Configuring & Managing Servers After an Upgrade

Part 1: Office Roleplay Dialogue

Scenario: An IT Technician, Jason, is working with his colleague, Emily, on configuring and managing the company's servers after a recent upgrade.

Emily: Hey Jason, now that we've completed the server upgrade, what's next?

Jason: First, we need to check that the **hypervisor** is properly configured. Since we're running multiple virtual machines on the server, the hypervisor ensures they operate efficiently.

Emily: Right, the hypervisor allows us to manage virtualization. Do we need to adjust anything?

Jason: Not yet, but we should monitor performance. The next step is setting up **load balancing** to distribute network traffic evenly across our servers. We don't want any single server to be overloaded.

Emily: That makes sense. How do we ensure that all servers stay online?

Jason: We need to check our **uptime** metrics. Uptime refers to how long the servers have been running without failure. The higher the uptime, the more reliable the system.

Emily: So, our goal is to maximize uptime. What happens if one of the servers fails?

Jason: That's where **redundancy** comes in. We have backup systems in place so that if one server goes down, another can take over without disrupting operations.

Emily: Got it. And if there's a major system failure, we rely on **failover**, right?

Jason: Exactly! **Failover** automatically switches operations to a backup server if the primary one fails. It ensures minimal downtime and keeps our business running smoothly.

Emily: Sounds good. I'll document our configurations and set up alerts to monitor server performance.

Jason: Perfect! With these systems in place, our upgraded servers should be stable and efficient.

Part 2: Comprehension Questions

1. What is the purpose of a hypervisor?
(A) To control physical network cables
(B) To manage and run virtual machines
(C) To monitor employee emails
(D) To increase internet speed

2. Why is load balancing important?
(A) It distributes network traffic evenly across servers
(B) It makes servers run faster
(C) It deletes old data to free up space
(D) It prevents employees from accessing certain websites

3. What does uptime refer to?
(A) The total storage capacity of a server
(B) The amount of time a server has been running without failure
(C) The speed at which a server processes data
(D) The time required to restart a server

4. What happens during a failover?
(A) The primary server automatically switches to a backup server
(B) The internet connection resets
(C) All data is deleted to free up space
(D) The server permanently shuts down

Part 3: Key Vocabulary Definitions in Japanese

1. **Hypervisor (ハイパーバイザー)** – 仮想マシン（VM）を管理し、複数の OS を同じ物理サーバー上で動作させるソフトウェア。
2. **Load Balancing (負荷分散)** – ネットワークトラフィックを複数のサーバーに均等に分散し、過負荷を防ぐ技術。
3. **Uptime (稼働時間)** – サーバーが停止せずに連続して動作している時間。システムの信頼性の指標となる。
4. **Redundancy (冗長性)** – システム障害時のデータ損失を防ぐために、バックアップサーバーやコンポーネントを用意する仕組み。

5. **Failover (フェイルオーバー)** – メインサーバーが故障した際に、自動的にバックアップサーバーへ切り替える仕組み。

Part 4: Answers

1. What is the purpose of a hypervisor?

✅ (B) To manage and run virtual machines

2. Why is load balancing important?

✅ (A) It distributes network traffic evenly across servers

3. What does uptime refer to?

✅ (B) The amount of time a server has been running without failure

4. What happens during a failover?

✅(A) The primary server automatically switches to a backup server