A large, stylized graphic of a sun or moon, colored in a gradient of yellow, orange, and red, with several sharp, triangular rays extending downwards from its base. It is centered in the background of the slide.

ColMon: A next generation AllMon

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AllMon2

- Allstar Monitor
 - Shows status of links
 - Show voter RSSI
- Disadvantages
 - Separates displays
 - Not solved in AllMon3

Allstar Monitor II

Monitoring the World One Node at a Time



About	1801	1811	1812	1813	1814	1816	1817	1819	1820	1821	1822	1823	
1824	1825	1826	1827	1828	1829	1830	1831	1832	1833	The Colorado Connection			
Denver-Voter	Denver-Spire	Denver-UHF	COS-Voter	WinterPark	Breckenridge	FitCol-Voter	Vail						
Leadville	Eagle_Hub	Limon	Glenwood	GrandJct	Akron	Salida	Durango	COS TEMP					
Burlington	Sterling	Login											

1801 - Thorodin Hub						
Node	Node Information	Received	Link	Direction	Connected	Mode
1812	Colo Spgs 145.130 - 88.5/123.0 Cheyenne Mtn	000:00:13	ESTABLISHED	OUT	35:35:07	Transceive
1811	Denver Voter 145.310 - 88.5/123.0 Thorodin	000:00:31	ESTABLISHED	OUT	26:55:19	Transceive
1822	Glenwood 146.850 - 88.5/123.0 Sunlight	000:13:32	ESTABLISHED	OUT	107:43:43	Transceive
1819	Leadville 145.445 - 88.5/123.0 Mosquito	000:20:27	ESTABLISHED	OUT	107:43:46	Transceive
1814	Breckenridge 147.390 - 88.5/123.0 Baldy	001:41:25	ESTABLISHED	OUT	107:43:49	Transceive
1825	Salida 147.285 - 88.5/123.0 Methodist Mountain	001:48:01	ESTABLISHED	OUT	107:43:40	Transceive
1817	Vail 147.345 - 88.5/123.0 Upper Dowd	004:48:58	ESTABLISHED	OUT	107:43:47	Transceive
1821	Limon 147.375 - 88.5/123.0 Cedar Point	005:40:00	ESTABLISHED	OUT	107:43:44	Transceive
1827	Durango 147.345 - 88.5/123.0 Missionary	005:55:22	ESTABLISHED	OUT	107:43:39	Transceive
1824	Akron 145.400 - 88.5/123.0	013:45:09	ESTABLISHED	OUT	12:48:07	Transceive
1820	Eagle_Hub 446.325 - 203.5 Castle Peak	027:47:23	ESTABLISHED	OUT	107:43:45	Transceive
1830	Denver-Spire 145.430 - 141.3	031:34:01	ESTABLISHED	OUT	107:43:36	Transceive
1813	Winter Park 147.285 - 88.5/123.0 WA4CCC	050:38:06	ESTABLISHED	OUT	107:43:50	Transceive
1832		101:03:00	ESTABLISHED	OUT	107:41:55	Transceive
1823	GrandJct 145.355 - 88.5/123.0 Grand Mesa	101:12:04	ESTABLISHED	OUT	107:43:42	Transceive
1829	Burlington 145.250 - 88.5/123.0	107:16:43	ESTABLISHED	OUT	107:43:37	Transceive
1828	Skunkworks K2AD	Never	ESTABLISHED	OUT	107:43:38	Transceive

Node 1811 - Denver Voter 145.310 - 88.5/123.0 Thorodin	
Client	RSSI
Thorodin_A TX	0
Thorodin_B RX Master ActiveMaster	247
Squaw RX	255
LeeHill RX	122
Conifer RX	253
Spire RX	0

ColMon

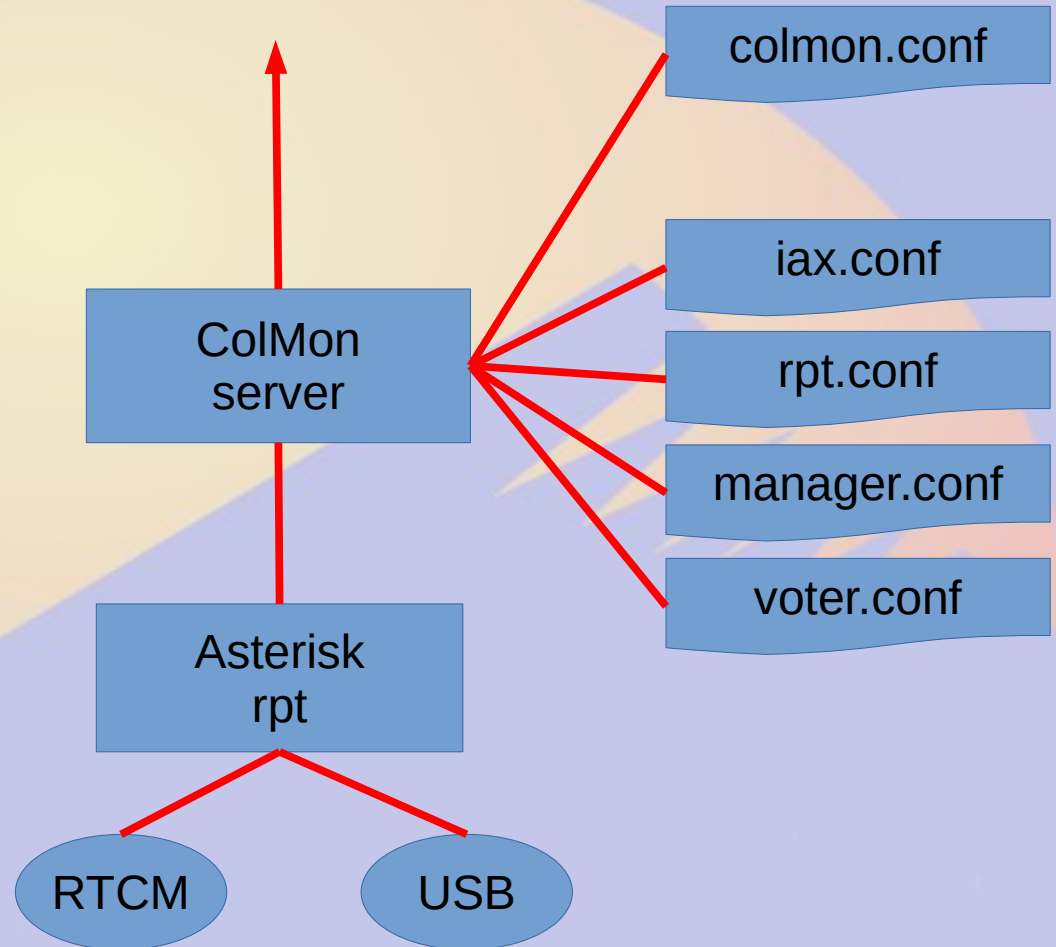
- Complete rewrite
 - C server (AC0KQ)
 - HTML/Javascript (K0SWE)
- Features
 - Integrate displays
 - Distribute servers
 - Minimal configuration
 - Focus on private nodes
 - Detailed node status

ColCon ColMon

1801 - Thorodin Hub							Rx Link	Tx Link
Node	Node Information		Received	Link	Direction	Connected	Mode	Tx
1811	Thorodin Voter 145.310 - 88.5/123.0		never	Established	Out	26:59:15	Transceive	Local
	Client	RSSI						
	Thorodin_A TX							
	Thorodin_B RX	255						
	LeeHill RX	156						
	Squaw RX	255						
	Spire RX							
	Conifer RX	255						
1812	Colorado Springs/Cheyenne Mtn 145.130 - 88.5/123.0		000:00:01	Established	Out	35:39:03	Transceive	Local
	Client	RSSI						
	CheyenneMt-Pri TX/RX	255						
	CheyenneMt-Bkp RX	255						
1813	Winter Park/WA4CCC 147.285 - 88.5/123.0		050:42:26	Established	Out	107:47:46	Transceive	Link
1814	Breckenridge/Baldy 147.390 - 88.5/123.0		001:45:45	Established	Out	107:47:45	Transceive	Link
1817	Vail/Upper Dowd 147.345 - 88.5/123.0		004:53:18	Established	Out	107:47:43	Transceive	Link
1819	Leadville/Mosquito 145.445 - 88.5/123.0		000:24:47	Established	Out	107:47:42	Transceive	Link
1820	Eagle Hub/Castle Peak 446.325 - 203.5		027:51:43	Established	Out	107:47:41	Transceive	Link
1821	Limon/Cedar Point 147.375 - 88.5/123.0		000:00:16	Established	Out	107:47:40	Transceive	Link
	Client	RSSI						
	Limon							
1822	Glenwood/Sunlight 146.850 - 88.5/123.0		000:17:52	Established	Out	107:47:39	Transceive	Link
1823	Grand Junction/Grand Mesa 145.355 - 88.5/123.0		101:16:24	Established	Out	107:47:39	Transceive	Link
1824	Akron 145.400 - 88.5/123.0		013:49:29	Established	Out	12:52:04	Transceive	Link
1825	Salida/Methodist Mountain 147.285 - 88.5/123.0		never	Established	Out	107:47:37	Transceive	Local
	Client	RSSI						
	Salida	255						
1827	Durango/Missionary 147.345 - 88.5/123.0		005:59:42	Established	Out	107:47:36	Transceive	Link
1828	Skunkworks/K2AD		never	Established	Out	107:47:35	Transceive	Link
1829	Burlington 145.250 - 88.5/123.0		107:21:03	Established	Out	107:47:34	Transceive	Link
1830	Denver-Spire 145.430 - 88.5/123.0		031:38:21	Established	Out	107:47:33	Transceive	Link
1832	Denver UHF		101:07:20	Established	Out	107:45:51	Transceive	Link

Basic ColMon on Allstar Node

- Node definitions and Asterisk data read from files
- Node status polled from Asterisk Management API



ColMon source data

- colmon.conf

```
# User and password
login user xxxxxx
# Read local files
local Thor Hub = 10.30.20.230
```

- iax.conf
manager.conf

- Ports and secrets

- voter.conf

- Node should vote

- rpt.conf

```
[1801]
; ! Thorodin Hub = Thorodin Hub
rxchannel = dahdi/pseudo
#includeifexists atf/hub.conf
```

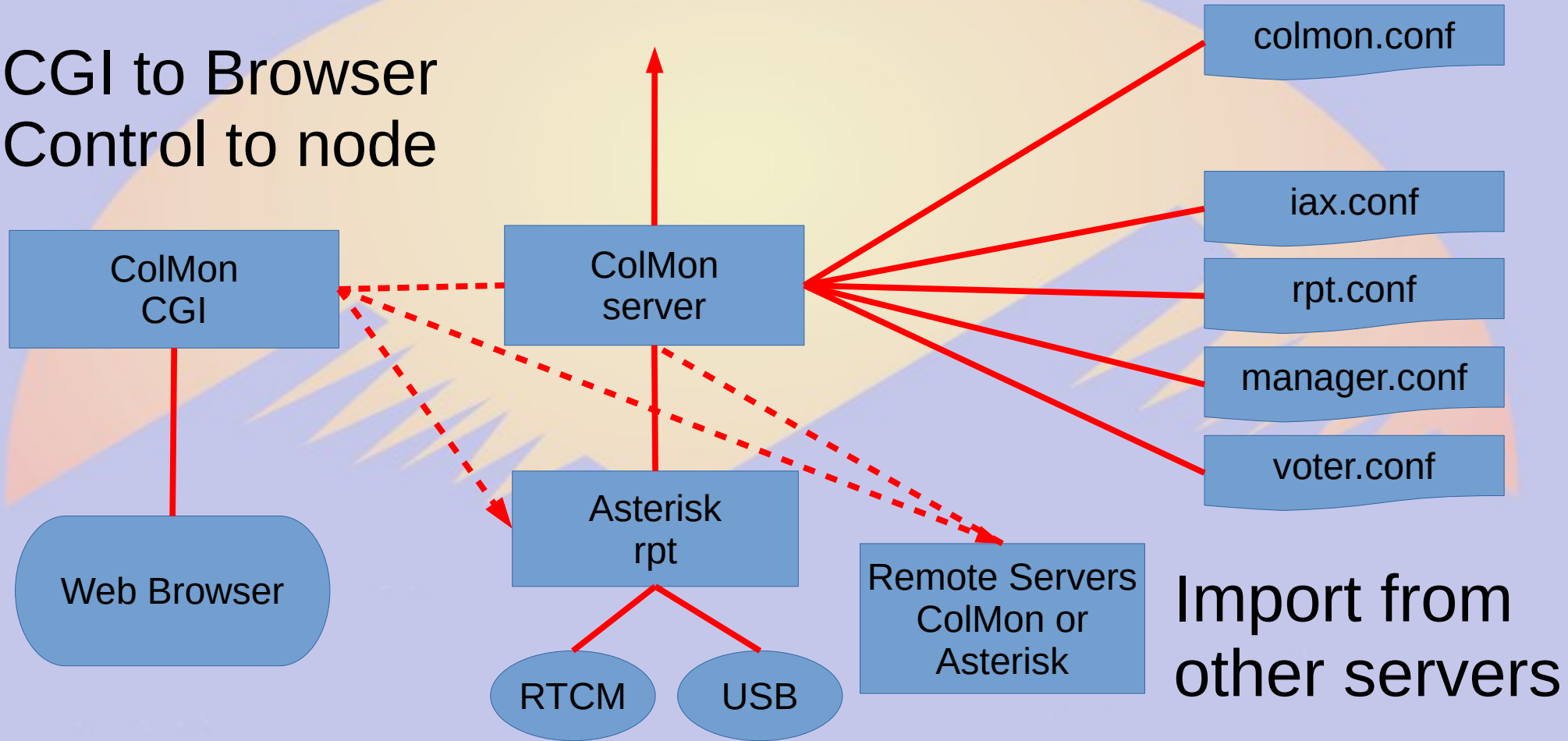
```
[1813]
; ! Winter Park = Winter Park/WA4CCC 147.285
rxchannel = Voter/1813
#includeifexists atf/voter.conf
```

```
[1814]
; ! Breckenridge = Breckenridge/Baldy 147.390
rxchannel = Voter/1814
#includeifexists atf/voter.conf
```

*; ! is a comment to Allstar, but a
node definition to ColMon*

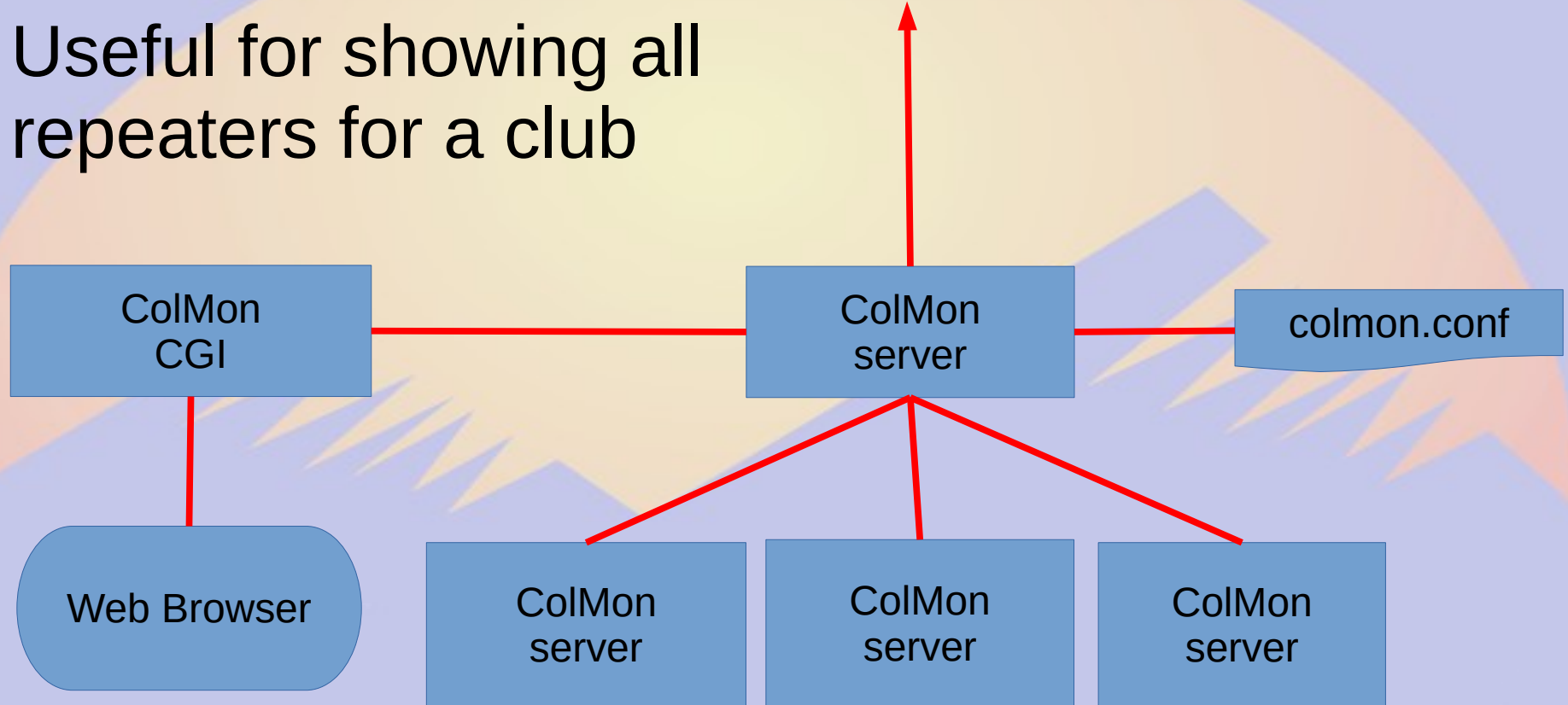
ColMon options

CGI to Browser
Control to node



ColMon Concentrator

- Useful for showing all repeaters for a club



Example: CRA ColMon

- Hub links nodes
- All nodes USB
 - No voting
- Several stand alone repeaters can be linked

CRA ColMon

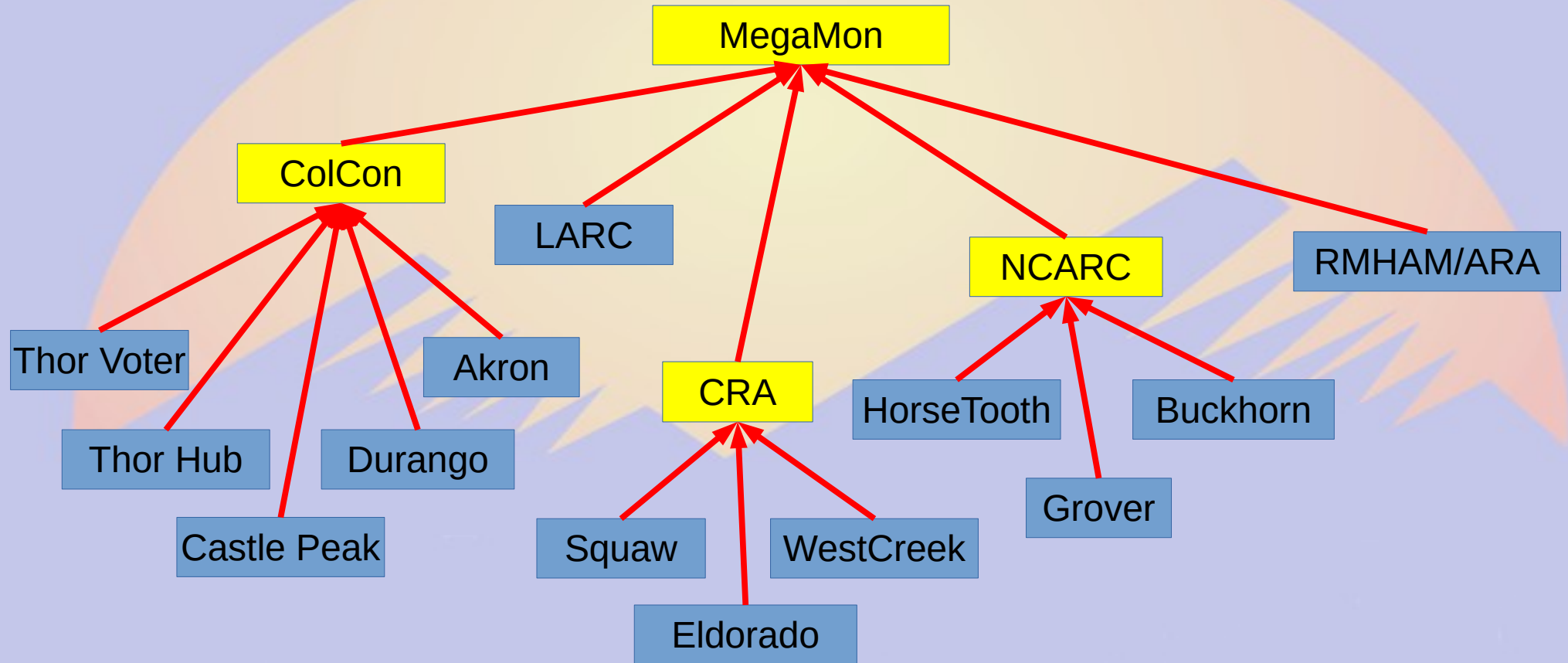
1300 - W0CRA VHF Hub						Rx Link	Tx Link
Node	Node Information	Received	Link	Direction	Connected	Mode	Tx
1301	W0CRA Westcreek 147.225	000:17:58	Established	Out	315:55:08	Transceive	Link
1308	W0CRA EchoLink/Autopatch	never	Established	Out	30:36:58	Transceive	Link
1310	W0CRA Cheyenne Mtn 145.160	002:07:37	Established	Out	30:37:22	Transceive	Link
1315	W0CRA Eldorado 145.460	000:00:03	Established	Out	178:46:28	Transceive	Local

1302 - W0CRA Westcreek 448.425/447.105						Rx Idle	Tx Idle
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1316 - W0CRA Eldorado 447.975						Rx Idle	Tx Idle
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1317 - W0CRA Squaw 145.145/447.575						Rx Local	Tx Local
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ColMon Hierarchy



Conclusions

- Provides improved view of entire system
- Allows reconfiguration of complex network
- Simplifies control operator tasks
 - Much more to come