

## 2- platform as a service (PaaS).

Platform as a service (PaaS) is a **middle ground** between renting space in a datacenter (infrastructure as a service) and paying for a complete and deployed solution (software as a service).

In a PaaS environment, the cloud provider maintains the

- physical infrastructure,
- physical security,
- connection to the internet,
- operating systems,
- middleware,
- development tools, and
- business intelligence services.

In a PaaS scenario, you don't have to worry about the licensing or patching for operating systems and databases.

PaaS is well suited to provide a complete development environment without the headache of maintaining all the development infrastructure.

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- **User Responsibilities:**
    - **Application Code:** Users are responsible for developing and deploying their application code and defining application-level configurations.
    - **Data Management:** Users need to manage their data and databases within the PaaS environment.
    - **Application Scaling:** Users configure the scaling of their applications as needed.
    - **Application Monitoring:** Users are responsible for monitoring the performance and health of their applications.
  - **Azure Responsibilities:**
    - **Runtime Environment:** Azure manages the runtime environment, including the underlying infrastructure, operating system, and middleware.
    - **Scalability and Load Balancing:** Azure provides automatic scalability and load balancing for applications.
    - **Data Backup and Recovery:** Azure offers data backup and recovery options for the PaaS services it provides.
    - **Security of the Platform:** Azure ensures the security of the PaaS environment, including patching and vulnerability management.

- **Availability and Fault Tolerance:** Azure ensures high availability and fault tolerance of the PaaS services.