4 Load Balancer

3 Create/Destroy Cluster

1 7 Monitoring Server

2 Send an email

5 SATCLUS01

- SatTermSrvr
- MastTimeSrvr
- WebSrvr
- DBSrvr

6 SCLDCLUS001

- ScldTermSrvr
- ScldTimeSrvr
- ScldWebSrvr
- ScldDBSrvr

1. Monitoring server will be used for cluster creation and the monitoring of the number of satellites being used. Initially It will create the SATCLUS01 along with the scaled cluster SCLDCLUS001. The servers will be created a CHEF custom script (kitchen.yml), so the servers will meet specifications needed. All server will be running CentOS 7.

2. When the monitoring server threshold is reached, 300 satellites per cluster, it will run the kitchen.yml to generate a new cluster and will generate a email to helpdesk@satelliteads.com This will be the same process in reverse as the number of satellites drop below the threshold and are no longer needed and the cluster is destroyed.

3. The decision to create/destroy the cluster is made and sent through the load balancer to process the request

4. Is the load balancer that will distribute satellites to clusters to maintain the effectiveness in the advertising.

5. The SATCLUS01 cluster will contain the 4 core servers consisting of the a terminal server, master time server, web server and a database server

6. The SCLDCLUS001 is the scaled cluster also containing 4 servers; terminal server, master time server, web server and a database server. Each scaled cluster will contain these four servers.

7. The script will iniitally set up the first two clusters, SATCLUS01 and SCLDCLUS001, as more satellites are put in use additional scaled clusters will be created