Graphical user interface, application

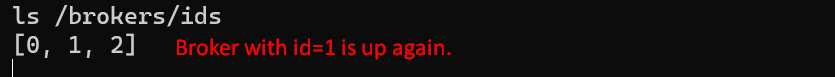
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1. Kafka Broker is a **Masterless Cluster**.
2. It doesn’t follow Master-Slave Architecture.
3. Diagram, schematic

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4. However, it uses Apache Zookeeper to maintain the list of active Brokers.
5. Diagram, schematic

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6. 
7. Every Kafka Broker has a **unique ID** that we define in the **Broker Configuration** file like 🡪 server.properties.
8. We also configure the coordinate of the Zookeeper in the **Kafka Broker Configuration** file like  
   
9. When a broker starts, it connects to the Zookeeper and creates **Ephemeral nodes** using broker id to represent an active Broker session.  
   **Ephemeral nodes in zookeeper are temporary kind of znodes. These znodes exists for a specific session only. They get created for a session and as soon as session ends, they also get deleted.  
   Every node created in Zookeeper is referred to as ZNode.**
10. So, the list of active Brokers in the Cluster is maintained as the list of ephemeral nodes under the brokers/ids path in the zookeeper.  
    Scatter chart

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11. **Jatin**:  
    1st start Zookeeper Start.  
    Then Broker(s).  
    Then following commands (Topic creation is up to you). The following command is to enter zookeeper DB shell.  
    Text

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12. Let’s stop broker with id=1.
13. 
14. 
15. So, this is way how Kafka Cluster maintains the list of active brokers which is maintained by zookeeper under the path brokers/ids.