

CMS Snapshot Analysis - Run Dynamic Link Manager - Error Free Logs - CAST AIP 8

Purpose

The Run Dynamic Link Manager (DLM) is a sub task that is optional. It will always be run, but would not have any specific results unless rules have been added to the analysis to be processed after the analysis is run.

A separate log will be generated for the action of the Run Dynamic Link Manager.

Please see the below documentation and example screenshots for more information on this step and an example of where it is located in the CAST Management Studio.

8.0.X Documentation: [CMS - Dynamic Link Manager filter rules](#)

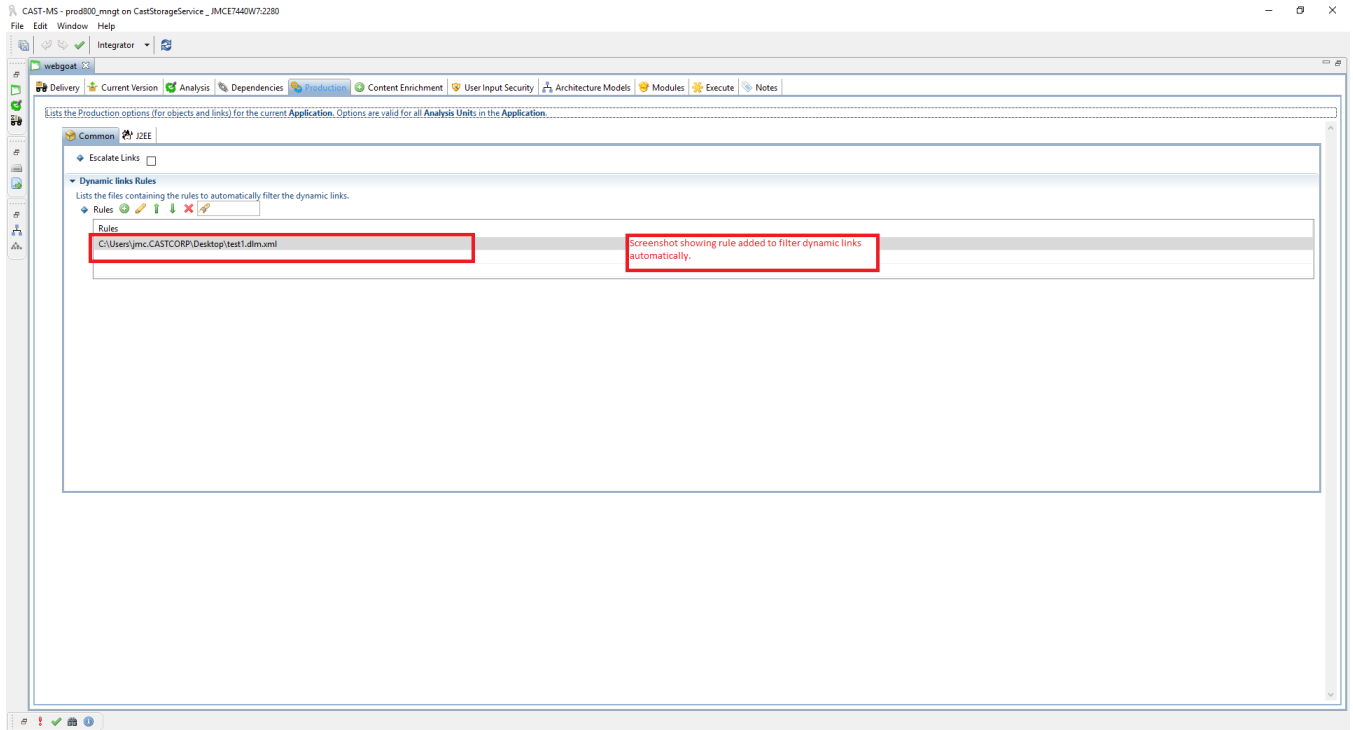
Example screenshot showing the Run Dynamic Link Manager being executed is shown below.

The screenshot displays two windows from the CAST Management Studio. The top window, titled "Run Analysis only", shows a task list with columns for Task, Duration, Progress, Log, and Results. The "Run Dynamic Link Manager" task is highlighted in grey, indicating it is currently being executed. Below this window is a "Statistics" window for "Run Dynamic Link Manager", which shows the start and finish times, the log file path, and the status "succeeded".

Task	Duration	Progress	Log	Results
Run Analysis only	6m42s			
Synchronize Services	1s			
Application "webgoat"	6m41s			
Run analysis for "webgoat"	6m28s			
Run Extensions at application level for webgoat	2s		Yes	
Tools after analysis	5s			
Run Copy Paste metrics calculation for webgoat	1s			
Run Dynamic Link Manager	3s		Yes	
Execution Summary	1s			

Statistics
Run Dynamic Link Manager
Start: 8/22/16 4:15:11 PM
Finish: 8/22/16 4:19:14 PM
Log file: C:\Users\jmk\Local AppData\Local\Temp\CAST\CAST18.0\UIS\Jed1c4926898f4e4c3a6e507378a898f0f\DynamicLinkManager.log
Status: succeeded

Example screenshot showing the Run Dynamic Link Manager being configured is shown below.



Following is the list of Logs generated by the task Run Dynamic Link Manager.

- [CAST-MS log file](#)
 - [Run Dynamic Link Manager](#)
- [DynamicLinkManager.log file](#)
 - [Run Dynamic Link Manager Results](#)

Take a snapshot of the application

Task

- ✓ Take a snapshot of the application
 - ✓ Snapshot generation
 - ✓ Synchronize Services
 - ✓ Application "J2EE Application"
 - ✓ Tools before analysis
 - ✓ My SQL Tool
 - ✓ Run CSV generation
 - ✓ My External Program
 - ✓ Run analysis for 'J2EE Application'
 - ✓ Run SQL Analyzers "My Package 2"
 - ✓ Compute Analysis Unit full content
 - ✓ Compute content for Refined Target
 - ✓ Run metrics calculation for My Package 2
 - ✓ Compute dependency dataset
 - ✓ Run J2EE Analyzer "My Source file based execution unit"
 - ✓ Clean dependency dataset
 - ✓ Compute Analysis Unit full content for BusinessHelloWorld
 - ✓ Run metrics calculation for My Source file based execution unit
 - ✓ Run reference pattern 'My Reference Pattern'
 - ✓ Create source set for My Reference Pattern
 - ✓ Create target set for My Reference Pattern
 - ✓ Run Reference Finder Analyzers "RP My Reference Pattern"
 - ✓ Delete source set for My Reference Pattern
 - ✓ Delete target set for My Reference Pattern
 - ✓ Run Extensions at application level for J2EE Application
 - ✓ Tools after analysis
 - ✓ My SQL Tool
 - ✓ My External Program
 - ✓ My Update CAST Knowledge Base
 - ✓ Run Universal Importer "My Universal Importer"
 - ✓ Run CSV generation
 - ✓ Create source set for My Reference Pattern
 - ✓ Run Reference Pattern Search String "My Reference Pattern Search String"
 - ✓ Delete source set for My Reference Pattern
 - ✓ Run Escalated Links Calculation on "J2EE Application"
 - ✓ Run Copy Paste metrics calculation for J2EE Application
 - ✓ Analyze Copy Paste code
 - ✓ Save results to database
 - ✓ Run Dynamic Link Manager
 - ✓ Update SQL XXL Table Size for "J2EE Application"
 - ✓ Run Data Flow Security Analysis on "J2EE Application"
 - ✓ Prepare snapshot in "cb802_sbo_local"
 - ✓ Generate Modules in "cb802_sbo_local"
 - ✓ Run CSV generation
 - ✓ Run Path builder on "cb802_sbo_local"
 - ✓ Update Sources in "cb802_sbo_local"
 - ✓ Finalize Data Flow Security in "cb802_sbo_local"
 - ✓ Create Architecture Model in "cb802_sbo_local"
 - ✓ Create Architecture Model in "cb802_sbo_central"
 - ✓ Synchronize Assessment Model in cb802_sbo_central
 - ✓ Create Snapshot Definition in "cb802_sbo_central"
 - ✓ Compute Snapshot in "cb802_sbo_central" with associated Analysis Services
 - ✓ Configure snapshot data into dashboard service.
 - ✓ Transfer sources, positions and bookmarks into dashboard service.
 - ✓ Synchronize Snapshot List from "cb802_sbo_central"
 - ✓ Dashboard automation in "cb802_sbo_central"
 - ✓ Execution Summary

CAST-MS log

CAST-MS log file

Section of CAST-MS log file dealing with Run Dynamic Link Manager step as shown in the log above.

Run Dynamic Link Manager

INF: 2016-08-22 16:19:11: starting Task Run Dynamic Link Manager

INF: 2016-08-22 16:19:11: [C:\Program Files\CAST\8.0\DynamicLinks.CLI.exe, executeRules, --profile=prod800_mngt on CastStorageService _ JMCE7440W7:2280, --ruleFile=C:\Users\JMC~1.CAS\AppData\Local\Temp\CAST\CAST\8.0\LISA\bd1c4a0b868f4e9cabae9c7378ab898f\ExecutionPlan.dlm.xml, --log=C:\Users\JMC~1.CAS\AppData\Local\Temp\CAST\CAST\8.0\LISA\bd1c4a0b868f4e9cabae9c7378ab898f\DynamicLinkManager.log]

INF: 2016-08-22 16:19:14: Task message: No Task message

INF: 2016-08-22 16:19:14: Log file: C:\Users\JMC~1.CAS\AppData\Local\Temp\CAST\CAST\8.0\LISA\bd1c4a0b868f4e9cabae9c7378ab898f\DynamicLinkManager.log

INF: 2016-08-22 16:19:14: ending Task Run Dynamic Link Manager

RunCSV log

DynamicLinkManager.log file

Sample results of a Dynamic Link Manager log (results will vary depending on the rules being run):

Run Dynamic Link Manager Results

2016-08-22 16:19:11,689 [1] INFO DynamicLinks main - DynamicLinks.CLI.exe "executeRules" "--profile=prod800_mngt on CastStorageService _ JMCE7440W7:2280" "--ruleFile=C:\Users\JMC~1.CAS\AppData\Local\Temp\CAST\CAST\8.0\LISA\bd1c4a0b868f4e9cabae9c7378ab898f\ExecutionPlan.dlm.xml" "--log=C:\Users\JMC~1.CAS\AppData\Local\Temp\CAST\CAST\8.0\LISA\bd1c4a0b868f4e9cabae9c7378ab898f\DynamicLinkManager.log"

2016-08-22 16:19:11,716 [1] INFO DynamicLinks main - Loading C:\Users\JMC~1.CAS\AppData\Local\Temp\CAST\CAST\8.0\LISA\bd1c4a0b868f4e9cabae9c7378ab898f\ExecutionPlan.dlm.xml

2016-08-22 16:19:11,824 [1] INFO DynamicLinks main - Loaded successfully 1 rule

2016-08-22 16:19:14,128 [1] INFO DynamicLinks main - SELECT "Extent1"."idacc" AS "idacc","Extent1"."acctyphi" AS "acctyphi","Extent1"."acctyplo" AS "acctyplo","Extent1"."prop" AS "prop","Extent1"."idpro" AS "idpro","Extent2"."idkey" AS "idkey","Extent2"."objtyp" AS "objtyp","Extent2"."keynam" AS "keynam","Extent3"."idkey" AS "idkey1","Extent3"."objtyp" AS "objtyp1","Extent3"."keynam" AS "keynam1" FROM "prod800_local"."acc" AS "Extent1" INNER JOIN "prod800_local"."keys" AS "Extent2" ON "Extent1"."idclr"="Extent2"."idkey" INNER JOIN "prod800_local"."keys" AS "Extent3" ON "Extent1"."idcle"="Extent3"."idkey" WHERE (1="Extent1"."prop" & 98305) AND (((109317="Extent1"."idpro") OR (109651="Extent1"."idpro")) OR (109255="Extent1"."idpro"))

2016-08-22 16:19:14,171 [1] INFO DynamicLinks main - SELECT "Extent1"."idacc" AS "idacc", "Extent1"."acctyphi" AS "acctyphi", "Extent1"."acctyplo" AS "acctyplo", "Extent1"."prop" AS "prop", "Extent1"."idpro" AS "idpro", "Extent2"."idkey" AS "idkey", "Extent2"."objtyp" AS "objtyp", "Extent2"."keynam" AS "keynam", "Extent3"."idkey" AS "idkey1", "Extent3"."objtyp" AS "objtyp1", "Extent3"."keynam" AS "keynam1" FROM "prod800_local"."acc" AS "Extent1" INNER JOIN "prod800_local"."keys" AS "Extent2" ON "Extent1"."idclr"="Extent2"."idkey" INNER JOIN "prod800_local"."keys" AS "Extent3" ON "Extent1"."idcle"="Extent3"."idkey" WHERE (1="Extent1"."prop" & 98305) AND ((105301="Extent1"."idpro") OR (106007="Extent1"."idpro"))

2016-08-22 16:19:14,202 [1] INFO DynamicLinks main - SELECT "Extent1"."idacc" AS "idacc", "Extent1"."acctyphi" AS "acctyphi", "Extent1"."acctyplo" AS "acctyplo", "Extent1"."prop" AS "prop", "Extent1"."idpro" AS "idpro", "Extent2"."idkey" AS "idkey", "Extent2"."objtyp" AS "objtyp", "Extent2"."keynam" AS "keynam", "Extent3"."idkey" AS "idkey1", "Extent3"."objtyp" AS "objtyp1", "Extent3"."keynam" AS "keynam1" FROM "prod800_local"."acc" AS "Extent1" INNER JOIN "prod800_local"."keys" AS "Extent2" ON "Extent1"."idclr"="Extent2"."idkey" INNER JOIN "prod800_local"."keys" AS "Extent3" ON "Extent1"."idcle"="Extent3"."idkey" WHERE (1="Extent1"."prop" & 98305) AND ((109125="Extent1"."idpro") OR (109054="Extent1"."idpro"))

2016-08-22 16:19:14,236 [1] INFO DynamicLinks main - SELECT "Extent1"."idacc" AS "idacc", "Extent1"."acctyphi" AS "acctyphi", "Extent1"."acctyplo" AS "acctyplo", "Extent1"."prop" AS "prop", "Extent1"."idpro" AS "idpro", "Extent2"."idkey" AS "idkey", "Extent2"."objtyp" AS "objtyp", "Extent2"."keynam" AS "keynam", "Extent3"."idkey" AS "idkey1", "Extent3"."objtyp" AS "objtyp1", "Extent3"."keynam" AS "keynam1" FROM "prod800_local"."acc" AS "Extent1" INNER JOIN "prod800_local"."keys" AS "Extent2" ON "Extent1"."idclr"="Extent2"."idkey" INNER JOIN "prod800_local"."keys" AS "Extent3" ON "Extent1"."idcle"="Extent3"."idkey" WHERE (1="Extent1"."prop" & 98305) AND ((5409="Extent1"."idpro") OR (5410="Extent1"."idpro"))

2016-08-22 16:19:14,286 [1] INFO DynamicLinks main - 0% of rules have been executed

2016-08-22 16:19:14,295 [1] INFO DynamicLinks main - SELECT "Extent1"."idacc" AS "idacc", "Extent1"."acctyphi" AS "acctyphi", "Extent1"."acctyplo" AS "acctyplo", "Extent1"."prop" AS "prop", "Extent1"."idpro" AS "idpro", "Extent2"."idkey" AS "idkey", "Extent2"."objtyp" AS "objtyp", "Extent2"."keynam" AS "keynam", "Extent3"."idkey" AS "idkey1", "Extent3"."objtyp" AS "objtyp1", "Extent3"."keynam" AS "keynam1" FROM "prod800_local"."acc" AS "Extent1" INNER JOIN "prod800_local"."keys" AS "Extent2" ON "Extent1"."idclr"="Extent2"."idkey" INNER JOIN "prod800_local"."keys" AS "Extent3" ON "Extent1"."idcle"="Extent3"."idkey" WHERE (1="Extent1"."prop" & 98305) AND ((5409="Extent1"."idpro") OR (5410="Extent1"."idpro"))

2016-08-22 16:19:14,338 [1] INFO DynamicLinks main - Profile: prod800_mngt on CastStorageService _ JMCE7440W7:2280 - Application webgoat

2016-08-22 16:19:14,338 [1] INFO DynamicLinks main - Executing rule test1 on scope webgoat

2016-08-22 16:19:14,369 [1] INFO DynamicLinks main - SELECT "Extent1"."idacc" AS "idacc", "Extent1"."acctyphi" AS "acctyphi", "Extent1"."acctyplo" AS "acctyplo", "Extent1"."prop" AS "prop", "Extent1"."idpro" AS "idpro", "Extent2"."idkey" AS "idkey", "Extent2"."objtyp" AS "objtyp", "Extent2"."keynam" AS "keynam", "Extent3"."idkey" AS "idkey1", "Extent3"."objtyp" AS "objtyp1", "Extent3"."keynam" AS "keynam1" FROM "prod800_local"."acc" AS "Extent1" INNER JOIN "prod800_local"."keys" AS "Extent2" ON "Extent1"."idclr"="Extent2"."idkey" INNER JOIN "prod800_local"."keys" AS "Extent3" ON "Extent1"."idcle"="Extent3"."idkey" WHERE (1="Extent1"."prop" & 98305) AND ((5409="Extent1"."idpro") OR (5410="Extent1"."idpro"))

2016-08-22 16:19:14,391 [1] INFO DynamicLinks main - SELECT "Extent1"."idacc" AS "idacc"," Extent1"."acctyphi" AS "acctyphi","Extent1"."acctyplo" AS "acctyplo","Extent1"."prop" AS "prop"," Extent1"."idpro" AS "idpro","Extent2"."idkey" AS "idkey","Extent2"."objtyp" AS "objtyp","Extent2"." keynam" AS "keynam","Extent3"."idkey" AS "idkey1","Extent3"."objtyp" AS "objtyp1","Extent3"." keynam" AS "keynam1" FROM "prod800_local"."acc" AS "Extent1" INNER JOIN "prod800_local"." keys" AS "Extent2" ON "Extent1"."idclr"="Extent2"."idkey" INNER JOIN "prod800_local"."keys" AS "Extent3" ON "Extent1"."idcle"="Extent3"."idkey" WHERE (1="Extent1"."prop" & 98305) AND ((5409="Extent1"."idpro") OR (5410="Extent1"."idpro"))

2016-08-22 16:19:14,466 [1] INFO DynamicLinks main - Saving changes...

2016-08-22 16:19:14,468 [1] INFO DynamicLinks main - UPDATE prod800_local.Acc SET Prop = ((Prop & -98305) | 32768) WHERE IdAcc IN (24414,28234,30180,26381,23340,17700,21608,34729,42321,31180,20355,35113,31102,34643,42890,2 7451,38135,32509,36480,20356,29800,33513,28769,31852,24779,27128,38551,28777,37362,21918,34 596,22419,20031,28447,20521,34993,22408,31461,19564,18296,27998,17503,23960,32789,42711,417 76,20728,41243,33612,31373,17385,17043,18154,26210,32061,34717,41577,37991,34094,24354,2254 9,38086,17222,33336,39402,38499,40759,32497,21950,34125,28361,21972,32031,40801,29353,35721, 21537,20165,36522,26337,19412,42958,18175,31323,35674,24558,29504,19452,18942,27470,34437,4 0373,36681,17445,27134,25491,32032,24289,30335,31184,38320,27960,37370,36302,20825,31001,22 793,21611,43115,31700,20180,17187,22295,40730,29873,43568,43360,33685,42351,40896,25336,321 94,37026,41910,17309,17541,20438,40214,23366,21773,36338,33684,34984,33963,25142,26157,2814 4,18673,29763,19661,40743,19446,24088,18163,33776,20720,32629,37957,38439,36962,22468,27948, 30327,24450,31679,39322,37373,17877,30771,25948,36293,39446,20309,40093,43350,30339,33157,2 5438,33868,42372,39527,42637,32127,35310,41655,29586,38555,24895,41242,42181,29384,35062,22 741,34590,41970,20815,20338,38252,22022,20928,24541,28798,42970,31986,42035,39941,24175,220 05,38546,20715,28973,43300,38910,24927,26317,28674,26046,19245,17253,21445,22222,34774,1899 3,39906,24411,29580,30287,39204,34401,20779,41714,28091,17298,37918,42275,39903,34090,41335, 28209,25447,39132,26655,29777,18342,38839,21626,38682,29727,17355,34630,30290,20227,39509,2 0558,29467,37814,36033,19816,31523,20914,42506,19099,29061,27643,23532,26322,32954,18318,21 580,23119,34145,17629,38233,26206,28985,34922,40790,18859,31896,39662,23719,27149,37336,430 69,41993,39991,26790,39995,23341,35574,23002,31603,23431,32803,27423,21385,28329,24229,1816 1,22450,40319,29286,28958,30066,27331,43696,17837,24993,27183,33486,42222,39395,30423,33169, 34961,27958,20046,18742,20119,17750,22230,35634,23750,24944,20806,41575,24770,29734,18238,3 1963,23361,31115,22868,38737,18590,34106,32701,34124,32794,32020,26877,22455,22710,28639,18 635,42057,34655,26259,25910,37658,37077,37525,34096,31933,37346,43486,25461,38151,17423,222 03,18415,26762,22600,26493,21296,19258,30553,17864,37927,28393,39209,20780,19881,23553,4136 2,37481,23379,40797,32788,39431,24419,43569,23799,41486,41840,24146,23200,23201,39845,36590, 19216,27902,31875,29372,32094,38046,33762,41046,22762,30827,29559,22676,34187,29824,30522,1 7119,36466,26936,38874,40534,40941,29252,29888,37633,42126,40988,42375,35616,20463,37831,26 693,23303,43432,39347,23401,26545,36932,20758,24334,24649,24492,31796,26804,34605,38936,206 24,17689,22405,25152,40212,35577,37750,30070,19230,26578,38203,36205,23488,18056,38240,3626 5,18337,21367,39068,22659,25897,32447,23652,20002,23981,41774,20223,20045,30190,30148,39405, 26013,29489,42809,19895,20798,28034,22152,29357,37025,25633,23333,18530,32506,42448,20721,2 4347,27685,36666,34966,20357,29902,32907,39098,38899,33468,32419,41456,42619,17720,22280,33 505,43384,34660,19055,26379,21464,24671,21997,30830,22628,34188,19182,31864,28219,37153,191 37,42760,39591,33606,25678,30331,26934,27621,28962,43099,24224,31492,23823,20279,25536,3707 9,35233,32600,33743,39339,43517,21571,28174,22106,23277,20979,36041,23497,33533,18066,23011, 39400,35315,39707,24053,30835,37497,26002,22076,27232,26853,27032,28135,29692,25952,23436,1 8170,21063,40707,35501,38344,38290,21755,30597,22173,20327,22850,27289,37215,43579,27076,21 808,32046,34440,23784,39825,30154,35293,31218,41717,33173,34016,18719,30106,19428,38776,366

42,39046,24420,36471,39356,38066,20903,32357,35515,32901,40862,25260,30334,37350,39517,3993
4,22602,38048,34203,39270,41236,37309,41554,34438,21596,29200,25182,17550,18460,39152,34672,
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4198,24805,38345,32784,18771,30487,39587,33218,38621,24581,29402,28787,35565,18817,17714,32
993,31849,19462,38502,26347,40869,23641,42939,33408,22788,22891,28697,39379,23899,21659,171
71,27397,19848,24506,28442,32037,17615,21174,21108,17347,24101,23010,35147,43378,35268,2067
0,29216,35605,27701,22674,35144,34271,26796,17137,17538,29442,41316,23316,24918,22838,38902,
20539,18168,43709,25759,34447,32720,26783,22708,19091,32532,23910,24868,39650,27489,34461,2
9632,29527,20881,39072,27200,21955,39688,29585,43665,37600,34351,40706,42309,33886,22007,23
982,42766,34571,18354,42205,36163,40462,38076,35226,27518,43279,33728,22824,18123,43108,265
56,37970,37113,22339,19899,22006,31380,37880,18511,38287,18776,18441,27915,31019,35134,4354
4,36859,33897,21934,34869,40229,19988,23773,41250,20453,23556,30329,31223,32835,28854,34541,
24703,26289,43061,17467,18332,27631,33908,24417,25288,33942,31667,37420,37482,43051,17490)

2016-08-22 16:19:14,632 [1] INFO DynamicLinks main - Rule test1 validated 775 links out of 992

2016-08-22 16:19:14,632 [1] INFO DynamicLinks main - 0% of rules have been executed

2016-08-22 16:19:14,635 [1] INFO DynamicLinks main - Out of 992 links to be reviewed, 775 have
been validated and 0 links have been ignored

2016-08-22 16:19:14,636 [1] INFO DynamicLinks main - 217 links are still to be reviewed