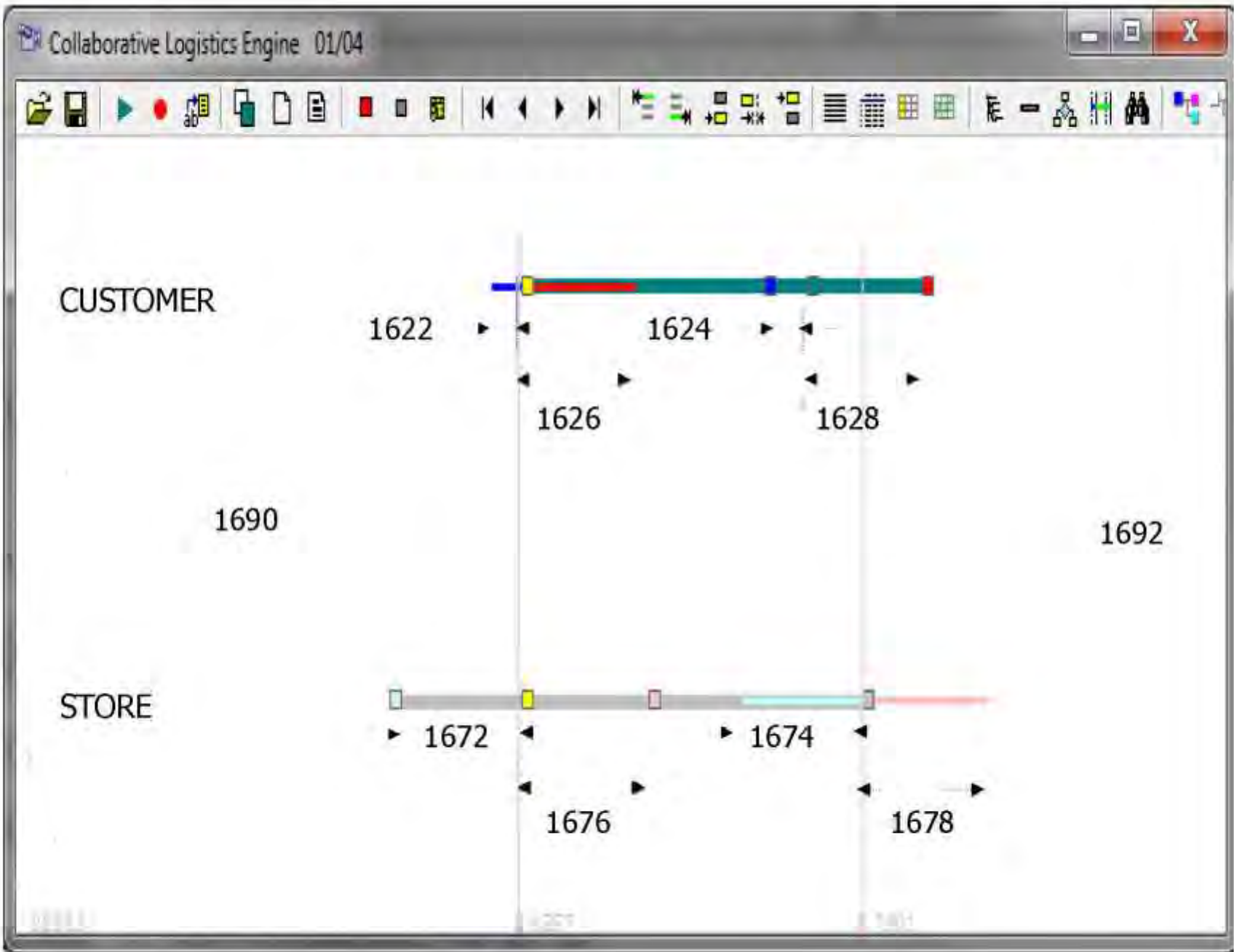
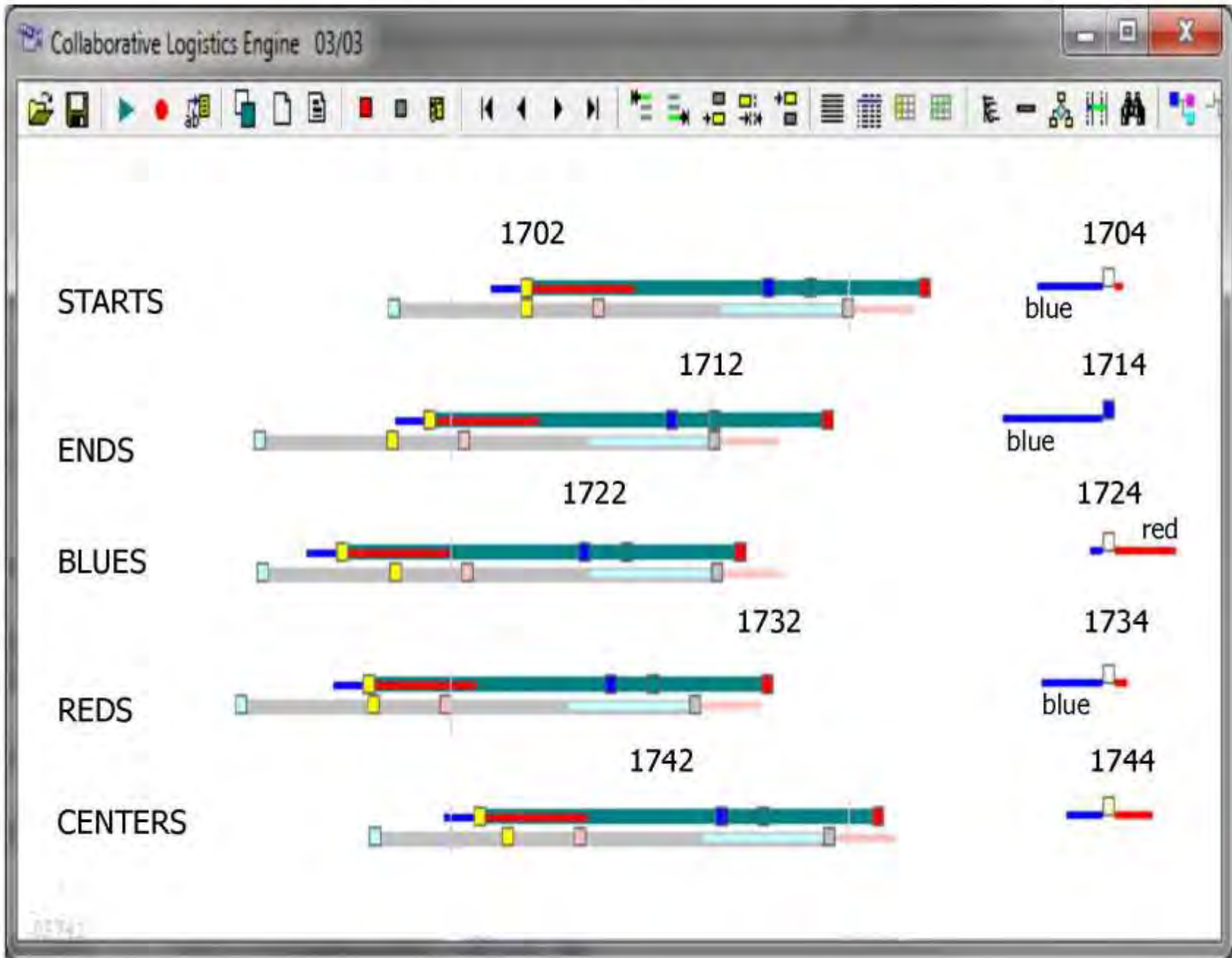
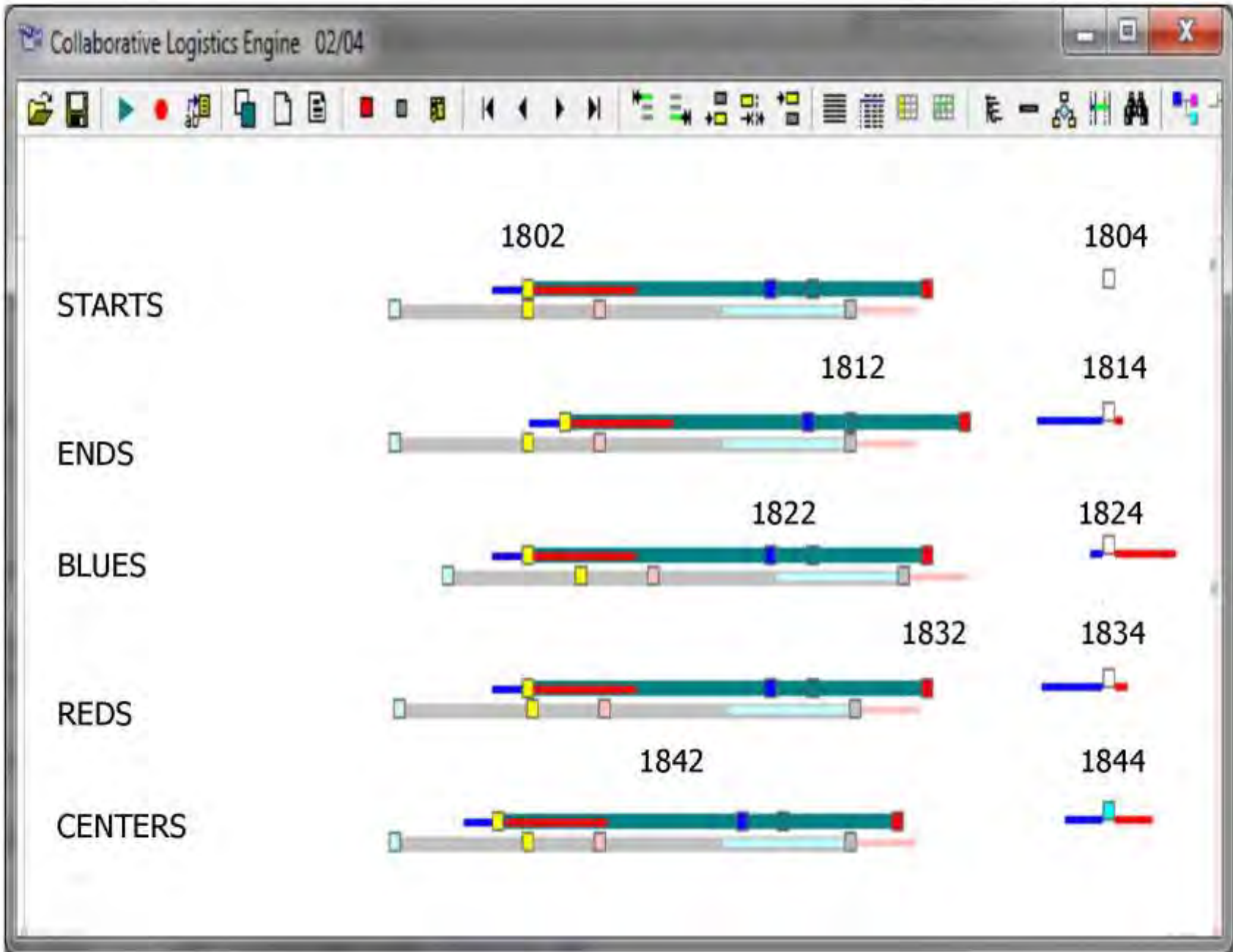


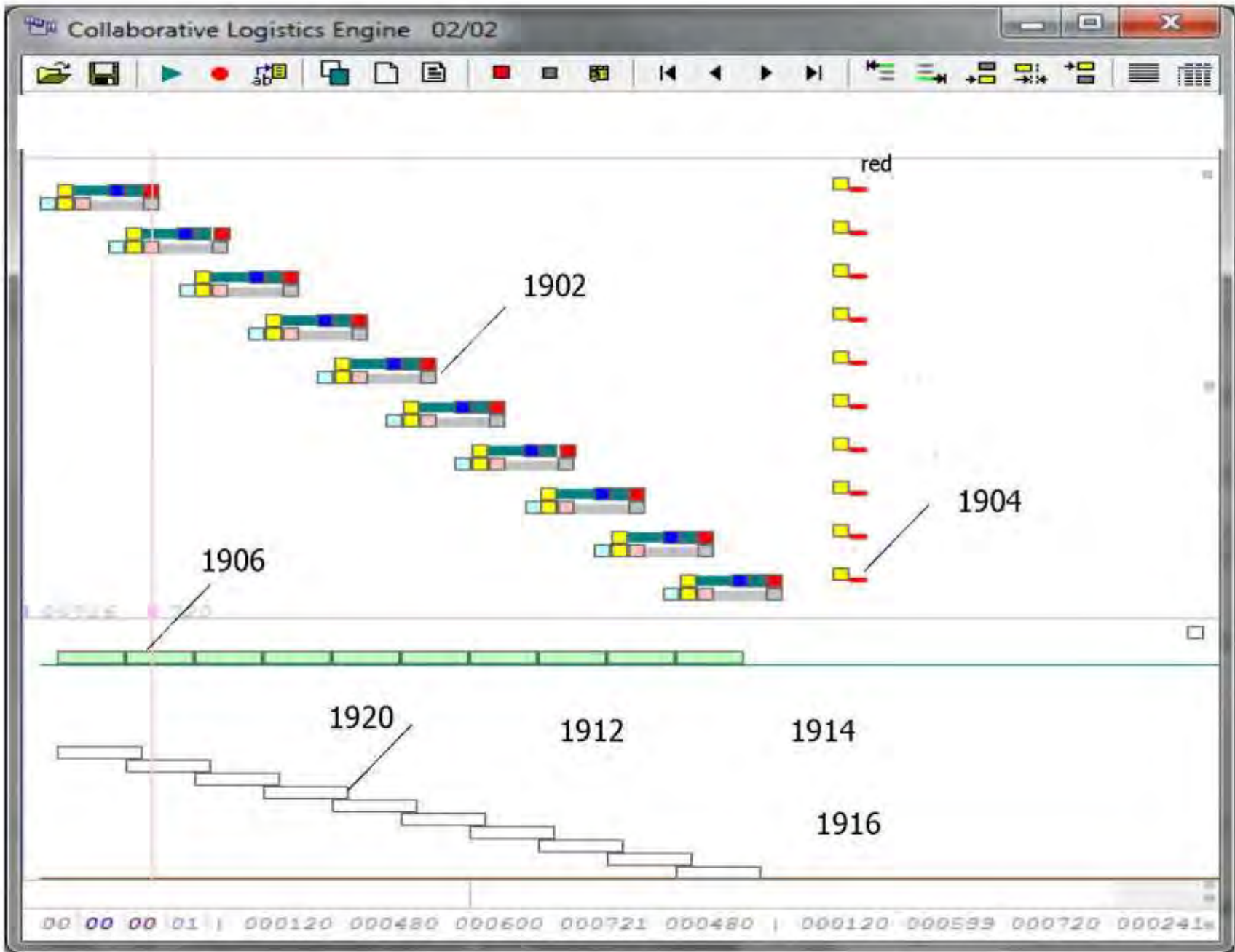
"Collaborative Logistics Control System"
daCosta et al.



"Collaborative Logistics Control System"
daCosta et al.

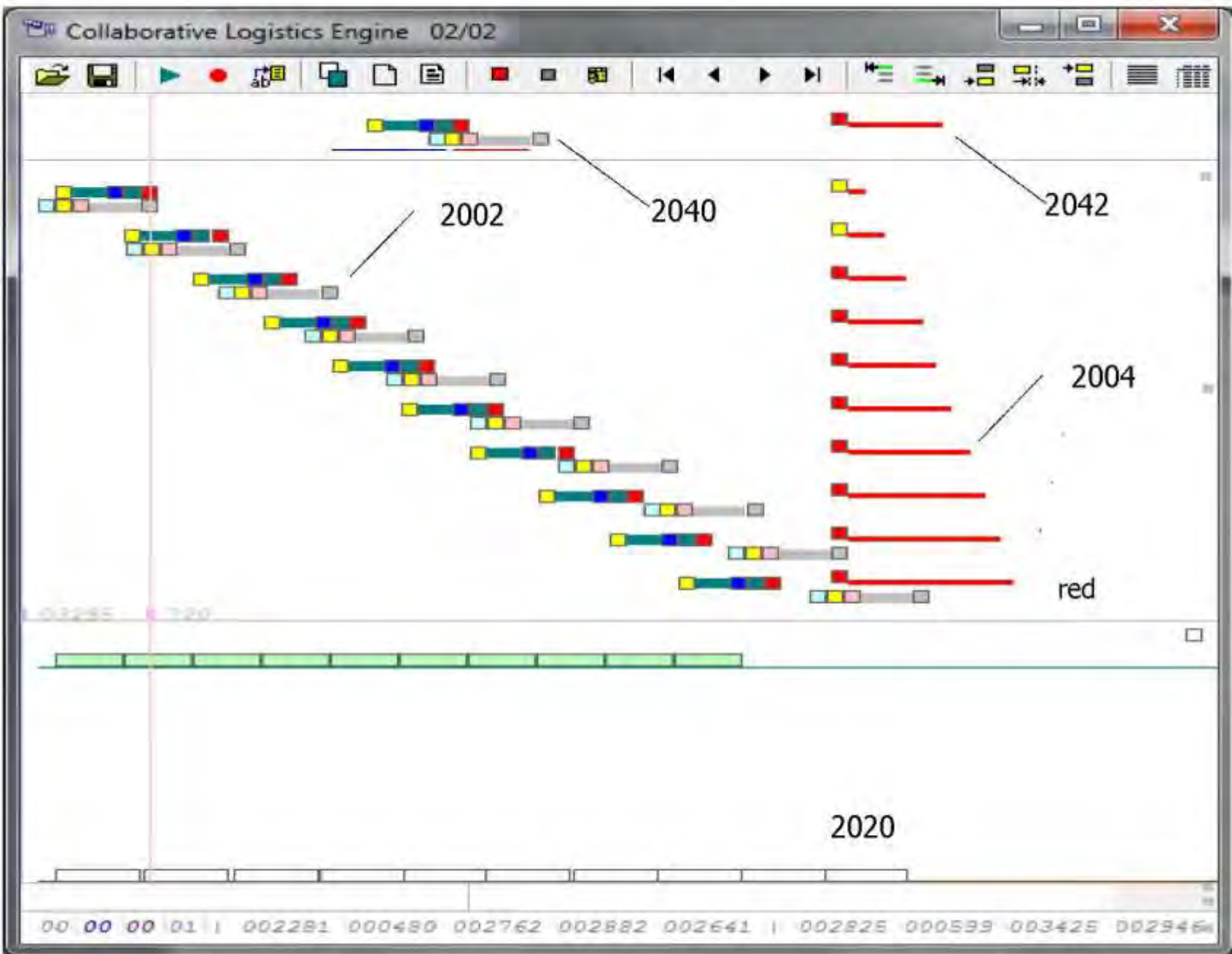






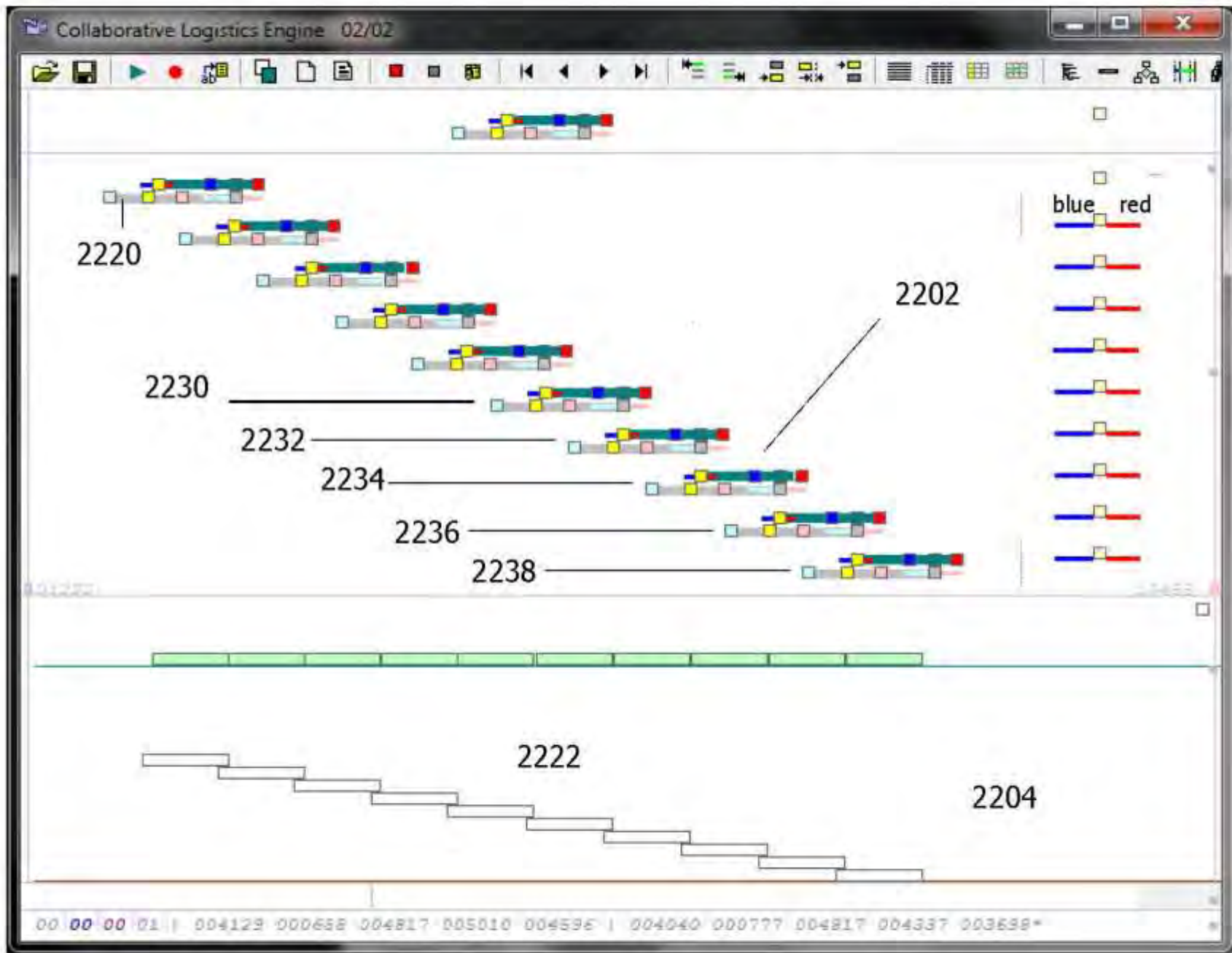
“Collaborative Logistics Control System”
daCosta et al.

1922





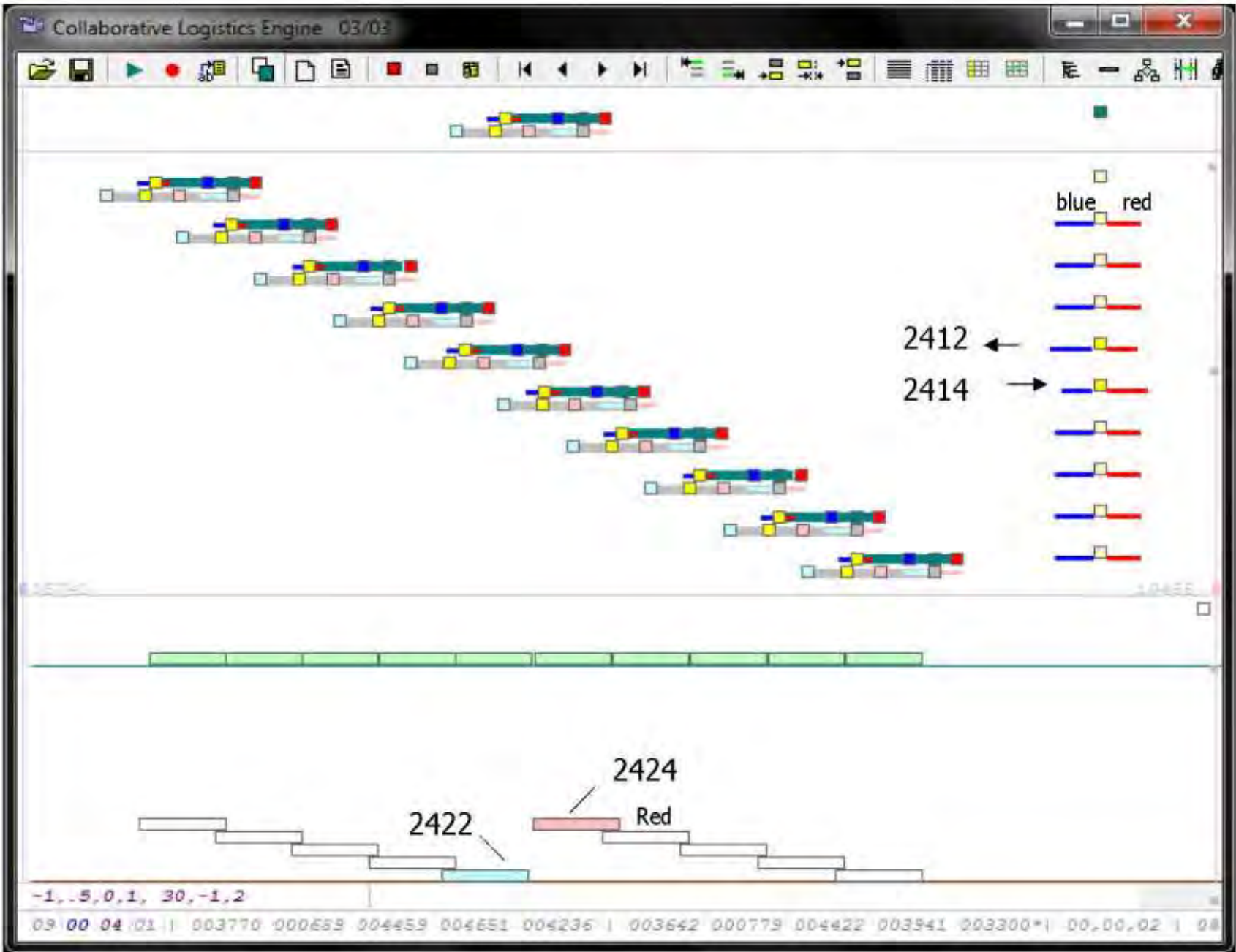
“Collaborative Logistics Control System”
daCosta et al.



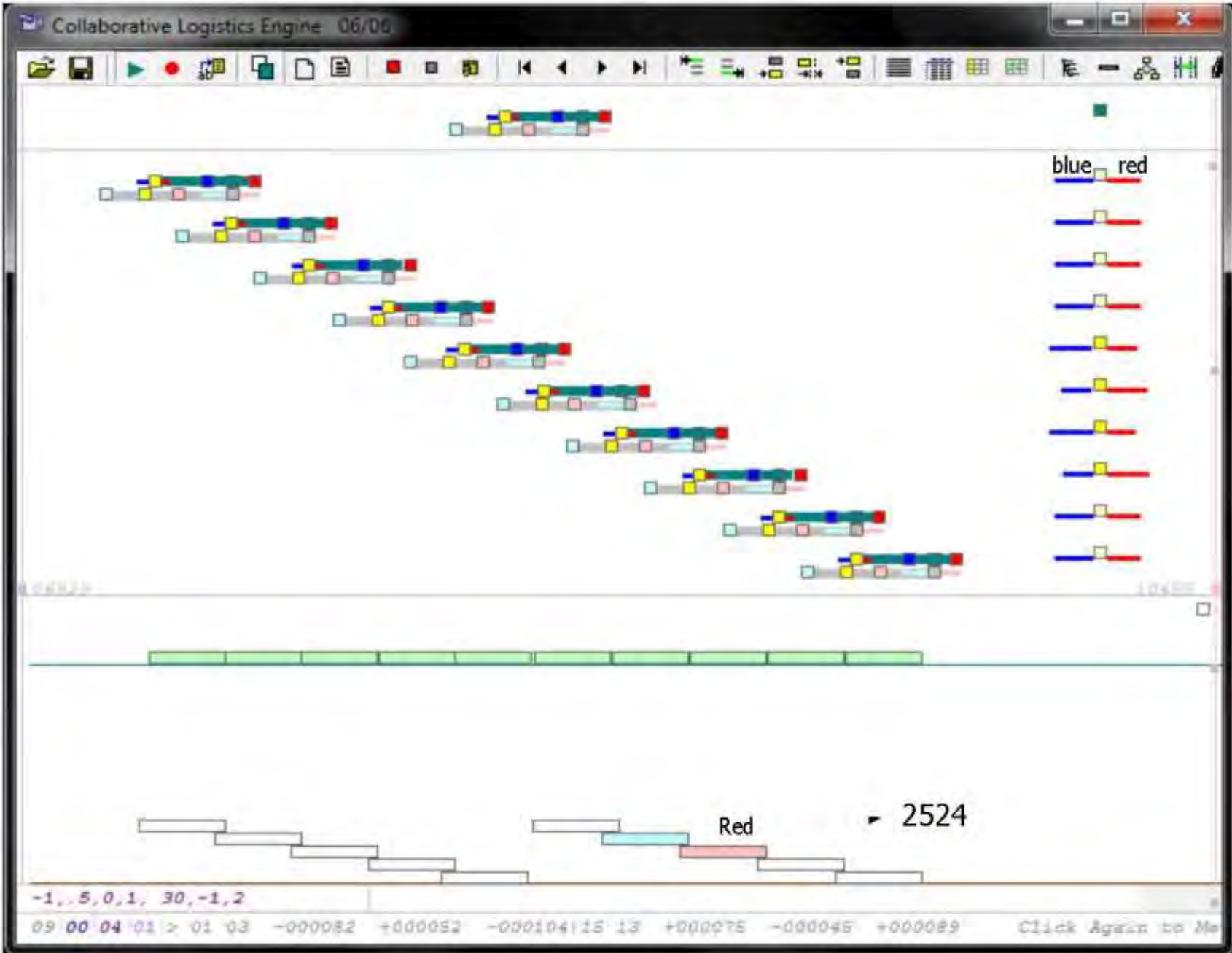
“Collaborative Logistics Control System”
daCosta et al.



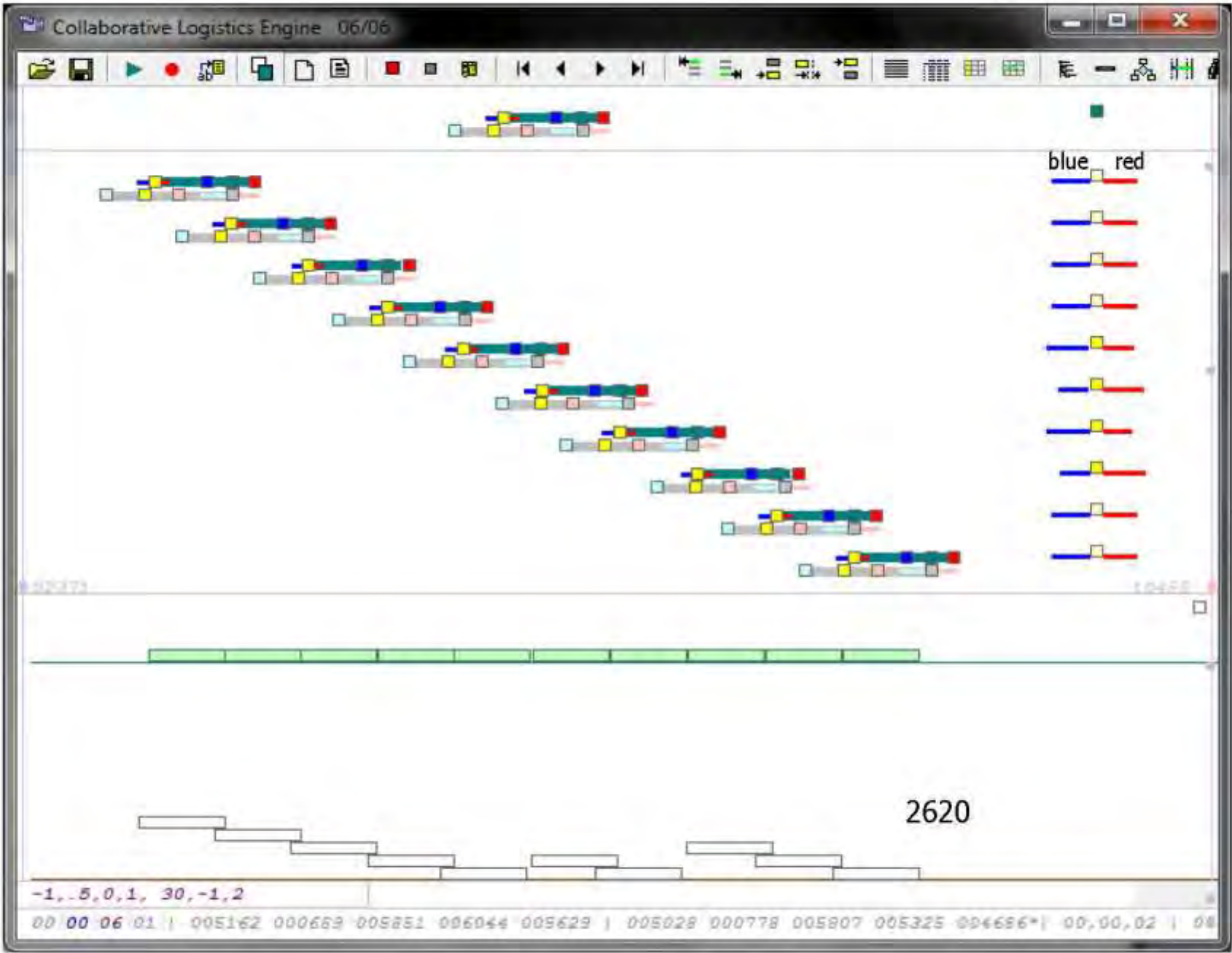
"Collaborative Logistics Control System"
daCosta et al.



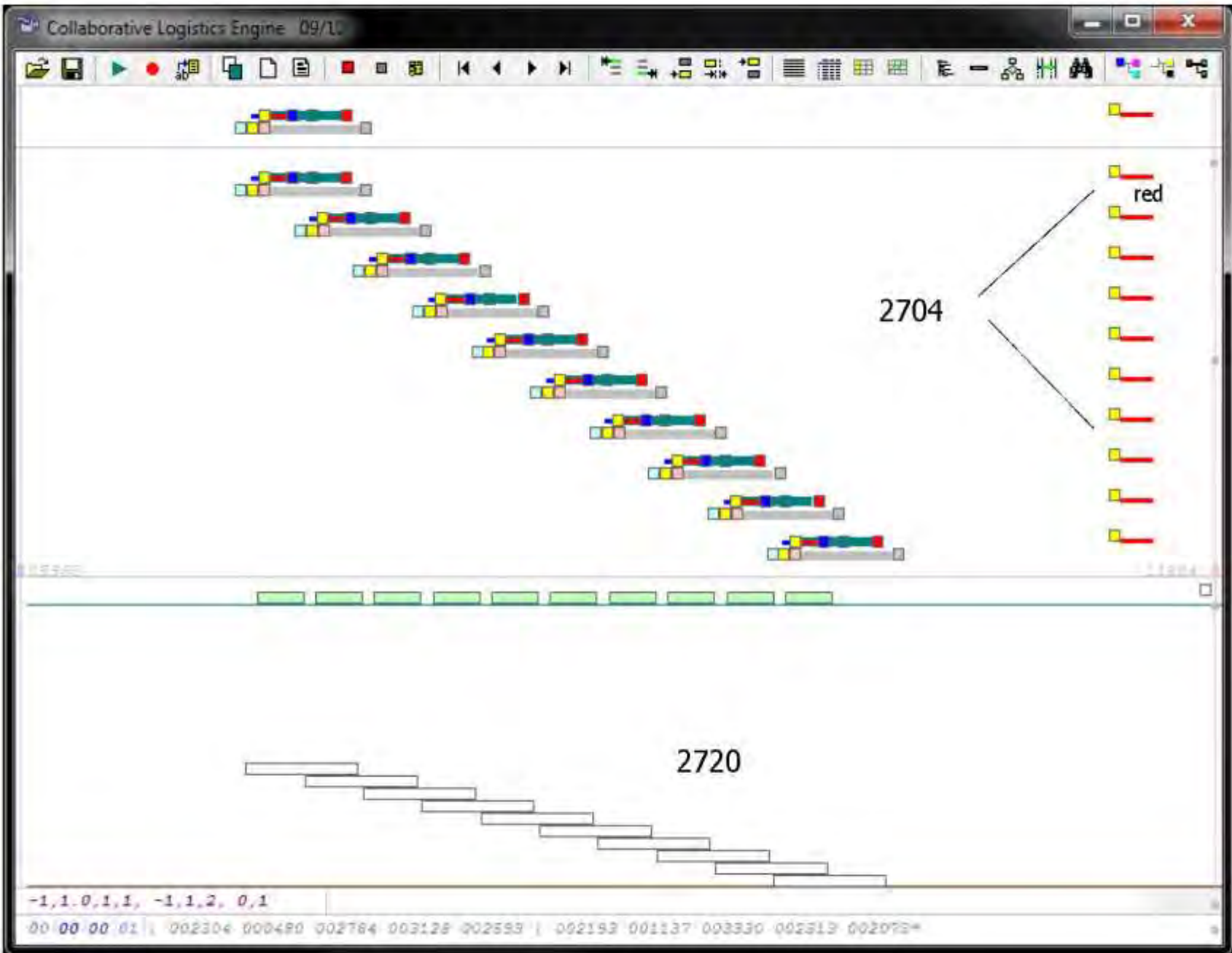
"Collaborative Logistics Control System"
daCosta et al.



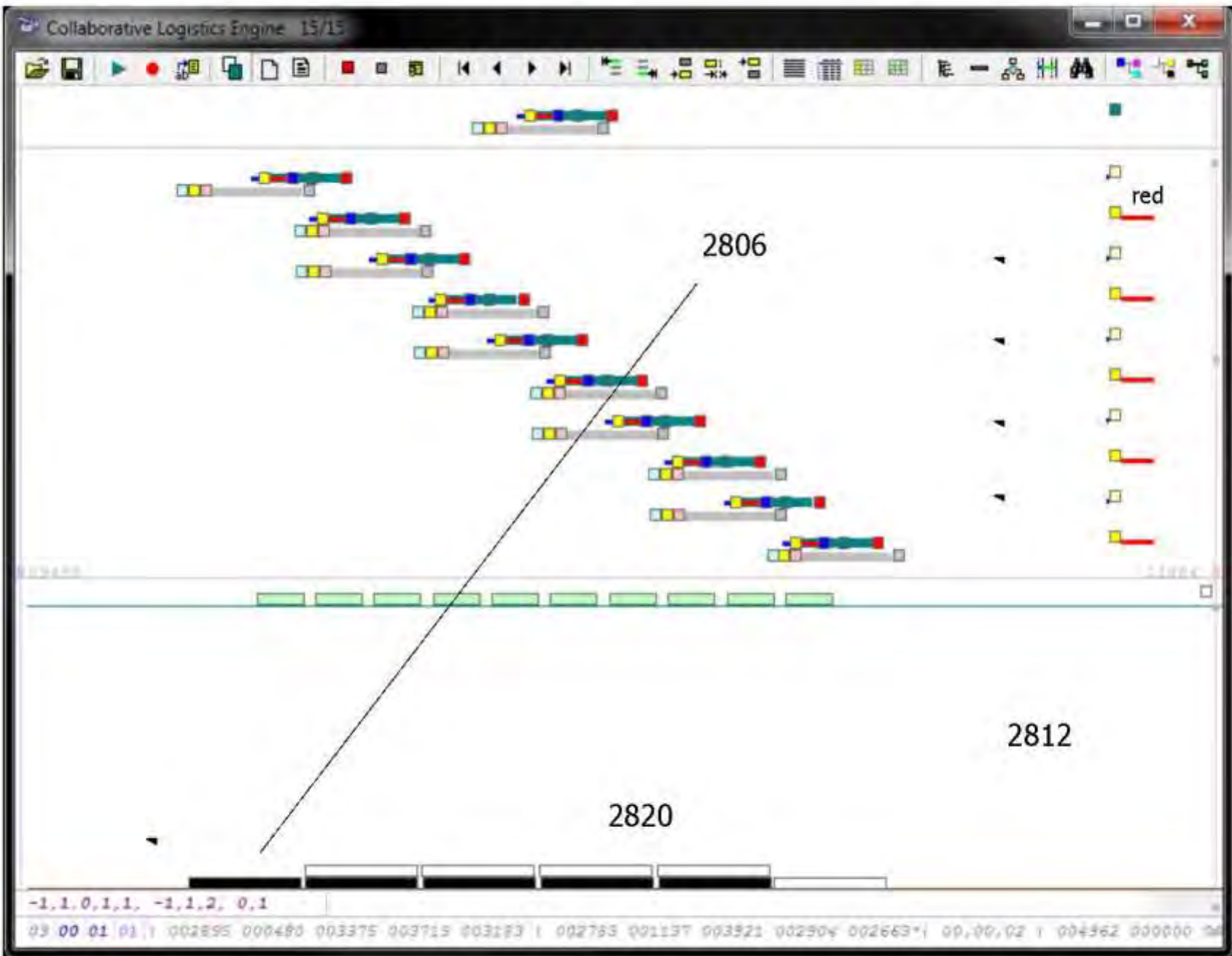
"Collaborative Logistics Control System"
daCosta et al.



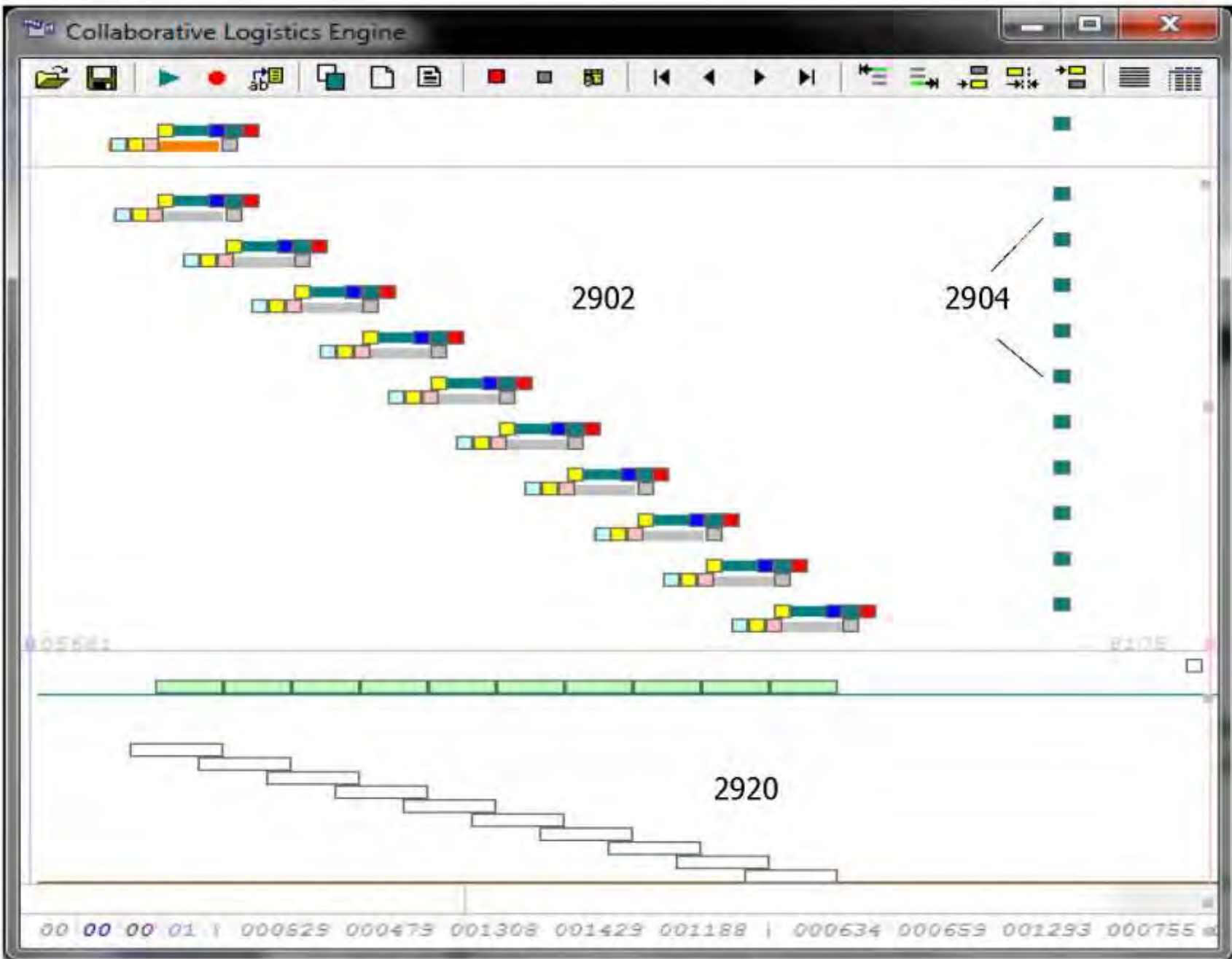
"Collaborative Logistics Control System"
daCosta et al.



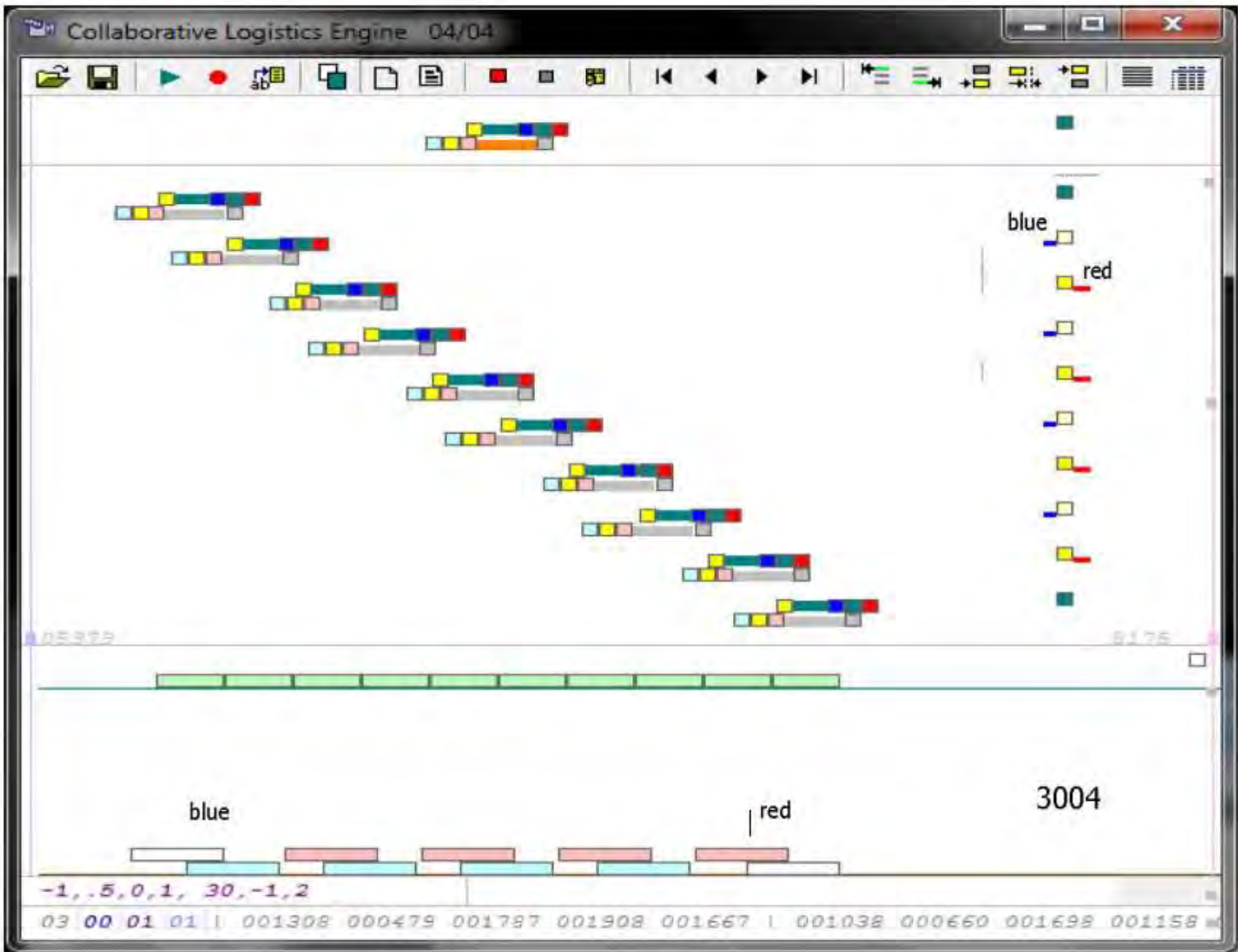
“Collaborative Logistics Control System”
 daCosta et al.



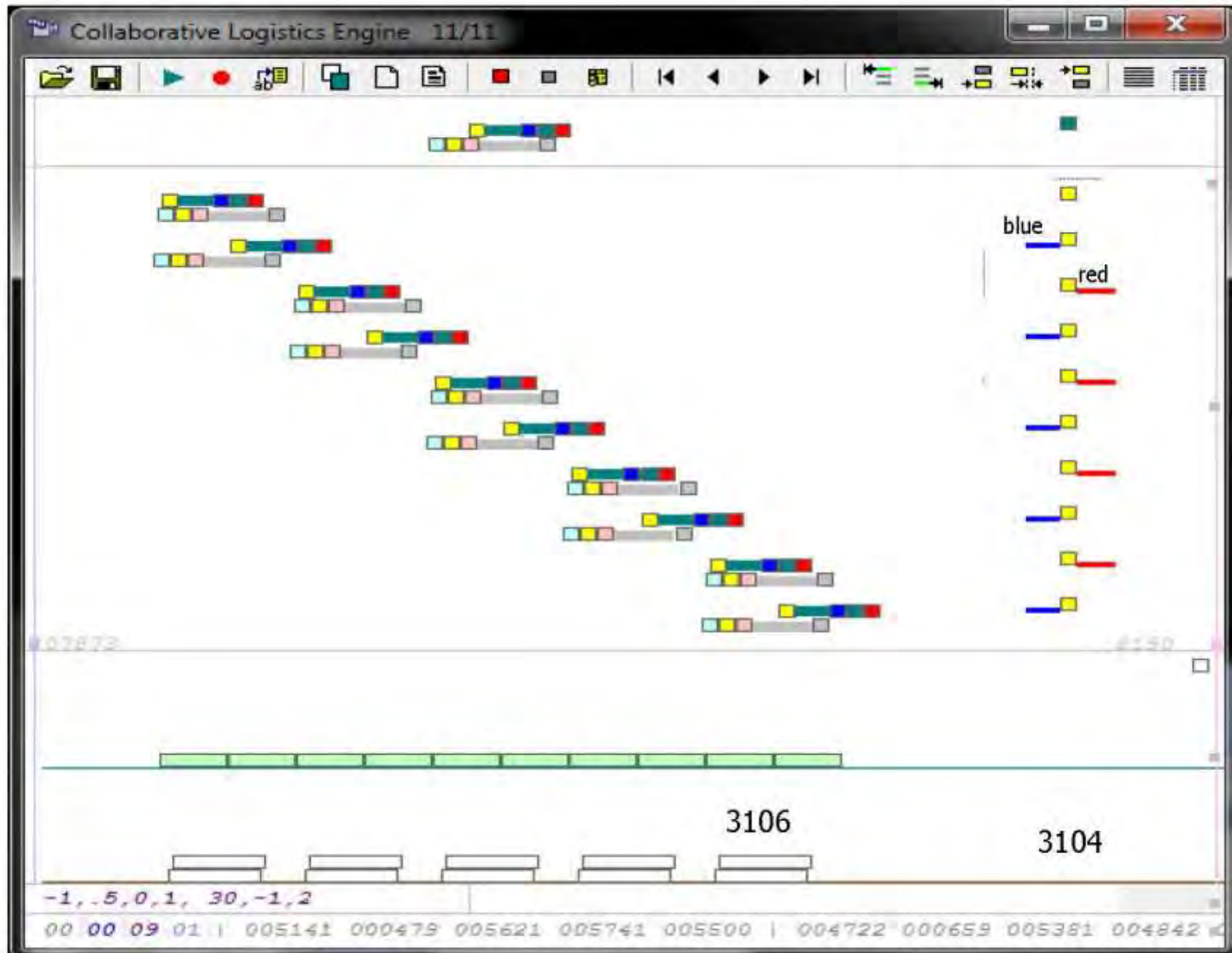
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daCosta et al.



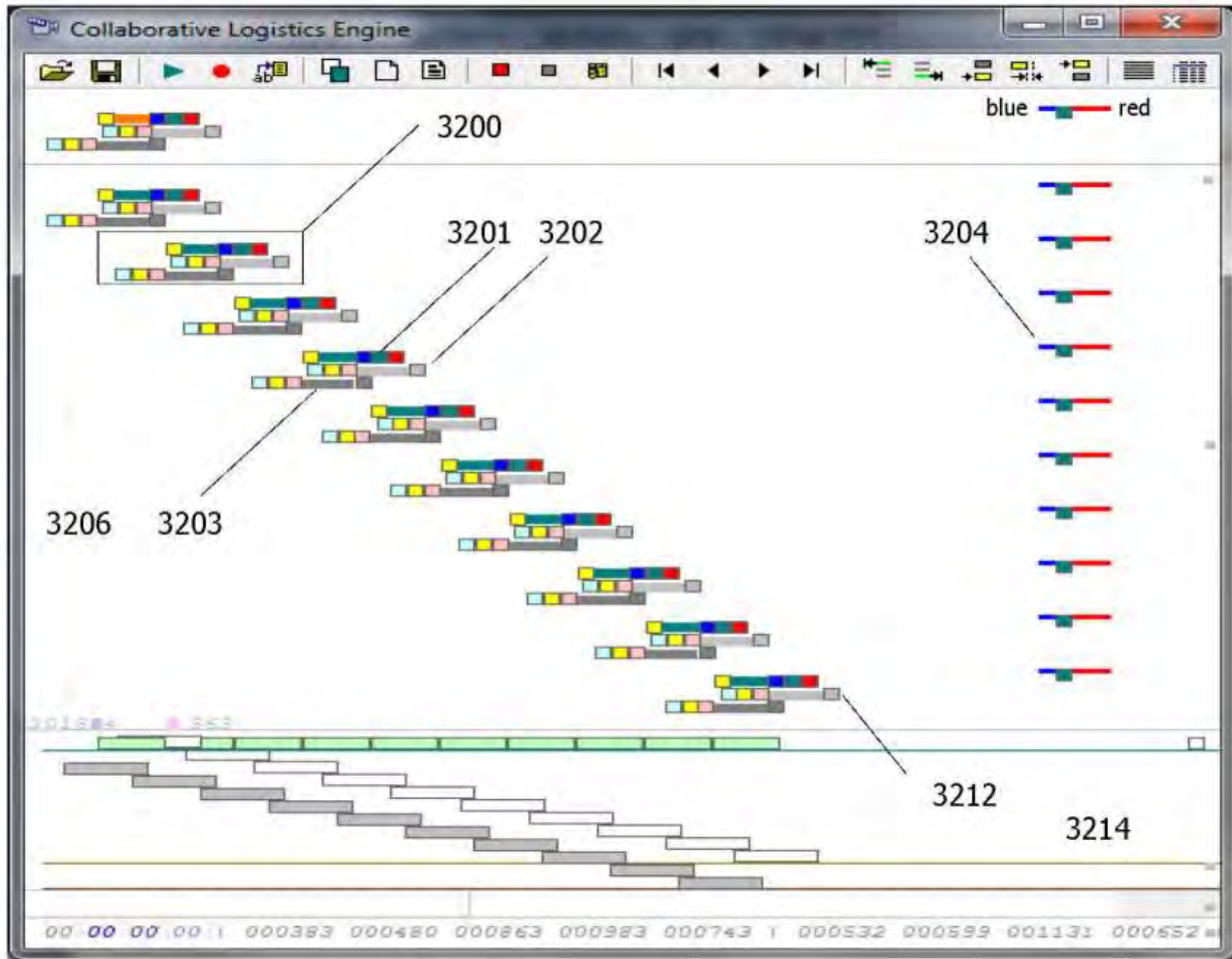
"Collaborative Logistics Control System"
daCosta et al.



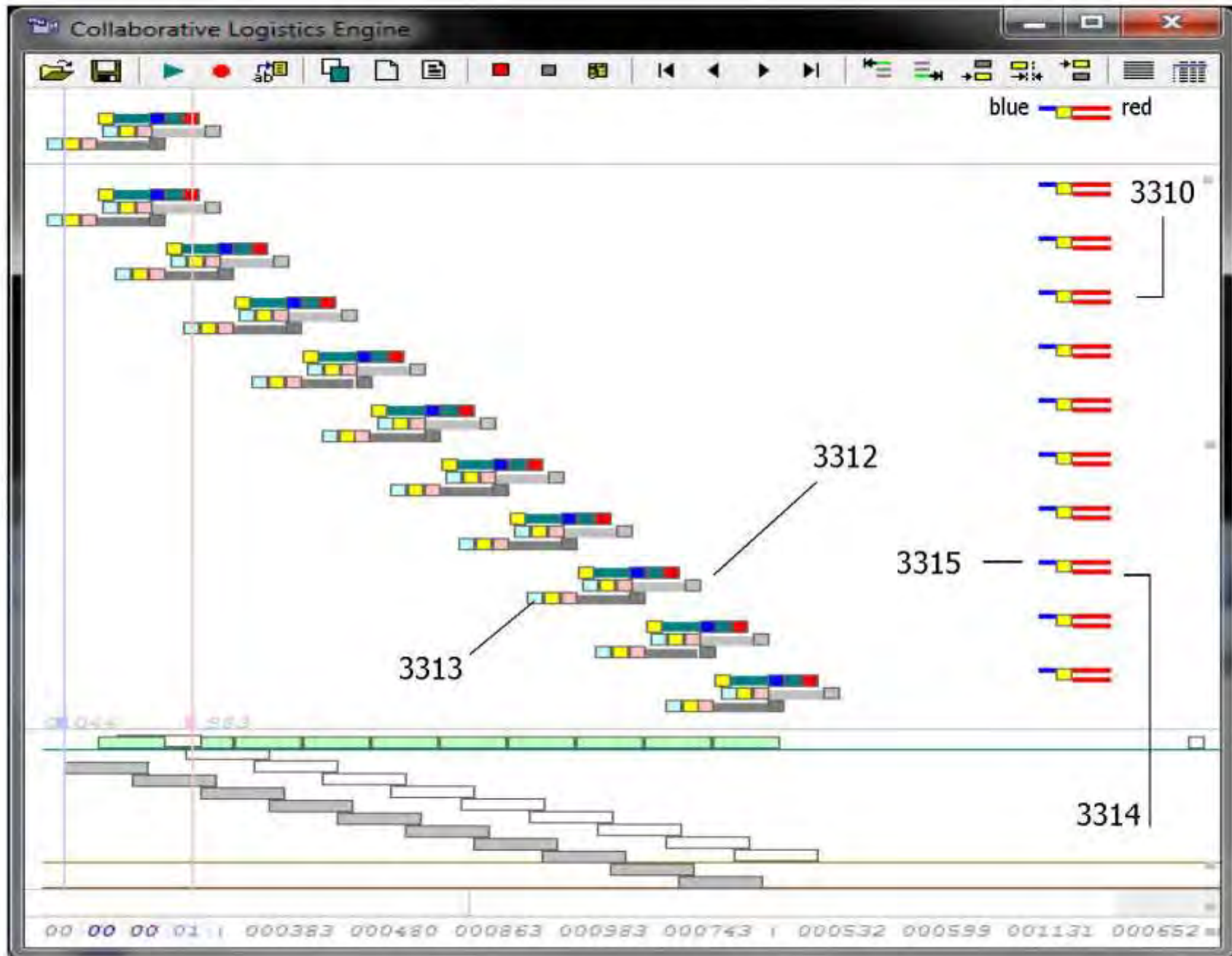
"Collaborative Logistics Control System"
daCosta et al.



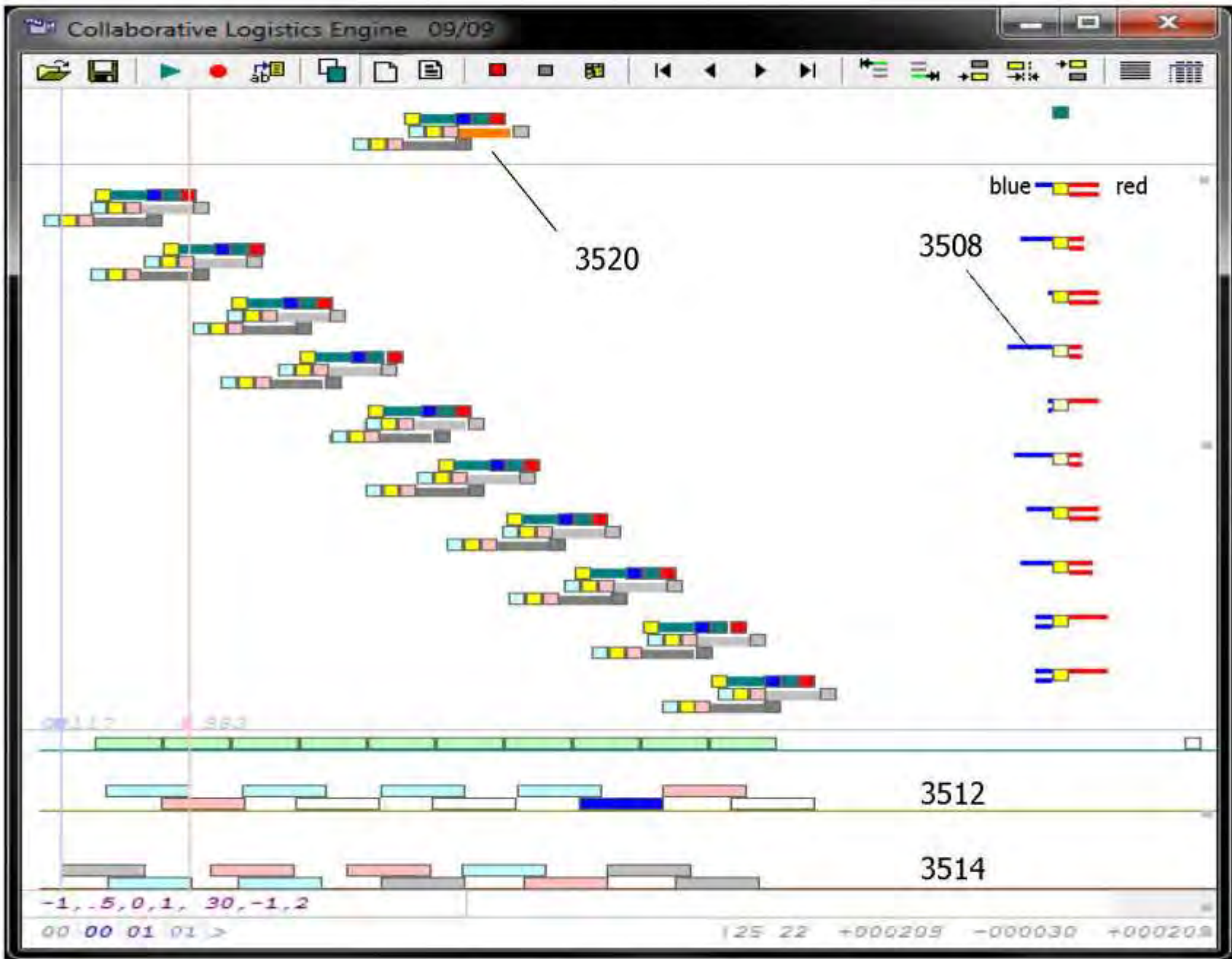
"Collaborative Logistics Control System"
daCosta et al.



“Collaborative Logistics Control System”
daCosta et al.



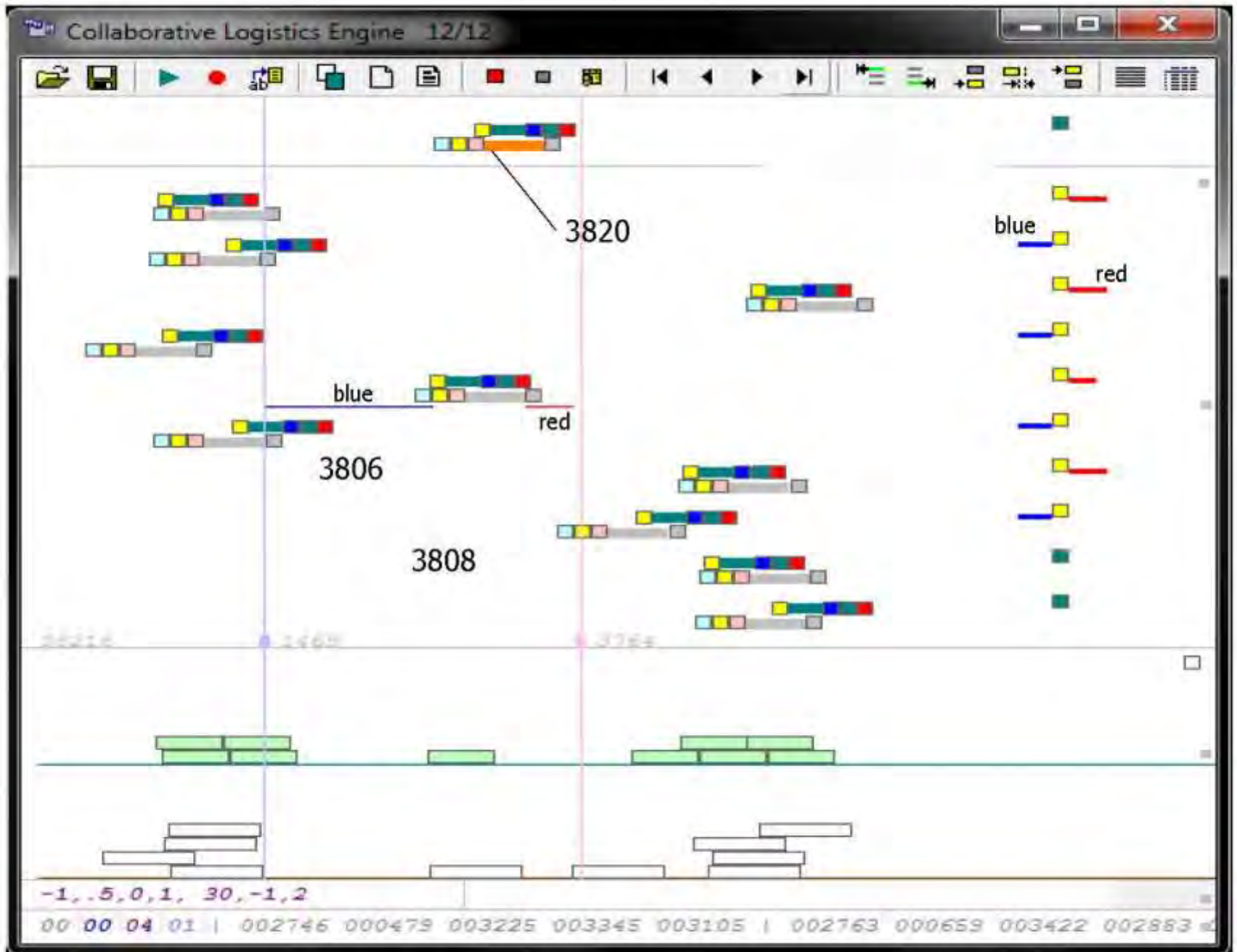
“Collaborative Logistics Control System”
daCosta et al.



"Collaborative Logistics Control System"
daCosta et al.



"Collaborative Logistics Control System"
daCosta et al.



Collaborative Logistics Engine 18/11

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Dynamic Watch List: Row:09 [9, 5, 0, 1, 30, -1, 2]

09	06	02	02	BR	+	+	HP	-000480	+000960	YIS	-000825	+000135	+000960	IIM	-000135	+000825	+000960	09	09	{011}
09	12	00	01	BR	+	+	HP	-000480	+000480	MS	-000345	+000615	+000960	IIM	-000615	+000345	+000960	09	09	{011}
09			01	BR	+	+	MP	-000345	+000615											
09								-000345	+000135											
09	06	y								MC	+000098	-000068	+000135							
06	09	G									-000098	+000068	-000135							
09	06	G									+000098	-000068	+000135							

00			t	t	t	-02	-02	{001}			
03			t	t	t	-02	-02	{001}			
06						-000135	+000825	+000960	09	09	{011}
09						-000345	+000135	+000480	12	06	{021}
12						-000615	+000345	+000960	09	09	{011}
15			t	t	t	-02	-02	{001}			
18			t	t	t	-02	-02	{001}			
21			t	t	t	-02	-02	{001}			
24			+	+	+	-02	-02	{001}			
27			+	+	+	-02	-02	{001}			

9, 5, 0, 1, 30, -1, 2

00 00 02 01 | 001343 000480 001623 001343 001703 | 001268 000539 001662 001383 001148 | 001150 000599 001750 001270 001030*

4004

4006

4008

Dynamic Watch List. Row: 09 [9,5,0,1, 30,-1,2]

09	06	02	02	BR	+	+	HF	-000480	+000960	MS	-000825	+000135	+000960	HM	-000135	+000825	+000960	09	09	[01]
09	12	00	01	BR	+	+	HF	-000480	+000480	MS	-000345	+000615	+000960	HM	-000615	+000345	+000960	09	09	[01]
09		01		BR	+	+	MF	-000345	+000615											
09								-000345	+000135											4010
09	06	Y								MC	+000098	-000068	+000135							4020
06	09	G								<=	-000098	+000068	-000135							
09	06	G								=>	+000098	-000068	+000135							4022
00					+	+					-02	-02	[00]							
03					+	+					-02	-02	[00]							
06								-000135	+000825	+000960								09	09	[01]
09								-000345	+000135	+000480								12	06	[02]
12								-000615	+000345	+000960								09	09	[01]
15					+	+					-02	-02	[00]							
18					+	+					-02	-02	[00]							
21					+	+					-02	-02	[00]							
24					+	+					-02	-02	[00]							
27					+	+					-02	-02	[00]							

Collaborative Logistics Engine

[Cm]:YPREVIEW

```

< 08 05 +000000 +000000 +000421|02 05 +000270 -000240 +000480
< 08 05 +000000 +000000 +000421|02 05 +000270 -000240 +000480
> 23 26 +000225 -000195 +000391|23 26 +000225 -000195 +000391
> 14 17 +000091 -000061 +000122|14 17 +000091 -000061 +000122
> 16 19 +000226 -000196 +000391|16 19 +000226 -000196 +000391
> 10 13 +000196 -000166 +000331|10 13 +000196 -000166 +000331
>
> 25 22 +000209 -000090 +000209|26L|22LR|25L|16LR|19R|19L|10LR|13R|13L|04LR|07R|07L*
> 01 04 -000090 +000060 -000115|04 01 +000090 -000060 +000115|26L|22LR|25L|16LR|19R|19L|10LR|13R|13L|07R|01R*
> 01 04 -000090 +000060 -000115|22 19 +000090 -000060 +000115|22L|16LR|19L|10LR|13R|13L|07R|01R*
> 02 05 -000090 +000060 -000115|08 05 +000090 -000060 +000115|29L|23LR|26L|20R|20L|14LR|17L|11R|02R*
> 02 05 -000090 +000060 -000115|14 11 +000090 -000060 +000115|29L|23LR|26L|20R|02R*
> 02 05 -000090 +000060 -000115|23 20 +000090 -000060 +000115|02R*
> 01 04 -000090 +000060 -000115|10 07 +000090 -000060 +000115|22L|16LR|19L|13R|01R*
> 01 04 -000090 +000060 -000115|15 13 +000090 -000060 +000115|01R*
> 17 19 +000270 -000240 +000475|17 19 +000270 -000240 +000475
> 13 15 +000270 -000240 +000475|13 15 +000270 -000240 +000475
> 09 11 +000270 -000240 +000475|09 11 +000270 -000240 +000475
> 17 15 +000000 +000000 +000475|05 07 +000270 -000240 +000475
> 03 01 -000509 +000000 +000475|01 03 +000270 -000240 +000475
> 01 03 -000120 +000090 -000180|05 03 +000120 -000090 +000180|17L|19L|13LR|15R|15L|09LR|11R|11L|07R|01R*
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> 01 03 -000120 +000090 -000180|13 11 +000120 -000090 +000180|17L|19L|15R|01R*
> 01 03 -000120 +000090 -000180|17 15 +000120 -000090 +000180|01R*

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4102

01 CASLEY-S

[Cm]:YPREVIEW

```
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< 08 05 +000000 +000000 +000421|02 05 +000270 -000240 +000480
> 23 26 +000225 -000195 +000391|23 26 +000225 -000195 +000391
> 14 17 +000091 -000061 +000122|14 17 +000091 -000061 +000122
> 16 19 +000226 -000196 +000391|16 19 +000226 -000196 +000391
> 19 13 +000196 -000166 +000391|19 13 +000196 -000166 +000391
> _____|25 12 +000209 -000030 +000209|28L|22LR|25L|16LR|19R|19L|10LR|13R|13L|04LR|07R|07L*
> _____|25 11 +000090 -000060 +000119|25 11 +000090 -000060 +000119|28L|22LR|25L|16LR|19R|19L|10LR|13R|13L|07R|01R*
> 01 04 -000090 +000060 -000119|22 19 +000090 -000060 +000119|22L|16LR|19L|10LR|13R|13L|07R|01R*
> 02 05 -000090 +000060 -000119|08 05 +000090 -000060 +000119|29L|23LR|26L|20R|20L|14LR|17L|11R|02R*
> 02 05 -000090 +000060 -000119|14 11 +000090 -000060 +000119|29L|23LR|26L|20R|02R*
> 02 05 -000090 +000060 -000119|23 20 +000090 -000060 +000119|02R*
> 01 04 -000090 +000060 -000119|10 07 +000090 -000060 +000119|22L|16LR|19L|13R|01R*
> 01 04 -000090 +000060 -000119|16 13 +000090 -000060 +000119|01R*
> 17 19 +000270 -000240 +000479|17 19 +000270 -000240 +000479
> 13 15 +000270 -000240 +000479|13 15 +000270 -000240 +000479
> 09 11 +000270 -000240 +000479|09 11 +000270 -000240 +000479
> 17 15 +000000 +000000 +000479|05 07 +000270 -000240 +000479
> 03 01 -000509 +000000 +000479|01 03 +000270 -000240 +000479
> 01 03 -000120 +000090 -000180|05 03 +000120 -000090 +000180||17L|19L|13LR|15R|15L|09LR|11R|11L|07R|01R*
> 01 03 -000120 +000090 -000180|09 07 +000120 -000090 +000180||17L|19L|13LR|15R|15L|11R|01R*
> 01 03 -000120 +000090 -000180|13 11 +000120 -000090 +000180||17L|19L|15R|01R*
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4204

4202

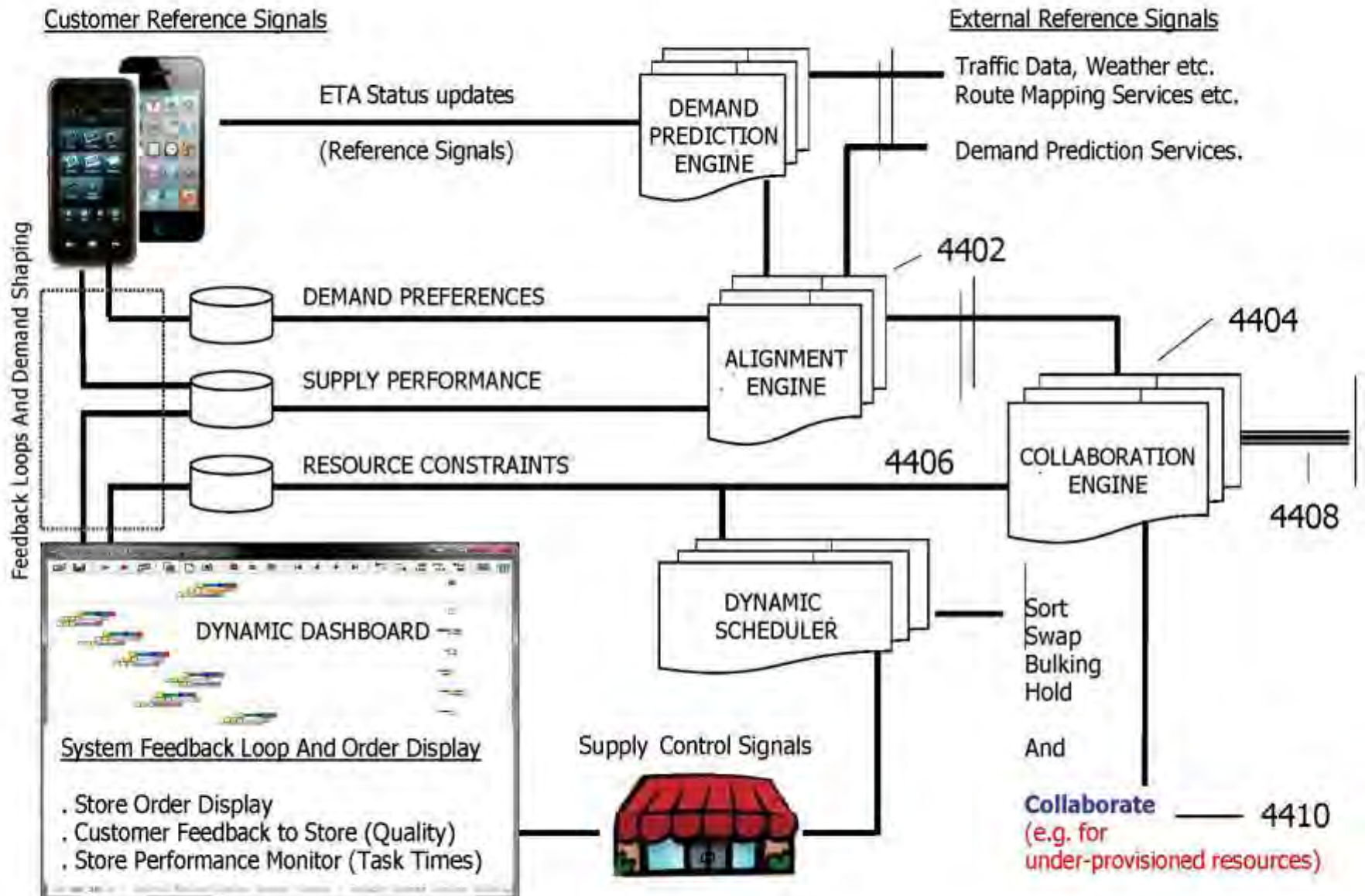
Collaborative Logistics Engine 0.1.0

4302

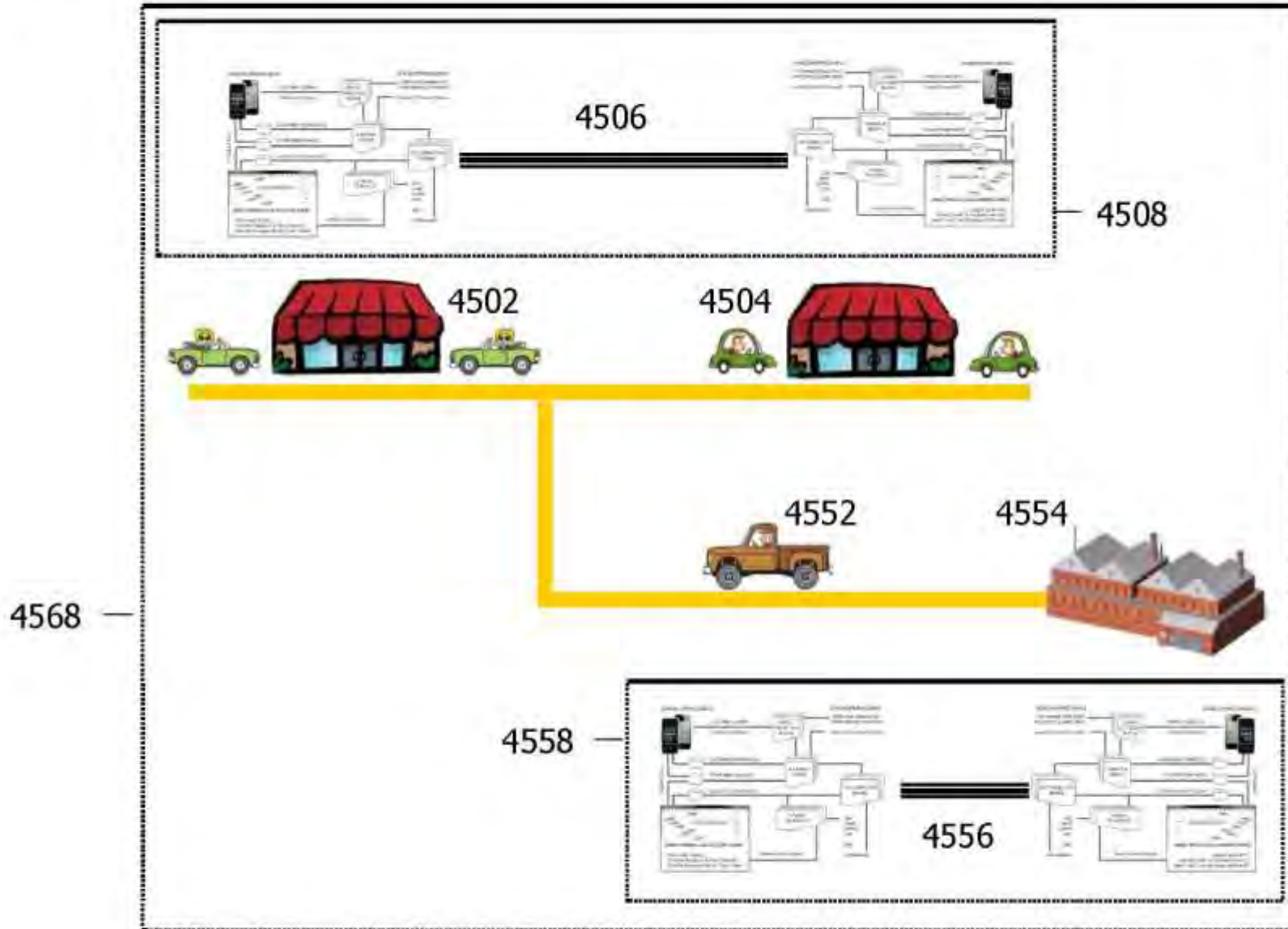
4312

[St]:EDIT

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03,00,03,002358,000480,002838,002958,002718,002239,000599,002838,002359,002118,002239,000599,002838,002359,002118*  
06,00,03,001081,000480,001561,001681,001440,000796,000764,001561,000917,000676,000961,000599,001561,001082,000841*  
09,00,03,002611,000480,003091,003211,002970,002027,001064,003091,002147,001907,002491,000599,003091,002611,002371*  
12,00,03,001381,000705,002086,002206,001965,001022,001064,002086,001142,000302,000877,001003,001980,001188,000857*  
15,00,03,002296,000705,003001,003257,002881,001937,001064,003001,002058,001817,001998,001003,003001,002118,001878*  
18,00,03,001743,000705,002447,002701,002327,001384,001064,002447,001504,001263,001444,001003,002447,001865,001324*  
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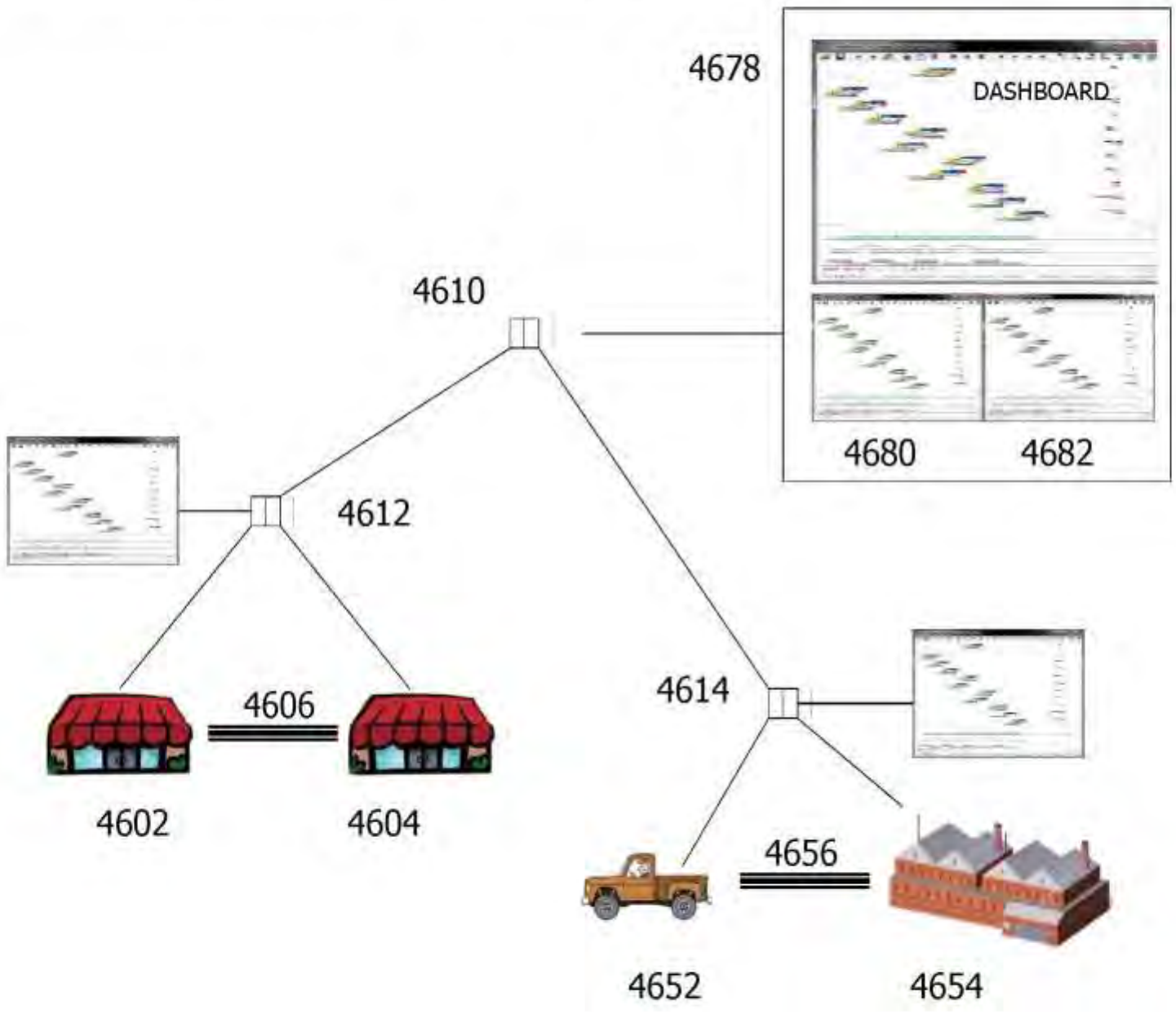



Distributed/Decentralized Collaborative Eco System



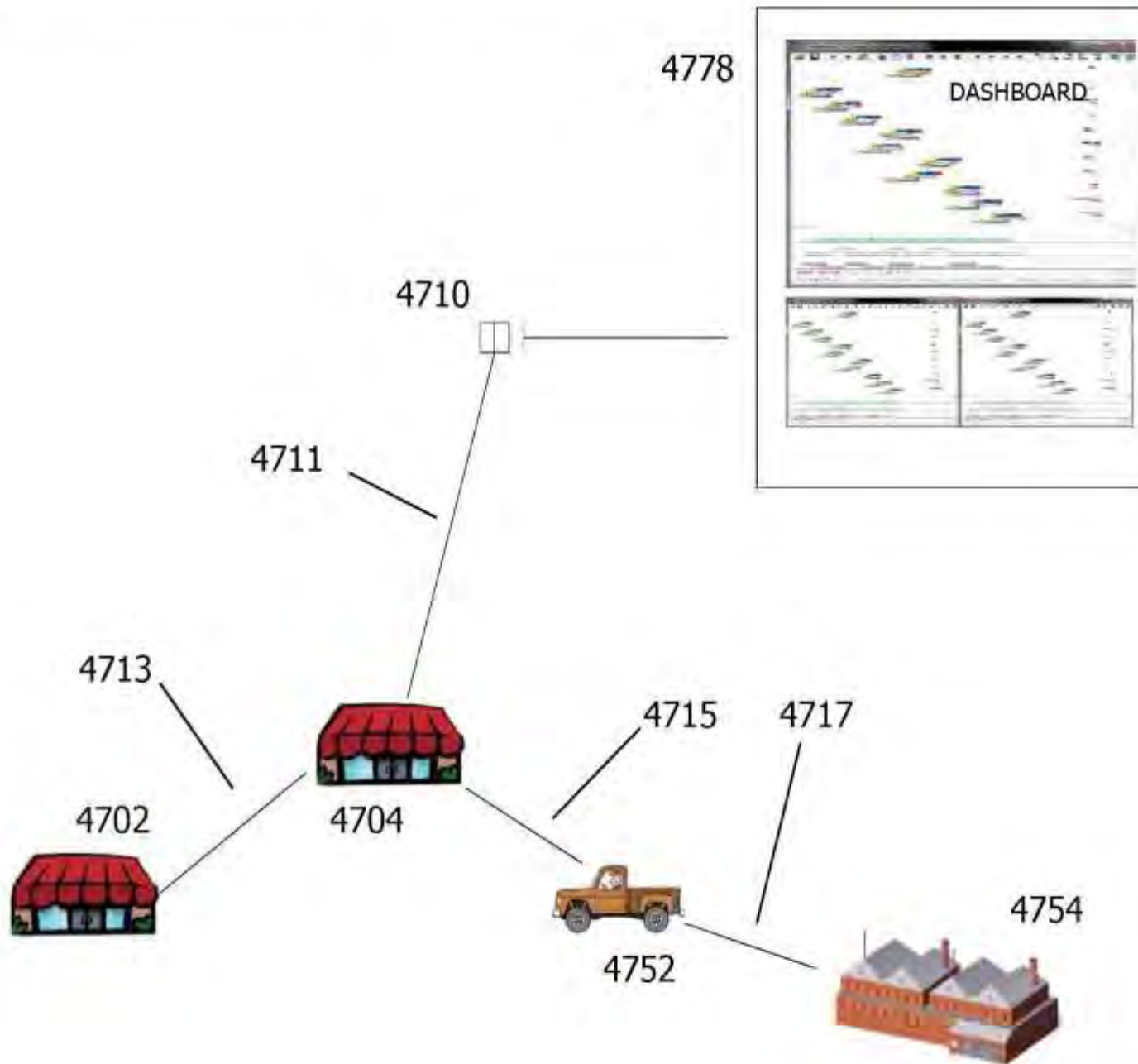
“Collaborative Logistics Control System”
daCosta et al.

Distributed Hierarchical Control System Network. (Tree Topology)

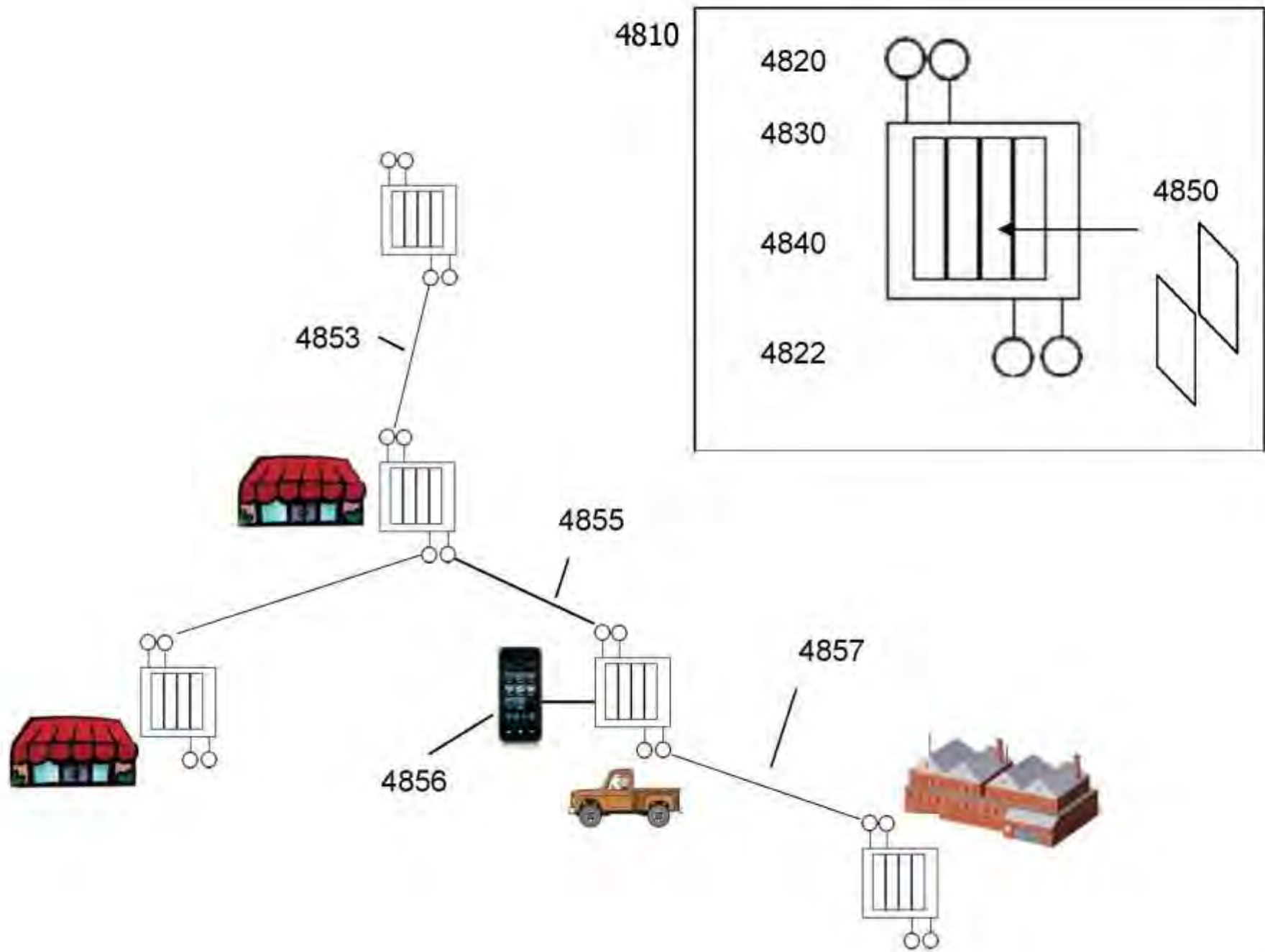


"Collaborative Logistics Control System"
daCosta et al.

Distributed Hierarchical Control System Network. (Tree Topology)



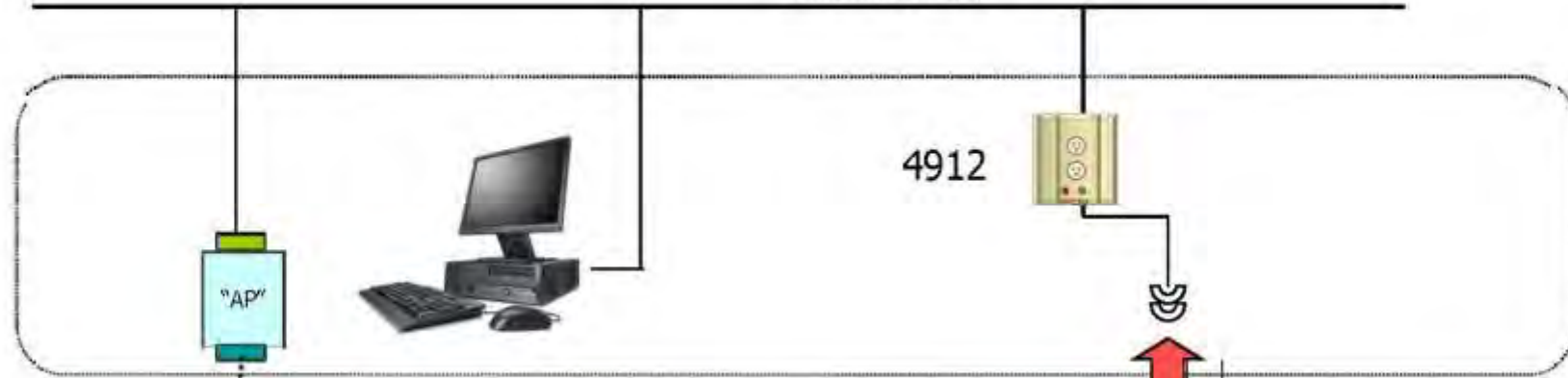
"Collaborative Logistics Control System"
daCosta et al.



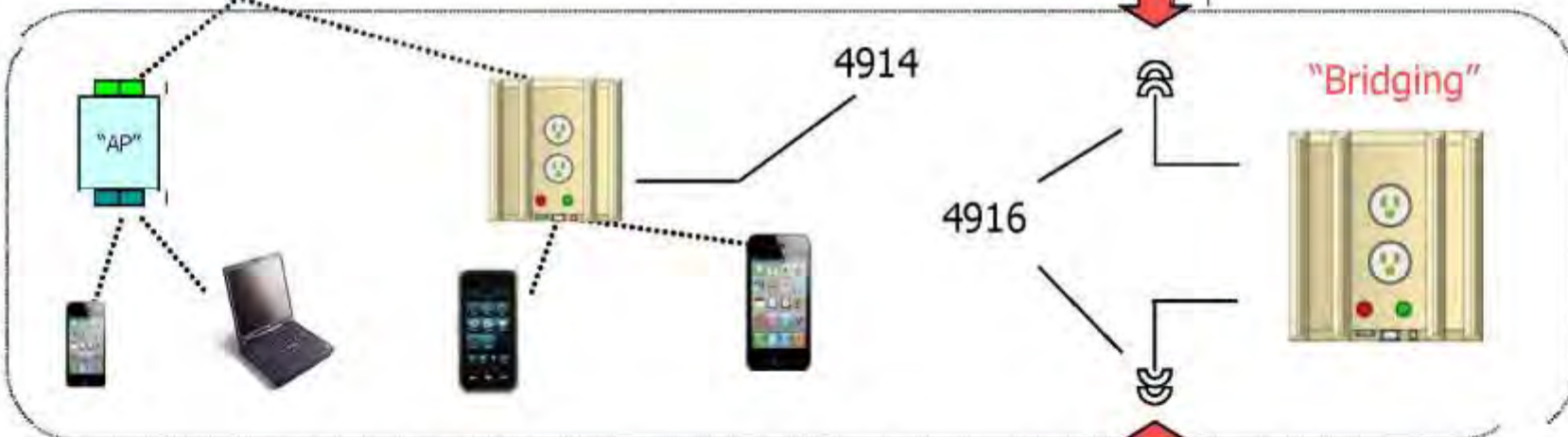


To Ethernet link

"WIRE"



"WIFI"

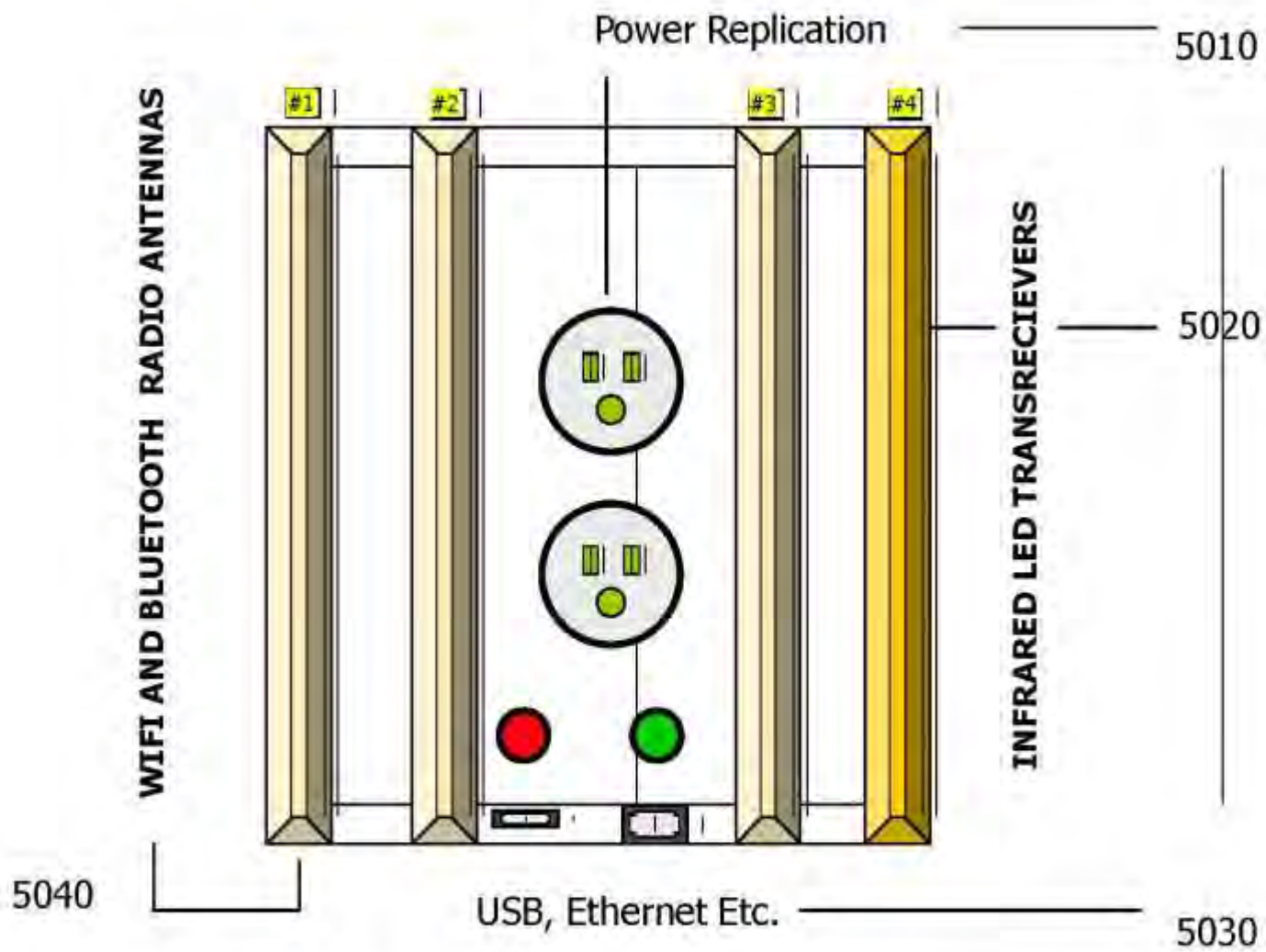


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daCosta et al.





N- Logical "Radio" Modular Mesh aware Bridge