In Azure, **SKU (Stock Keeping Unit)** refers to the **specific pricing tier or configuration of a resource**. It defines the features, capacity, and pricing of a resource, allowing you to select a configuration that matches your requirements for performance, scalability, and cost.

**Key Concepts of SKU**

1. **Resource Specification**:
   * Each Azure service or product offers multiple SKUs, representing different levels of performance, features, or capacity.
   * For example:
     + Virtual Machines: Different VM sizes (e.g., Standard\_D2s\_v3, Standard\_E8s\_v5).
     + Storage: Different redundancy types (e.g., LRS, GRS, ZRS) or performance levels (e.g., Standard, Premium).
     + App Services: Different plans like Free, Basic, Standard, Premium, or Isolated.
2. **Pricing**:
   * The cost of an Azure resource depends on the chosen SKU.
   * Higher-tier SKUs typically offer better performance, scalability, or additional features but are more expensive.
3. **Customization**:
   * You can select a SKU based on the workload's specific needs, such as:
     + Compute power.
     + Storage capacity.
     + Data throughput.
     + High availability.

**Components of a SKU**

A SKU in Azure typically includes the following attributes:

* **Tier**: The overall performance level or classification (e.g., Basic, Standard, Premium).
* **Family**: Indicates the category or generation of the resource (e.g., D-series for general-purpose VMs, F-series for compute-optimized VMs).
* **Capacity**: Defines the specific configuration, such as the number of CPUs, memory size, or data storage limits.
* **Region**: Some SKUs may vary in availability or pricing across Azure regions.

**Examples of SKUs in Azure**

1. **Virtual Machines (VMs)**:
   * SKU: Standard\_B1s (low-cost general-purpose VM).
   * Attributes:
     + 1 vCPU.
     + 1 GiB memory.
     + Lower cost, suitable for test environments.
   * SKU: Standard\_E8s\_v5 (high-performance VM).
     + 8 vCPUs.
     + 64 GiB memory.
     + Optimized for memory-intensive workloads.
2. **Storage Accounts**:
   * SKU: Standard\_LRS (Locally Redundant Storage).
     + Low-cost, single-region redundancy.
   * SKU: Premium\_ZRS (Zone Redundant Storage).
     + High-performance, multi-zone redundancy.
3. **App Service Plans**:
   * Free: For experimentation with limited resources.
   * Premium: Higher performance, dedicated instances, and support for autoscaling.
4. **Azure SQL Database**:
   * Basic: Low-cost database for light workloads.
   * Premium: High-throughput and high-availability databases for mission-critical applications.

**Selecting a SKU**

* **Performance Requirements**: Choose SKUs based on CPU, memory, storage, or network needs.
* **Budget**: Align SKUs with your cost constraints and required features.
* **Scalability**: Select a SKU that supports scaling options to meet future demands.
* **Availability**: Ensure the chosen SKU is available in the desired Azure region.

**Changing SKUs**

Many Azure resources allow you to change their SKU after deployment. For example:

* You can scale a VM to a higher or lower SKU within the same series.
* Storage account redundancy can be upgraded (e.g., from LRS to GRS).

However, some changes might require downtime or redeployment.

**Summary**

The **SKU** in Azure represents the configuration and pricing tier of a resource. By selecting the appropriate SKU, you can ensure that your Azure resources meet the performance, scalability, and cost-efficiency needs of your application or workload.