

1. For access control in ABC, Inc., Role-Based Access Control (RBAC) would be the most appropriate option. RBAC allows access rights to be assigned based on roles, making it easier to manage permissions for different users within the organization. Given the structure of ABC, Inc., where there are clear roles such as CFO, CSO, COO, and others, RBAC aligns well with the organization's hierarchy and access requirements.
2. There are a couple of things you need to take into account before purchasing authentication servers. Security Requirements: This ensures that the chosen authentication servers meet the security standards and requirements of ABC, Inc. This includes compliance with industry regulations and internal security policies. Next, scalability: the scalability of the authentication servers to accommodate the increasing customer activity. The solution should be able to handle growing demands without compromising security or performance. Finally reliability and availability, you should choose authentication servers that are reliable and provide high availability to minimize downtime and ensure continuous access to critical systems and services.
3. Due to the sensitivity of the data and the potential risks, there is indeed a need for intrusion detection systems . Network-based IDS (NIDS) and host-based IDS (HIDS) are some of the most recommended ones. NIDS can monitor network traffic for suspicious patterns or anomalies, while HIDS can monitor individual hosts for unauthorized access or malicious activities.
4. Defense-in-depth is highly relevant for ABC, Inc. This is because it involves implementing multiple layers of security controls to mitigate the risk of unauthorized access and data breaches. Given the organization's structure and the importance of security in its operations, adopting a defense-in-depth strategy can provide comprehensive protection against various threats and vulnerabilities.