Introduction to hierarchical quorums

by

This document gives an example of how to use hierarchical quorums. The basic idea is very simple. First, we split servers into groups, and add a line for each group listing the servers that form this group. Next we have to assign a weight to each server.

The following example shows how to configure a system with three groups of three servers each, and we assign a weight of 1 to each server:

```
group.1=1:2:3  
group.2=4:5:6  
group.3=7:8:9  
weight.1=1    
weight.2=1    
weight.3=1    
weight.4=1    
weight.5=1    
weight.6=1    
weight.7=1    
weight.8=1    
weight.9=1
```

When running the system, we are able to form a quorum once we have a majority of votes from a majority of non-zero-weight groups. Groups that have zero weight are discarded and not considered when forming quorums. Looking at the example, we are able to form a quorum once we have votes from at least two servers from each of two different groups.