Module 2 Homework 2: Research Active Directory Logical Structures

**Part 1: Hierarchical AD Logical Structure**

The hierarchical logical structure of active directory is an essential concept in understanding how active directory organizes and manages resources within a networked environment.

**Part 2: Overview of Components in a Hierarchical Tree Structure**

Active Directory uses a hierarchical tree structure to organize and manage resources. A forest is the top-level container in the AD hierarchy. It is a collection of one or more domains that share a common schema, configuration, and global catalog. A forest represents the highest level of administrative and security boundaries. A domain is a logical container within a forest that contains a defined set of objects, such as users, computers, and groups. Domains are used to manage resources and security policies within a specific administrative boundary. Multiple domains within a forest can have different administrative policies while sharing a common schema and global catalog. A tree is a collection of one or more domains within a forest that share a contiguous namespace. Domains in a tree have a parent-child relationship, creating a hierarchical structure where each domain can have its own policies and objects. An OU is a container object used to organize resources within a domain. OUs allow for a more granular organization of objects, such as users, groups, and computers. OUs can have delegated administrative control, allowing administrators to manage resources within their scope without requiring full domain-wide privileges. Objects are the fundamental entities in AD and can represent users, groups, computers, printers, and more. These objects are organized within domains and OUs in the tree structure. Objects have attributes that define their properties and characteristics. User resources refer to the objects that represent users in Active Directory. These objects include attributes such as usernames, passwords, group memberships, and security policies that define user access and permissions.

**Part 3: Scenario Resolution**

In the scenario where the development group in a company wants to set up their own child domain to have full control over managing their accounts and policies, the recommendation of the main IT group to set up an organizational unit and delegate appropriate access is a valid approach. Organizational units are recommended because they provide a more granular level of control and delegation. Instead of creating a separate Child Domain, which would introduce additional complexity, an OU can be created within the existing domain specifically for the Development group. Managing multiple domains can also be more complex and require additional administrative overhead. By using organizational unit, the main IT group can retain centralized control while delegating specific responsibilities to the Development group administrators. Creating a new Child Domain typically involves additional licensing and infrastructure considerations. Using organizational unit is a cost-effective solution as it leverages existing domain infrastructure. Organizational units are also flexible. Organizational units can be easily restructured or modified as the organization's needs evolve. If the Development group's requirements change, the Organizational units structure can be adapted accordingly.

In summary, using an Organizational Unit with delegated access is a recommended approach for the Development group to achieve their goal of managing their accounts and policies while maintaining the advantages of a centralized Active Directory domain structure.

**References:**

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