



SAS Data Integration Studio

Simulation of 5 million records

Confidential & Private

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SAS Data Integration Studio

Testing Environment Specification

- OS Version: Windows NT 6.2
- Processor: Intel® Xeon(R) Gold 6130 CPU @ 2.10 GHz
- Memory: 32 GB
- Hardware Requirement: - 64 bit CPU [Speed: 2398]
- Size of Drivers:
 - C: [Size: 61443 MB, Used: 22463 MB] Local Fixed Disk
 - D: [Size: 143384 MB, Used: 41178 MB] Local Fixed Disk

SAS Data Integration Studio

SAS – Load 5 million records from external file (csv)

The screenshot displays the SAS Data Integration Studio 4.902 - SASAdmin interface. The main workspace shows a workflow diagram for a job named 'load_1m_join_1m'. The workflow consists of the following steps:

- New External File 90494** (Source)
- File Reader** (Step 1)
- Extract** (Step 2)
- Extract** (Step 3)
- Extract** (Step 4)
- Append** (Step 5)
- Table Loader** (Step 6)
- new_temp1** (Target)
- Join** (Step 7)
- Table Loader** (Step 8)
- new_temp2** (Target)

The workflow is designed to load data from an external file (90494) into a temporary table (new_temp1) and then join it with another temporary table (new_temp2) before loading the final result into a new table (new_temp2).

Basic Properties

Name	Value
Name	load_1m_join_1m
Description	
Folder Location	/Data Mart Develop...
Checked Out By	
Tables Loaded	new_temp1, new_t...
Last Modified By	sasadm
Metadata Modified	Apr 7, 2020 2:53:3...
Metadata Created	Apr 3, 2020 5:50:5...
Metadata Archived	
Metadata Archived As	
Logical Type	Job
Metadata ID	ASHEHCWL8200004C
Usage Version	1.0

Details

Order	Name	Status	Details
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SAS Data Integration Studio

SAS – Load 5 million records New External File 90494

The screenshot displays the SAS Data Integration Studio 4.902 - SASAdmin interface. The left pane shows the 'Folders' tree with a red box highlighting 'New External File 90494' under the 'load_1m_join_1m' folder. The right pane shows a workflow diagram for 'load_1m_join_1m' with the following steps:

- 1. New External File 90494 (Source)
- 1. File Reader (Connector)
- 2. Extract (Destination)
- 3. Extract (Destination)
- 4. Extract (Destination)

The workflow is visualized as a sequence of steps connected by arrows, with each step marked with a green checkmark indicating successful execution or configuration.

SAS Data Integration Studio

SAS – Load 5 million records New External File 90494

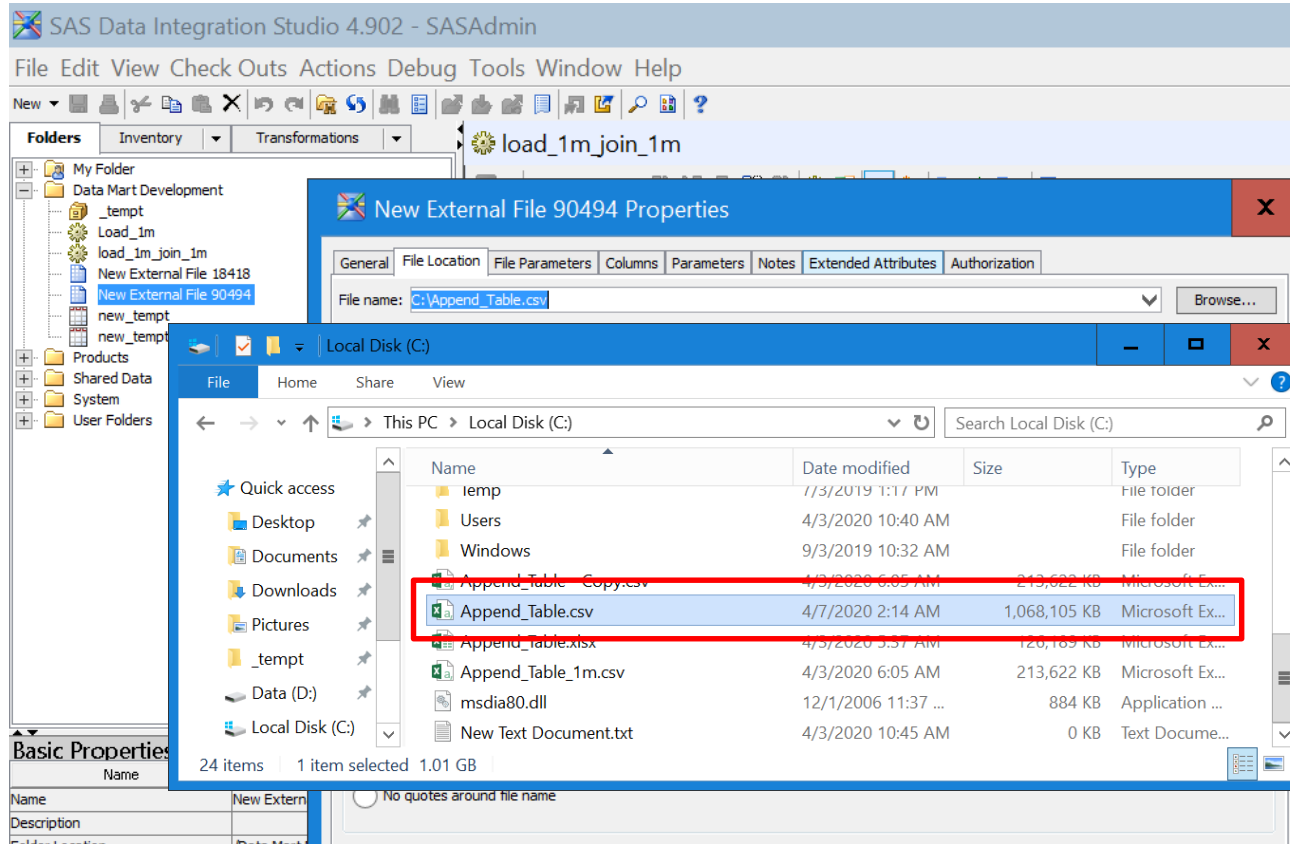
The screenshot displays the SAS Data Integration Studio 4.902 - SASAdmin interface. The main window shows a project tree on the left with folders like 'My Folder', 'Data Mart Development', and 'Products'. The 'load_1m_join_1m' project is selected. A dialog box titled 'New External File 90494 Properties' is open, showing the 'General' tab. The 'File name' field is set to 'C:\Append_Table.csv'. The 'Application Server' is 'SASApp'. The 'Access Method' is 'Default file system'. The 'File Name Quoting' is 'Default quoting with single quotes'.

Basic Properties

Name	
Name	New Extern
Description	
Folder	

SAS Data Integration Studio

SAS – Load 5 million records New External File 90494



SAS Data Integration Studio

New External File 90494

Append_Table.csv - Excel

FILE HOME INSERT PAGE LAYOUT FORMULAS DATA REVIEW VIEW SAS

Clipboard Font Alignment Number Styles Editing

Calibri 11 Wrap Text General

B I U Merge & Center

Conditional Formatting Cell Styles Insert Delete Format AutoSum Fill Sort & Find & Filter Select

A1 type

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	
1	type	amount	nameOrig	oldbalanc	newbalanc	nameDest	oldbalanc	newbalanc	isFraud	isFlaggedF	type1	amount1	nameOrig	oldbalanc	newbalanc	nameDest	oldbalanc	newbalanc	isFraud1	isF
2	CASH_IN	1.42	C1822231	1270713	1270715	C1084289	7644.26	7642.84	0	0	CASH_IN	1.42	C1822231	1270713	1270715	C1084289	7644.26	7642.84	0	
3	CASH_IN	4.71	C1805377	50198	50202.71	C1105788	75699.61	75694.89	0	0	CASH_IN	4.71	C1805377	50198	50202.71	C1105788	75699.61	75694.89	0	
4	CASH_IN	5.44	C7047097	0	5.44	C1657344	594031.5	1014777	0	0	CASH_IN	5.44	C7047097	0	5.44	C1657344	594031.5	1014777	0	
5	CASH_IN	5.66	C2047873	5061561	5061567	C4337565	60569.78	60564.12	0	0	CASH_IN	5.66	C2047873	5061561	5061567	C4337565	60569.78	60564.12	0	
6	CASH_IN	8.27	C2144774	8428411	8428419	C4338473	258574.4	258566.1	0	0	CASH_IN	8.27	C2144774	8428411	8428419	C4338473	258574.4	258566.1	0	
7	CASH_IN	8.44	C3886521	39384	39392.44	C6162447	3314616	3314607	0	0	CASH_IN	8.44	C3886521	39384	39392.44	C6162447	3314616	3314607	0	
8	CASH_IN	9.02	C7915729	2416261	2416270	C7513811	342107.9	215696.3	0	0	CASH_IN	9.02	C7915729	2416261	2416270	C7513811	342107.9	215696.3	0	
9	CASH_IN	11.13	C6674237	4116440	4116451	C1476757	347523.1	347512	0	0	CASH_IN	11.13	C6674237	4116440	4116451	C1476757	347523.1	347512	0	
10	CASH_IN	12.79	C4416006	601743	601755.8	C1064204	2819795	2819782	0	0	CASH_IN	12.79	C4416006	601743	601755.8	C1064204	2819795	2819782	0	
11	CASH_IN	13.2	C1417732	106204	106217.2	C7622072	50112.07	50098.87	0	0	CASH_IN	13.2	C1417732	106204	106217.2	C7622072	50112.07	50098.87	0	
12	CASH_IN	13.86	C1990289	6868100	6868114	C1536925	1085768	1085755	0	0	CASH_IN	13.86	C1990289	6868100	6868114	C1536925	1085768	1085755	0	
13	CASH_IN	14.4	C1108458	11400000	11400000	C1587543	46093	124958.2	0	0	CASH_IN	14.4	C1108458	11400000	11400000	C1587543	46093	124958.2	0	
14	CASH_IN	14.54	C6220959	3347287	3347301	C1504196	145142	274474	0	0	CASH_IN	14.54	C6220959	3347287	3347301	C1504196	145142	274474	0	
15	CASH_IN	15.52	C1143207	4368030	4368046	C4734543	450380.4	429479.8	0	0	CASH_IN	15.52	C1143207	4368030	4368046	C4734543	450380.4	429479.8	0	
16	CASH_IN	15.59	C1423196	16400000	16400000	C3414113	2524155	2363408	0	0	CASH_IN	15.59	C1423196	16400000	16400000	C3414113	2524155	2363408	0	
17	CASH_IN	16.3	C1487373	21400000	21400000	C1632648	3391248	3391232	0	0	CASH_IN	16.3	C1487373	21400000	21400000	C1632648	3391248	3391232	0	
18	CASH_IN	17.33	C9636901	8964057	8964074	C2451975	1129422	1129404	0	0	CASH_IN	17.33	C9636901	8964057	8964074	C2451975	1129422	1129404	0	
19	CASH_IN	17.53	C7572711	1111295	1111312	C1962597	401071.3	401053.7	0	0	CASH_IN	17.53	C7572711	1111295	1111312	C1962597	401071.3	401053.7	0	
20	CASH_IN	18.53	C9150901	951352.8	951371.3	C1160019	444539.2	444520.7	0	0	CASH_IN	18.53	C9150901	951352.8	951371.3	C1160019	444539.2	444520.7	0	
21	CASH_IN	20.34	C2101047	991344.4	991364.7	C6868432	921396.2	921375.9	0	0	CASH_IN	20.34	C2101047	991344.4	991364.7	C6868432	921396.2	921375.9	0	
22	CASH_IN	21.15	C1595822	2729078	2729099	C1349442	328283.2	328262.1	0	0	CASH_IN	21.15	C1595822	2729078	2729099	C1349442	328283.2	328262.1	0	
23	CASH_IN	21.57	C1410453	104362	104383.6	C2142748	7251135	7289256	0	0	CASH_IN	21.57	C1410453	104362	104383.6	C2142748	7251135	7289256	0	

Append_Table

READY

100%

SAS

SAS Data Integration Studio

SAS – Load 5 million records New External File 18418

The screenshot displays the SAS Data Integration Studio 4.902 - SASAdmin interface. The left pane shows the 'Folders' tree with the following structure:

- My Folder
 - Data Mart Development
 - _tempt
 - Load_1m
 - load_1m_join_1m
 - New External File 18418** (highlighted with a red box)
 - New External File 90494
 - new_tempt
 - new_tempt_1
- Products
- Shared Data
- System
- User Folders

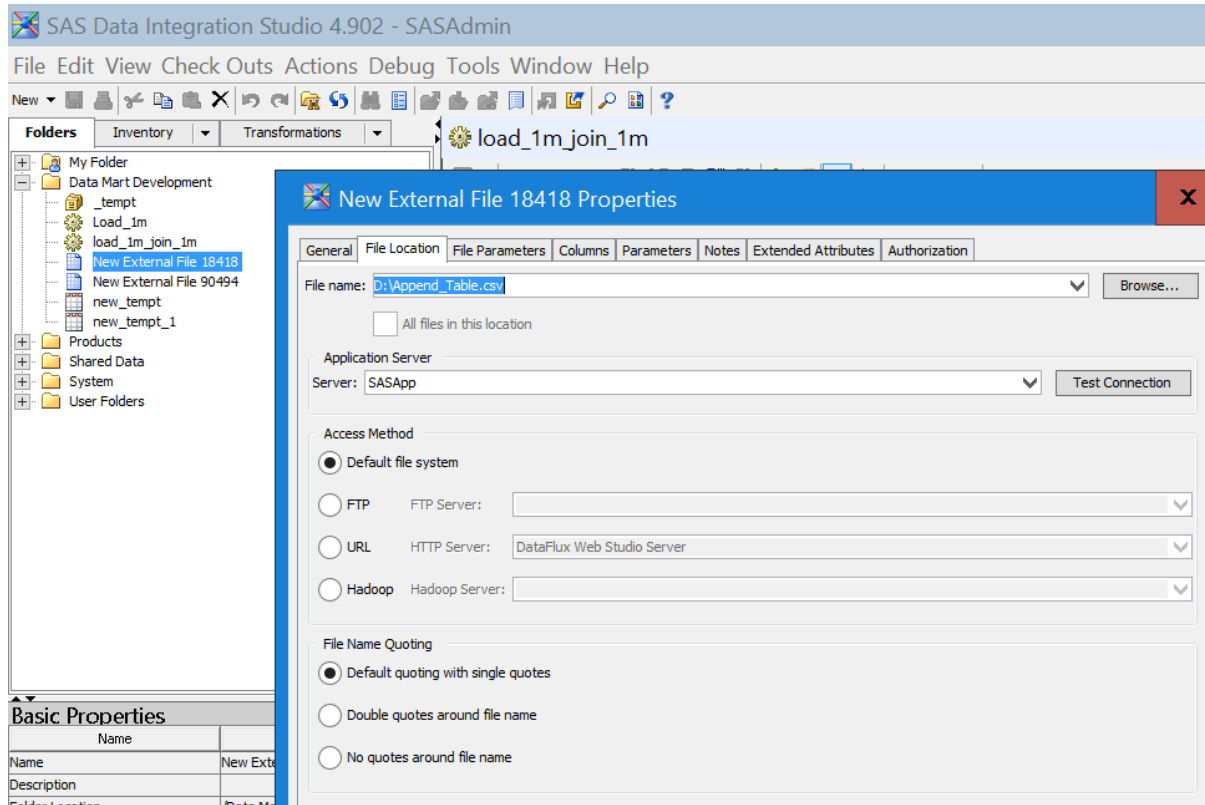
The right pane shows a workflow diagram titled 'load_1m_join_1m'. The workflow consists of the following steps:

- New External File 90494** (yellow box)
- File Reader** (blue box, labeled 1)
- Extract** (blue box, labeled 2)
- Extract** (blue box, labeled 3)
- Extract** (blue box, labeled 4)

The workflow is connected by arrows, indicating a sequential process. Each step has a green checkmark icon next to it, indicating successful execution or configuration.

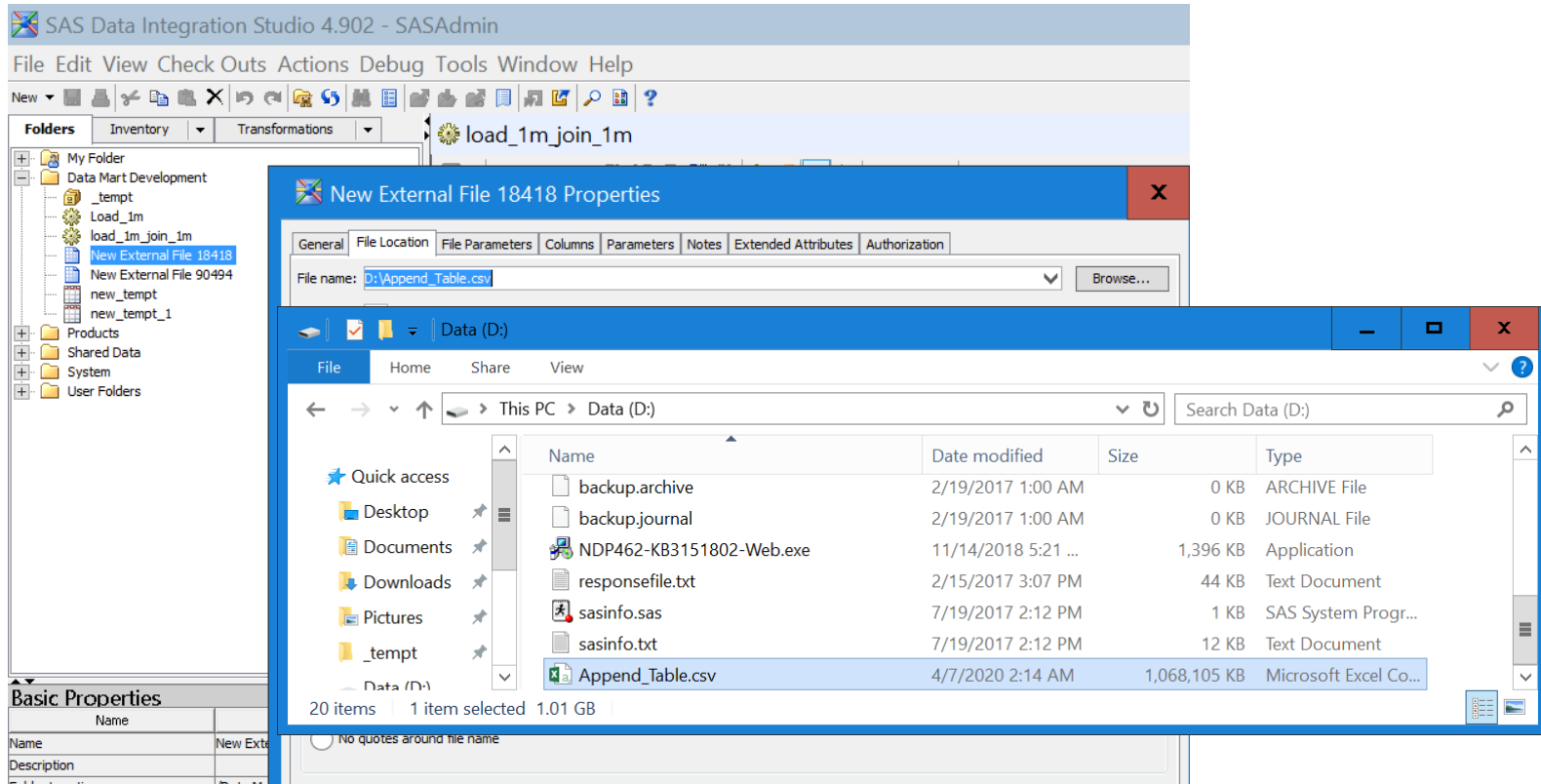
SAS Data Integration Studio

SAS – Load 5 million records New External File 18418



SAS Data Integration Studio

SAS – Load 5 million records New External File 18418



SAS Data Integration Studio

New External File 18418

Append_Table.csv - Excel

FILE HOME INSERT PAGE LAYOUT FORMULAS DATA REVIEW VIEW SAS

Clipboard Font Alignment Number Styles Editing

Calibri 11 Wrap Text General Conditional Formatting Cell Insert Delete Format AutoSum Fill Sort & Find & Filter Select

A1 type

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	
1	type	amount	nameOrig	oldbalanc	newbalanc	nameDest	oldbalanc	newbalanc	isFraud	isFlaggedF	type1	amount1	nameOrig	oldbalanc	newbalanc	nameDest	oldbalanc	newbalanc	isFraud1	isF
2	CASH_IN	1.42	C1822231	1270713	1270715	C1084289	7644.26	7642.84	0	0	CASH_IN	1.42	C1822231	1270713	1270715	C1084289	7644.26	7642.84	0	
3	CASH_IN	4.71	C1805377	50198	50202.71	C1105788	75699.61	75694.89	0	0	CASH_IN	4.71	C1805377	50198	50202.71	C1105788	75699.61	75694.89	0	
4	CASH_IN	5.44	C7047097	0	5.44	C1657344	594031.5	1014777	0	0	CASH_IN	5.44	C7047097	0	5.44	C1657344	594031.5	1014777	0	
5	CASH_IN	5.66	C2047873	5061561	5061567	C4337565	60569.78	60564.12	0	0	CASH_IN	5.66	C2047873	5061561	5061567	C4337565	60569.78	60564.12	0	
6	CASH_IN	8.27	C2144774	8428411	8428419	C4338473	258574.4	258566.1	0	0	CASH_IN	8.27	C2144774	8428411	8428419	C4338473	258574.4	258566.1	0	
7	CASH_IN	8.44	C3886521	39384	39392.44	C6162447	3314616	3314607	0	0	CASH_IN	8.44	C3886521	39384	39392.44	C6162447	3314616	3314607	0	
8	CASH_IN	9.02	C7915729	2416261	2416270	C7513811	342107.9	215696.3	0	0	CASH_IN	9.02	C7915729	2416261	2416270	C7513811	342107.9	215696.3	0	
9	CASH_IN	11.13	C6674237	4116440	4116451	C1476757	347523.1	347512	0	0	CASH_IN	11.13	C6674237	4116440	4116451	C1476757	347523.1	347512	0	
10	CASH_IN	12.79	C4416006	601743	601755.8	C1064204	2819795	2819782	0	0	CASH_IN	12.79	C4416006	601743	601755.8	C1064204	2819795	2819782	0	
11	CASH_IN	13.2	C1417732	106204	106217.2	C7622072	50112.07	50098.87	0	0	CASH_IN	13.2	C1417732	106204	106217.2	C7622072	50112.07	50098.87	0	
12	CASH_IN	13.86	C1990289	6868100	6868114	C1536925	1085768	1085755	0	0	CASH_IN	13.86	C1990289	6868100	6868114	C1536925	1085768	1085755	0	
13	CASH_IN	14.4	C1108458	11400000	11400000	C1587543	46093	124958.2	0	0	CASH_IN	14.4	C1108458	11400000	11400000	C1587543	46093	124958.2	0	
14	CASH_IN	14.54	C6220959	3347287	3347301	C1504196	145142	274474	0	0	CASH_IN	14.54	C6220959	3347287	3347301	C1504196	145142	274474	0	
15	CASH_IN	15.52	C1143207	4368030	4368046	C4734543	450380.4	429479.8	0	0	CASH_IN	15.52	C1143207	4368030	4368046	C4734543	450380.4	429479.8	0	
16	CASH_IN	15.59	C1423196	16400000	16400000	C3414113	2524155	2363408	0	0	CASH_IN	15.59	C1423196	16400000	16400000	C3414113	2524155	2363408	0	
17	CASH_IN	16.3	C1487373	21400000	21400000	C1632648	3391248	3391232	0	0	CASH_IN	16.3	C1487373	21400000	21400000	C1632648	3391248	3391232	0	
18	CASH_IN	17.33	C9636901	8964057	8964074	C2451975	1129422	1129404	0	0	CASH_IN	17.33	C9636901	8964057	8964074	C2451975	1129422	1129404	0	
19	CASH_IN	17.53	C7572711	1111295	1111312	C1962597	401071.3	401053.7	0	0	CASH_IN	17.53	C7572711	1111295	1111312	C1962597	401071.3	401053.7	0	
20	CASH_IN	18.53	C9150901	951352.8	951371.3	C1160019	444539.2	444520.7	0	0	CASH_IN	18.53	C9150901	951352.8	951371.3	C1160019	444539.2	444520.7	0	
21	CASH_IN	20.34	C2101047	991344.4	991364.7	C6868432	921396.2	921375.9	0	0	CASH_IN	20.34	C2101047	991344.4	991364.7	C6868432	921396.2	921375.9	0	
22	CASH_IN	21.15	C1595822	2729078	2729099	C1349442	328283.2	328262.1	0	0	CASH_IN	21.15	C1595822	2729078	2729099	C1349442	328283.2	328262.1	0	
23	CASH_IN	21.57	C1410453	104362	104383.6	C2142748	7251135	7289256	0	0	CASH_IN	21.57	C1410453	104362	104383.6	C2142748	7251135	7289256	0	

Append_Table

READY

100%

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SAS Data Integration Studio

SAS – End-to-End process (Run-time Statistics)

SAS Data Integration Studio 4.902 - SASAdmin

File Edit View Check Outs Actions Debug Tools Window Help

New Open Recent Save Undo Redo Cut Copy Paste Find Replace Help Workspace Server

Folders Inventory Transformations

load_1m_join_1m

My Folder
Data Mart Development
_temp
Load_1m
load_1m_join_1m
New External File 18418
New External File 90494
new_temp
new_temp_1
Products
Shared Data
System
User Folders

Basic Properties

Name	Value
Name	load_1m_join_1m
Description	
Folder Location	/Data Mart Development
Checked Out By	
Tables Loaded	new_temp, new_temp_1
Disable Checkpoints	No
Last Modified By	sasadm
Metadata Modified	Apr 7, 2020 2:53:31 AM (by Ver...
Metadata Created	Apr 3, 2020 5:50:52 AM
Logical Type	Job
Metadata ID	ASHEHCWL.B200004C
Usage Version	1.0

Diagram Code Log Output

Details

Status Warnings and Errors Statistics Control Flow

Line Graph Select... Bar Chart All transformations

Last Run: Apr 7, 2020 2:54:47 AM Clear All

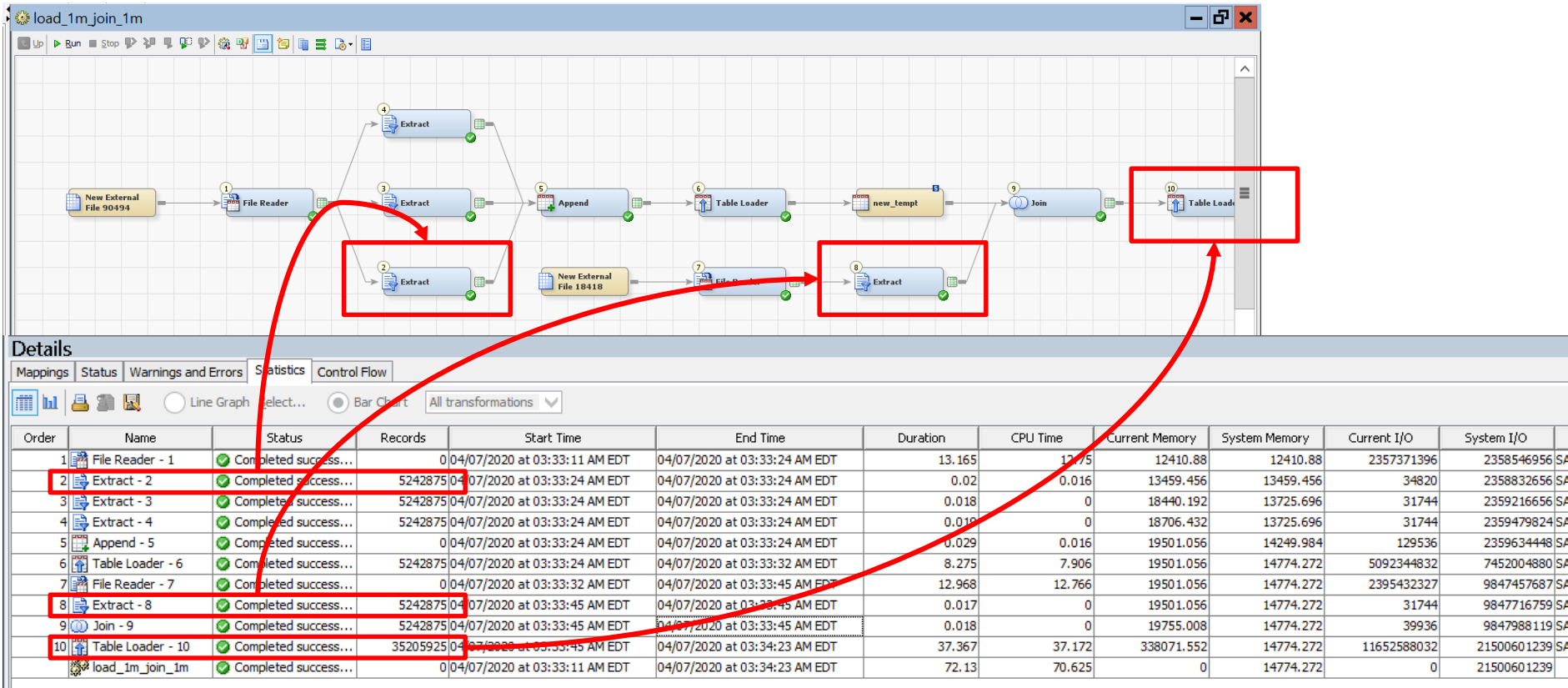
Order	Name	Status	Records	Start Time	End Time	Duration	CPU Time	Current Memory	System Memory	Current I/O	System I/O	Server	Threads
1	File Reader - 1	Completed success...	0	04/07/2020 at 02:53:33 AM EDT	04/07/2020 at 02:53:46 AM EDT	13.165	13.016	339914.752	16617.472	2357159815	114182863343	SASBAP	
2	Extract - 2	Completed success...	5242875	04/07/2020 at 02:53:46 AM EDT	04/07/2020 at 02:53:46 AM EDT	0.023	0.016	339914.752	16617.472	32256	114183151599	SASBAP	
3	Extract - 3	Completed success...	5242875	04/07/2020 at 02:53:46 AM EDT	04/07/2020 at 02:53:46 AM EDT	0.022	0	339914.752	16617.472	32256	114183427967	SASBAP	
4	Extract - 4	Completed success...	5242875	04/07/2020 at 02:53:46 AM EDT	04/07/2020 at 02:53:46 AM EDT	0.019	0	339914.752	16617.472	32256	114183691247	SASBAP	
5	Append - 5	Completed success...	0	04/07/2020 at 02:53:46 AM EDT	04/07/2020 at 02:53:46 AM EDT	0.048	0	339914.752	16617.472	129024	114183845359	SASBAP	
6	Table Loader - 6	Completed success...	5242875	04/07/2020 at 02:53:46 AM EDT	04/07/2020 at 02:53:54 AM EDT	8.079	7.641	339914.752	16355.328	5092385280	119276255215	SASBAP	
7	File Reader - 7	Completed success...	0	04/07/2020 at 02:53:54 AM EDT	04/07/2020 at 02:54:08 AM EDT	14.036	13.219	339914.752	16355.328	2395432839	121671708534	SASBAP	
8	Extract - 8	Completed success...	5242875	04/07/2020 at 02:54:08 AM EDT	04/07/2020 at 02:54:08 AM EDT	0.024	0	339914.752	16355.328	32256	121671980406	SASBAP	
9	Join - 9	Completed success...	5242875	04/07/2020 at 02:54:08 AM EDT	04/07/2020 at 02:54:08 AM EDT	0.021	0	339914.752	16355.328	40448	121672252278	SASBAP	
10	Table Loader - 10	Completed success...	35205925	04/07/2020 at 02:54:08 AM EDT	04/07/2020 at 02:54:46 AM EDT	37.984	37.562	339914.752	16355.328	11652991104	133324868470	SASBAP	
11	load_1m_join_1m	Completed success...	0	04/07/2020 at 02:53:33 AM EDT	04/07/2020 at 02:54:46 AM EDT	73.648	71.453	0	16617.472	0	133324868470		

Completed successfully

SASApp sasadm@sasbpw as Unrestricted sasbpw : 8561

SAS Data Integration Studio

SAS – End-to-End process (Run-time Statistics)



SAS Data Integration Studio

SAS – End-to-End process (Run-time Statistics)

