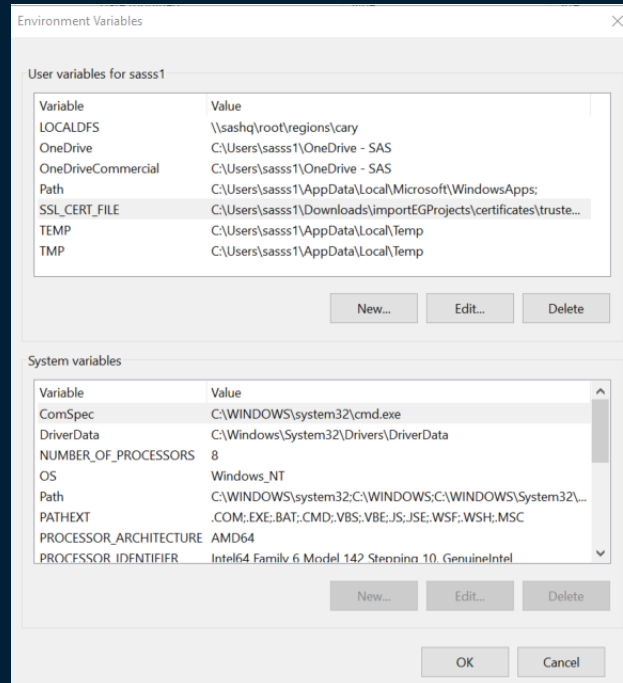
Bulk Migration of SAS 9 Artifacts into SAS Viya

Requirements – Download SAS Viya Certificates



Bulk Migration of SAS 9 Artifacts into SAS Viya

Requirements – Create Environment Variable SSL_CERT_FILE



Bulk Migration of SAS 9 Artifacts into SAS Viya

Requirements – Download SAS Viya CLI

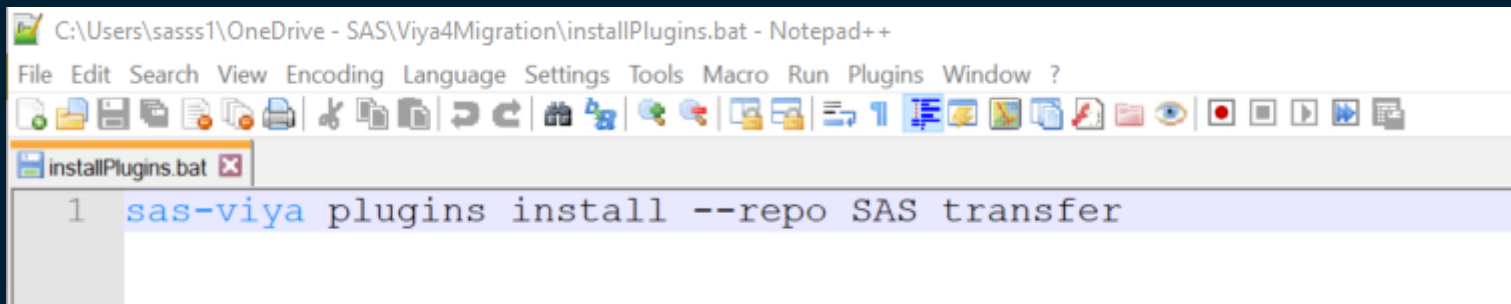
sas-viya-cli-1.18.2-windows.zip



sas-viya.exe
Type: Application

Bulk Migration of SAS 9 Artifacts into SAS Viya

Requirements – Install Transfer Plugin



The image shows a screenshot of a Notepad++ window. The title bar reads "C:\Users\sass1\OneDrive - SAS\Viya4Migration\installPlugins.bat - Notepad++". The menu bar includes "File", "Edit", "Search", "View", "Encoding", "Language", "Settings", "Tools", "Macro", "Run", "Plugins", and "Window?". The toolbar contains various icons for file operations. The active window is titled "installPlugins.bat" and contains a single line of code: "1 sas-viya plugins install --repo SAS transfer".

```
1 sas-viya plugins install --repo SAS transfer
```

Bulk Migration of SAS 9 Artifacts into SAS Viya

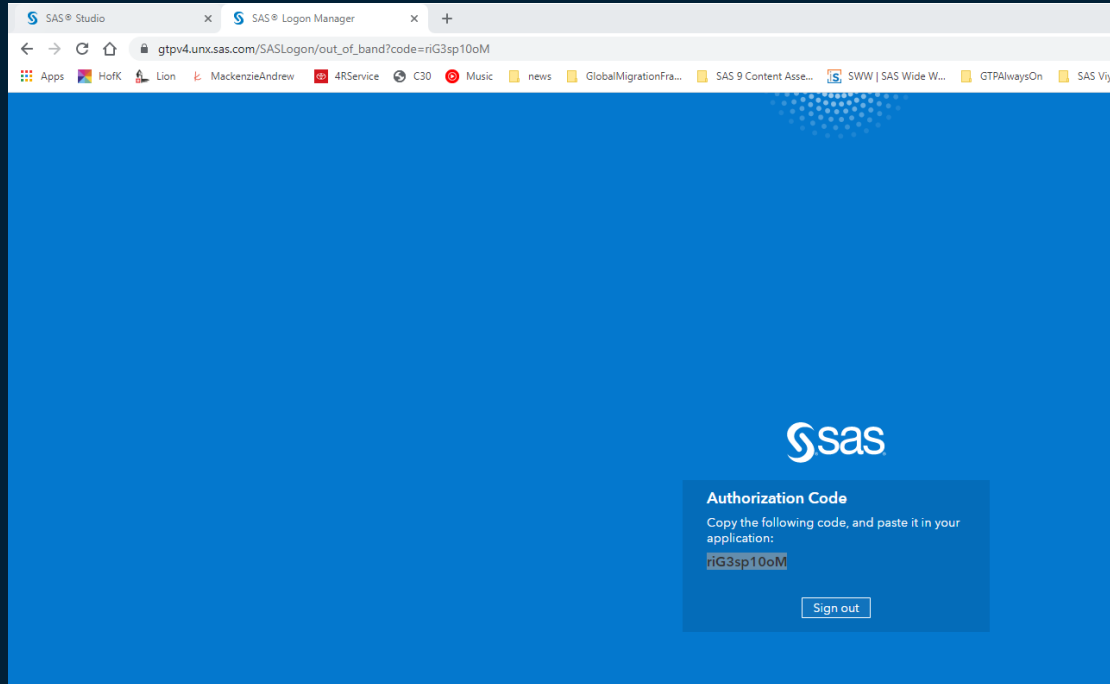
Requirements – Authenticate to SAS Viya

```
sas-viya --profile prod auth loginCode
```

```
C:\Users\sasss1\Downloads\importEGProjects>sas-viya auth loginCode  
Open the following link in a web browser and sign in to obtain an authorization code:  
https://gtpv4.unx.sas.com/SASLogon/oauth/authorize?client\_id=sas.cli&response\_type=code
```

Bulk Migration of SAS 9 Artifacts into SAS Viya

Requirements – Authenticate to SAS Viya – Copy Authorization Code



Bulk Migration of SAS 9 Artifacts into SAS Viya

Requirements – Authenticate to SAS Viya

```
C:\Users\sasss1\Downloads\importEGProjects>sas-viya auth loginCode
Open the following link in a web browser and sign in to obtain an authorization code:
https://gtpv4.unx.sas.com/SASLogon/oauth/authorize?client_id=sas.cli&response_type=code

Code> riG3sp10oM
Login succeeded. Token saved.
```



Bulk Migration of SAS 9 Artifacts into SAS Viya

importEGProjects



Bulk Migration of SAS 9 Artifacts into SAS Viya

importEGProjects Application

The screenshot shows the SAS 9 Code Check for SAS Enterprise Guide Projects application. The title bar reads "SAS® Visual Analytics - Explore and Visualize". The main header is "SAS 9 Code Check for SAS Enterprise Guide Projects". Below the header, there are two dropdown menus: "Select a deployment to filter the report" (set to "Deployment") and "Select a tag to filter the report" (set to "Scan Tag"). A navigation bar includes links for "Overview", "Incompatible Projects", "Compatible Projects", "Review: Hard-Coded Paths", "Review: Library Engines", "Review: Items Not Checked", "Advanced: Explore Details", and "About This Report".

Which SAS Enterprise Guide projects have compatible code in SAS Viya?

Select a [content grouping](#) to filter the table.

You can export this list of SAS Enterprise Guide projects as a CSV file. Use the exported CSV file as input to the batch import process when you migrate.

Which content grouping has the most compatible projects?

Content Grouping

A project is flagged as compatible if the code contains programming elements that are supported in SAS Viya.

SAS Enterprise Guide Project Name
D:\S9CA\EG Projects\BaseBallStats.egp
D:\S9CA\EG Projects\CarsGLM.egp
D:\S9CA\EG Projects\codeNode.egp
D:\S9CA\EG Projects\EGIntegration2Viya.egp
D:\S9CA\EG Projects\luis.egp
D:\S9CA\EG Projects\Steve.egp

Bulk Migration of SAS 9 Artifacts into SAS Viya

importEGProjects Application

The screenshot displays the SAS Visual Analytics interface. The main report is titled "SAS 9 Code Check for SAS Enterprise Guide Projects". The report content includes a table with the following data:

SAS Enterprise Guide Project Name
D:\SPCA\EG Projects\BassBall\Stats.egg
D:\SPCA\EG Projects\Cars\GLM.egg
D:\SPCA\EG Projects\code\Node.egg
D:\SPCA\EG Projects\EGIntegration2\Viya.egg
D:\SPCA\EG Projects\Ius.egg
D:\SPCA\EG Projects\Steve.egg

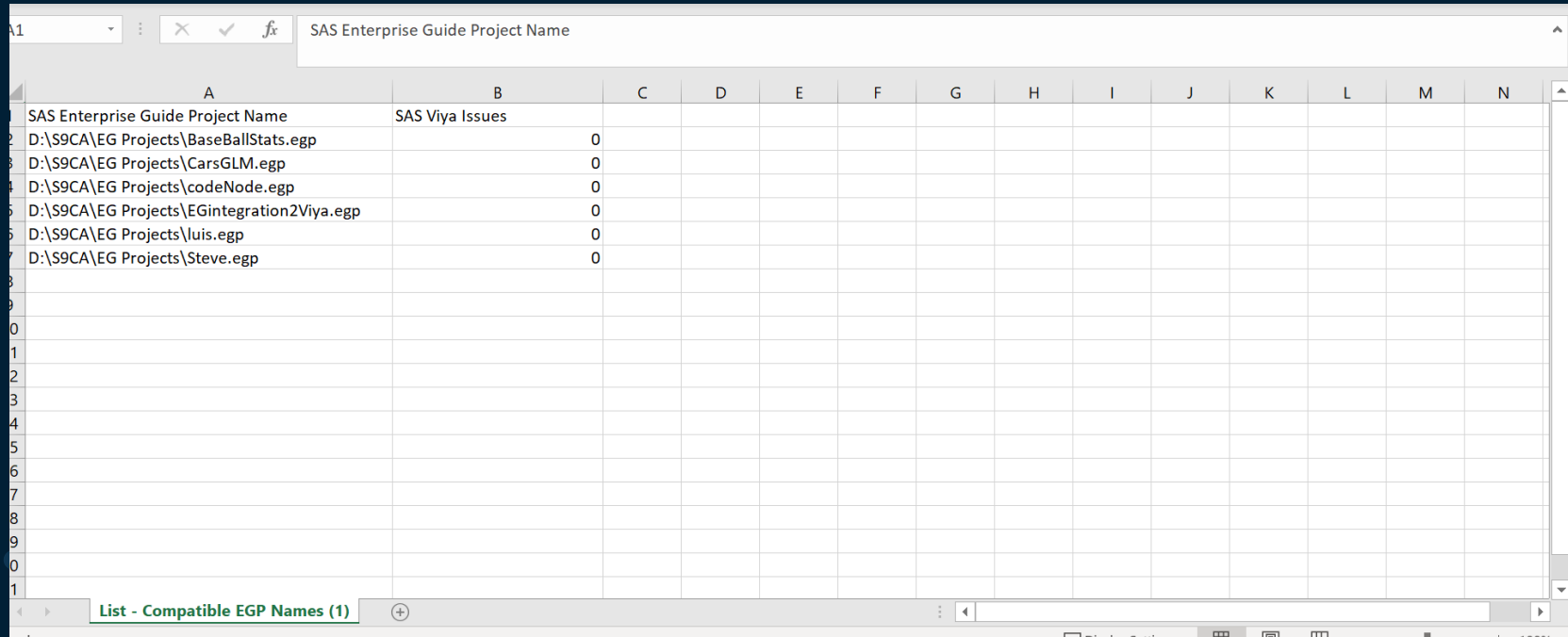
An "Export Data" dialog box is open in the foreground, allowing the user to export the data. The dialog box contains the following options:

- Rows: 1 - 6
- Columns: Select all
- Options: Formatted data, Detailed data
- File type: Comma separated values (*.csv)

The dialog box has "Export" and "Cancel" buttons at the bottom.

Bulk Migration of SAS 9 Artifacts into SAS Viya

importEGProjects Application



The screenshot shows a spreadsheet window titled "SAS Enterprise Guide Project Name". The spreadsheet has columns labeled A through N and rows numbered 1 through 11. The data is as follows:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	SAS Enterprise Guide Project Name	SAS Viya Issues												
2	D:\\$9CA\EG Projects\BaseBallStats.egp		0											
3	D:\\$9CA\EG Projects\CarsGLM.egp		0											
4	D:\\$9CA\EG Projects\codeNode.egp		0											
5	D:\\$9CA\EG Projects\EGintegration2Viya.egp		0											
6	D:\\$9CA\EG Projects\luis.egp		0											
7	D:\\$9CA\EG Projects\Steve.egp		0											
8														
9														
10														
11														

The spreadsheet is displayed in a window with a title bar "SAS Enterprise Guide Project Name". The bottom status bar shows "List - Compatible EGP Names (1)".

Bulk Migration of SAS 9 Artifacts into SAS Viya

importEGProjects Parameters

- `--root-folder`
 - This is the parent folder in SAS Viya where the EG projects get imported to
- `--sas-viya-path`
 - This is the path to the SAS Viya CLI
- `--source-file`
 - This is a CSV file containing the EG Projects to be imported

Bulk Migration of SAS 9 Artifacts into SAS Viya

importEGProjects Application

```
C:\Users\sasss1\Downloads\importEGProjects>importEGProjects --root-folder "/Users/Steven.Sober@sas.com/My Folder/migratedEGProjects" --sas-viya-path C:\Users\sasss1\Downloads\importEGProjects\sas-viya.exe --source-file C:\Users\sasss1\Downloads\importEGProjects\CompatibleEGProjects.csv

SAS Enterprise Guide projects import process beginning: [29Nov21:15:52:20]

Validating the specified settings
Validating the specified settings: SUCCESS
Enumerating SAS Enterprise Guide projects to import.
Processing SAS Enterprise Guide project 3 of 3 from C:\Users\sasss1\Downloads\importEGProjects\CompatibleEGProjects.csv.
Enumerating SAS Enterprise Guide projects to import: SUCCESS

Importing the specified SAS Enterprise Guide projects.
Processing 1 of 3 SAS Enterprise Guide project(s): C:\Users\sasss1\Downloads\importEGProjects\Steve.egg
  The project was uploaded successfully with the ID: 6b1defbd-e06c-4a11-b2ef-9cbf4429d401.
  The project import was successful.

Processing 2 of 3 SAS Enterprise Guide project(s): C:\Users\sasss1\Downloads\importEGProjects\CarsGLM.egg
  The project was uploaded successfully with the ID: 1f02828c-3fcc-4ce2-b434-c6996e9fc61.
  The project import was successful.

Processing 3 of 3 SAS Enterprise Guide project(s): C:\Users\sasss1\Downloads\importEGProjects\BaseBallStats.egg
  The project was uploaded successfully with the ID: 18e43f3a-7dcd-405e-8550-e7205a6b3f24.
  The project import was successful.
Importing the specified SAS Enterprise Guide projects: SUCCESS

3 SAS Enterprise Guide project(s) imported successfully.
0 SAS Enterprise Guide project(s) failed to import.
0 SAS Enterprise Guide project(s) were skipped.

Logging information for this import execution can be found here: C:\Users\sasss1\Downloads\importEGProjects\importEGProjects_T10h028_2021-11-29-15.52.20.log

SAS Enterprise Guide projects import process complete: [29Nov21:15:53:04]
```



Bulk Migration of SAS 9 Artifacts into SAS Viya

createSPKPackages



Bulk Migration of SAS 9 Artifacts into SAS Viya

createSASPackages – SAS 9 Profile for Data Integration

This page shows the transforms used in your jobs and which of those transforms are currently supported for migration to SAS Viya. To see only the jobs that should migrate well to SAS Viya, select 'Ready to migrate' to review the list of candidates. The migration candidates are the green rows. See [About this report](#) for the definition of migration candidate in this report.

You can export this list of SAS Jobs as a CSV file. Use the exported CSV file as input to the batch import process when you migrate.

Ready to Migrate (12)

Select a row to filter the table below.

Job with Path

- /Projects/Digital Intelligence/Data/In-Memory/DIGITAL_ACTIVITY_PATH_ANALYSIS - Load Job 0707150329PM
- /Projects/Digital Intelligence/Data/In-Memory/DIGITAL_CLICKSTREAM_DATA - Load Job 0707150330PM
- /Projects/Digital Intelligence/Data/In-Memory/DIGITAL_PROD_INTEREST - Load Job 0707150330PM
- /Shared Data/LASR/CARDATA - Load Job 0705190714AM
- /Shared Data/LASR/CLASS - Load Job 0705190715AM
- /Shared Data/LASR/GARTNER - Load Job 0705190715AM
- /Shared Data/LASR/INSIGHT_TOY4 - Load Job 0705190716AM
- /Shared Data/LASR/MEGACORPS_4M - Load Job 0705190717AM
- /Shared Data/LASR/ORGANICS_NEW - Load Job 0705190718AM

Migration candidates have Supported Transforms

Job with Path	Transform Name	Transform Internal Name	SupportedTransform
/Shared Data/LASR/GARTNER - Load Job 0705190715AM	User Written	User Written	User Written
/Shared Data/LASR/INSIGHT_TOY4 - Load Job 0705190716AM	Table metadata update	User Written	User Written
/Shared Data/LASR/INSIGHT_TOY4 - Load Job 0705190716AM	User Written	User Written	User Written

Bulk Migration of SAS 9 Artifacts into SAS Viya

createSASPackages – SAS 9 Profile for Data Integration

This page shows the transforms used in your jobs and which of those transforms are currently supported for migration to SAS Viya. To only the jobs that should migrate well to SAS Viya, select 'Ready to migrate' to review the list of candidates. The migration candidates are the green rows. See the Migration Candidates report.

You can export this list of SAS Jobs as a CSV file. Use the exported CSV file as input to the batch migration tool.

Select a row to filter the table below.

Job with Path
/Projects/Digital Intelligence/Data/In-Memory/DIGITAL_ACTIVITY_PATH_ANALYSIS - Load Job 07071903PM
/Projects/Digital Intelligence/Data/In-Memory/DIGITAL_CLICKSTREAM_DATA - Load Job 0707190330PM
/Projects/Digital Intelligence/Data/In-Memory/DIGITAL_PROD_INTEREST - Load Job 0707190330PM
/Shared Data/LASR/CARDATA - Load Job 0705190718AM
/Shared Data/LASR/CLASS - Load Job 0705190718AM
/Shared Data/LASR/GARTNER - Load Job 0705190715AM
/Shared Data/LASR/INSIGHT_T0Y4 - Load Job 0705190716AM
/Shared Data/LASR/MEGACORPS_4M - Load Job 0705190717AM
/Shared Data/LASR/ORGANICS_NEW - Load Job 0705190718AM

Migration candidates have Supported Transforms

Job with Path	Transform Name	Transform Internal Name	Supported Transform
/Shared Data/LASR/GARTNER - Load Job 0705190715AM	User Written	User Written	User Written
/Shared Data/LASR/INSIGHT_T0Y4 - Load Job 0705190716AM	Table metadata update	User Written	User Written
/Shared Data/LASR/INSIGHT_T0Y4 - Load Job 0705190716AM	User Written	User Written	User Written

Bulk Migration of SAS 9 Artifacts into SAS Viya

createSASPackages – SAS 9 Profile for Data Integration

	A	B	C	D	E
1	Job with Path	Transform Name	Transform Internal	Supported	Transform
2	/Projects/Digital Intelligence/Data/In-Memory/DIGITAL_ACTIVITY_PATH_ANALYSIS - Load Job 0707150329PM	Table metadata update	User Written	User Written	
3	/Projects/Digital Intelligence/Data/In-Memory/DIGITAL_ACTIVITY_PATH_ANALYSIS - Load Job 0707150329PM	User Written	User Written	User Written	
4	/Projects/Digital Intelligence/Data/In-Memory/DIGITAL_CLICKSTREAM_DATA - Load Job 0707150330PM	Table metadata update	User Written	User Written	
5	/Projects/Digital Intelligence/Data/In-Memory/DIGITAL_CLICKSTREAM_DATA - Load Job 0707150330PM	User Written	User Written	User Written	
6	/Projects/Digital Intelligence/Data/In-Memory/DIGITAL_PROD_INTEREST - Load Job 0707150330PM	Table metadata update	User Written	User Written	
7	/Projects/Digital Intelligence/Data/In-Memory/DIGITAL_PROD_INTEREST - Load Job 0707150330PM	User Written	User Written	User Written	
8	/Shared Data/LASR/CARDDATA - Load Job 0705190714AM	Table metadata update	User Written	User Written	
9	/Shared Data/LASR/CARDDATA - Load Job 0705190714AM	User Written	User Written	User Written	
10	/Shared Data/LASR/CLASS - Load Job 0705190715AM	Table metadata update	User Written	User Written	
11	/Shared Data/LASR/CLASS - Load Job 0705190715AM	User Written	User Written	User Written	
12	/Shared Data/LASR/GARTNER - Load Job 0705190715AM	Table metadata update	User Written	User Written	
13	/Shared Data/LASR/GARTNER - Load Job 0705190715AM	User Written	User Written	User Written	
14	/Shared Data/LASR/INSIGHT_TOY4 - Load Job 0705190716AM	Table metadata update	User Written	User Written	
15	/Shared Data/LASR/INSIGHT_TOY4 - Load Job 0705190716AM	User Written	User Written	User Written	
16	/Shared Data/LASR/MEGACORP5_4M - Load Job 0705190717AM	Table metadata update	User Written	User Written	
17	/Shared Data/LASR/MEGACORP5_4M - Load Job 0705190717AM	User Written	User Written	User Written	
18	/Shared Data/LASR/ORGANICS_NEW - Load Job 0705190718AM	Table metadata update	User Written	User Written	
19	/Shared Data/LASR/ORGANICS_NEW - Load Job 0705190718AM	User Written	User Written	User Written	
20	/Shared Data/LASR/PVA_DATA - Load Job 0705190718AM	Table metadata update	User Written	User Written	

Jobs with or without transform

Bulk Migration of SAS 9 Artifacts into SAS Viya

createSPKPackages Parameter

- --source-file
 - Location of SAS DI Studio csv file

Bulk Migration of SAS 9 Artifacts into SAS Viya

createSASPackages – SAS 9 Profile for Data Integration

```
D:\S9CA\v2021.2.5\assessment>createSASPackages.exe --source-file "D:\S9CA\v2021.2.5\assessment\spkDIStudio\Jobs ready for migration or not.csv"
Beginning the SAS package creation process: [ 21Mar22:15:46:47 ]

Validating the environment.
Validating the environment: SUCCESS

Initializing profiling directories.
Initializing profiling directories: SUCCESS

Validating the SAS license
Validating the SAS license: SUCCESS

Validating SAS program execution uses UTF-8 encoding.
The encoding used by SAS program execution is UTF-8.
Validating SAS program execution uses UTF-8 encoding: SUCCESS

Validating the specified Java
Validating the specified Java: SUCCESS

Obtaining SAS Metadata repository information.
Obtaining SAS Metadata repository information: SUCCESS

Processing the input CSV file.
There were a total of 12 SAS artifact(s) found.
The content type for the artifacts found is SAS DI Studio Job.
Processing the input CSV file: SUCCESS

Creating a SAS Metadata profile (ContentAssessment_EEC137)
Creating a SAS Metadata profile (ContentAssessment_EEC137): SUCCESS
```

Bulk Migration of SAS 9 Artifacts into SAS Viya

createSASPackages – SAS 9 Profile for Data Integration

```
Creating the SAS packages for the specified artifacts.
Processing 01 of 12 SAS artifacts: DIGITAL_ACTIVITY_PATH_ANALYSIS - Load Job 0707150329PM
Processing 02 of 12 SAS artifacts: DIGITAL_CLICKSTREAM_DATA - Load Job 0707150330PM
Processing 03 of 12 SAS artifacts: DIGITAL_PROD_INTEREST - Load Job 0707150330PM
Processing 04 of 12 SAS artifacts: CARDATA - Load Job 0705190714AM
Processing 05 of 12 SAS artifacts: CLASS - Load Job 0705190715AM
Processing 06 of 12 SAS artifacts: GARTNER - Load Job 0705190715AM
Processing 07 of 12 SAS artifacts: INSIGHT_TOY4 - Load Job 0705190716AM
Processing 08 of 12 SAS artifacts: MEGACORP5_4M - Load Job 0705190717AM
Processing 09 of 12 SAS artifacts: ORGANICS_NEW - Load Job 0705190718AM
Processing 10 of 12 SAS artifacts: PVA_DATA - Load Job 0705190718AM
Processing 11 of 12 SAS artifacts: SCHEDULECHART_SIMPLE - Load Job 0705190719AM
Processing 12 of 12 SAS artifacts: SIMPLE_PATH - Load Job 0705190719AM
Creating the SAS packages for the specified artifacts: SUCCESS

12 SAS Package(s) were created successfully.
0 SAS Package(s) were unable to be created successfully.
0 SAS Package(s) were created with warnings.

Logging information for this package creation execution can be found here: D:\S9CA\v2021.2.5\assessment\logs\createspks\EEC137\createSASPackages_SAS-AAP_2022-03-21-15.46.47.log

The SAS package creation process is complete. [ 21Mar22:15:49:25 ]
```

Bulk Migration of SAS 9 Artifacts into SAS Viya

createSASPackages – SAS 9 Code Check for Stored Processes

The screenshot shows the SAS 9 Code Check for SAS Stored Processes report in SAS Visual Analytics. The interface includes a navigation bar with the title "SAS 9 Code Check for SAS Stored Processes" and a search icon. Below the navigation bar, there are two dropdown menus for filtering the report: "Select a deployment to filter the report" (set to "Deployment") and "Select a tag to filter the report" (set to "Scan Tag"). The main content area is titled "Which SAS 9 stored processes have compatible code in SAS Viya?" and includes a sub-section "Which content grouping has the most compatible stored processes?" with a dropdown menu set to "Content Grouping". A table lists the stored process names, with the last row highlighted in blue. The table has a header "Stored Process Name" and a vertical scrollbar on the right side.

Select a deployment to filter the report: Deployment

Select a tag to filter the report: Scan Tag

Overview | Incompatible Stored Processes | **Compatible Stored Processes** | Review: Hard-Coded Paths | Review: Library Engines | Review: Items Not Checked | Advanced: Explore Details | About This Report

Which SAS 9 stored processes have compatible code in SAS Viya?

Select a [content grouping](#) to filter the table.

You can export this list of SAS stored processes as a CSV file. Use the exported CSV file as input to the batch import process when you migrate.

Which content grouping has the most compatible stored processes?
Content Grouping

A stored process is flagged as compatible if the code contains programming elements that are supported in SAS Viya.

Stored Process Name
/Products/SAS Intelligence Platform/Samples/Sample: Cholesterol by Sex and Age Group
/Products/SAS Intelligence Platform/Samples/Sample: European Demographic Data
/Products/SAS Intelligence Platform/Samples/Sample: European Demographic Data Detail
/Products/SAS Intelligence Platform/Samples/Sample: Frequency Analysis of Municipalities
/Products/SAS Intelligence Platform/Samples/Sample: Hello World
/Products/SAS Intelligence Platform/Samples/Sample: MEANS Procedure Web Service
/Products/SAS Intelligence Platform/Samples/Sample: Multiple Output Formats
/Products/SAS Intelligence Platform/Samples/Sample: Server Test
/Products/SAS Intelligence Platform/Samples/Sample: Shoe Sales by Region
/Products/SAS Intelligence Platform/Samples/Sample: Shoe Sales Graphics
/Products/SAS Intelligence Platform/Samples/Sample: Stored Process Macro Variables
/Products/SAS Intelligence Platform/Samples/Sample: Year to Date Budget
/System/Applications/SAS Web Infrastructure Platform/Web Infrastructure Platform 9.4/Utilities/GeographicalMappingService

Bulk Migration of SAS 9 Artifacts into SAS Viya

createSASPackages – SAS 9 Profile for Stored Processes

The screenshot displays the SAS Visual Analytics interface. The main report is titled "SAS 9 Code Check for SAS Stored Processes". The report content includes a table with the following data:

Stored Process Name
/Products/SAS Intelligence Platform/Samples/Sample: Cholesterol by Sex and Age Group
/Products/SAS Intelligence Platform/Samples/Sample: European Demographic Data
/Products/SAS Intelligence Platform/Samples/Sample: European Demographic Data Detail
/Products/SAS Intelligence Platform/Samples/Sample: Frequency Analysis of Municipalities
/Products/SAS Intelligence Platform/Samples/Sample: Hello World
/Products/SAS Intelligence Platform/Samples/Sample: MEANS Procedure Web Service
/Products/SAS Intelligence Platform/Samples/Sample: Multiple Output Formats
/Products/SAS Intelligence Platform/Samples/Sample: Server Test
/Products/SAS Intelligence Platform/Samples/Sample: Shoe Sales by Region
/Products/SAS Intelligence Platform/Samples/Sample: Shoe Sales Graphics
/Products/SAS Intelligence Platform/Samples/Sample: Stored Process Macro Variables
/Products/SAS Intelligence Platform/Samples/Sample: Year to Date Budget
/System/Applications/SAS Web Infrastructure Platform/Web Infrastructure Platform 9.4/Utilities/GeographicalMappingService

An "Export Data" dialog box is open, showing the following options:

- Rows: 1 - 13
- Columns: Select all
- Stored Process Name
- Public Type
- Options: Formatted data, Detailed data
- File type: Comma separated values (*.csv)

The dialog box has "Export" and "Cancel" buttons.

Bulk Migration of SAS 9 Artifacts into SAS Viya

createSASPackages – SAS 9 Profile for Stored Processes

	A	B	C	D	E	F	G	H
1	Stored Process Name	Public Type						
2	/Products/SAS Intelligence Platform/Samples/Sample: Cholesterol by Sex and Age Group	StoredProcess						
3	/Products/SAS Intelligence Platform/Samples/Sample: European Demographic Data	StoredProcess						
4	/Products/SAS Intelligence Platform/Samples/Sample: European Demographic Data Detail	StoredProcess						
5	/Products/SAS Intelligence Platform/Samples/Sample: Frequency Analysis of Municipalities	StoredProcess						
6	/Products/SAS Intelligence Platform/Samples/Sample: Hello World	StoredProcess						
7	/Products/SAS Intelligence Platform/Samples/Sample: MEANS Procedure Web Service	StoredProcess						
8	/Products/SAS Intelligence Platform/Samples/Sample: Multiple Output Formats	StoredProcess						
9	/Products/SAS Intelligence Platform/Samples/Sample: Server Test	StoredProcess						
10	/Products/SAS Intelligence Platform/Samples/Sample: Shoe Sales by Region	StoredProcess						
11	/Products/SAS Intelligence Platform/Samples/Sample: Shoe Sales Graphics	StoredProcess						
12	/Products/SAS Intelligence Platform/Samples/Sample: Stored Process Macro Variables	StoredProcess						
13	/Products/SAS Intelligence Platform/Samples/Sample: Year to Date Budget	StoredProcess						
14	/System/Applications/SAS Web Infrastructure Platform/Web Infrastructure Platform 9.4/Utilities/GeographicalMappingService	StoredProcess						
15								
16								
17								
18								
19								
20								

Bulk Migration of SAS 9 Artifacts into SAS Viya

createSASPackages – SAS 9 Profile for Stored Processes

```
D:\S9CA\v2021.2.5\assessment>createSASPackages.exe --source-file "D:\S9CA\v2021.2.5\assessment\spkSTP\Summary of compatible programs.csv"
Beginning the SAS package creation process: [ 21Mar22:15:40:10 ]

Validating the environment.
Validating the environment: SUCCESS

Initializing profiling directories.
Initializing profiling directories: SUCCESS

Validating the SAS license
Validating the SAS license: SUCCESS

Validating SAS program execution uses UTF-8 encoding.
The encoding used by SAS program execution is UTF-8.
Validating SAS program execution uses UTF-8 encoding: SUCCESS

Validating the specified Java
Validating the specified Java: SUCCESS

Obtaining SAS Metadata repository information.
Obtaining SAS Metadata repository information: SUCCESS

Processing the input CSV file.
There were a total of 13 SAS artifact(s) found.
The content type for the artifacts found is SAS Stored Process.
An internal account was specified for the user connecting to metadata.
Any SAS Stored Processes that have external file references will not be able to be packaged correctly with this type of account.
Processing the input CSV file: SUCCESS

Creating a SAS Metadata profile (ContentAssessment_EEC137)
Creating a SAS Metadata profile (ContentAssessment_EEC137): SUCCESS
```

Bulk Migration of SAS 9 Artifacts into SAS Viya

createSASPackages – SAS 9 Profile for Stored Processes

```
Creating the SAS packages for the specified artifacts.
Processing 01 of 13 SAS artifacts: Sample: Cholesterol by Sex and Age Group
Processing 02 of 13 SAS artifacts: Sample: European Demographic Data
Unable to create the SAS package successfully. See D:\S9CA\v2021.2.5\assessment\SASPackages\EEC137\Foundation\Products\SAS Intelligence Platform\Samples\SampleCOLON European Demographic Data_ExportPackage.log for details.
Processing 03 of 13 SAS artifacts: Sample: European Demographic Data Detail
Unable to create the SAS package successfully. See D:\S9CA\v2021.2.5\assessment\SASPackages\EEC137\Foundation\Products\SAS Intelligence Platform\Samples\SampleCOLON European Demographic Data Detail_ExportPackage.log for details.
Processing 04 of 13 SAS artifacts: Sample: Frequency Analysis of Municipalities
Unable to create the SAS package successfully. See D:\S9CA\v2021.2.5\assessment\SASPackages\EEC137\Foundation\Products\SAS Intelligence Platform\Samples\SampleCOLON Frequency Analysis of Municipalities_ExportPackage.log for details.
Processing 05 of 13 SAS artifacts: Sample: Hello World
Unable to create the SAS package successfully. See D:\S9CA\v2021.2.5\assessment\SASPackages\EEC137\Foundation\Products\SAS Intelligence Platform\Samples\SampleCOLON Hello World_ExportPackage.log for details.
Processing 06 of 13 SAS artifacts: Sample: MEANS Procedure Web Service
Unable to create the SAS package successfully. See D:\S9CA\v2021.2.5\assessment\SASPackages\EEC137\Foundation\Products\SAS Intelligence Platform\Samples\SampleCOLON MEANS Procedure Web Service_ExportPackage.log for details.
Processing 07 of 13 SAS artifacts: Sample: Multiple Output Formats
Unable to create the SAS package successfully. See D:\S9CA\v2021.2.5\assessment\SASPackages\EEC137\Foundation\Products\SAS Intelligence Platform\Samples\SampleCOLON Multiple Output Formats_ExportPackage.log for details.
Processing 08 of 13 SAS artifacts: Sample: Server Test
Unable to create the SAS package successfully. See D:\S9CA\v2021.2.5\assessment\SASPackages\EEC137\Foundation\Products\SAS Intelligence Platform\Samples\SampleCOLON Server Test_ExportPackage.log for details.
Processing 09 of 13 SAS artifacts: Sample: Shoe Sales by Region
Unable to create the SAS package successfully. See D:\S9CA\v2021.2.5\assessment\SASPackages\EEC137\Foundation\Products\SAS Intelligence Platform\Samples\SampleCOLON Shoe Sales by Region_ExportPackage.log for details.
Processing 10 of 13 SAS artifacts: Sample: Shoe Sales Graphics
Unable to create the SAS package successfully. See D:\S9CA\v2021.2.5\assessment\SASPackages\EEC137\Foundation\Products\SAS Intelligence Platform\Samples\SampleCOLON Shoe Sales Graphics_ExportPackage.log for details.
Processing 11 of 13 SAS artifacts: Sample: Stored Process Macro Variables
Unable to create the SAS package successfully. See D:\S9CA\v2021.2.5\assessment\SASPackages\EEC137\Foundation\Products\SAS Intelligence Platform\Samples\SampleCOLON Stored Process Macro Variables_ExportPackage.log for details.
Processing 12 of 13 SAS artifacts: Sample: Year to Date Budget
Unable to create the SAS package successfully. See D:\S9CA\v2021.2.5\assessment\SASPackages\EEC137\Foundation\Products\SAS Intelligence Platform\Samples\SampleCOLON Year to Date Budget_ExportPackage.log for details.
Processing 13 of 13 SAS artifacts: GeographicalMappingService
Creating the SAS packages for the specified artifacts: WARNINGS

2 SAS Package(s) were created successfully.
11 SAS Package(s) were unable to be created successfully.
0 SAS Package(s) were created with warnings.

Logging information for this package creation execution can be found here: D:\S9CA\v2021.2.5\assessment\logs\createspks\EEC137\createSASPackages_SAS-AAP_2022-03-21-15.40.10.log

The SAS package creation process is complete. [ 21Mar22:15:43:28 ]
```


Bulk Migration of SAS 9 Artifacts into SAS Viya

createSPKPackages Results

Name	Status	Date modified	Type
Products	✓	3/21/2022 1:55 PM	File folder
Projects	✓	3/21/2022 1:56 PM	File folder
Shared Data	✓	3/21/2022 1:56 PM	File folder
System	✓	3/21/2022 1:56 PM	File folder



Bulk Migration of SAS 9 Artifacts into SAS Viya

importSPKPackages



Bulk Migration of SAS 9 Artifacts into SAS Viya

importSPKPackages

- --source-location
 - Location of the files created by createSPKPackages
 - Default location is \SAS 9 Content Assessment Applications\v2021.2.5\assessment\SASPackages
- --sas-viya-path
 - Location of sas-viya application

Bulk Migration of SAS 9 Artifacts into SAS Viya

importSPKPackages

```
C:\Users\sass1\OneDrive - SAS\SAS 9 Content Assessment Applications\2021.2.5\migrations\importSASPackages.exe --source-location "C:\Users\sass1\OneDrive - SAS\SAS 9 Content Assessment Applications\2021.2.5\assessment\SASPackages" --sas-viya-path "C:\Users\sass1\OneDrive - SAS\SAS 9 Content Assessment Applications\2021.2.5\migration\sas-viya.exe"
SAS Packages import process beginning: [ 21Mar22:15:46:56 ]
Validating the specified settings
Validating the specified settings: SUCCESS
Enumerating SAS Packages to import.
Processing SAS Package 25 of 25 from C:\Users\sass1\OneDrive - SAS\SAS 9 Content Assessment Applications\2021.2.5\assessment\SASPackages.
Enumerating SAS Packages to import: SUCCESS
Importing the specified SAS Packages.
Processing 1 of 25 SAS Package(s): C:\Users\sass1\OneDrive - SAS\SAS 9 Content Assessment Applications\2021.2.5\assessment\SASPackages\EEC137\Foundation\Products\SAS Intelligence Platform\Samples\SampleCOLON Cholesterol by Sex and Age (roup.spk)
The project was uploaded successfully with the ID: 16431038-8ea9-4847-b59d-b29dea2575f2.
The project import was successful.
Processing 2 of 25 SAS Package(s): C:\Users\sass1\OneDrive - SAS\SAS 9 Content Assessment Applications\2021.2.5\assessment\SASPackages\EEC137\Foundation\Products\SAS Intelligence Platform\Samples\SampleCOLON European Demographic Data Detail.spk
The project was uploaded successfully with the ID: 79fca3e-2625-4461-8a4e-bbdf5410201b.
The project import was successful.
Processing 3 of 25 SAS Package(s): C:\Users\sass1\OneDrive - SAS\SAS 9 Content Assessment Applications\2021.2.5\assessment\SASPackages\EEC137\Foundation\Products\SAS Intelligence Platform\Samples\SampleCOLON European Demographic Data.spk
The project was uploaded successfully with the ID: 7ede749d-1adc-4cb7-bd64-b48c08a72049.
The project import was successful.
Processing 4 of 25 SAS Package(s): C:\Users\sass1\OneDrive - SAS\SAS 9 Content Assessment Applications\2021.2.5\assessment\SASPackages\EEC137\Foundation\Products\SAS Intelligence Platform\Samples\SampleCOLON Frequency Analysis of Municipalities.spk
The project was uploaded successfully with the ID: dcd512e5-08fd-4066-ab5-c2725d2976ff.
The project import was successful.
Processing 5 of 25 SAS Package(s): C:\Users\sass1\OneDrive - SAS\SAS 9 Content Assessment Applications\2021.2.5\assessment\SASPackages\EEC137\Foundation\Products\SAS Intelligence Platform\Samples\SampleCOLON Hello World.spk
The project was uploaded successfully with the ID: a0706f4e-92d7-4357-bc34-a927bcfae882.
The project import was successful.
Processing 6 of 25 SAS Package(s): C:\Users\sass1\OneDrive - SAS\SAS 9 Content Assessment Applications\2021.2.5\assessment\SASPackages\EEC137\Foundation\Products\SAS Intelligence Platform\Samples\SampleCOLON MEANS Procedure Web Service.spk
The project was uploaded successfully with the ID: 322372c2-dfc2-484e-9765-a2317570822a.
The project import was successful.
Processing 7 of 25 SAS Package(s): C:\Users\sass1\OneDrive - SAS\SAS 9 Content Assessment Applications\2021.2.5\assessment\SASPackages\EEC137\Foundation\Products\SAS Intelligence Platform\Samples\SampleCOLON Multiple Output Formats.spk
The project was uploaded successfully with the ID: ce08d01c-3fcd-4b06-bd5c-dfbcba12e99.
The project import was successful.
Processing 8 of 25 SAS Package(s): C:\Users\sass1\OneDrive - SAS\SAS 9 Content Assessment Applications\2021.2.5\assessment\SASPackages\EEC137\Foundation\Products\SAS Intelligence Platform\Samples\SampleCOLON Server Test.spk
The project was uploaded successfully with the ID: 0616313f-6274-43ca-94ed-d79d3e52b09e.
The project import was successful.
Processing 9 of 25 SAS Package(s): C:\Users\sass1\OneDrive - SAS\SAS 9 Content Assessment Applications\2021.2.5\assessment\SASPackages\EEC137\Foundation\Products\SAS Intelligence Platform\Samples\SampleCOLON Shoe Sales Graphics.spk
The project was uploaded successfully with the ID: 2c4c1b01-b99c-4cd7-99c4-58e7c2887bfo.
The project import was successful.
Processing 10 of 25 SAS Package(s): C:\Users\sass1\OneDrive - SAS\SAS 9 Content Assessment Applications\2021.2.5\assessment\SASPackages\EEC137\Foundation\Products\SAS Intelligence Platform\Samples\SampleCOLON Shoe Sales by Region.spk
The project was uploaded successfully with the ID: dc20b518-fe08-4784-9a8b-f963affe1e04.
The project import was successful.
Processing 11 of 25 SAS Package(s): C:\Users\sass1\OneDrive - SAS\SAS 9 Content Assessment Applications\2021.2.5\assessment\SASPackages\EEC137\Foundation\Products\SAS Intelligence Platform\Samples\SampleCOLON Stored Process Macro Variables.spk
The project was uploaded successfully with the ID: 9c0ca5a8-f164-4bba-b7a9-d6d141a2e3eb.
The project import was successful.
```

Bulk Migration of SAS 9 Artifacts into SAS Viya

importSPKPackages

```
Processing 14 of 25 SAS Package(s): C:\Users\sasss1\OneDrive - SAS\SAS 9 Content Assessment Applications\2021.2.5\assessment\SASPackages\EEC137\Foundation\Projects\Digital Intelligence\Data\In-Memory\DIGITAL_CLICKSTREAM_DATA - Load Job 0707150330PM.spk
  The project was uploaded successfully with the ID: ed4134ff-706c-485f-87f0-d00432a1301a.
  The project import was successful.
Processing 15 of 25 SAS Package(s): C:\Users\sasss1\OneDrive - SAS\SAS 9 Content Assessment Applications\2021.2.5\assessment\SASPackages\EEC137\Foundation\Projects\Digital Intelligence\Data\In-Memory\DIGITAL_PROD_INTEREST - Load Job 0707150330PM.spk
  The project was uploaded successfully with the ID: 78e88ed7-0127-46f8-a0d5-b6a3a6fd2d53.
  The project import was successful.
Processing 16 of 25 SAS Package(s): C:\Users\sasss1\OneDrive - SAS\SAS 9 Content Assessment Applications\2021.2.5\assessment\SASPackages\EEC137\Foundation\Shared Data\LASR\CARDATA - Load Job 0705190714AM.spk
  The project was uploaded successfully with the ID: e73ff2d9-4c48-4226-965c-1e26ced9d9dd.
  The project import was successful.
Processing 17 of 25 SAS Package(s): C:\Users\sasss1\OneDrive - SAS\SAS 9 Content Assessment Applications\2021.2.5\assessment\SASPackages\EEC137\Foundation\Shared Data\LASR\CLASS - Load Job 0705190715AM.spk
  The project was uploaded successfully with the ID: 40a8ebd1-22a4-4966-93c0-saf6c146e66.
  The project import was successful.
Processing 18 of 25 SAS Package(s): C:\Users\sasss1\OneDrive - SAS\SAS 9 Content Assessment Applications\2021.2.5\assessment\SASPackages\EEC137\Foundation\Shared Data\LASR\GARTNER - Load Job 0705190715AM.spk
  The project was uploaded successfully with the ID: fa7b346c-c0ab-40c2-a619-f96b0f7ee8dc.
  The project import was successful.
Processing 19 of 25 SAS Package(s): C:\Users\sasss1\OneDrive - SAS\SAS 9 Content Assessment Applications\2021.2.5\assessment\SASPackages\EEC137\Foundation\Shared Data\LASR\INSTIGHT_TOY4 - Load Job 0705190716AM.spk
  The project was uploaded successfully with the ID: 4b12f0e1-cbde-44e1-b977-b39dd0468a30.
  The project import was successful.
Processing 20 of 25 SAS Package(s): C:\Users\sasss1\OneDrive - SAS\SAS 9 Content Assessment Applications\2021.2.5\assessment\SASPackages\EEC137\Foundation\Shared Data\LASR\MEGACORPS_4M - Load Job 0705190717AM.spk
  The project was uploaded successfully with the ID: fc9944b1-5328-48e4-9cba-f26904f752a9.
  The project import was successful.
Processing 21 of 25 SAS Package(s): C:\Users\sasss1\OneDrive - SAS\SAS 9 Content Assessment Applications\2021.2.5\assessment\SASPackages\EEC137\Foundation\Shared Data\LASR\ORGANICS_NEW - Load Job 0705190718AM.spk
  The project was uploaded successfully with the ID: 23a88809-02d1-46ce-b1b8-a915811a4eb1.
  The project import was successful.
Processing 22 of 25 SAS Package(s): C:\Users\sasss1\OneDrive - SAS\SAS 9 Content Assessment Applications\2021.2.5\assessment\SASPackages\EEC137\Foundation\Shared Data\LASR\PVA_DATA - Load Job 0705190718AM.spk
  The project was uploaded successfully with the ID: 06a1bde8-elbe-44b6-a863-b332db112168.
  The project import was successful.
Processing 23 of 25 SAS Package(s): C:\Users\sasss1\OneDrive - SAS\SAS 9 Content Assessment Applications\2021.2.5\assessment\SASPackages\EEC137\Foundation\Shared Data\LASR\SCHEDULECHART_SIMPLE - Load Job 0705190719AM.spk
  The project was uploaded successfully with the ID: 0ff1a763-fa6b-4e9a-8380-4644e5e0b1da.
  The project import was successful.
Processing 24 of 25 SAS Package(s): C:\Users\sasss1\OneDrive - SAS\SAS 9 Content Assessment Applications\2021.2.5\assessment\SASPackages\EEC137\Foundation\Shared Data\LASR\SIMPLE_PATH - Load Job 0705190719AM.spk
  The project was uploaded successfully with the ID: 4c968253-48c9-47c0-a5ed-a0f6545ac386.
  The project import was successful.
Processing 25 of 25 SAS Package(s): C:\Users\sasss1\OneDrive - SAS\SAS 9 Content Assessment Applications\2021.2.5\assessment\SASPackages\EEC137\Foundation\System\Applications\SAS Web Infrastructure Platform\Web Infrastructure Platform 9.4\Utilities\GeographicalMappingService.spk
  The project was uploaded successfully with the ID: 784dbac-332e-4fc0-b092-4cd5e9f962c.
  The project import was successful.
Importing the specified SAS Packages: SUCCESS
25 SAS Package(s) imported successfully.
0 SAS Package(s) failed to import.
0 SAS Package(s) were skipped.
Logging information for this import execution can be found here: C:\Users\sasss1\OneDrive - SAS\SAS 9 Content Assessment Applications\2021.2.5\migration\importSASPackages_110h028_2022-03-21-15.46.56.log
SAS Package import process is complete. [ 21Mar22:15:49:55 ]
```

Bulk Migration of SAS 9 Artifacts into SAS Viya

SAS DI Studio Jobs – SAS EG Projects
become SAS Viya SAS Studio Flows

The screenshot displays the SAS Studio interface for developing SAS code. On the left, the Explorer pane shows a project structure with folders for 'My Favorites', 'Folder Shortcuts', and 'Bulk Migration - DI Studio Flows'. The 'MEGACORPS_4M' folder is selected, containing several flow files. The main canvas shows a flow diagram with the following nodes: 'Job pre-code', 'MEGACORPS_4M', 'User Written', 'MEGACORPS_4M', and 'Table metadata...'. A 'Job post-code' node is also visible below the main flow. A red error banner at the top of the canvas reads 'The flow contains migration errors.' The bottom status bar indicates 'Recover (42)' and 'Submission (0)'.

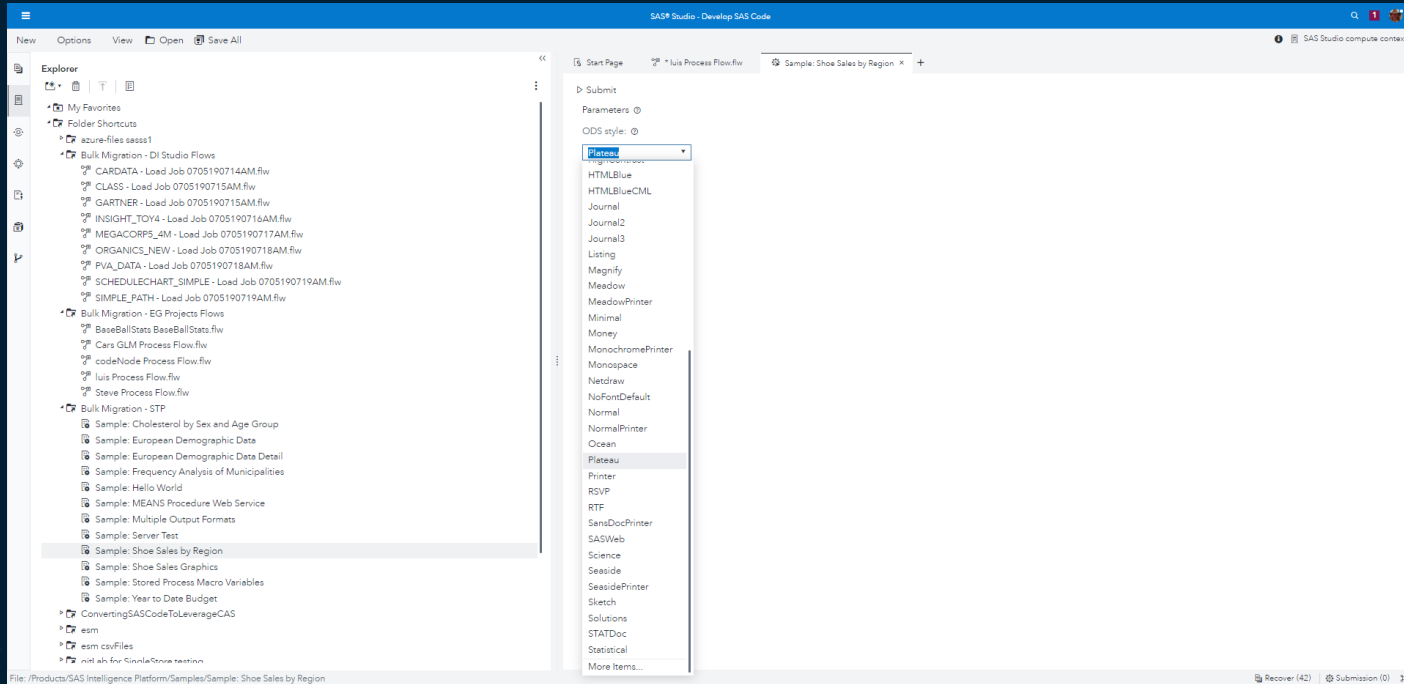
Bulk Migration of SAS 9 Artifacts into SAS Viya

SAS DI Studio Jobs – SAS EG Projects
become SAS Viya SAS Studio Flows

The screenshot displays the SAS Studio interface for developing SAS code. On the left, the Explorer pane shows a tree view of files and folders, including 'Bulk Migration - DI Studio Flows' and 'Bulk Migration - EG Projects Flows'. The main canvas shows a flow diagram for 'Luis Process Flow.fw'. The flow starts with a 'CARS' data source, which branches into two parallel paths. Each path begins with a 'Query Builder' node, followed by a 'QUERY_FOR_CARS1' node. The top path continues with 'Characterize Data', 'Frequency Counts for...', and 'List Data (2)'. The bottom path continues with 'Linear Models', 'Univariate Statistics for...', and 'List Data'. The interface includes a menu bar at the top with options like 'Run', 'Cancel', and 'Add', and a toolbar with various icons for flow manipulation.

Bulk Migration of SAS 9 Artifacts into SAS Viya

SAS Stored Processes
become SAS Viya Jobs





Bulk Modification of Hard coded Paths

modifySASCode – SAS 9 Content Assessment V2021.1.5



Bulk Modification of Hard Coded Paths

Documentation located in the SAS 9 Content Assessment ../assessment/doc folder

modifySASCode – bulk modification of hard coded paths

```
C:\Users\sass1\OneDrive - SAS\SAS 9 Content Assessment Applications\v2021.2.5\assessment>modifySASCode.exe --help
NAME:
  modifySASCode - This application will update paths via a specified CSV file for all SAS code associated with a specified SAS 9 Code Check execution.

VERSION:
  2021.2.5

USAGE:
  modifySASCode [command options...]

COMMAND OPTIONS:
  --generate-map
    Specifies the name of the file that will be generated with a mapping of old paths to new paths based on the SAS 9 Code Check run associated with the specified scan tag. This option is mutually exclusive with --map-file.
  --map-file
    Specifies the mapping file of old paths to new paths based on the SAS 9 Code Check run associated with the specified scan tag. This option is mutually exclusive with --generate-map.
  --help
    Shows help.
  --output-location
    Specifies the directory to write the updated SAS program files to.
  --scan-tag
    Specifies the scan tag to use that corresponds to the SAS 9 Code Check results to process.
  --version
    Displays the application's version.

ADDITIONAL DOCUMENTATION:
  C:\Users\sass1\OneDrive - SAS\SAS 9 Content Assessment Applications\v2021.2.5\assessment\doc\SASContentAssessment.pdf
```

Bulk Modification of Hard Coded Paths

modifySASCode – bulk modification of hard coded paths

```
./modifySASCode.exe --scan-tag SAS9Code --generate-map mapping.txt
```

```
C:\Users\sasss1\OneDrive - SAS\SAS 9 Content Assessmet Applications\v2021.2.5\assessment>modifySASCode.exe --scan-tag SAS9Code --generate-map mapping.txt
Beginning the SAS 9 Modify SAS Code application: [ 22Mar22:11:46:36 ]

Validating the environment.
Validating the environment: SUCCESS

Initializing SAS 9 Modify SAS Code directories.
Initializing SAS 9 Modify SAS Code directories: SUCCESS

Processing the results for the specified SAS 9 Code Check execution.
Determined 190 unique file(s) with issues.
Determined 263 unique path(s) that need to be potentially updated.
Generated the mapping file mapping.txt.
Processing the results for the specified SAS 9 Code Check execution: SUCCESS

Logging information for this SAS 9 Modify SAS Code execution can be found here:
  C:\Users\sasss1\OneDrive - SAS\SAS 9 Content Assessmet Applications\v2021.2.5\assessment\logs\modify\Server1\modifySASCode110h028_2022-03-22-11.46.36.log

A mapping file for use in a future replacement operation has been generated:

    mapping.txt

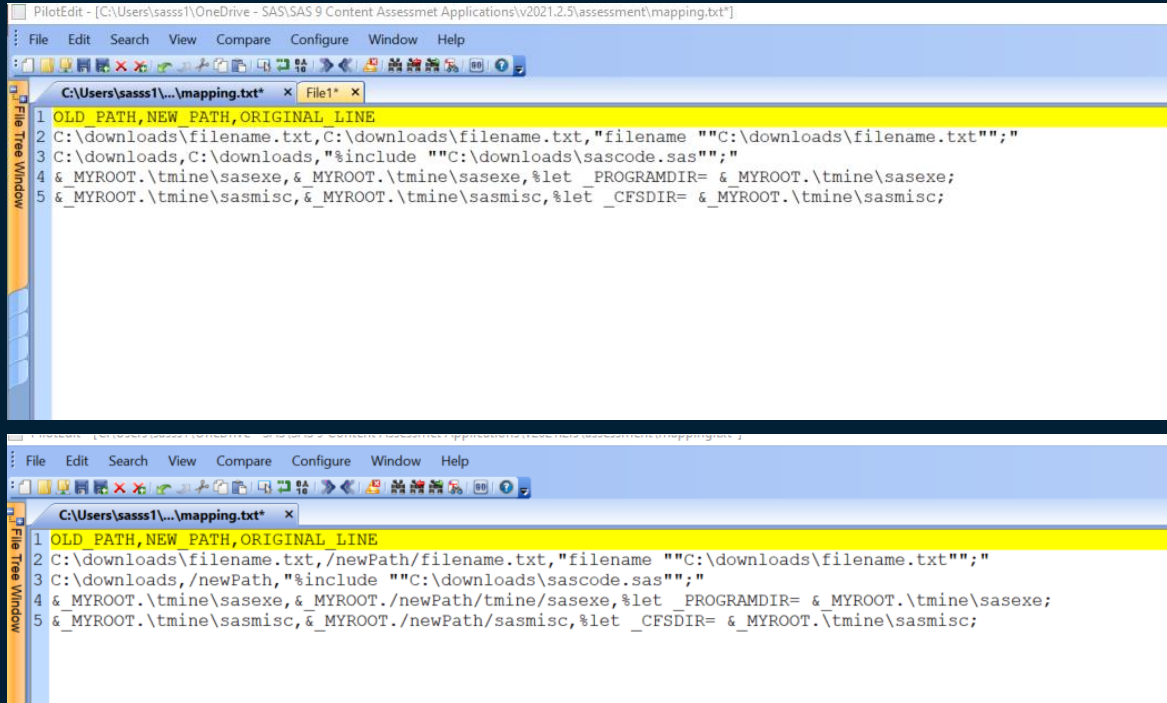
This mapping file contains columns that represent the "old" and "new" paths and will need to be edited.
In the event, the "old" path was not calculated correctly, a reference line of code using that path is provided.

After editing, the updated mapping file can be used with this application to make the corresponding updates to
all SAS code identified with hard-coded path issues for the specified SAS 9 Code Check run.

SAS 9 Modify SAS Code is complete. [ 22Mar22:11:46:41 ]
```

Bulk Modification of Hard Coded Paths

modifySASCode – bulk modification of hard coded paths



The image displays two screenshots of a text editor window, illustrating the process of bulk modification of hard-coded paths in SAS code. The editor window title is "PilotEdit - [C:\Users\sass1\OneDrive - SAS\SAS 9 Content Assessment Applications\v2021.2.5\assessment\mapping.txt*"] and the file name is "C:\Users\sass1\...\mapping.txt*".

The top screenshot shows the original code with the following lines:

```
1 OLD_PATH,NEW_PATH,ORIGINAL_LINE
2 C:\downloads\filename.txt,C:\downloads\filename.txt,"filename "C:\downloads\filename.txt";"
3 C:\downloads,C:\downloads,"%include "C:\downloads\sascode.sas";"
4 & MYROOT.\tmime\sasexe,& MYROOT.\tmime\sasexe,%let PROGRAMDIR= & MYROOT.\tmime\sasexe;
5 & MYROOT.\tmime\sasmisc,& MYROOT.\tmime\sasmisc,%let _CFSDIR= & MYROOT.\tmime\sasmisc;
```

The bottom screenshot shows the modified code with the following lines:

```
1 OLD_PATH,NEW_PATH,ORIGINAL_LINE
2 C:\downloads\filename.txt,/newPath/filename.txt,"filename "C:\downloads\filename.txt";"
3 C:\downloads,/newPath,"%include "C:\downloads\sascode.sas";"
4 & MYROOT.\tmime\sasexe,& MYROOT./newPath/tmime/sasexe,%let PROGRAMDIR= & MYROOT.\tmime\sasexe;
5 & MYROOT.\tmime\sasmisc,& MYROOT./newPath/sasmisc,%let _CFSDIR= & MYROOT.\tmime\sasmisc;
```

The modifications are highlighted in yellow in both screenshots. The changes include replacing the original path "C:\downloads" with "/newPath" in the second and third lines, and replacing the original path "MYROOT.\tmime" with "MYROOT./newPath" in the fourth and fifth lines.

Bulk Modification of Hard Coded Paths

modifySASCode – bulk modification of hard coded paths

```
./modifySASCode --scan-tag SAS9Code --output-location mappings --map-file mapping.txt
```

```
C:\Users\sass1\OneDrive - SAS\SAS 9 Content Assessment Applications\v2021.2.5\assessment>modifySASCode.exe --scan-tag SAS9Code --output-location mappings --map-file mapping.txt
Beginning the SAS 9 Modify SAS Code application: [ 28Apr22:11:16:51 ]

Validating the environment.
Validating the environment: SUCCESS

Initializing SAS 9 Modify SAS Code directories.
Initializing SAS 9 Modify SAS Code directories: SUCCESS

Processing the results for the specified SAS 9 Code Check execution.
Determined 190 unique file(s) with issues.
Processing the results for the specified SAS 9 Code Check execution: SUCCESS

Processing the specified mapping file.
Processed 4 mappings.
Processing the specified mapping: SUCCESS

Running the SAS 9 Modify SAS Code application.
Updated 190 SAS program files.
Time to update 190 SAS program files: [ 4.087 seconds ]
Running the SAS 9 Modify SAS Code application: SUCCESS

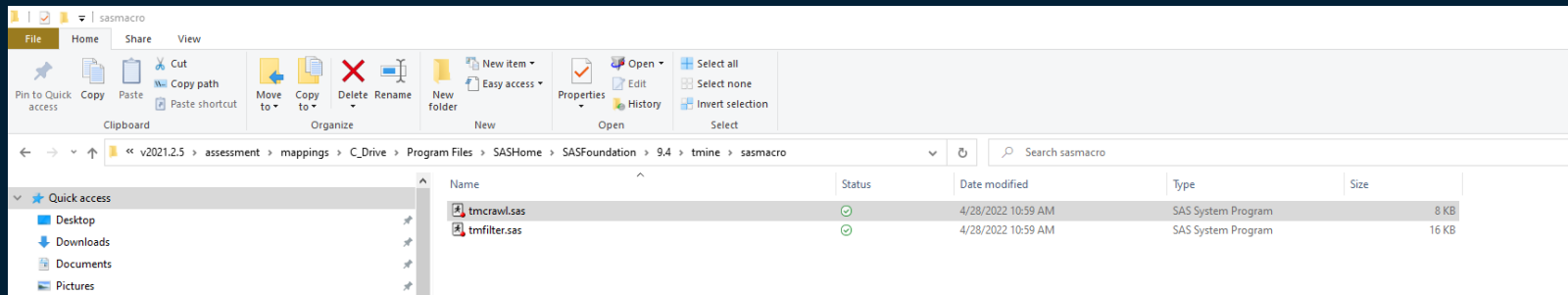
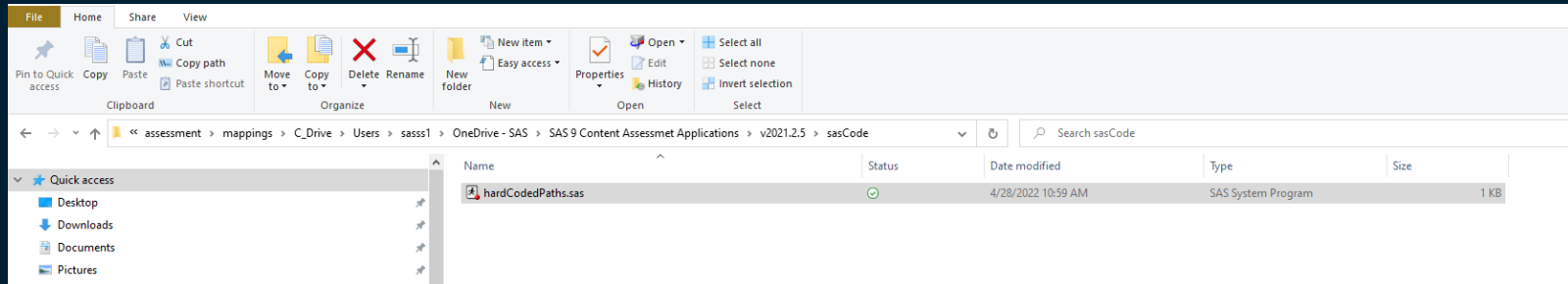
Logging information for this SAS 9 Modify SAS Code execution can be found here:
C:\Users\sass1\OneDrive - SAS\SAS 9 Content Assessment Applications\v2021.2.5\assessment\togs\modify\Server1\modifySASCode110h028_2022-04-28-11.16.51.log

SAS 9 Modify SAS Code is complete. [ 28Apr22:11:17:02 ]

C:\Users\sass1\OneDrive - SAS\SAS 9 Content Assessment Applications\v2021.2.5\assessment>
```

Bulk Modification of Hard Coded Paths

modifySASCode – bulk modification of hard coded paths



Bulk Modification of Hard Coded Paths

modifySASCode – bulk modification of hard coded paths

```
PilotEdit - [C:\Users\sasss1\OneDrive - SAS\SAS 9 Content Assessment Applications\v2021.2.5\assessment\mappings\C_Drive\Users\sasss1\OneDrive -
File Edit Search View Compare Configure Window Help
C:\Users\sasss1\hardCodedPaths.sas
1 1 %* Modified by modifySASCode: 28Apr22:10:59:36;
2 2 %* Original: filename "C:\downloads\filename.txt";
3 3 %* Changes Made;;
4 4 %* C:\downloads\filename.txt was changed to /newPath/filename.txt;
5 5 filename "/newPath/filename.txt";
6 6 %* Modified by modifySASCode: 28Apr22:10:59:36;
7 7 %* Original: %include "C:\downloads\sascode.sas";
8 8 %* Changes Made;;
9 9 %* C:\downloads\ was changed to /newPath/;
10 10 %include "/newPath/sascode.sas";
11 11 %* Modified by modifySASCode: 28Apr22:10:59:36;
12 12 %* Original: file "C:\downloads\filename.txt";
13 13 %* Changes Made;;
14 14 %* C:\downloads\filename.txt was changed to /newPath/filename.txt;
15 15 file "/newPath/filename.txt";
16 16 %* Modified by modifySASCode: 28Apr22:10:59:36;
17 17 %* Original: %let path = "C:\downloads";
18 18 %* Changes Made;;
19 19 %* C:\downloads was changed to /newPath;
20 20 %let path = "/newPath";
21
```

```
C:\Users\sasss1\hardCodedPaths.sas C:\Users\sasss1\OneDrive - SAS\SAS 9 Content Assessment Applications\v2021.2.5\assessment\mappings\C_Drive\Users\sasss1\OneDrive -
81 81 %* Modified by modifySASCode: 28Apr22:10:59:34;
82 82 %* Original: %let _PROGRAMDIR= & MYROOT.\tmtime\sasexe;;
83 83 %* Changes Made;;
84 84 %* & MYROOT.\tmtime\sasexe was changed to & MYROOT./newPath/tmtime/sasexe;
85 85 %let _PROGRAMDIR= & MYROOT./newPath/tmtime/sasexe;
86 86 %* Modified by modifySASCode: 28Apr22:10:59:34;
87 87 %* Original: %let _CFSDIR= & MYROOT.\tmtime\sasmisc;;
88 88 %* Changes Made;;
89 89 %* & MYROOT.\tmtime\sasmisc was changed to & MYROOT./newPath/sasmisc;
90 90 %let _CFSDIR= & MYROOT./newPath/sasmisc;
91
92
```

One Last Thing

Migration application for SAS 9 Forecast Server


SAS 9 Content Assessment V2021.1.6

- createFARPackages
 - A new migration application for SAS 9 Forecast Server
 - It creates SAS Forecast archives for specified SAS Forecast Server projects to be migrated to SAS Viya
 - Within SAS Viya Visual Forecasting one imports the SAS Forecast archive file

Details

Here are some important details about using this application:

- The application uses a CSV file to determine what can be migrated. A CSV file should not be edited except to delete projects so that they will not be packaged. Each project requires a separate CSV file.
 - To create a CSV file for SAS Forecast Server projects, in the SAS 9 Profile for SAS Forecast Server report, select the **Projects** tab. In a table, right-click, and select **Export data**. In the Export Data window, make sure that **Detailed data** is not selected and that the **File type** is **Comma-separated values (*.csv)**.
- The application uses a setenv.yaml property named ASSESSMENT_FAR_PACKAGES_OUTPUT_LOCATION. This location contains paths that are created for packages based on their metadata folder locations. A server label directory is also created. The first element of the path is the name of the metadata repository from which the package's content comes. For example, SASFARPackages/DemoCust/SASForecastServer/My_Folder. In this example, SASForecastServer is a metadata repository. A server label directory is also created. The default value for ASSESSMENT_FAR_PACKAGES_OUTPUT_LOCATION is \$BASE_DIR/SASFARPackages.
- A FAR package is named based on its content. If a FAR package contains a SAS Forecast Server project named MyForecasts, the FAR package is named MyForecasts.spk.
- A log file for each package's creation is included in the value specified for ASSESSMENT_FAR_PACKAGES_OUTPUT_LOCATION. For example, for the MyForecasts FAR package, there is a MyForecasts_ExportPackage.log file.
- If the metadata path of a project or the name of the project contains an unsupported character for its file system, the unsupported character is substituted.



Bulk Migration of SAS 9 Artifacts into SAS Viya Q&A

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