KUBERNETES

Kubernetes, often abbreviated as K8S, derives its name from the eight letters between the 'K' and the 'S'. It is a powerful orchestration tool used to manage Docker containers, which can include front-end, back-end, and database services. Kubernetes handles tasks such as scaling containers, identifying and healing failed containers, and managing the interactions between them.

**Monolithic vs. Microservices**

Consider a large store like DMART, which houses a variety of products such as clothing and confectionery in a single repository. This monolithic approach can be challenging to manage and maintain. In contrast, a microservices architecture is akin to having separate stores for clothing, confectionery, and kids' care, each operating independently. Similarly, microservices, often encapsulated in Docker containers, are managed by Kubernetes.

In Kubernetes terminology:

* **1 node** represents **1 server**.
* **Multi-node** refers to multiple servers, collectively known as a **cluster**.