

**WLAN Health Monitor**

0	14	57
1	14	38
2	14	30
3	24	51
4	14	50
5	14	50
6	14	63
7	34	38
8	14	82
9	14	82

Hop Count: 2.1  
Throughput: 51  
Fail Safe: 75

**Adaptive Power Control**

0	59
1	50
2	76
3	81
4	82
5	74
6	81
7	82
8	74
9	74

**Dynamic Load Balancing** CoS: 00  
Buffer: .....

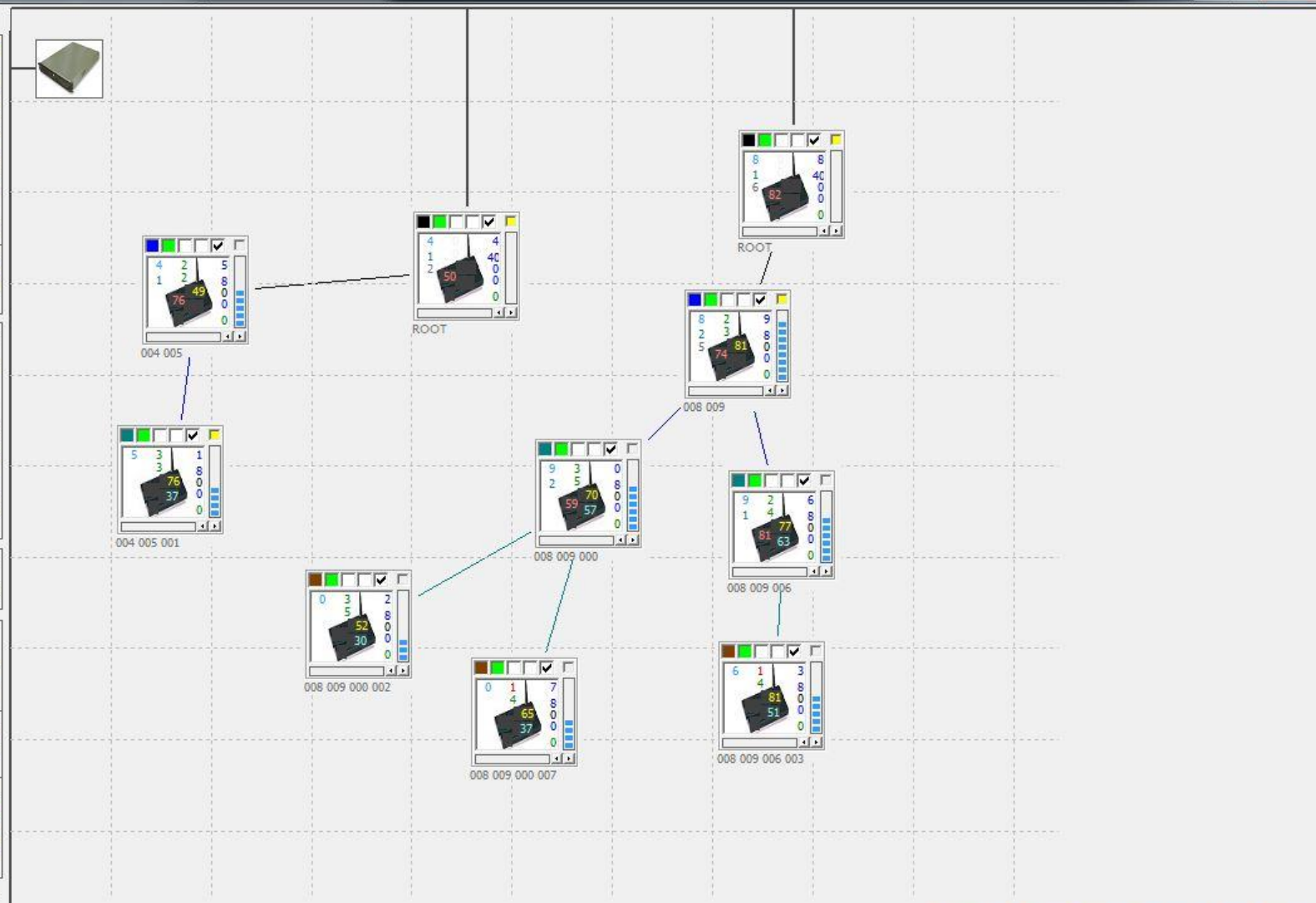
**Adaptive Multi-Hop WLAN Topology**

Restrict Max Allowable Hops: 4  
Thruput Trade for Less Hops: 0

Plan Scale: 150  
Simulation Interval (ms): 100

Buffer Depletion Rate/cycle: 1  
Buffer per Node (cycles): 4  
Max Capacity Each Node: 8  
Current Load Each Node: 0

Topology Channels Distance Map Power



WLAN Health Monitor [Green] [Red] [Yellow]

0	[Green]	14	57
1	[Green]	14	38
2	[Green]	14	30
3	[Red]	24	51
4	[Green]	14	50
5	[Green]	14	50
6	[Green]	14	63
7	[Red]	34	38
8	[Green]	14	82
9	[Green]	14	82

Hop Count: 2.1  
Throughput: 51  
Fail Safe: 75

Adaptive Power Control

0	[Red]	59
1	[Green]	
2	[Green]	
3	[Green]	
4	[Red]	50
5	[Green]	76
6	[Green]	81
7	[Green]	
8	[Green]	82
9	[Green]	74

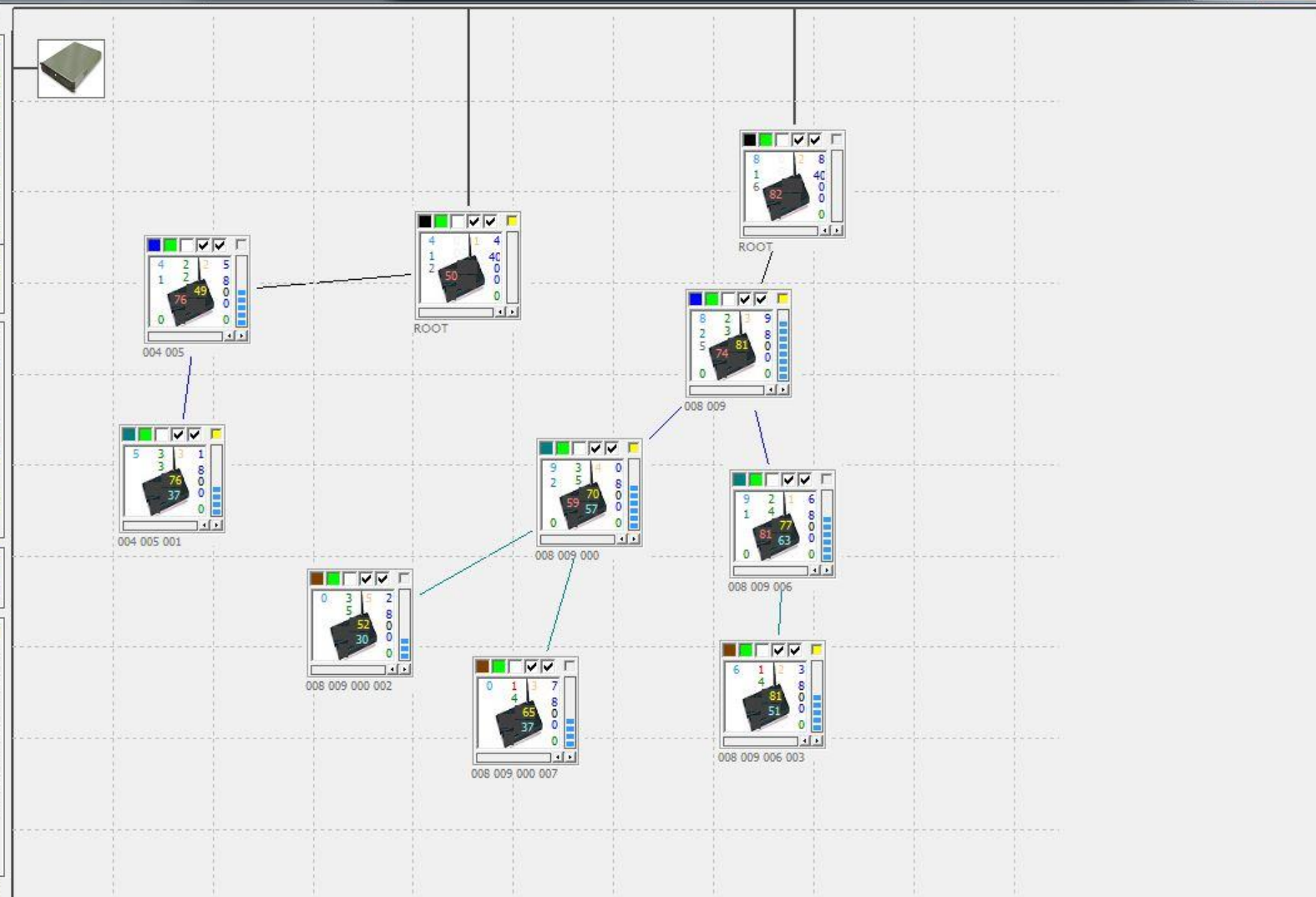
Dynamic Load Balancing CoS [Yellow]  
Buffer: 00

Dynamic Channel Allocation [Green] [Yellow]

0	[Green]	03 04 06 08 09.	4	[Green]
1	[Green]	02 04 05.	3	[Green]
2	[Green]	00 01 04 05 07.	5	[Green]
3	[Green]	00 06 07 09.	2	[Green]
4	[Green]	00 01 02 05 08 09.	1	[Green]
5	[Green]	02 04.	2	[Green]
6	[Green]	00 07 08 09.	1	[Green]
7	[Green]	00 02 03 06.	3	[Green]
8	[Green]	00 04 06 09.	2	[Green]
9	[Green]	03 04 08.	3	[Green]

.....

Topology Channels Distance Map Power







**WLAN Health Monitor**

0	14	57
1	14	38
2	14	30
3	24	51
4	14	50
5	14	50
6	14	63
7	34	38
8	14	82
9	14	82

Hop Count: 2.1  
Throughput: 51  
Fail Safe: 75

**Adaptive Power Control**

0	59
1	50
2	76
3	81
4	82
5	74
6	81
7	82
8	82
9	74

**Dynamic Load Balancing** CoS: 00  
Buffer: ....

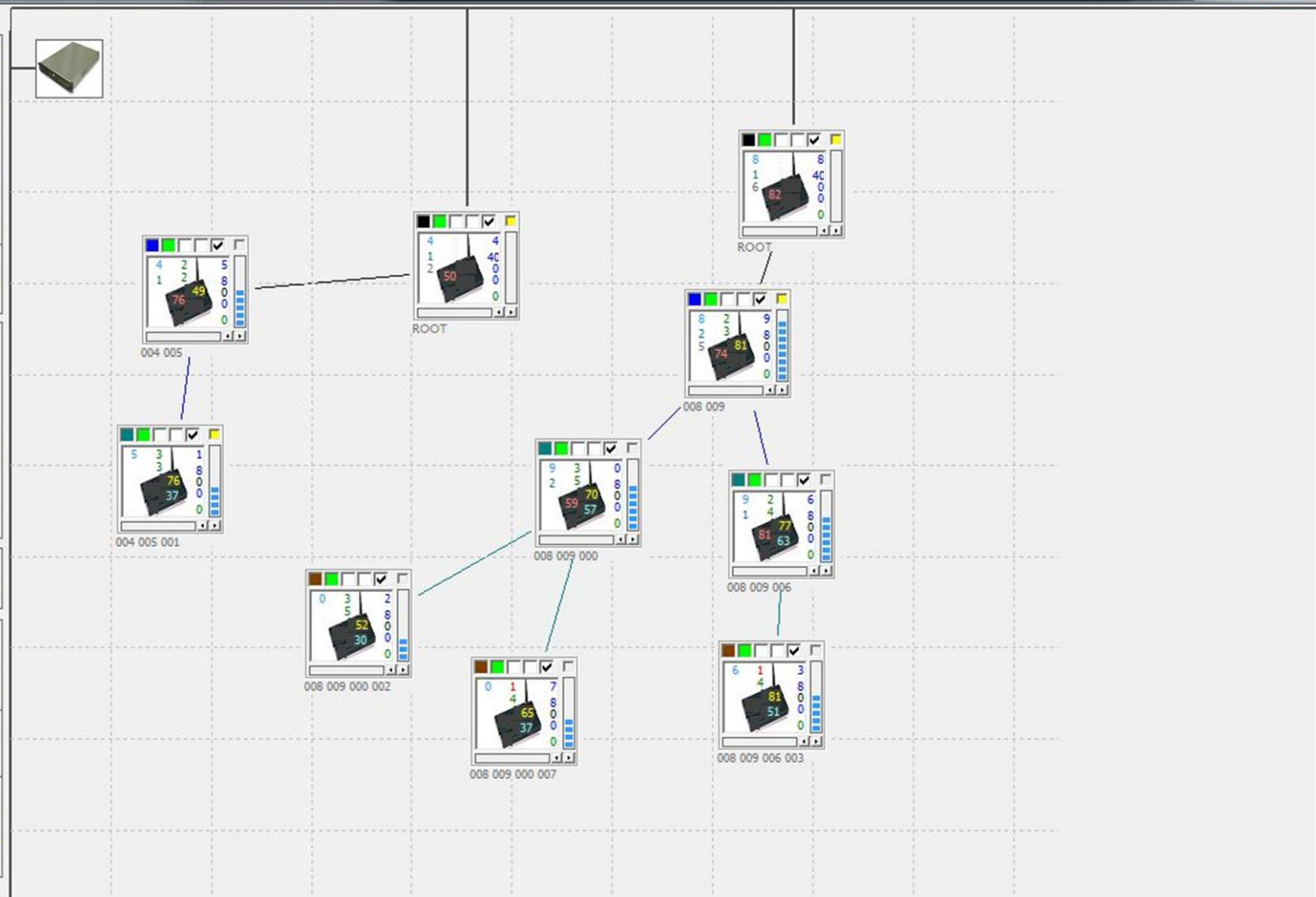
**Adaptive Multi-Hop WLAN Topology**

Restrict Max Allowable Hops: 4  
Thruput Trade for Less Hops: 0

Plan Scale: 150  
Simulation Interval (ms): 100

Buffer Depletion Rate/cycle: 1  
Buffer per Node (cycles): 4  
Max Capacity Each Node: 8  
Current Load Each Node: 0

Topology Channels Distance Map Power



WLAN Health Monitor

0	79
1	57
2	54
3	37
4	
5	77
6	45
7	52
8	
9	88

Hop Count: 1.3  
Throughput: 61  
Fail Safe: 00

Adaptive Power Control

0	65
1	
2	
3	
4	
5	67
6	
7	81
8	
9	66

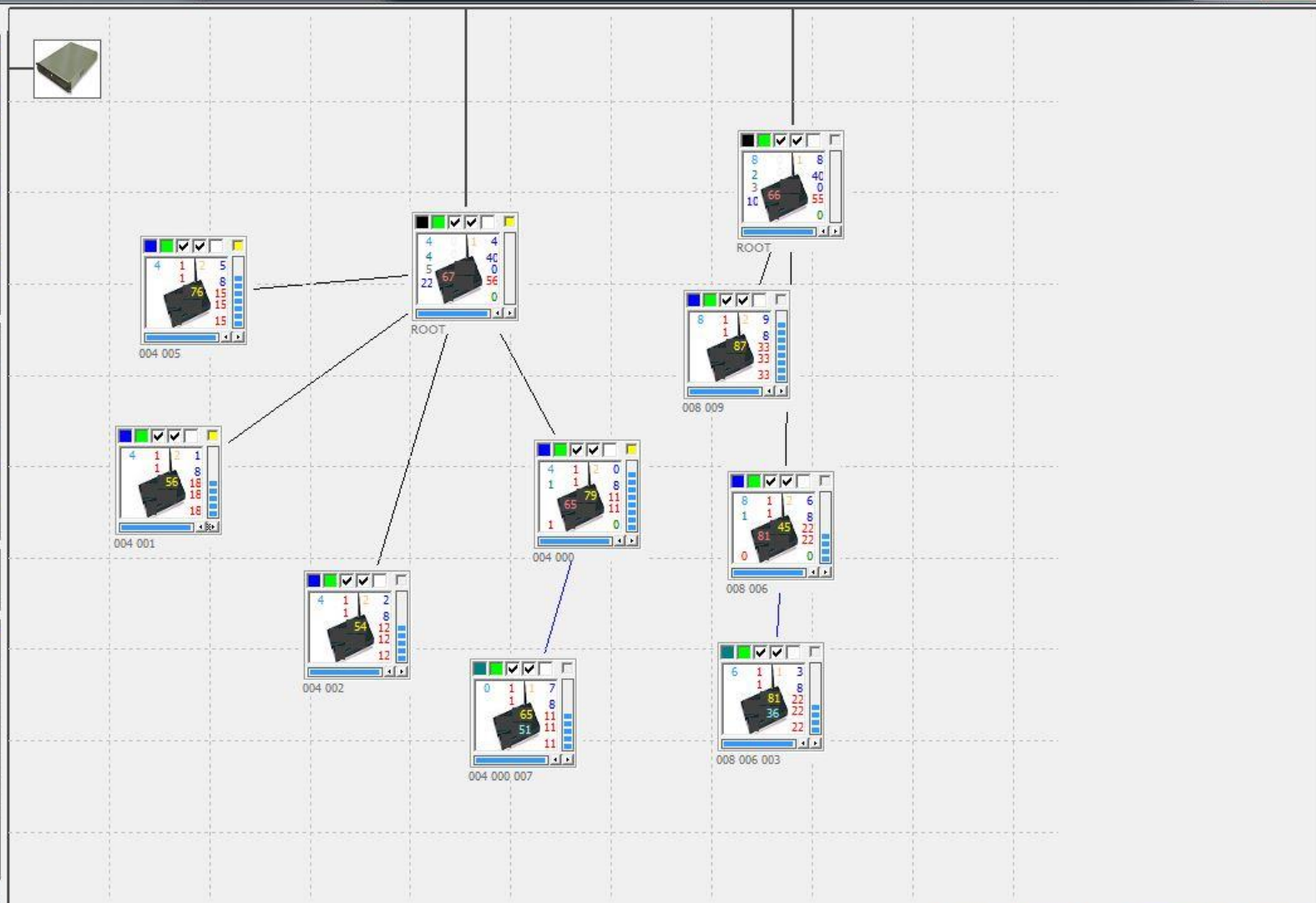
Dynamic Load Balancing     CoS

Buffer: 1    231

Dynamic Channel Allocation

0	04.	2	
1	04.	2	
2	04.	2	
3	06.	1	
4	.	1	
5	04.	2	
6	08.	2	
7	00.	1	
8	.	1	
9	08.	2	

Topology   Channels   Distance Map   Power



WLAN Health Monitor

0	11	55
1	11	08
2	11	04
3	22	16
4		
5	11	50
6	11	20
7	22	36
8		
9	11	82

Hop Count: 1.3  
Throughput: 34  
Fail Safe: 00

Adaptive Power Control

0	65
1	
2	
3	
4	29
5	
6	81
7	
8	51
9	

Dynamic Load Balancing

Buffer: 134

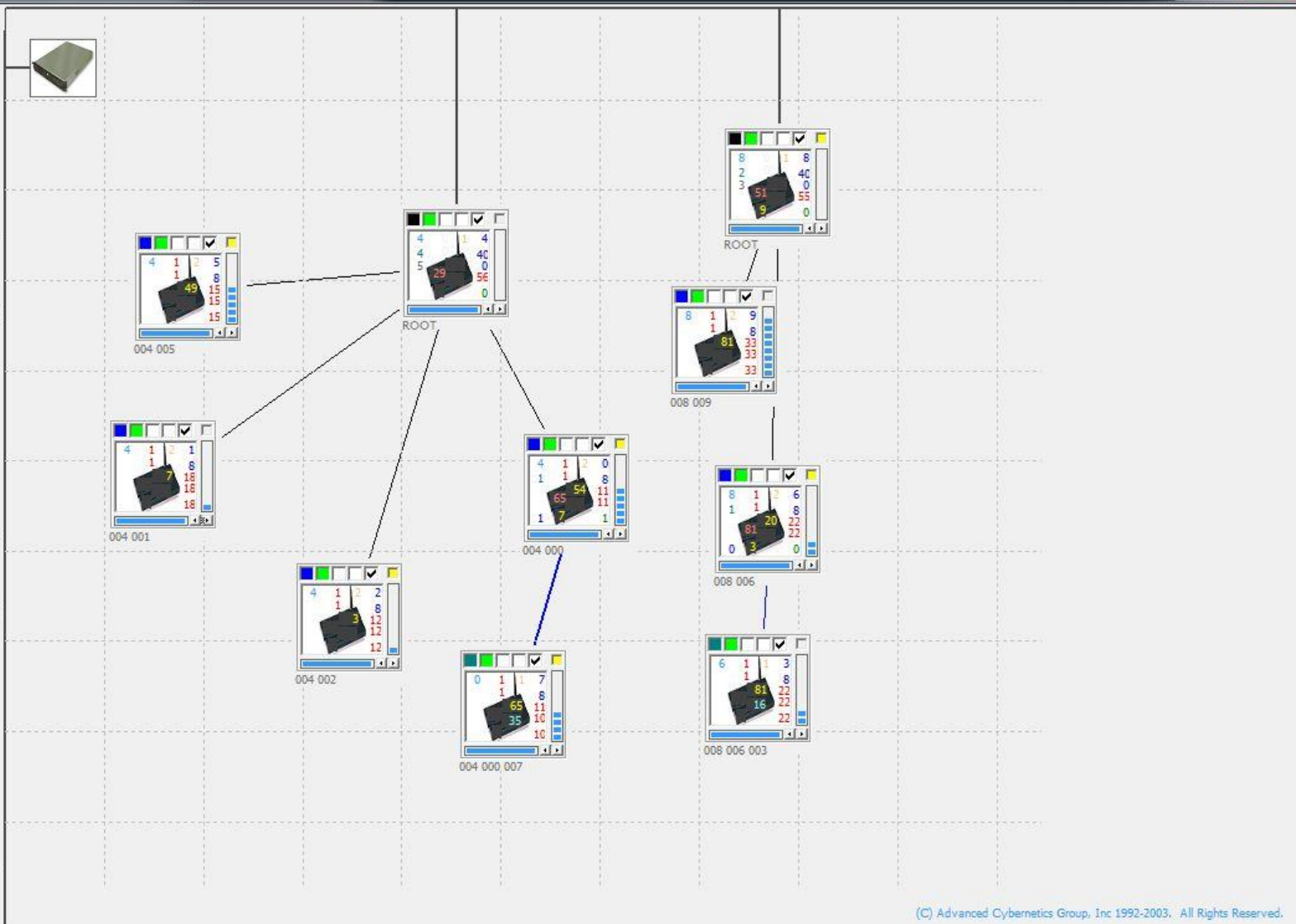
CoS

198

Dynamic Channel Allocation

0	04.	2	██████████
1	04.	2	██████████
2	04.	2	██████████
3	06.	1	██████████
4	.	1	██████████
5	04.	2	██████████
6	08.	2	██████████
7	00.	1	██████████
8	.	1	██████████
9	08.	2	██████████

Topology Channels Distance Map Power





WLAN Health Monitor

0	11	55
1	11	08
2	11	04
3	22	16
4		
5	11	50
6	11	20
7	22	36
8		
9	11	82

Hop Count: 1.3  
Throughput: 34  
Fail Safe: 00

Adaptive Power Control

0	65
1	
2	
3	
4	29
5	
6	81
7	
8	51
9	

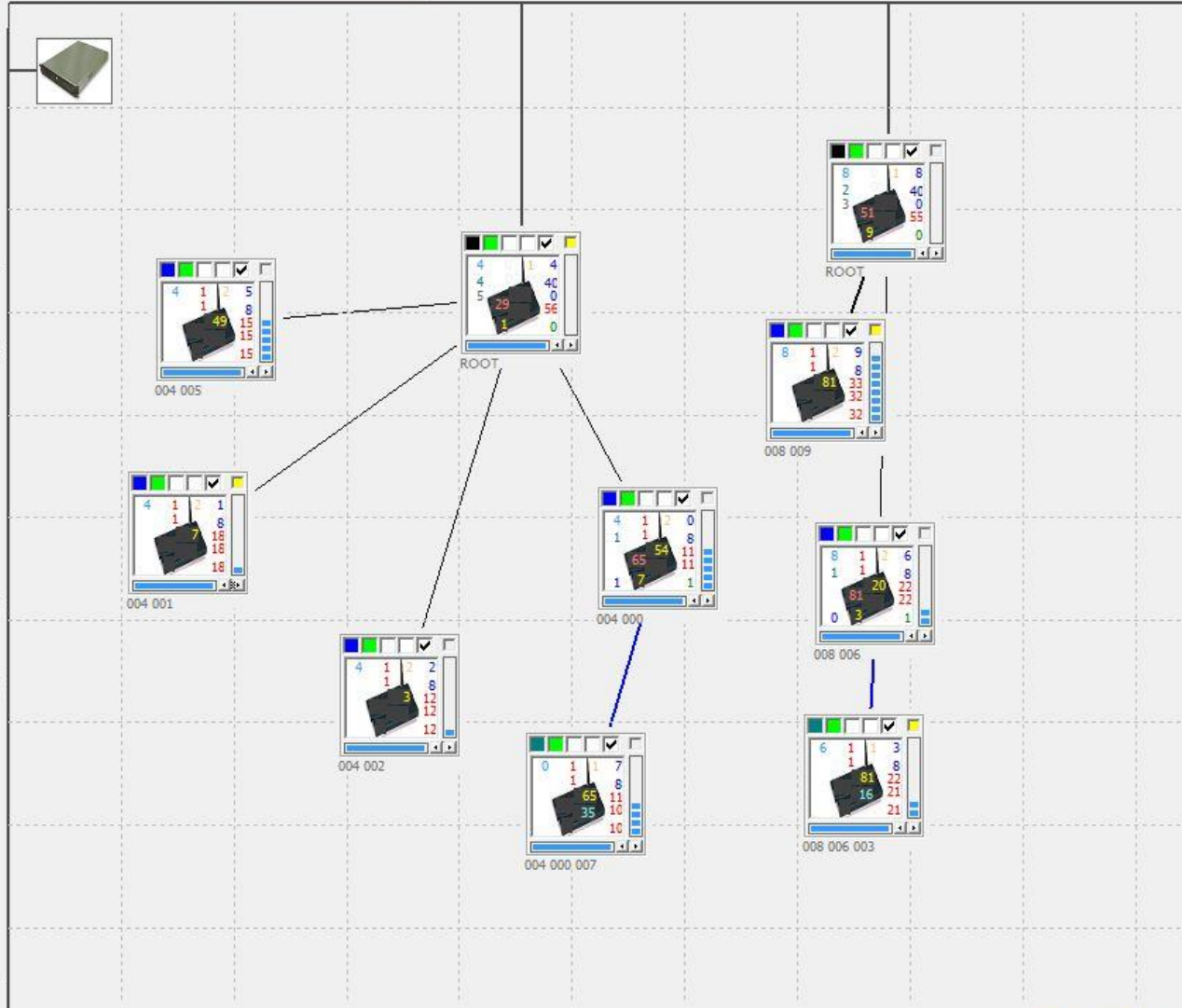
Dynamic Load Balancing     CoS

Buffer: 746    172

Dynamic Channel Allocation

0	04.	2	
1	04.	2	
2	04.	2	
3	06.	1	
4	.	1	
5	04.	2	
6	08.	2	
7	00.	1	
8	.	1	
9	08.	2	

Topology   Channels   Distance Map   Power



WLAN Health Monitor

0	11	55
1	11	08
2	11	04
3	22	16
4		
5	11	50
6	11	20
7	22	36
8		
9	11	82

Hop Count: 1.3  
Throughput: 34  
Fail Safe: 00

Adaptive Power Control

0	65
1	
2	
3	
4	29
5	
6	81
7	
8	51
9	

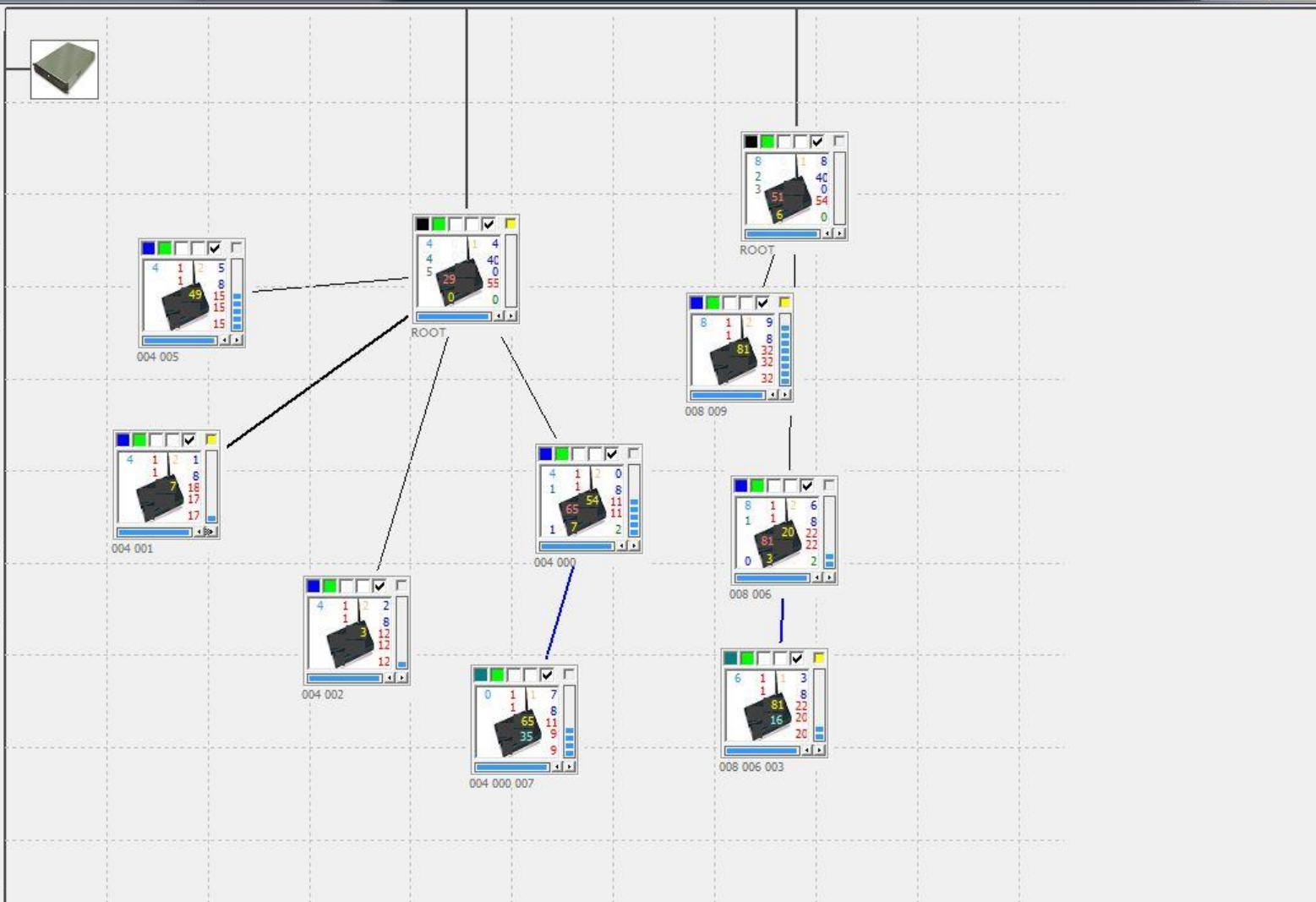
Dynamic Load Balancing     CoS

Buffer: 135    170

Dynamic Channel Allocation

0	04.	2	■
1	04.	2	■
2	04.	2	■
3	06.	1	■
4	.	1	■
5	04.	2	■
6	08.	2	■
7	00.	1	■
8	.	1	■
9	08.	2	■

Topology   Channels   Distance Map   Power





WLAN Health Monitor

0	11	55
1	11	08
2	11	04
3	22	16
4		
5	11	50
6	11	20
7	22	36
8		
9	11	82

Hop Count: 1.3  
Throughput: 34  
Fail Safe: 00

Adaptive Power Control

0	65
1	
2	
3	
4	29
5	
6	81
7	
8	51
9	

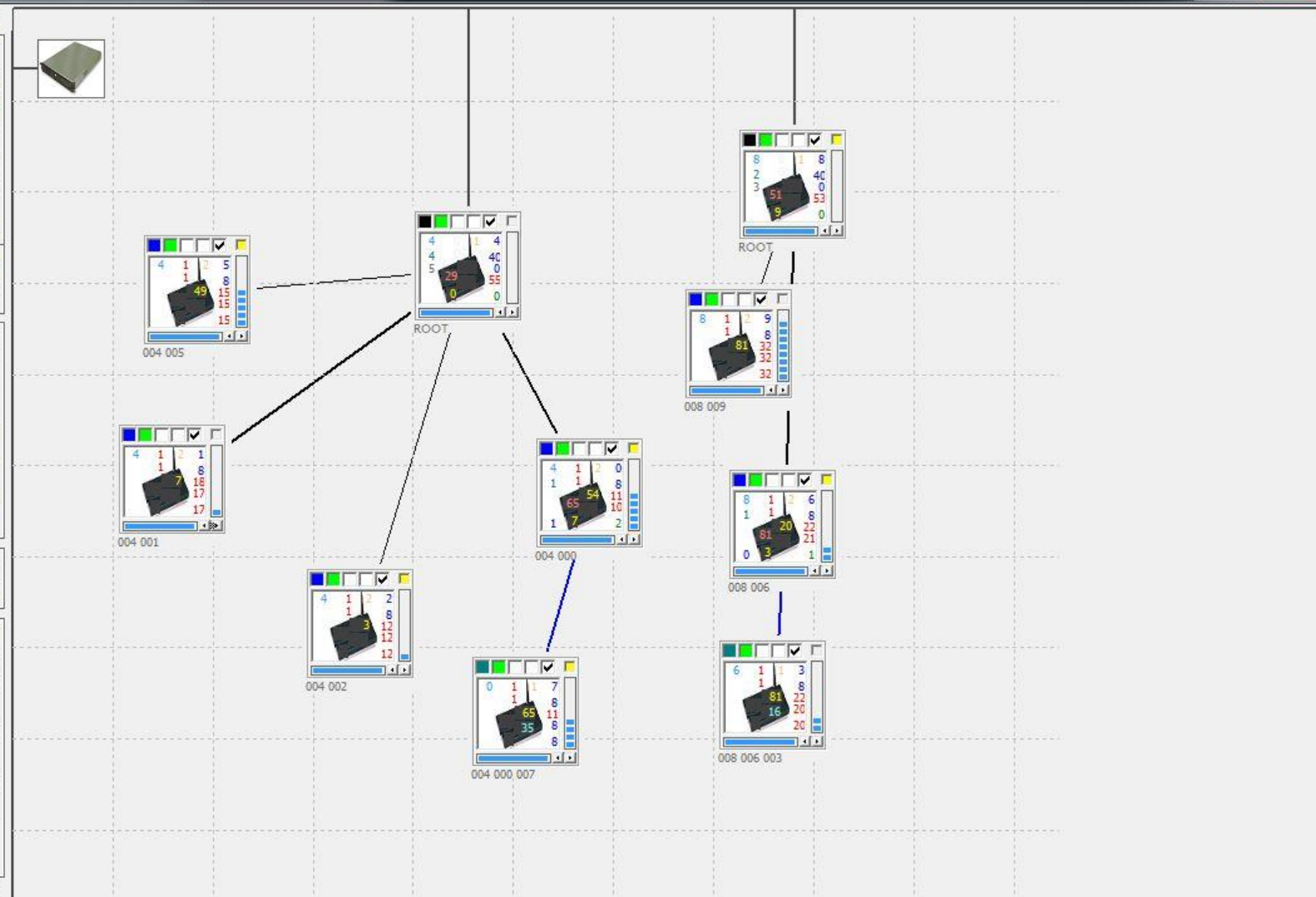
Dynamic Load Balancing     CoS

Buffer: 186    167

Dynamic Channel Allocation

0	04.	2	
1	04.	2	
2	04.	2	
3	06.	1	
4	.	1	
5	04.	2	
6	08.	2	
7	00.	1	
8	.	1	
9	08.	2	

Topology   Channels   Distance Map   Power



WLAN Health Monitor

0	11	55
1	11	08
2	11	04
3	22	16
4		
5	11	50
6	11	20
7	22	36
8		
9	11	82

Hop Count: 1.3  
Throughput: 34  
Fail Safe: 00

Adaptive Power Control

0	65
1	
2	
3	
4	29
5	
6	81
7	
8	51
9	

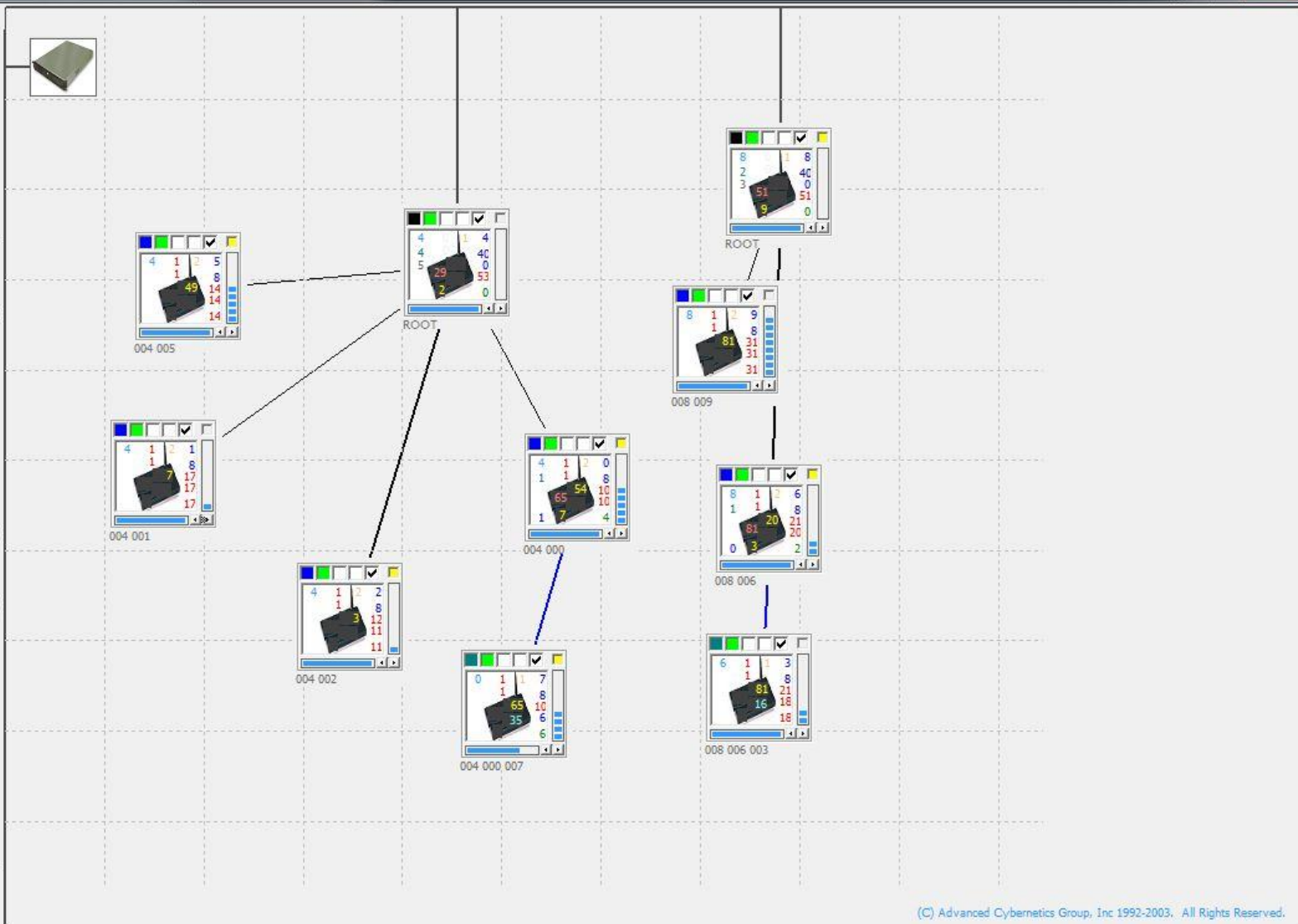
Dynamic Load Balancing     CoS

Buffer: 242    161

Dynamic Channel Allocation

0	04.	2	██████████
1	04.	2	██████████
2	04.	2	██████████
3	06.	1	██████████
4	.	1	██████████
5	04.	2	██████████
6	08.	2	██████████
7	00.	1	██████████
8	.	1	██████████
9	08.	2	██████████

Topology   Channels   Distance Map   Power



WLAN Health Monitor

0	55
1	08
2	04
3	27
4	
5	50
6	41
7	36
8	
9	82

Hop Count: 1.4  
Throughput: 38  
Fail Safe: 50

Adaptive Power Control

0	63
1	
2	
3	
4	29
5	
6	
7	
8	82
9	

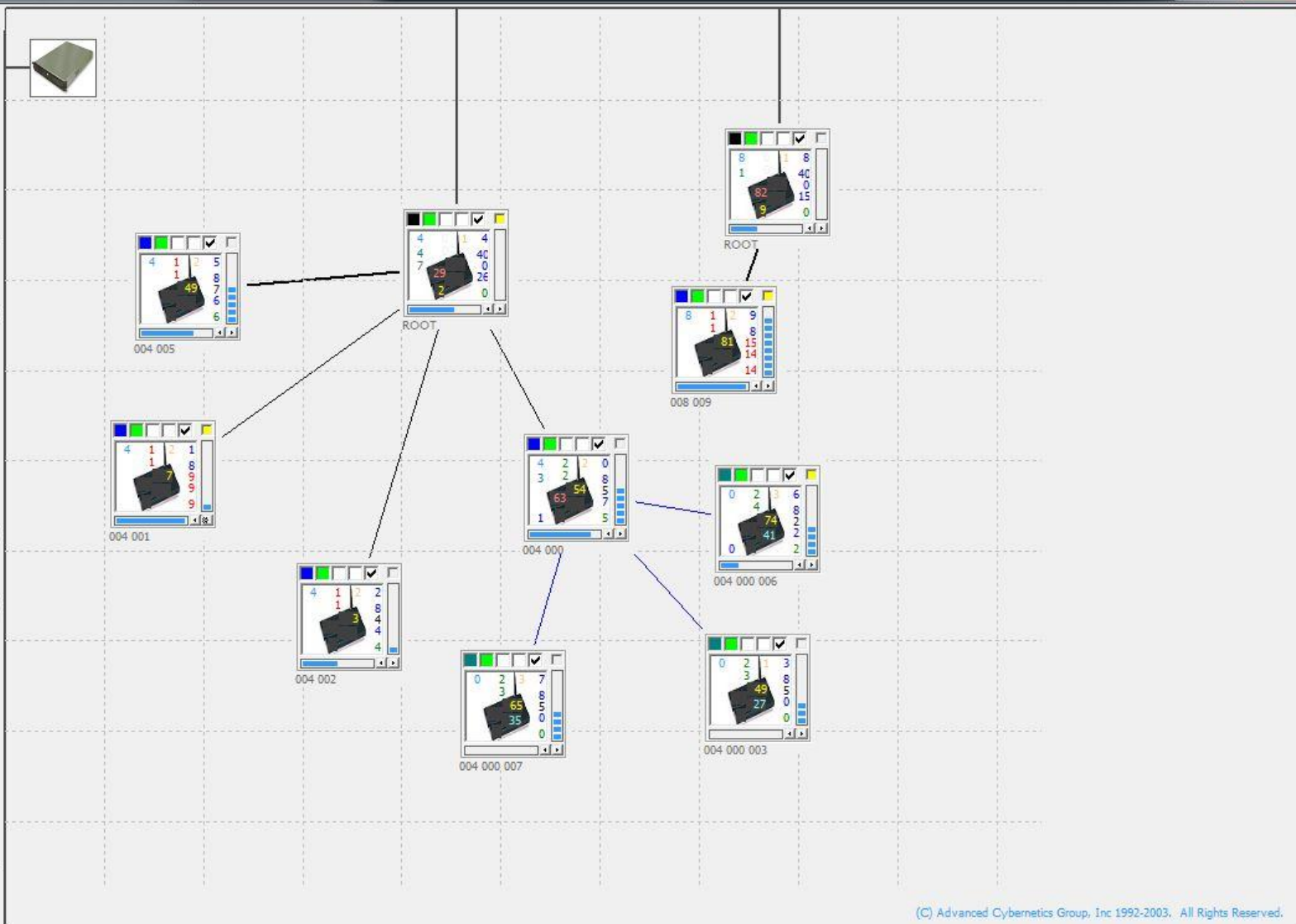
Dynamic Load Balancing     CoS

Buffer: 317    83

Dynamic Channel Allocation

0	04 06.	2	██████████
1	04.	2	██████████
2	04.	2	██████████
3	00 06 07.	1	██████████
4	.	1	██████████
5	04.	2	██████████
6	00 03 07 08.	3	██████████
7	00 02 03.	3	██████████
8	.	1	██████████
9	08.	2	██████████

Topology   Channels   Distance Map   Power





WLAN Health Monitor

0	11	55
1	11	08
2	11	04
3	23	33
4		
5	11	50
6	22	41
7	23	36
8		
9	11	82

Hop Count: 1.5  
Throughput: 39  
Fail Safe: 25

Adaptive Power Control

0	70
1	
2	
3	
4	29
5	
6	81
7	
8	82
9	

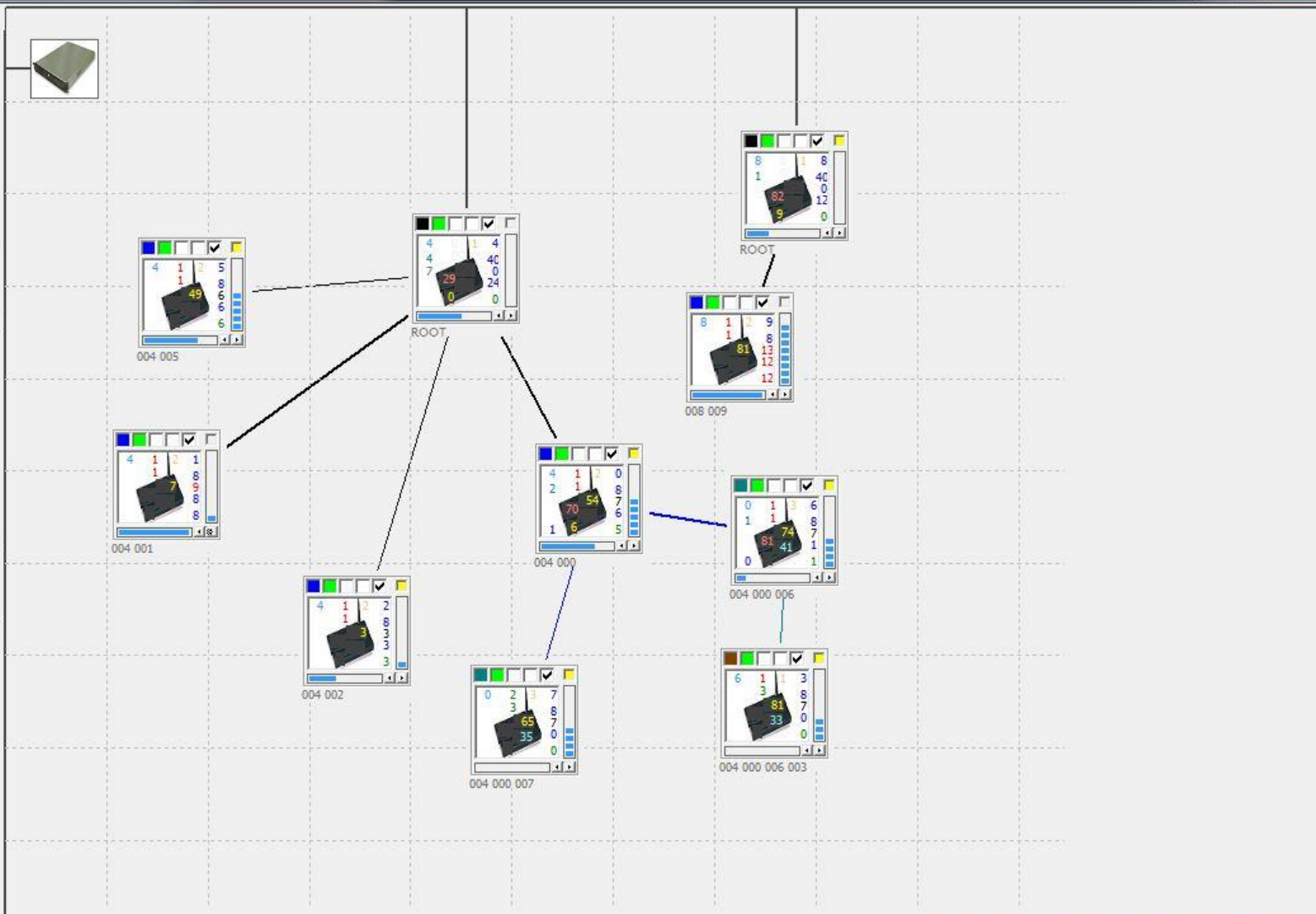
Dynamic Load Balancing     CoS

Buffer: 373    73

Dynamic Channel Allocation

0	04.	2	
1	04.	2	
2	04.	2	
3	00 06 07.	4	
4	.	1	
5	04.	2	
6	00.	1	
7	00 02 06.	3	
8	.	1	
9	08.	2	

Topology   Channels   Distance Map   Power



WLAN Health Monitor

0	11	55
1	11	08
2	13	28
3	23	33
4		
5	11	50
6	13	41
7	24	36
8		
9	11	82

Hop Count: 1.8  
Throughput: 42  
Fail Safe: 25

Adaptive Power Control

0	70
1	
2	
3	
4	37
5	
6	81
7	77
8	82
9	

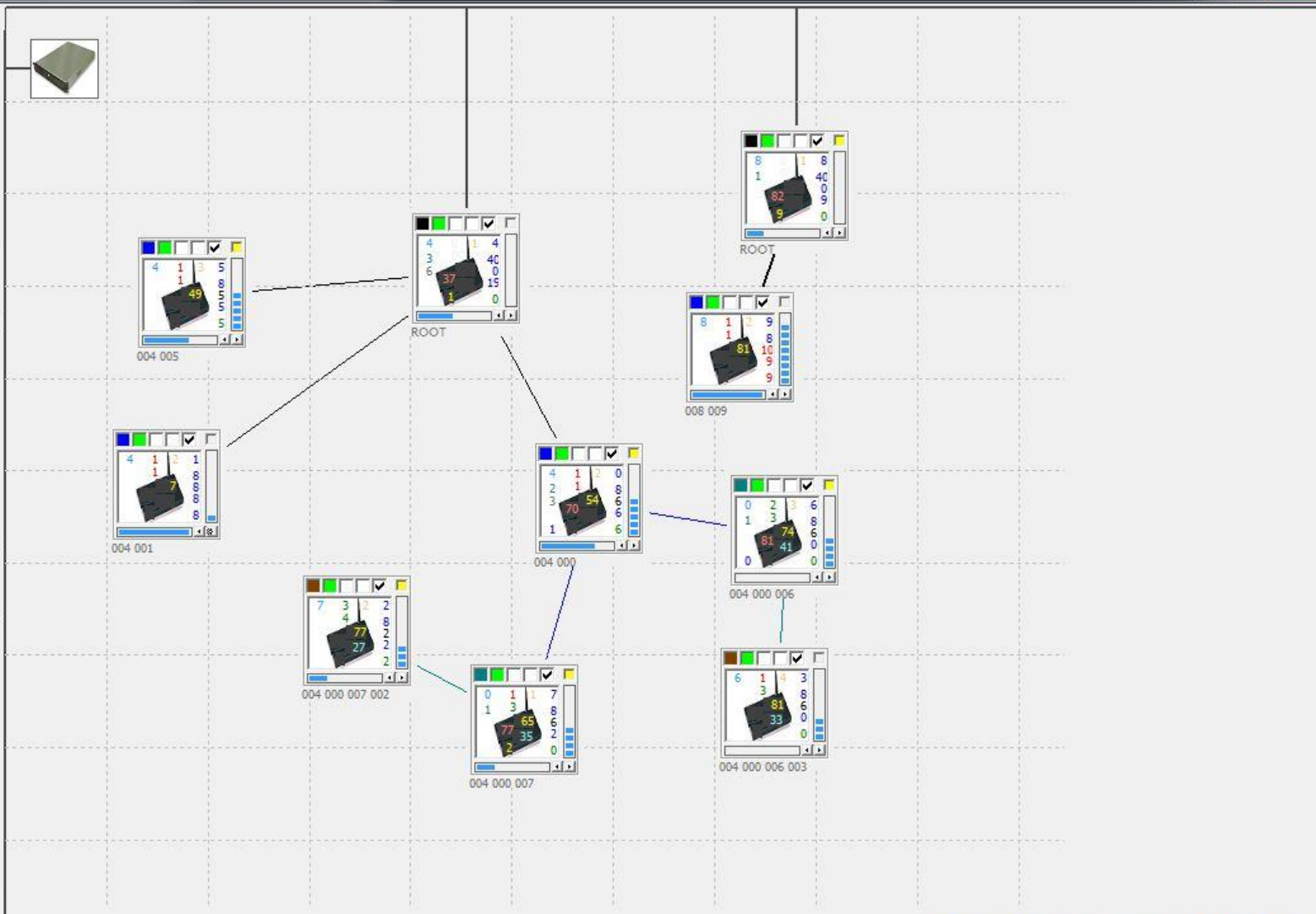
Dynamic Load Balancing     CoS

Buffer: 422    75

Dynamic Channel Allocation

0	04.	2	
1	04.	3	
2	00 04 05 07.	3	
3	00 06 07.	4	
4	.	1	
5	04.	2	
6	00 07 08.	3	
7	00 03 06.	1	
8	.	1	
9	08.	2	

Topology   Channels   Distance Map   Power



WLAN Health Monitor

0	11	55
1	11	08
2	13	28
3	23	33
4		
5	14	50
6	13	63
7	22	36
8		
9	11	82

Hop Count: 1.8  
Throughput: 44  
Fail Safe: 38

Adaptive Power Control

0	70
1	
2	
3	
4	37
5	
6	81
7	77
8	82
9	78

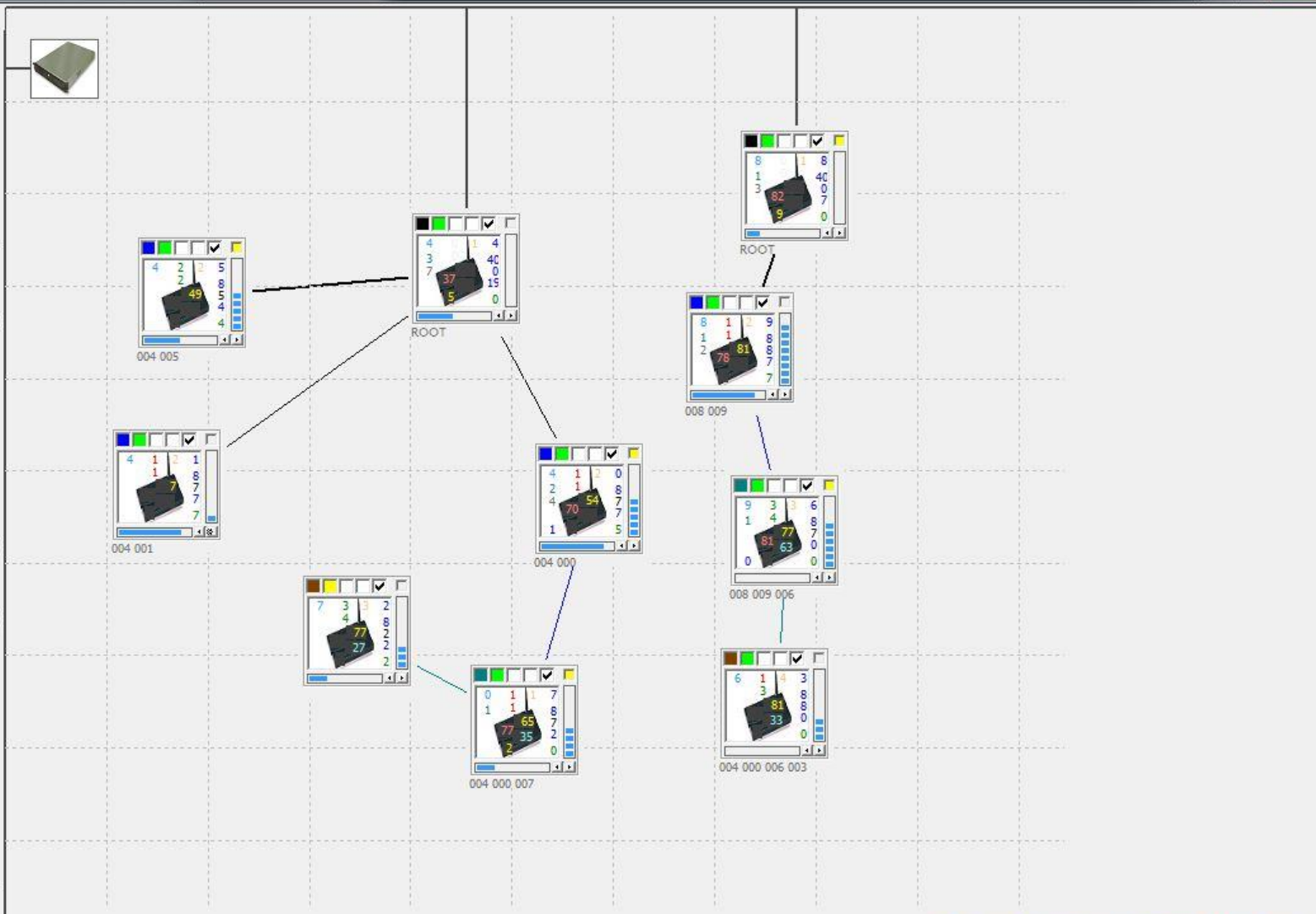
Dynamic Load Balancing     CoS

Buffer: 477    62

Dynamic Channel Allocation

0	04.	2	
1	04.	2	
2	00 04 05 07.	3	
3	00 06 07.	4	
4	.	1	
5	02 04.	2	
6	00 07 08 09.	3	
7	00.	1	
8	.	1	
9	08.	2	

Topology   Channels   Distance Map   Power





WLAN Health Monitor

0	11	55
1	12	38
2	13	28
3	23	51
4		
5	11	50
6	13	63
7	24	36
8		
9	14	82

Hop Count: 1.9  
Throughput: 50  
Fail Safe: 75

Adaptive Power Control

0	65
1	
2	
3	
4	52
5	76
6	81
7	77
8	82
9	78

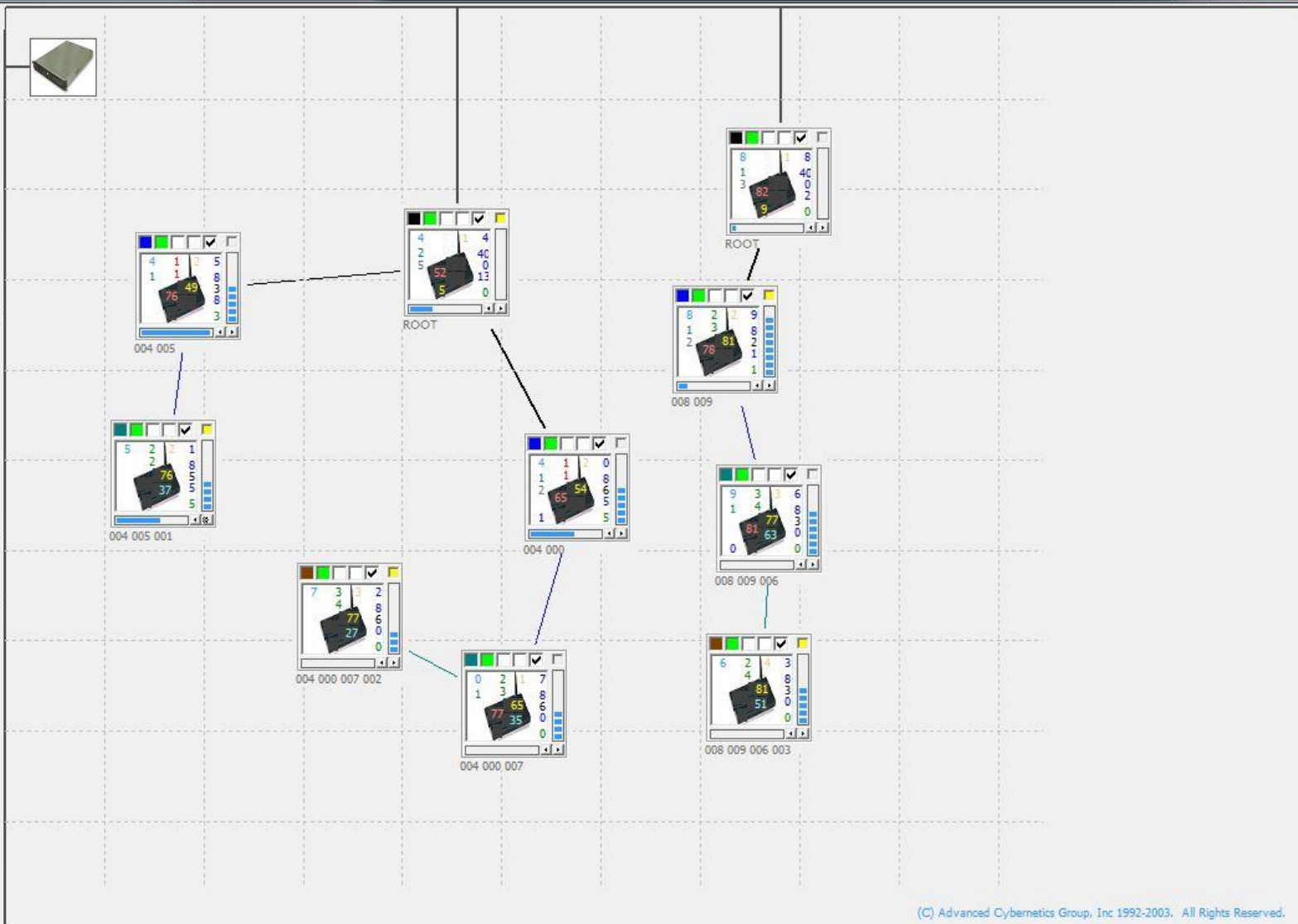
Dynamic Load Balancing     CoS

Buffer: 603

Dynamic Channel Allocation

0	04.	2
1	04 05.	3
2	00 04 05 07.	3
3	00 06 07 09.	5
4	.	1
5	04.	2
6	00 07 08 09.	4
7	00 03 06.	1
8	00 05 09.	1
9	00 03 08.	3

Topology   Channels   Distance Map   Power



WLAN Health Monitor

0	14	57
1	12	38
2	13	28
3	23	51
4		
5	11	50
6	13	63
7	24	36
8		
9	14	82

Hop Count: 2.0  
Throughput: 51  
Fail Safe: 88

Adaptive Power Control

0	65
1	
2	
3	
4	50
5	76
6	81
7	77
8	82
9	74

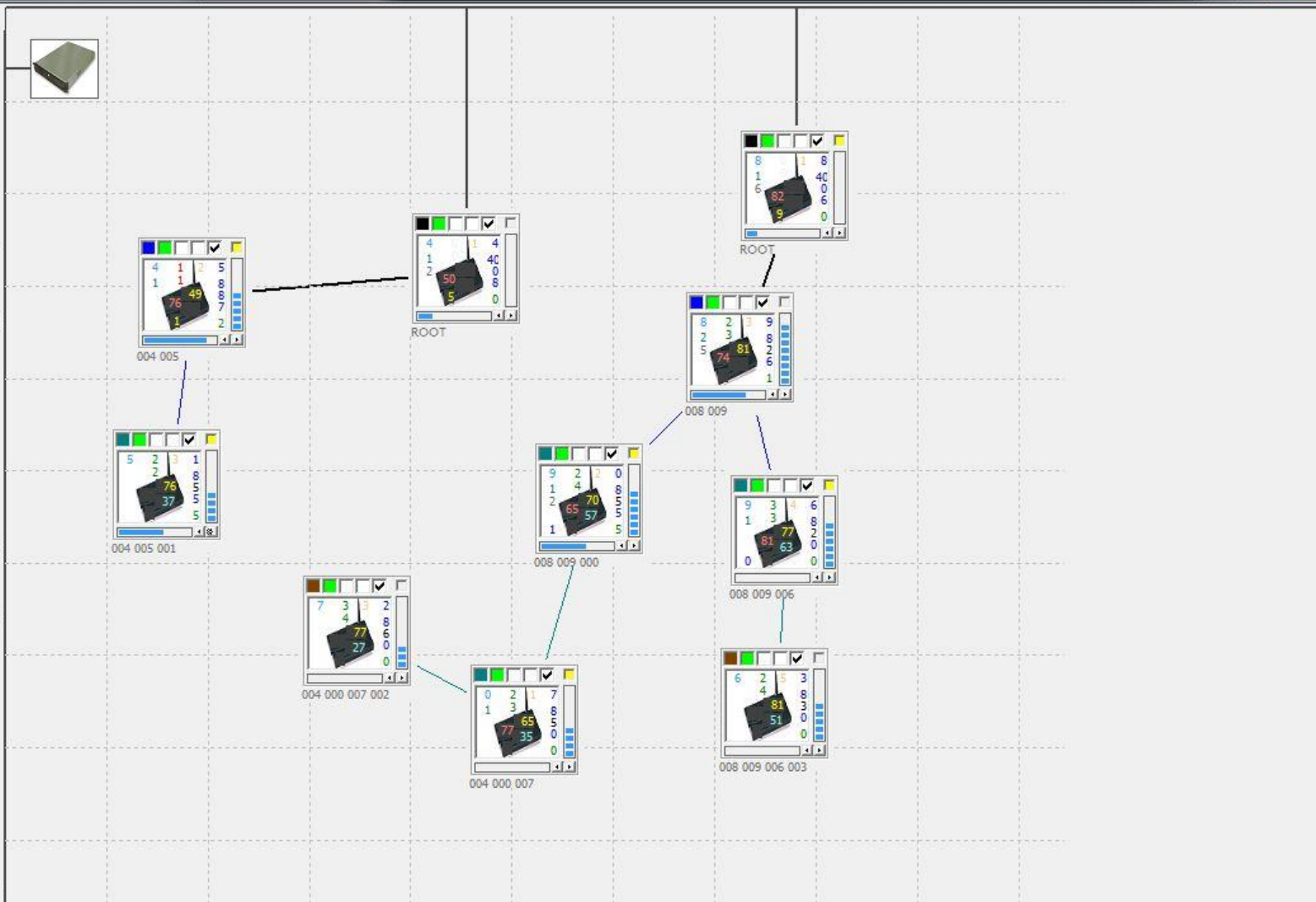
Dynamic Load Balancing     CoS

Buffer: 640

Dynamic Channel Allocation

0	03 04 06 09.	3	
1	04 05.	3	
2	00 04 05 07.	4	
3	00 06 07 09.	4	
4	.	1	
5	04.	2	
6	07 08 09.	3	
7	00 03 06.	1	
8	06.	1	
9	00 03 08.	2	

Topology   Channels   Distance Map   Power



WLAN Health Monitor

0	14	57
1	12	38
2	13	28
3	23	51
4		
5	11	50
6	13	63
7	24	36
8		
9	14	82

Hop Count: 2.0  
Throughput: 51  
Fail Safe: 88

Adaptive Power Control

0	65
1	
2	
3	
4	50
5	76
6	81
7	77
8	82
9	74

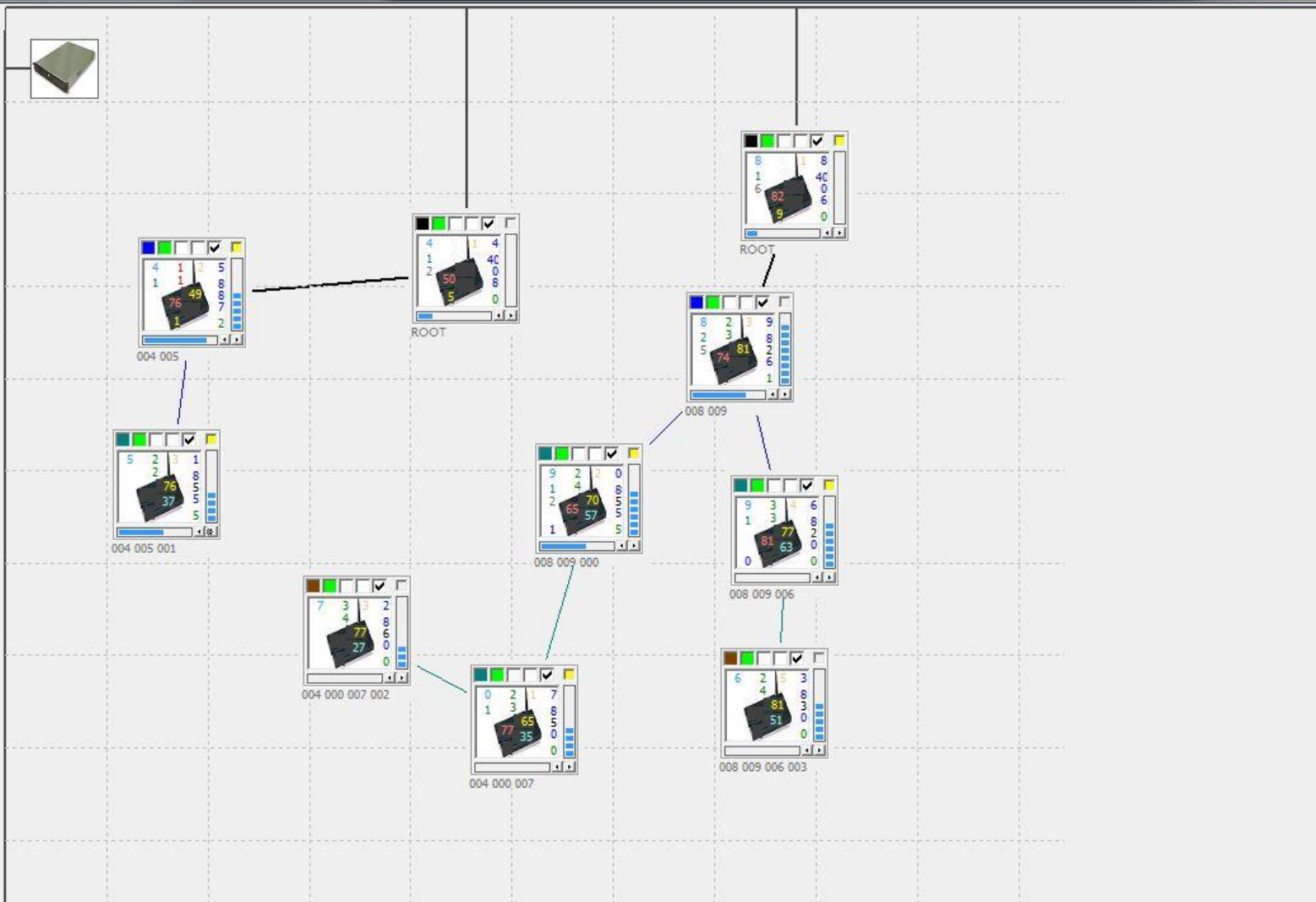
Dynamic Load Balancing     CoS

Buffer: 640

Dynamic Channel Allocation

0	03 04 06 09.	3
1	04 05.	3
2	00 04 05 07.	4
3	00 06 07 09.	4
4	.	1
5	04.	2
6	07 08 09.	3
7	00 03 06.	1
8	06.	1
9	00 03 08.	2

Topology   Channels   Distance Map   Power





WLAN Health Monitor

0	14	57
1	12	38
2	13	28
3	23	51
4		
5	11	50
6	13	63
7	24	36
8		
9	14	82

Hop Count: 2.0  
Throughput: 51  
Fail Safe: 62

Adaptive Power Control

0	65
1	
2	
3	
4	50
5	76
6	81
7	77
8	82
9	74

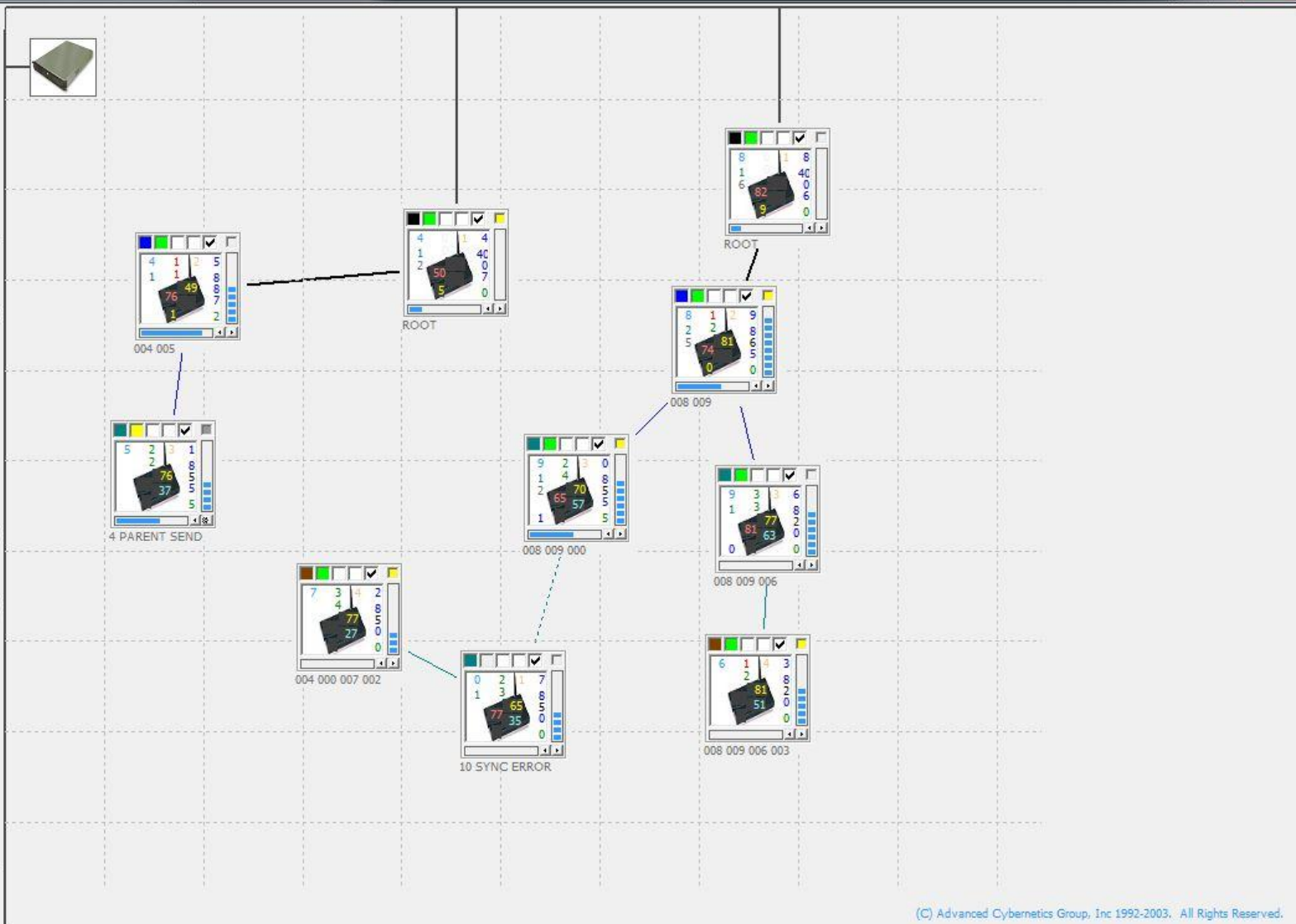
Dynamic Load Balancing     CoS

Buffer: 69+    50

Dynamic Channel Allocation

0	03 04 06 09.	3	
1	04 05.	3	
2	00 04 05 07.	4	
3	06 09.	1	
4	.	1	
5	04.	2	
6	07 08 09.	3	
7	00 03 06.	1	
8	06.	1	
9	03 08.	2	

Topology   Channels   Distance Map   Power



WLAN Health Monitor

0	14	57
1	12	38
2	13	28
3	23	51
4		
5	11	50
6	13	63
7	24	36
8		
9	14	82

Hop Count: 2.0  
Throughput: 51  
Fail Safe: 62

Adaptive Power Control

0	65
1	
2	
3	
4	50
5	76
6	81
7	77
8	82
9	74

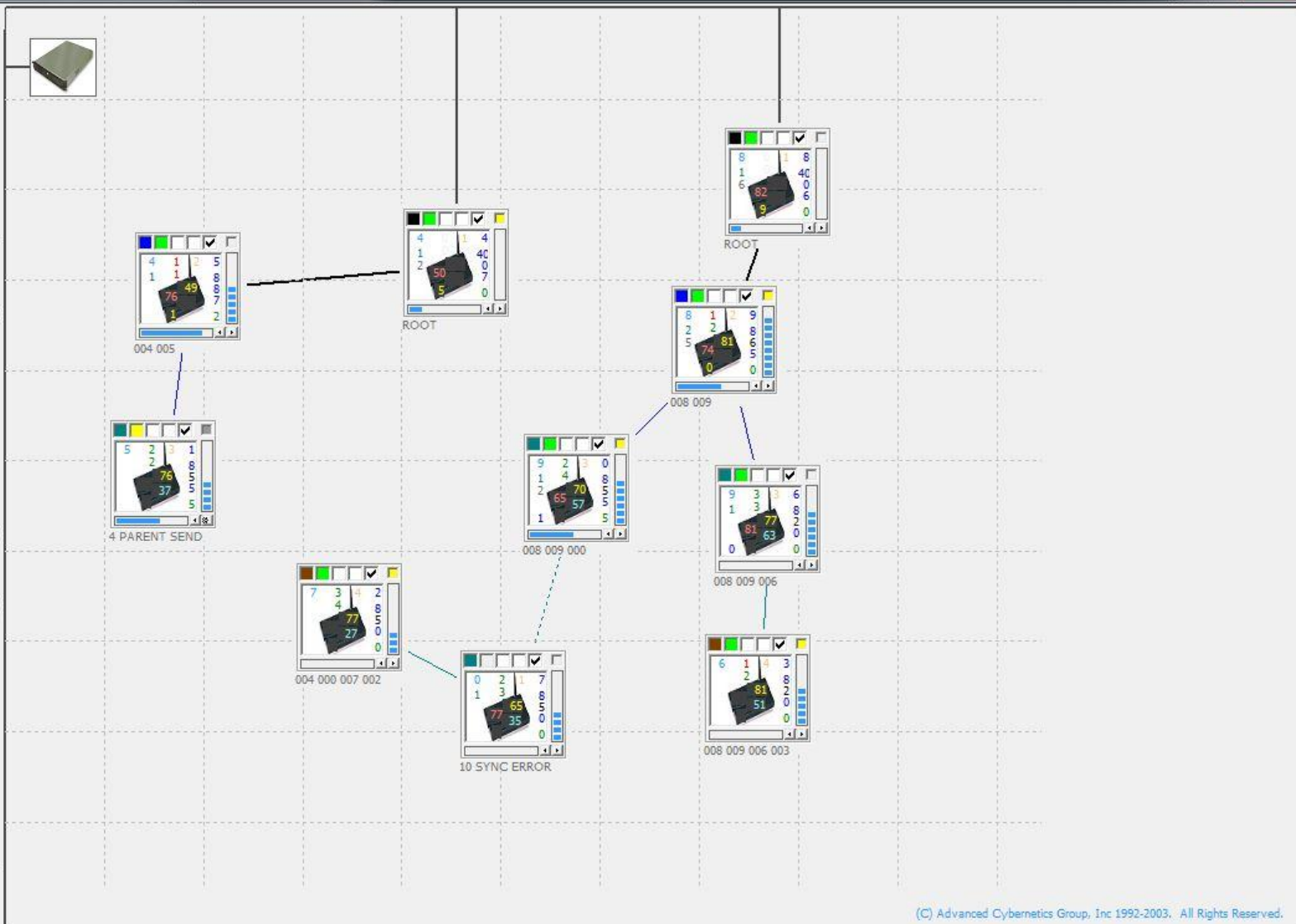
Dynamic Load Balancing     CoS

Buffer: 69+    50

Dynamic Channel Allocation

0	03 04 06 09.	3	
1	04 05.	3	
2	00 04 05 07.	4	
3	06 09.	1	
4	.	1	
5	04.	2	
6	07 08 09.	3	
7	00 03 06.	1	
8	06.	1	
9	03 08.	2	

Topology   Channels   Distance Map   Power



**WLAN Health Monitor**

0	14	57
1	12	38
2	13	28
3	23	51
4		
5	11	50
6	12	63
7	24	36
8		
9	11	82

Hop Count: 2.0  
Throughput: 51  
Fail Safe: 62

**Adaptive Power Control**

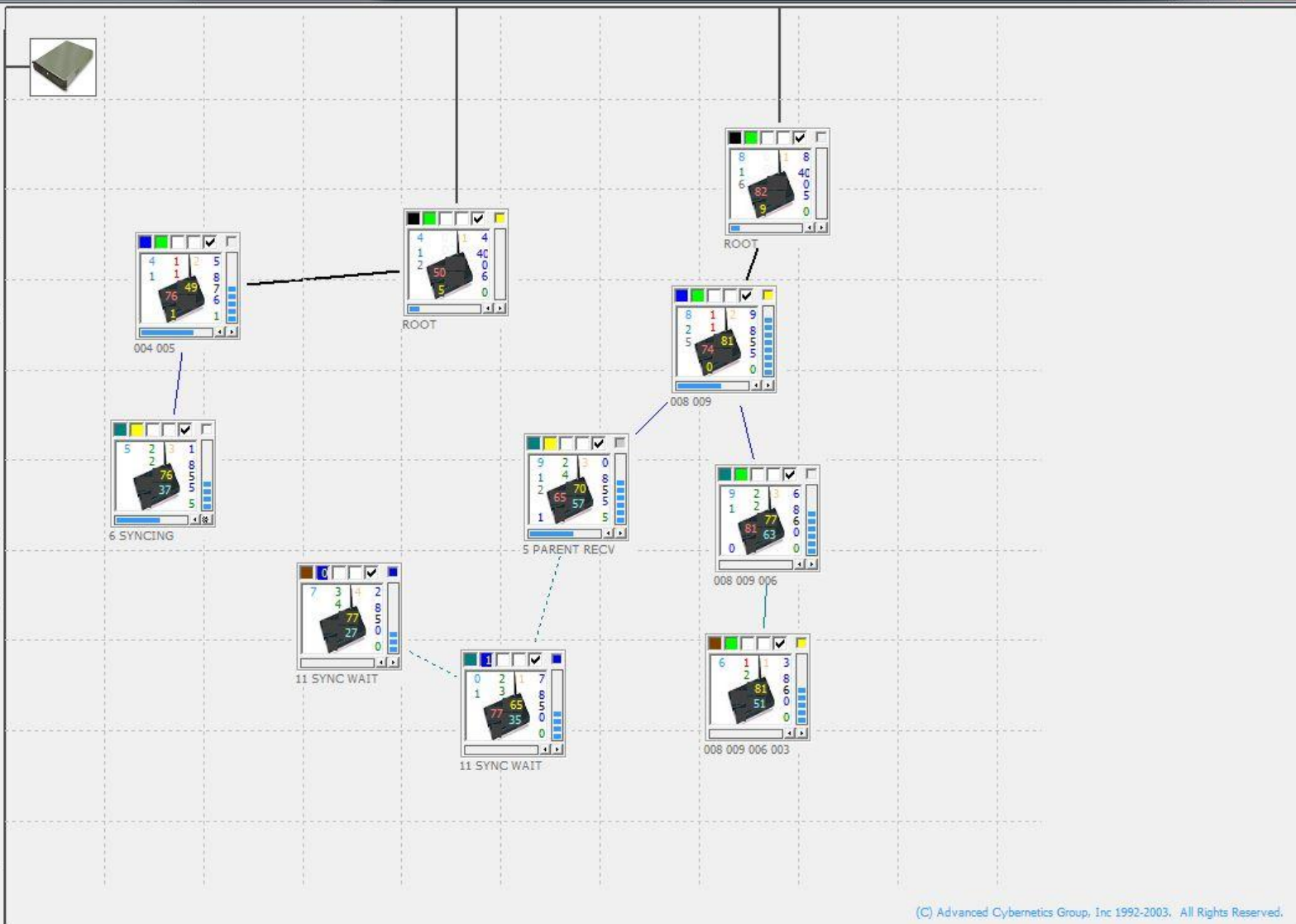
0	65
1	
2	
3	
4	50
5	76
6	81
7	77
8	82
9	74

**Dynamic Load Balancing** CoS: 46

**Dynamic Channel Allocation**

0	03 04 06 09.	3
1	04 05.	3
2	00 04 05 07.	4
3	06 09.	1
4	.	1
5	04.	2
6	08 09.	3
7	00 03 06.	1
8	.	1
9	08.	2

Topology Channels Distance Map Power





WLAN Health Monitor

0	14	57
1	12	38
2	13	28
3	23	51
4		
5	11	50
6	12	63
7	24	36
8		
9	11	82

Hop Count: 2.0  
Throughput: 51  
Fail Safe: 62

Adaptive Power Control

0	65
1	
2	
3	
4	50
5	76
6	81
7	77
8	82
9	74

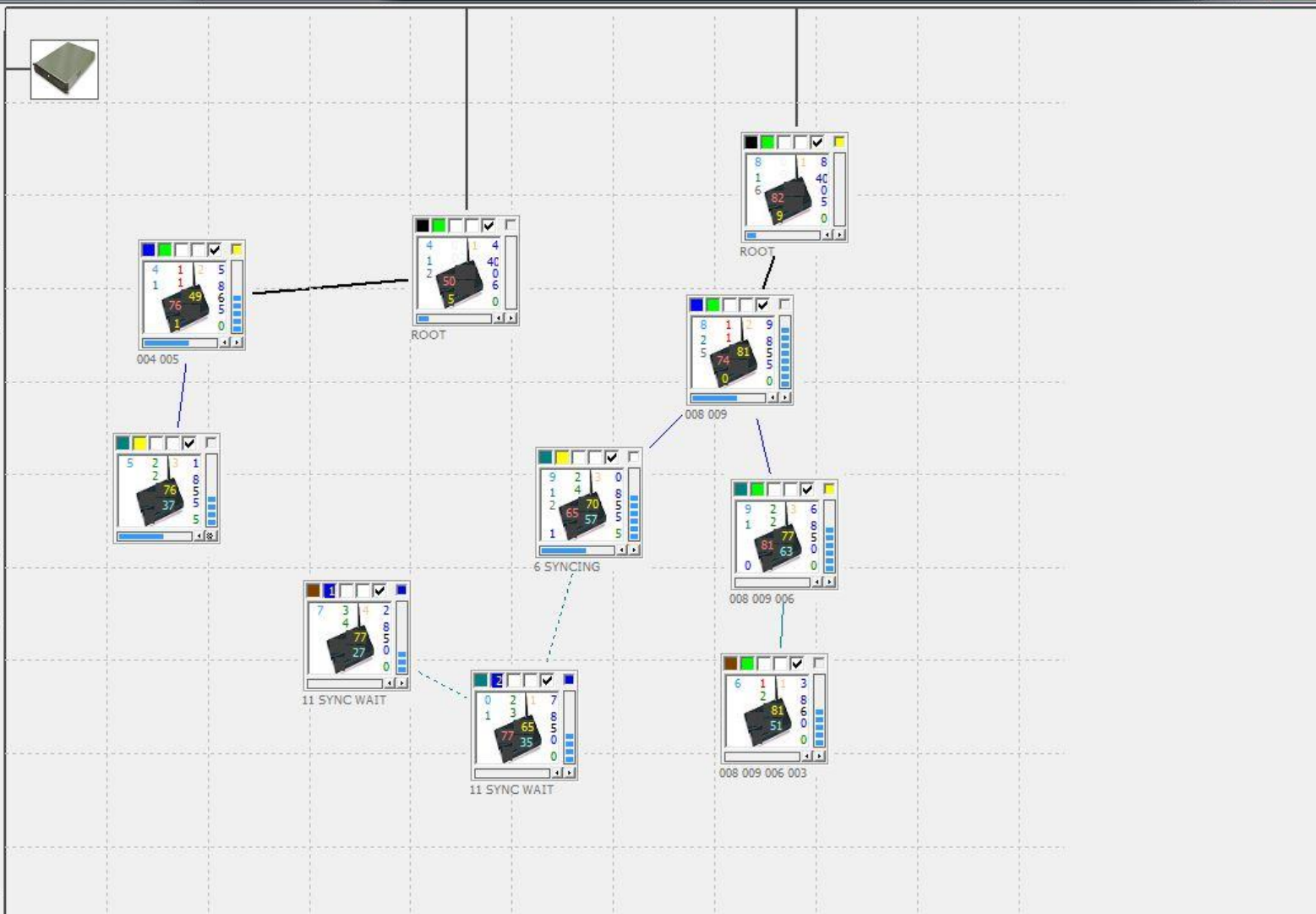
Dynamic Load Balancing  CoS

Buffer 824 62

Dynamic Channel Allocation

0	03 04 06 09.	3	
1	04 05.	3	
2	00 04 05 07.	4	
3	06 09.	1	
4	.	1	
5	04.	2	
6	08 09.	3	
7	00 03 06.	1	
8	.	1	
9	08.	2	

Topology Channels Distance Map Power



**WLAN Health Monitor**

0	14	57
1	22	38
2	13	28
3	23	51
4		
5	11	50
6	12	63
7	24	36
8		
9	11	82

Hop Count: 2.0  
Throughput: 51  
Fail Safe: 50

**Adaptive Power Control**

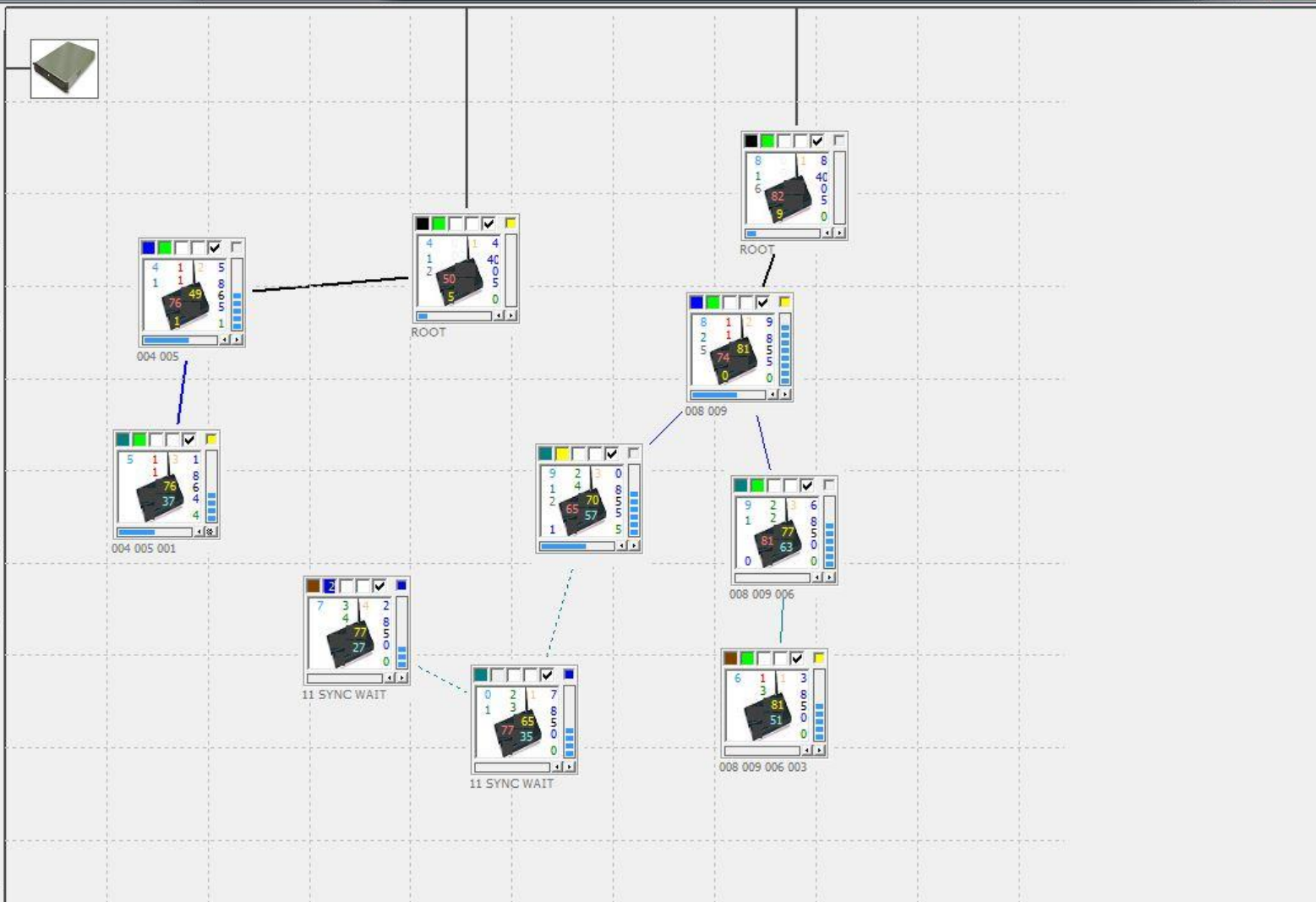
0	65
1	
2	
3	
4	50
5	76
6	81
7	77
8	82
9	74

**Dynamic Load Balancing** CoS: 42

**Dynamic Channel Allocation**

0	03 04 06 09.	3
1	05.	1
2	00 04 05 07.	4
3	00 06 09.	1
4	.	1
5	04.	2
6	08 09.	3
7	00 03 06.	1
8	.	1
9	08.	2

Topology Channels Distance Map Power



**WLAN Health Monitor**

0	24	57
1	22	38
2	13	28
3	24	51
4		
5	11	50
6	14	63
7	34	38
8		
9	14	82

Hop Count: 2.1  
Throughput: 51  
Fail Safe: 25

**Adaptive Power Control**

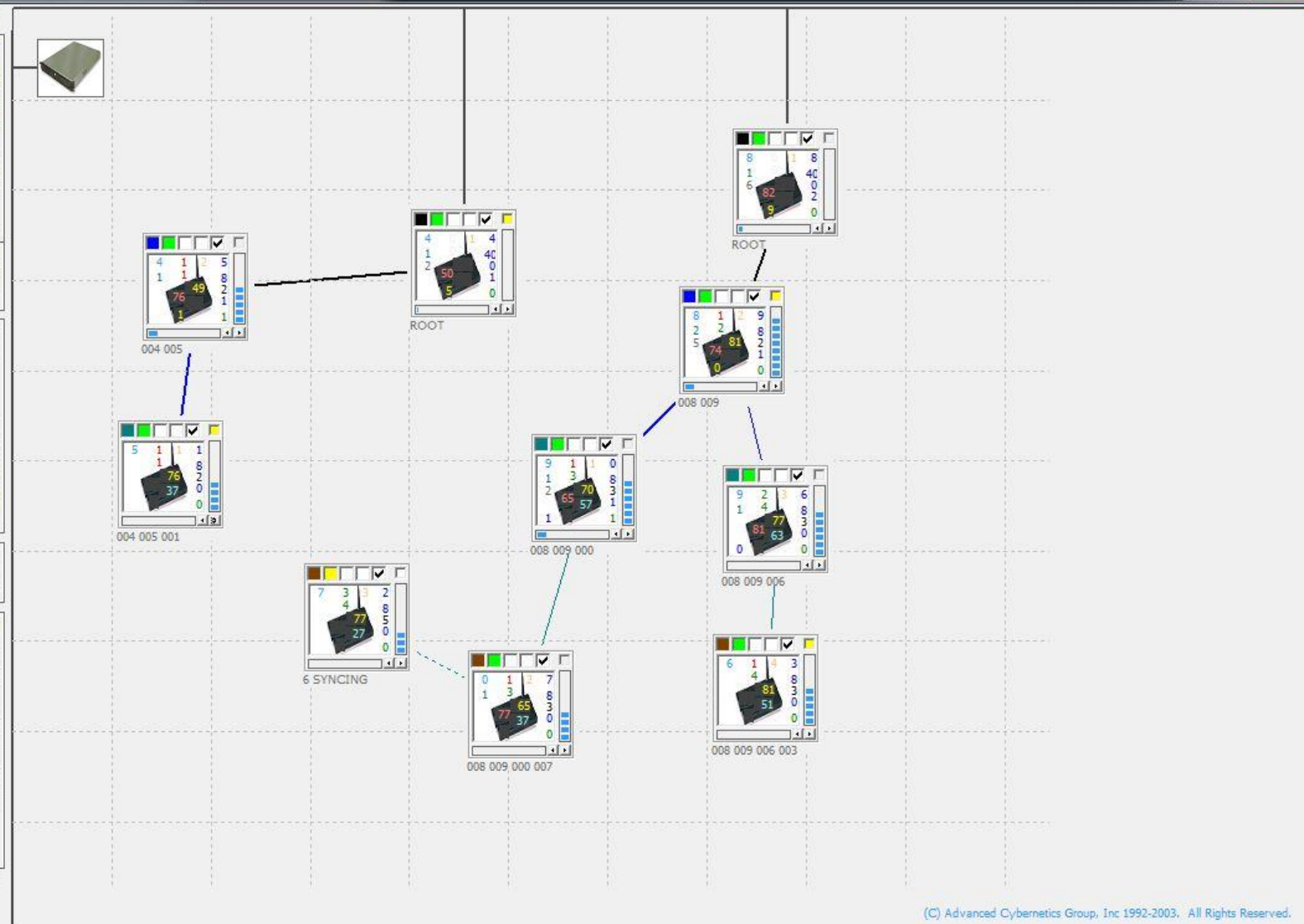
0	65
1	
2	
3	
4	50
5	76
6	81
7	77
8	82
9	74

**Dynamic Load Balancing** CoS: 12  
Buffer: 920

**Dynamic Channel Allocation**

0	03 06 09	1	
1	05	1	
2	00 04 05 07	3	
3	00 06 07 09	4	
4	00 01 05 09	1	
5	04	2	
6	00 07 08 09	3	
7	00 03 06	2	
8	00 06 09	1	
9	03 08	2	

Topology Channels Distance Map Power





WLAN Health Monitor

0	24	57
1	22	38
2	13	28
3	24	51
4		
5	14	50
6	14	63
7	34	38
8		
9	14	82

Hop Count: 2.1  
Throughput: 51  
Fail Safe: 38

Adaptive Power Control

0	65
1	
2	
3	
4	50
5	76
6	81
7	77
8	82
9	74

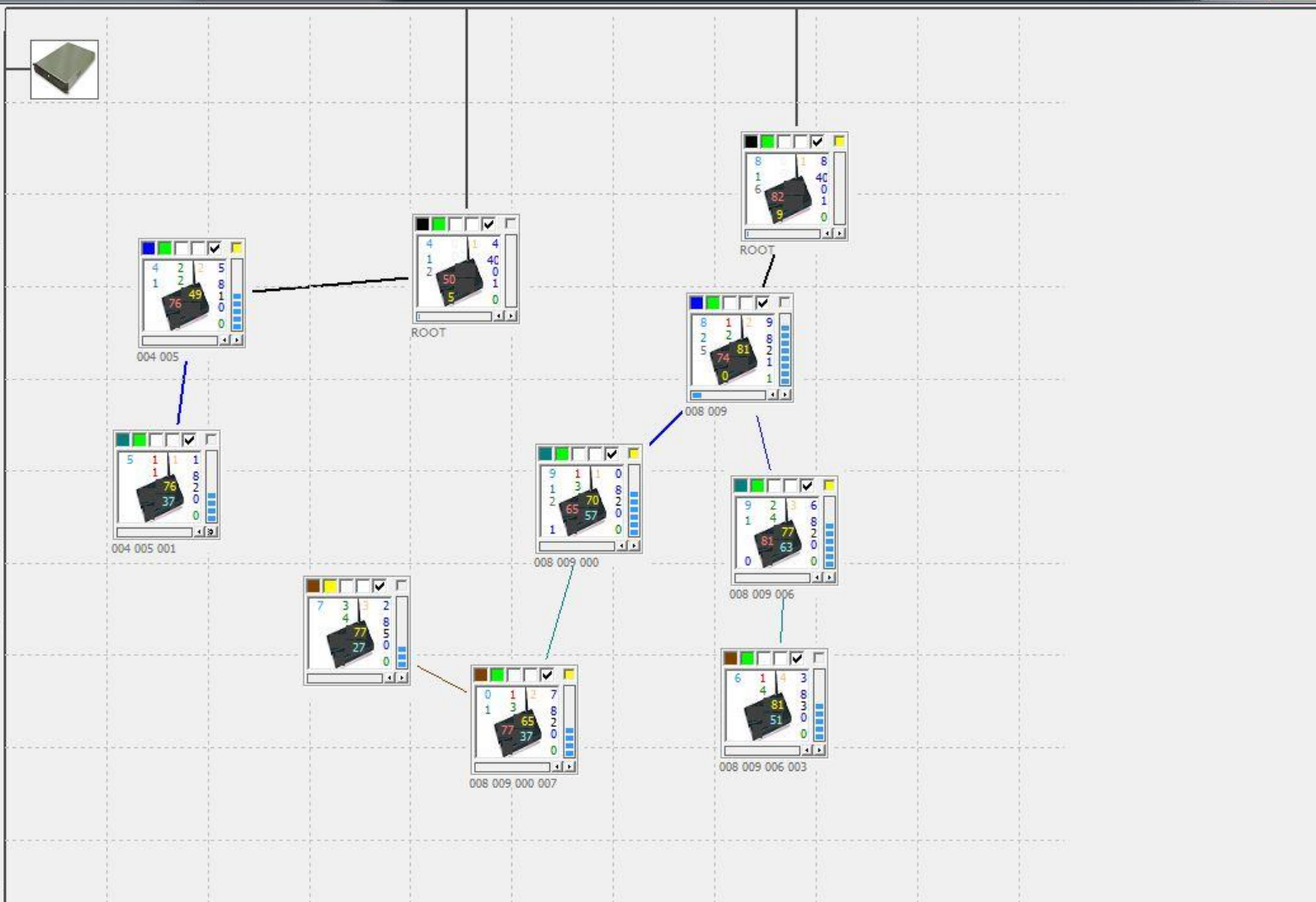
Dynamic Load Balancing     CoS

Buffer: 995    12

Dynamic Channel Allocation

0	03 06 09.	1	██████████
1	05.	1	██████████
2	00 04 05 07.	3	██████████
3	00 06 07 09.	4	██████████
4	00 01 02 05 09.	1	██████████
5	02 04.	2	██████████
6	00 07 08 09.	3	██████████
7	00 03 06.	2	██████████
8	00 06 09.	1	██████████
9	03 08.	2	██████████

Topology   Channels   Distance Map   Power



**WLAN Health Monitor**

0	14	57
1	14	38
2	14	29
3	24	51
4		
5	11	50
6	14	63
7	34	38
8		
9	14	82

Hop Count: 2.3  
Throughput: 51  
Fail Safe: 50

**Adaptive Power Control**

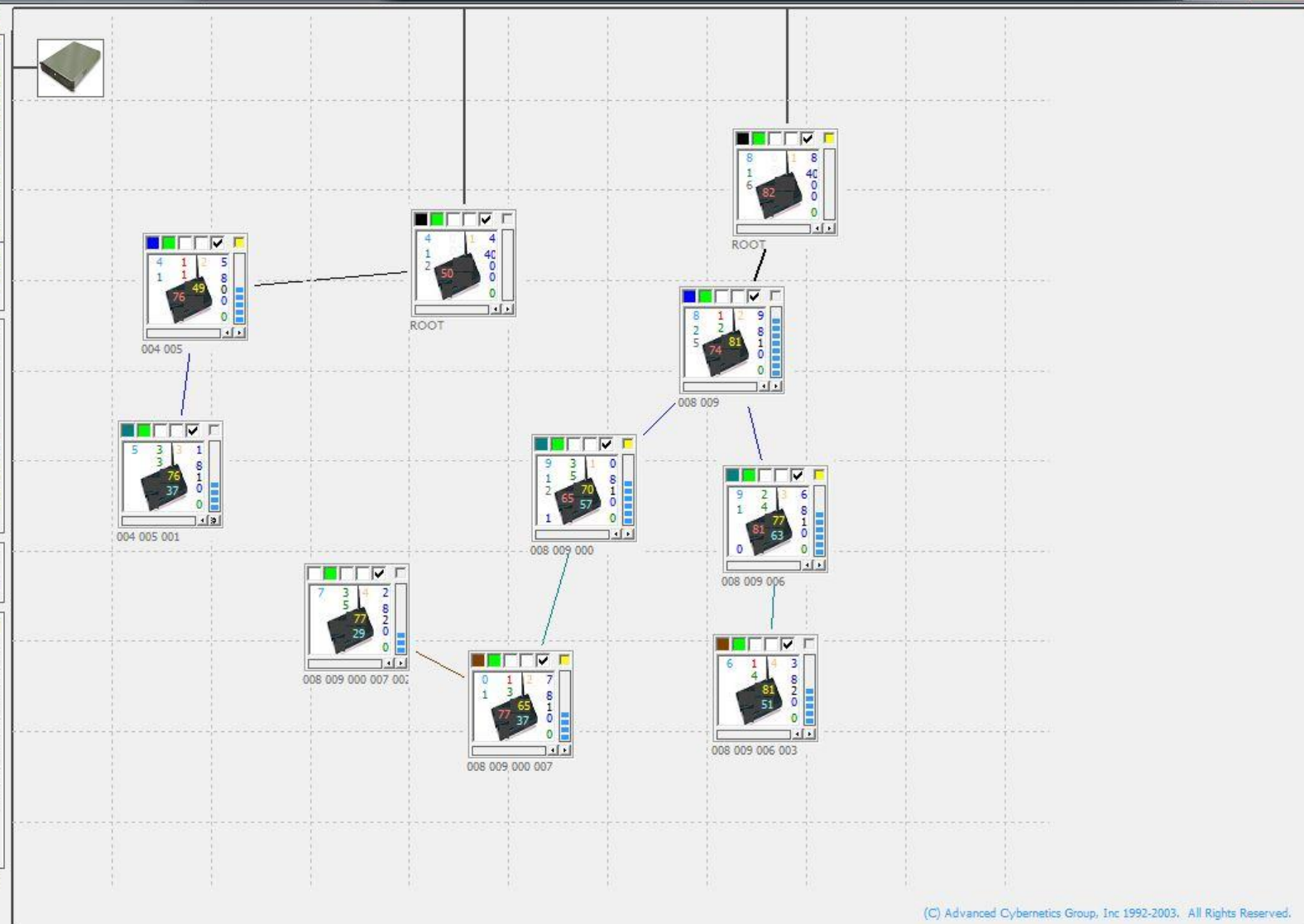
0	65
1	
2	
3	
4	50
5	76
6	81
7	77
8	82
9	74

**Dynamic Load Balancing**  **CoS**   
Buffer: 102

**Dynamic Channel Allocation**

0	03 04 06 08 09	3
1	02 04 05	3
2	00 01 04 05 07	4
3	00 06 07 09	2
4	00 01 02 05 08 09	1
5	04	2
6	00 07 08 09	4
7	00 03 06	1
8	00 04 06 09	2
9	03 08	1

Topology Channels Distance Map Power



**WLAN Health Monitor**

0	14	57
1	12	38
2	14	29
3	24	51
4		
5	11	50
6	14	63
7	34	38
8		
9	14	82

Hop Count: 2.3  
Throughput: 51  
Fail Safe: 62

**Adaptive Power Control**

0	65
1	
2	
3	
4	50
5	76
6	81
7	77
8	82
9	74

**Dynamic Load Balancing** CoS: 00  
Buffer: 102

**Dynamic Channel Allocation**

0	03 04 06 08 09	4
1	04 05	3
2	00 01 04 05 07	5
3	00 06 07 09	2
4	00 01 02 05 08 09	1
5	04	2
6	00 07 08 09	1
7	00 03 06	3
8	00 04 06 09	2
9	03 04 08	3

Topology Channels Distance Map Power

