Cigna Challenge: How would you effectively scale a large number of production databases?

Here at Cigna, as we manage our 1300 production databases we care deeply about speed, security and scalability. Keep that in mind as you solve this challenge!

Consider the following apps:
1. app for uploading and sharing photos with friends
2. app for breaking news

DELIVERABLES
As your solution, please discuss the following for each of the two apps:
1. What is your database design - what is your schema?
2. What scaling issues do you see with your schema? What if you had to scale to 1300 databases - what steps would you take to scale?
3. What technologies would you use to monitor your database?

https://www.mindsumo.com/contests/how-would-you-effectively-scale-a-large-number-of-production-databases

Questions can be directed to aaron@mindsumo.com