SAS Data Integration Studio

Simulation of 5 million records

Confidential & Private

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sas
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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

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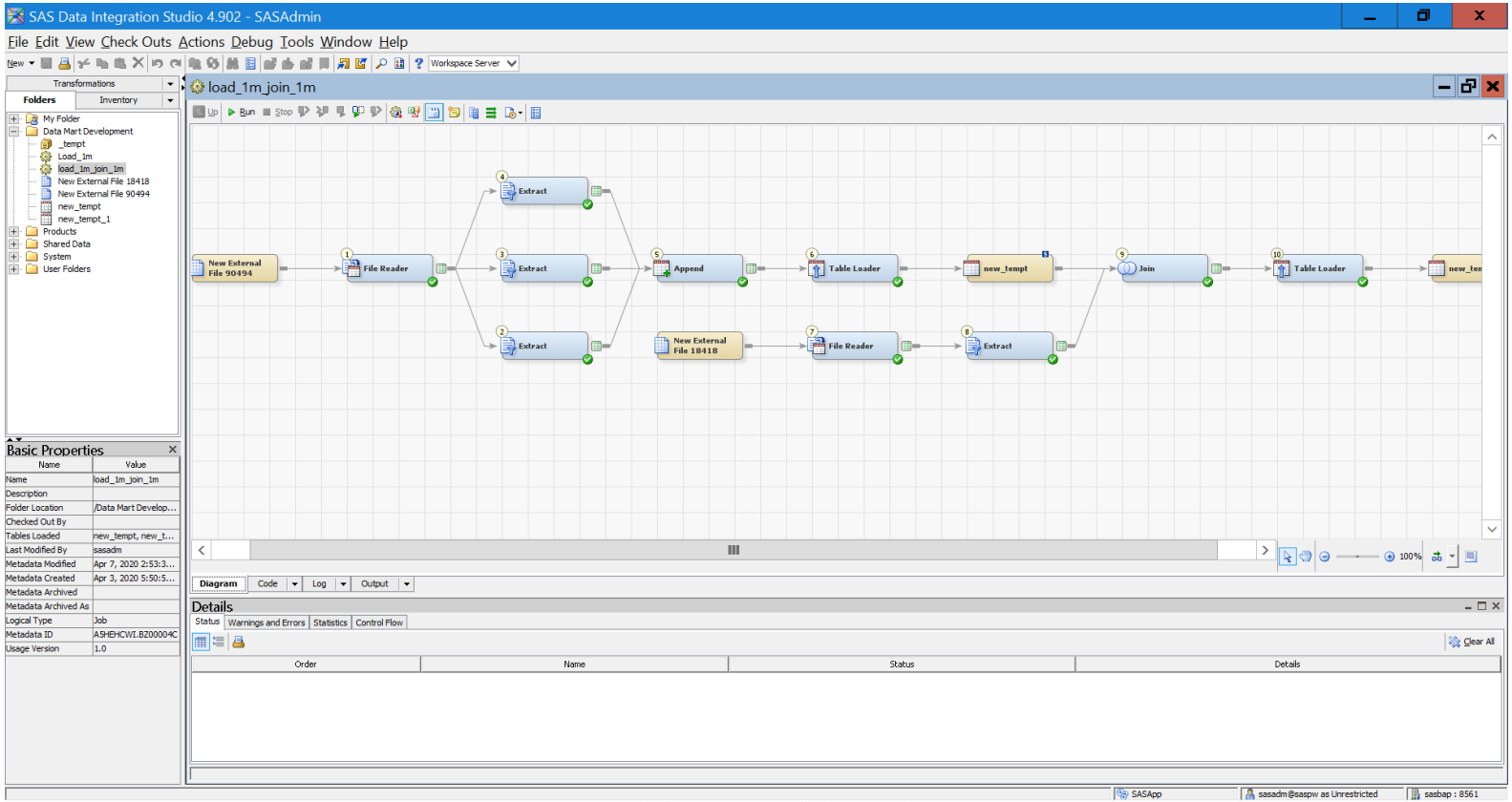
SAS Data Integration Studio

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



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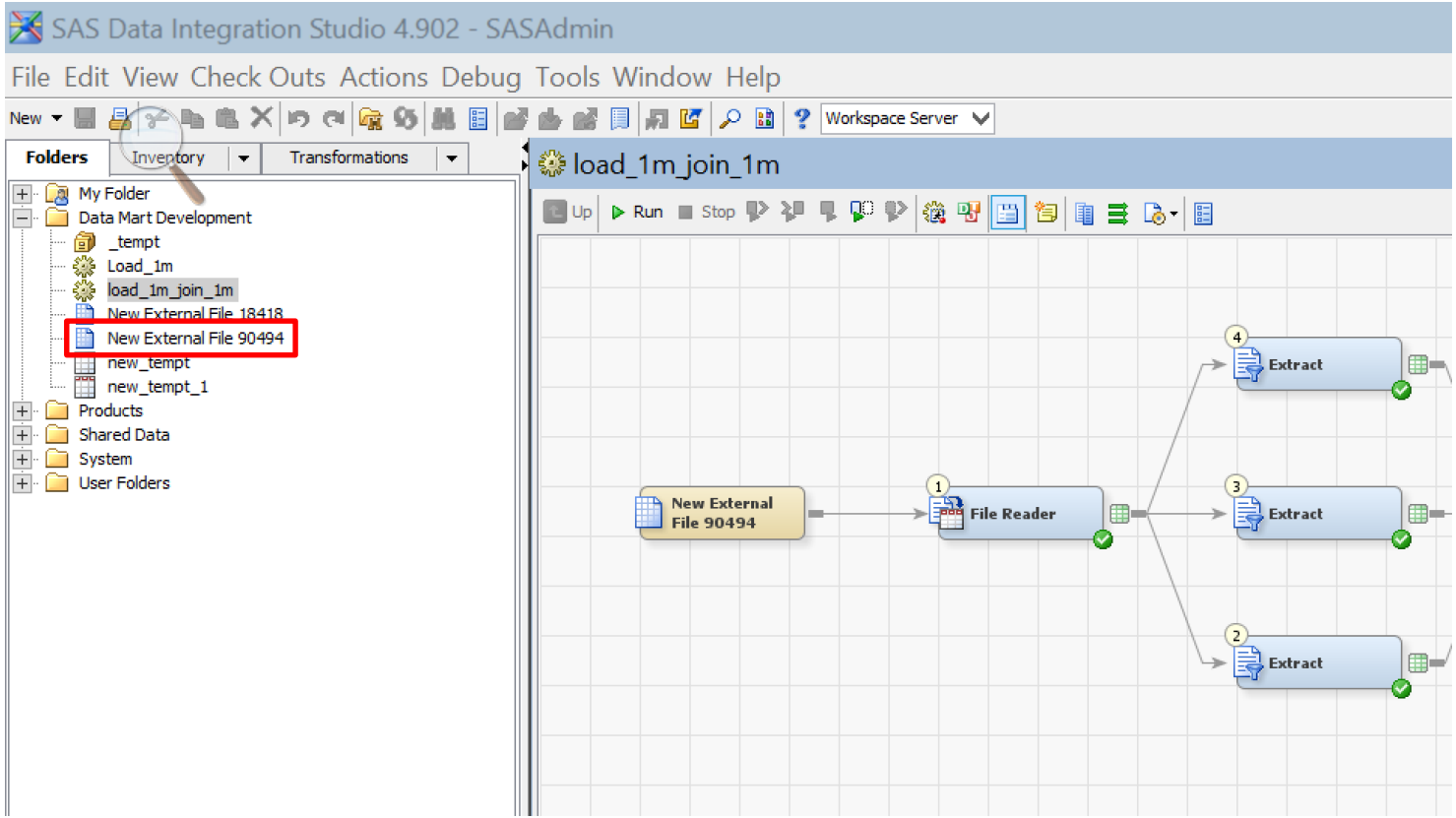
SAS Data Integration Studio

SAS – Load 5 million records New External File 90494



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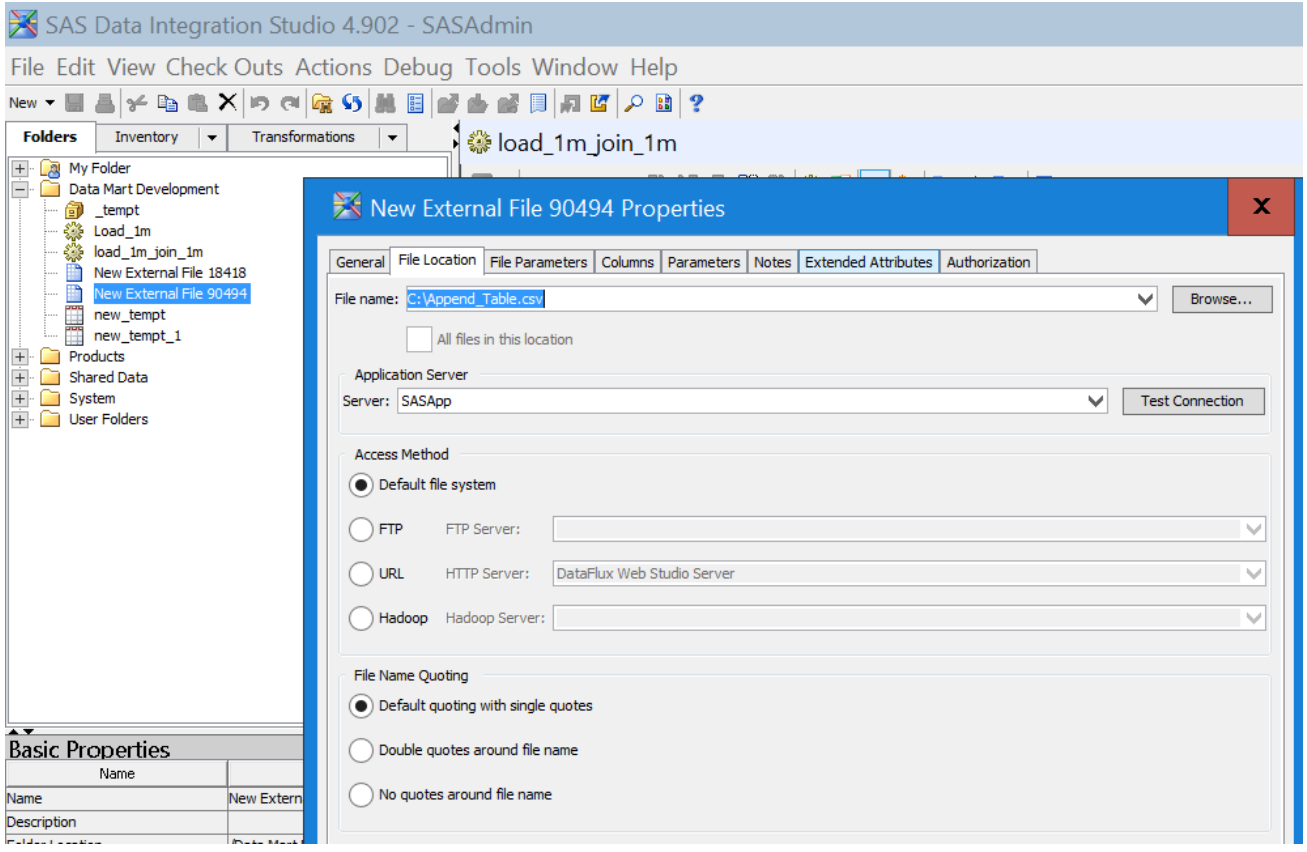
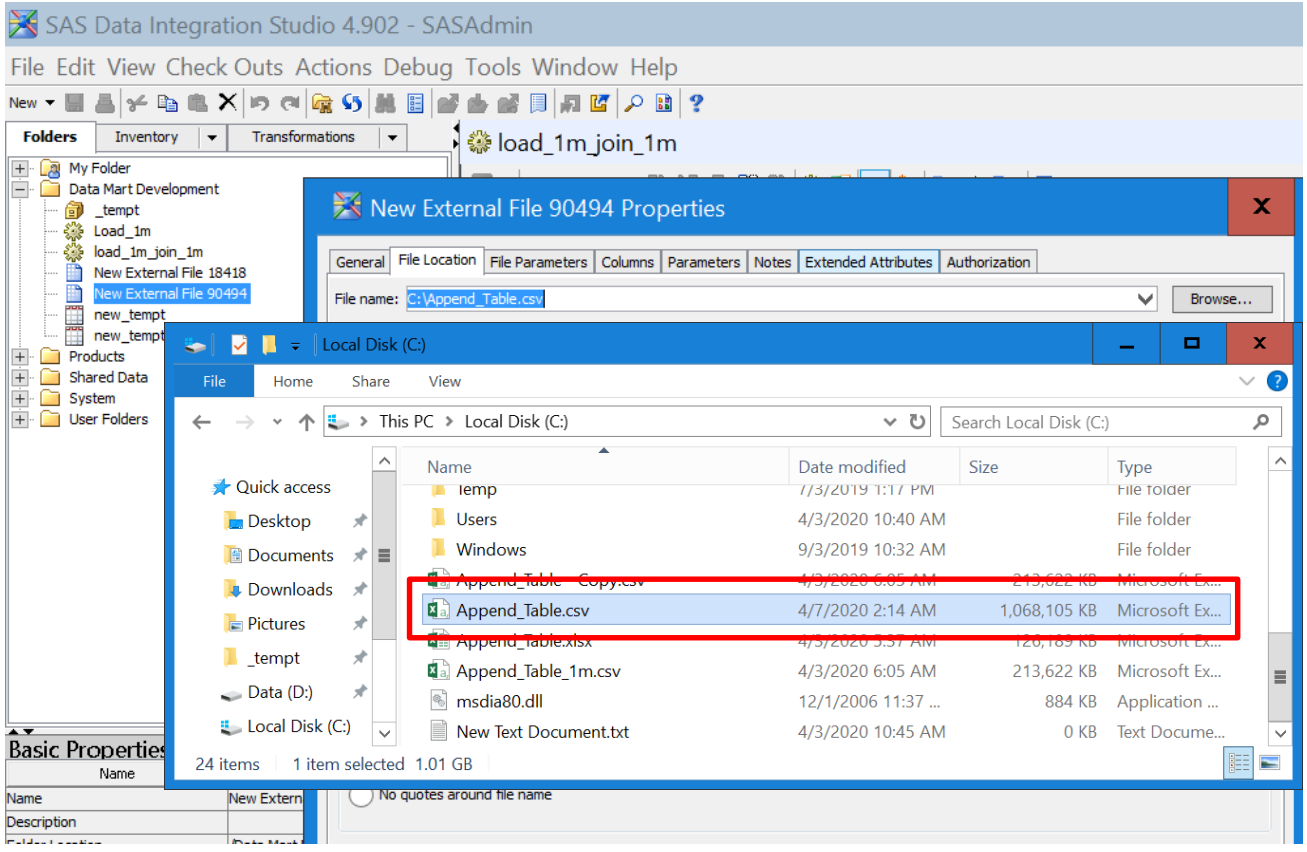
SAS Data Integration Studio

SAS – Load 5 million records New External File 90494



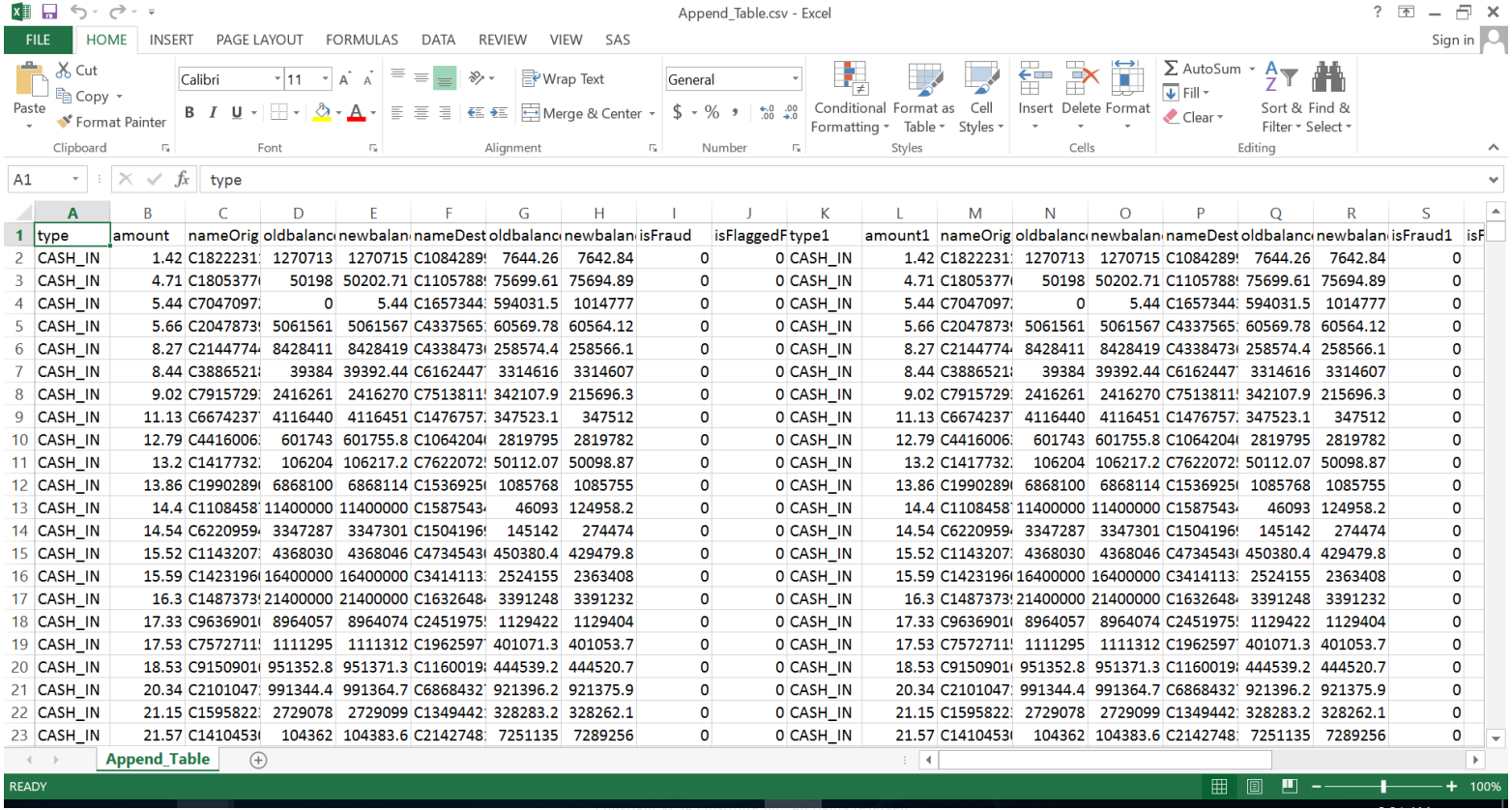
SAS Data Integration Studio

SAS – Load 5 million records New External File 90494



SAS Data Integration Studio

New External File 90494



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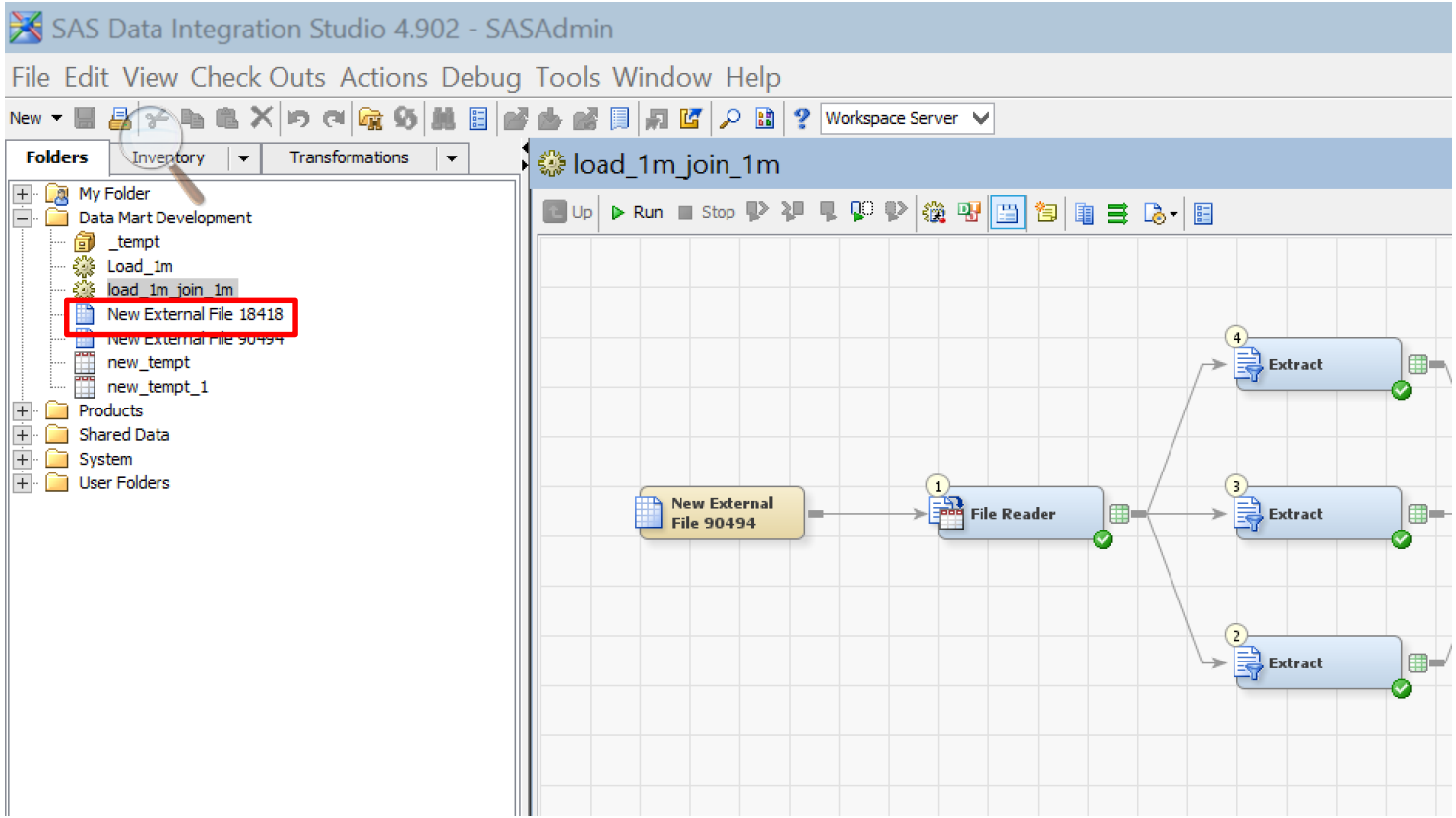
1	type	amount	nameOrig	oldbalanc	newbalan	nameDest	oldbalanc	newbalan	isFraud	isFlaggedF	type1	amount1	nameOrig	oldbalanc	newbalan	nameDest	oldbalanc	newbalan	isFraud1
2	CASH_IN	1.42	C1822231	1270713	1270715	C1084289	7644.26	7642.84	0	0	CASH_IN	1.42	C1822231	1270713	1270715	C1084289	7644.26	7642.84	0
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

SAS Data Integration Studio

SAS – Load 5 million records New External File 18418



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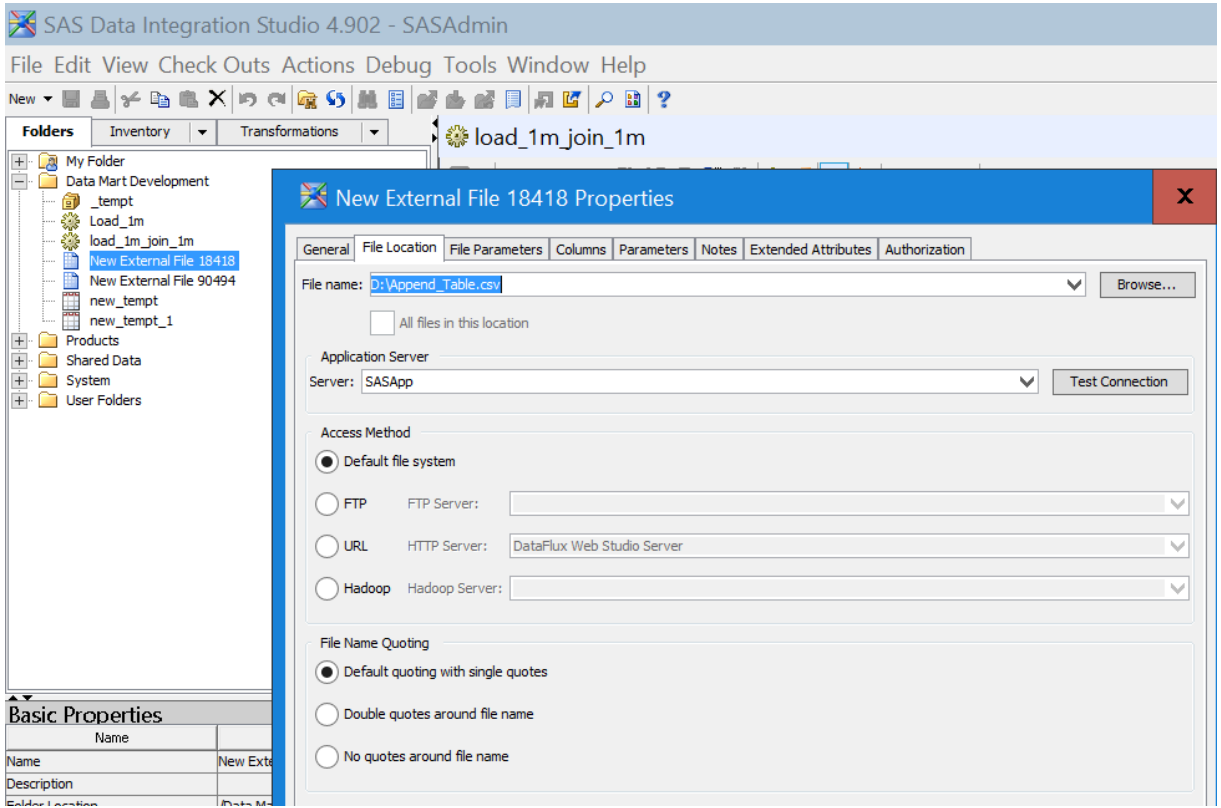
SAS Data Integration Studio

SAS – Load 5 million records New External File 18418



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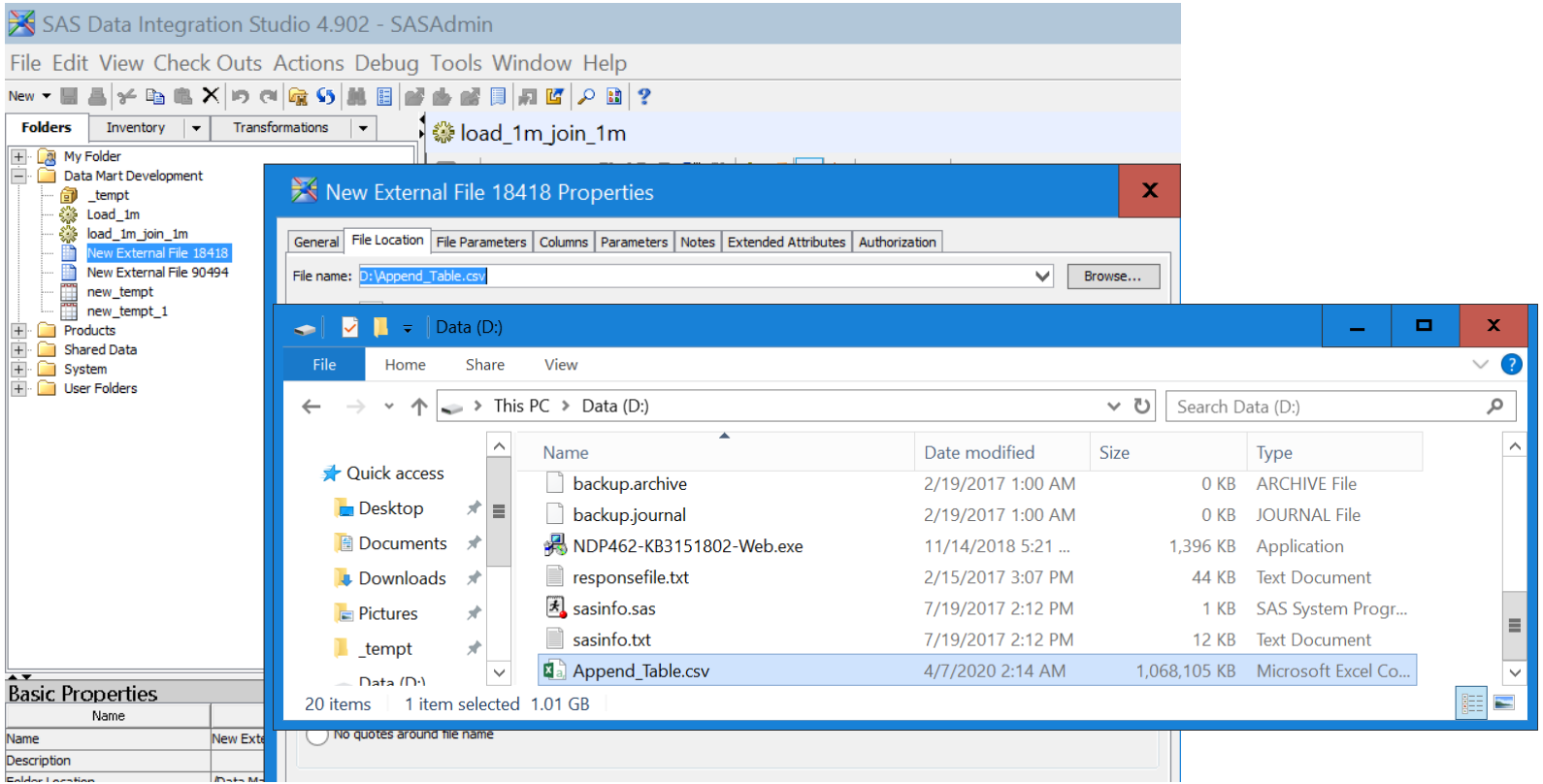
SAS Data Integration Studio

SAS – Load 5 million records New External File 18418



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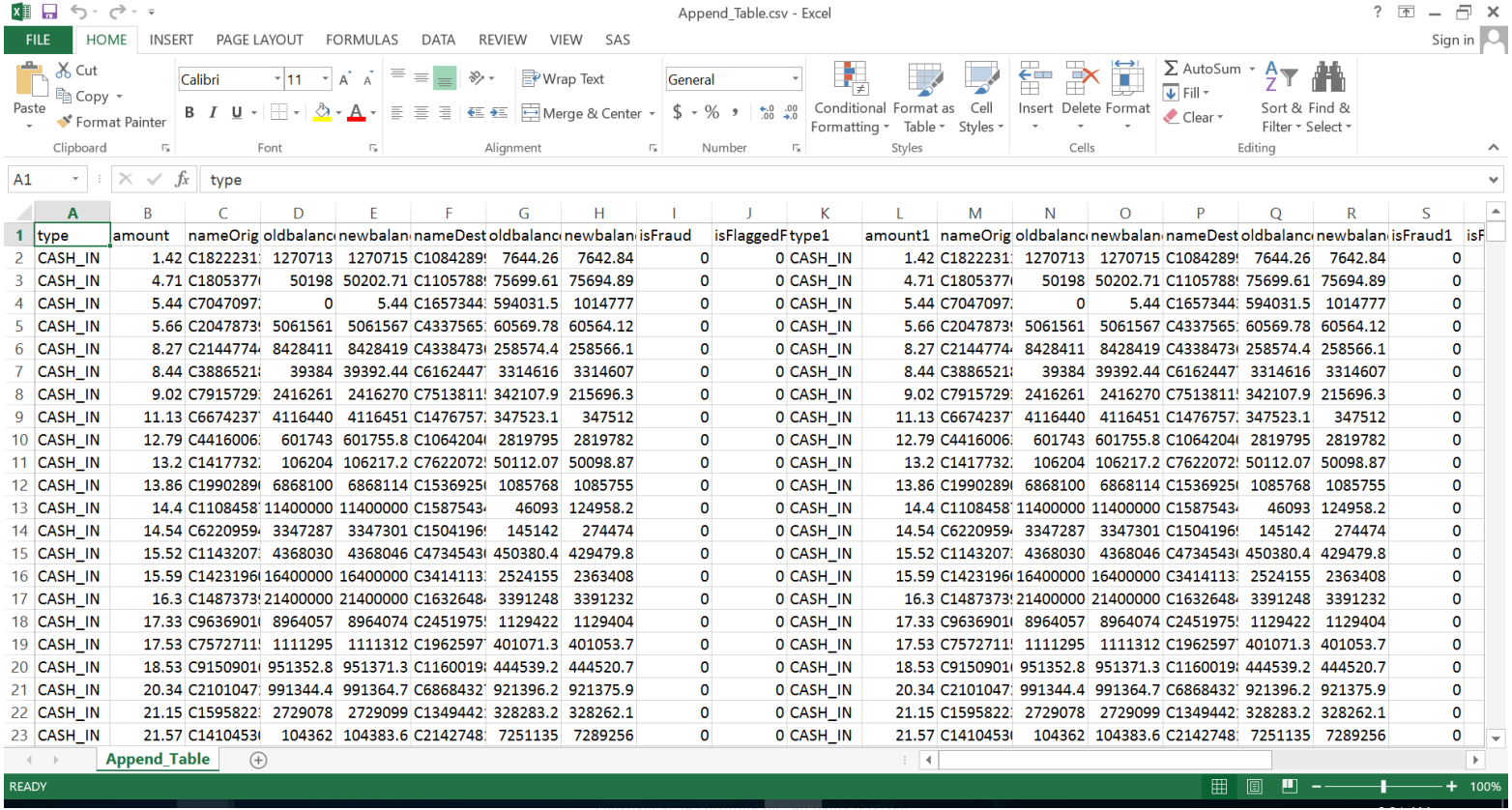
SAS Data Integration Studio

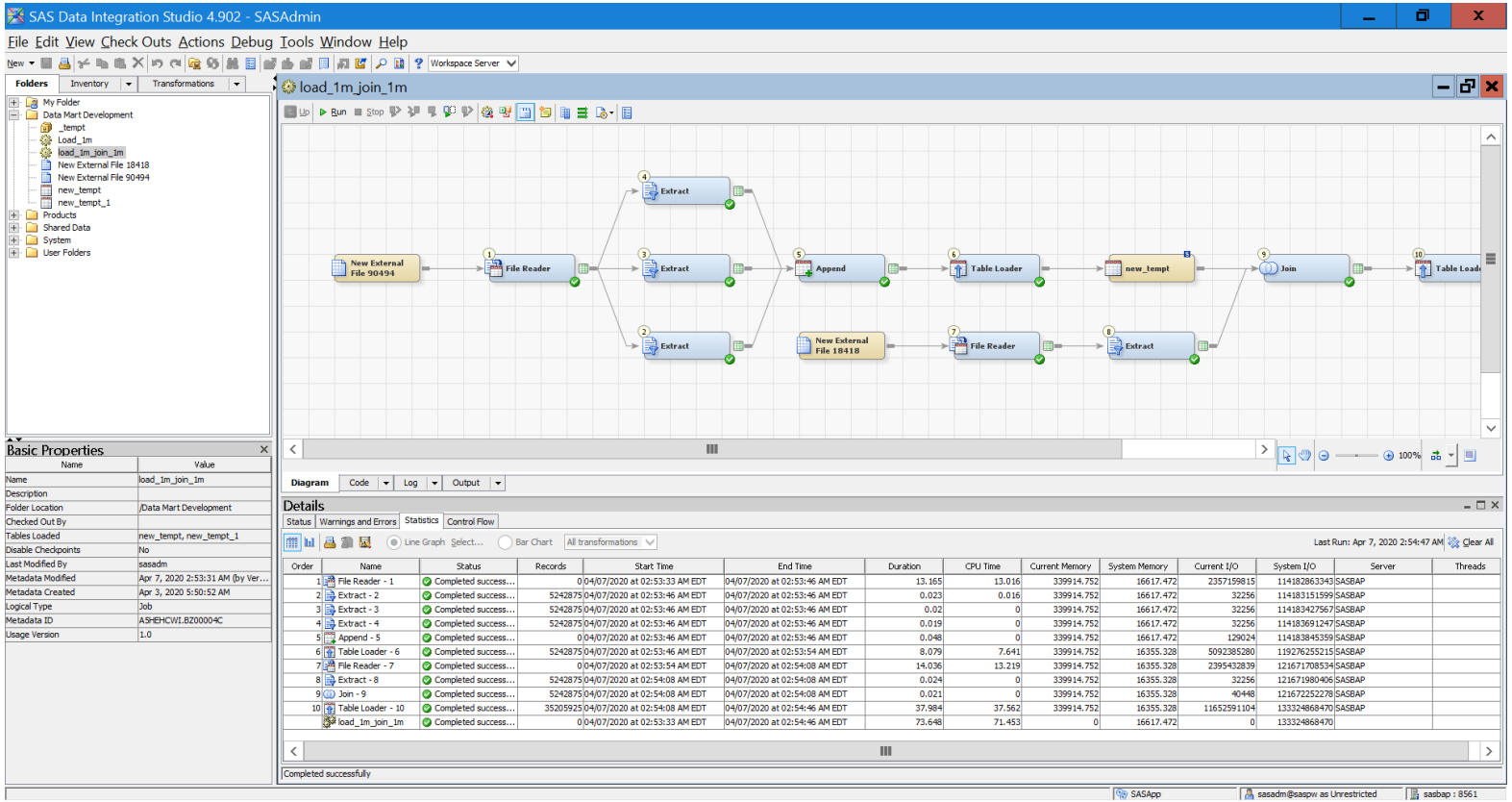
New External File 18418



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	type	amount	nameOrig	oldbalanc	newbalan	nameDest	oldbalanc	newbalan	isFraud	isFlaggedF	type1	amount1	nameOrig	oldbalanc	newbalan	nameDest	oldbalanc	newbalan	isFraud1
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

SAS Data Integration Studio

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



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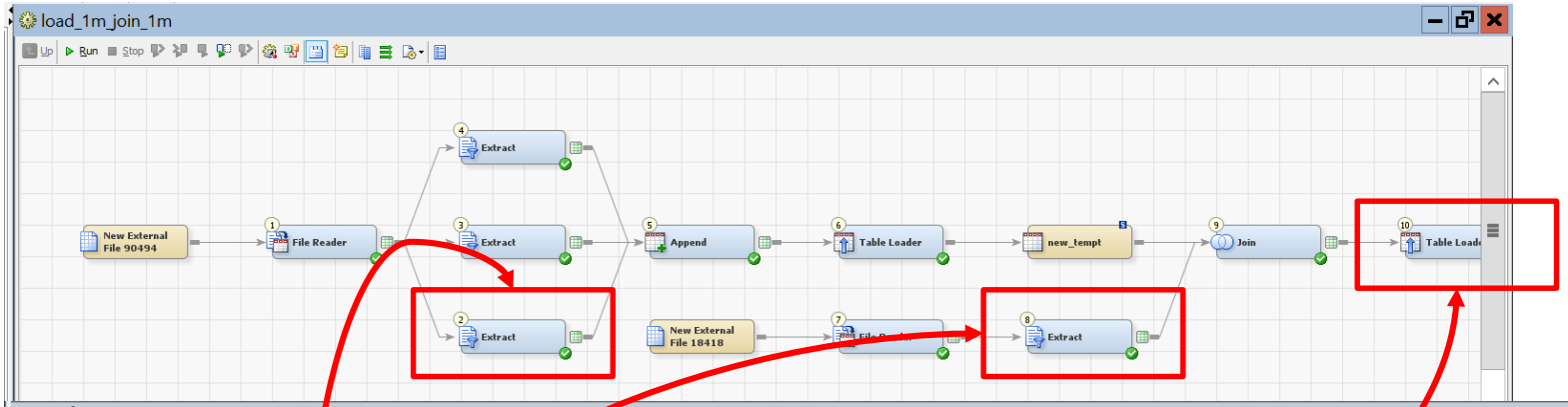
SAS Data Integration Studio

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



Details

Mappings | Status | Warnings and Errors | Statistics | Control Flow

Line Graph | Select... | Bar Chart | All transformations

Order	Name	Status	Records	Start Time	End Time	Duration	CPU Time	Current Memory	System Memory	Current I/O	System I/O
1	File Reader - 1	Completed success...	0	04/07/2020 at 03:33:11 AM EDT	04/07/2020 at 03:33:24 AM EDT	13.165	12.975	12410.88	12410.88	2357371396	2358546956
2	Extract - 2	Completed success...	5242875	04/07/2020 at 03:33:24 AM EDT	04/07/2020 at 03:33:24 AM EDT	0.02	0.016	13459.456	13459.456	34820	2358832656
3	Extract - 3	Completed success...	5242875	04/07/2020 at 03:33:24 AM EDT	04/07/2020 at 03:33:24 AM EDT	0.018	0	18440.192	13725.696	31744	2359216656
4	Extract - 4	Completed success...	5242875	04/07/2020 at 03:33:24 AM EDT	04/07/2020 at 03:33:24 AM EDT	0.018	0	18706.432	13725.696	31744	2359479824
5	Append - 5	Completed success...	0	04/07/2020 at 03:33:24 AM EDT	04/07/2020 at 03:33:24 AM EDT	0.029	0.016	19501.056	14249.984	129536	2359634448
6	Table Loader - 6	Completed success...	5242875	04/07/2020 at 03:33:24 AM EDT	04/07/2020 at 03:33:32 AM EDT	8.275	7.906	19501.056	14774.272	5092344832	7452004880
7	File Reader - 7	Completed success...	0	04/07/2020 at 03:33:32 AM EDT	04/07/2020 at 03:33:45 AM EDT	12.968	12.766	19501.056	14774.272	2395432327	9847457687
8	Extract - 8	Completed success...	5242875	04/07/2020 at 03:33:45 AM EDT	04/07/2020 at 03:33:45 AM EDT	0.017	0	19501.056	14774.272	31744	9847716759
9	Join - 9	Completed success...	5242875	04/07/2020 at 03:33:45 AM EDT	04/07/2020 at 03:33:45 AM EDT	0.018	0	19755.008	14774.272	39936	9847988119
10	Table Loader - 10	Completed success...	35205925	04/07/2020 at 03:33:45 AM EDT	04/07/2020 at 03:34:23 AM EDT	37.367	37.172	338071.552	14774.272	11652588032	21500601239
	load_1m_join_1m	Completed success...	0	04/07/2020 at 03:33:11 AM EDT	04/07/2020 at 03:34:23 AM EDT	72.13	70.625	0	14774.272	0	21500601239

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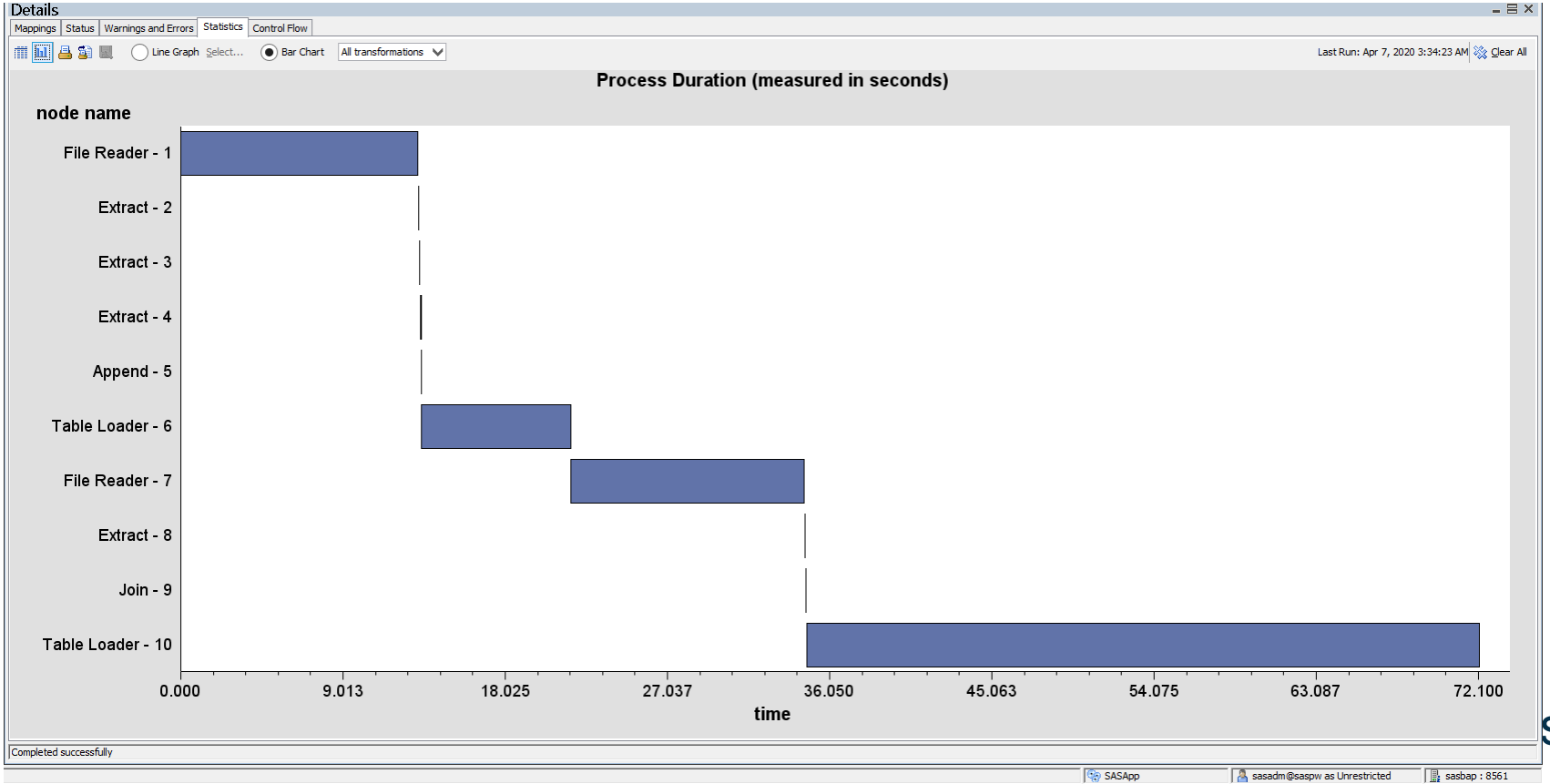
SAS – End-to-End process (Run-time Statistics)