Active Directory Design

Contents

Time required: 60 minutes

Knowing how to design a functional Active Directory is an important skill to have.

This individual assignment will give you the skills to get you started on your AD design for your final project. This is to be a separate assignment, and shouldn't be used in your final project, just the skills learned.

Type of Business

Pick a type of business for your AD design. Here are some ideas.

Accounting Firm, Health Care, Manufacturing, Agriculture, Transportation, Professional, Government, Education, Business Services. Pick one of your own.

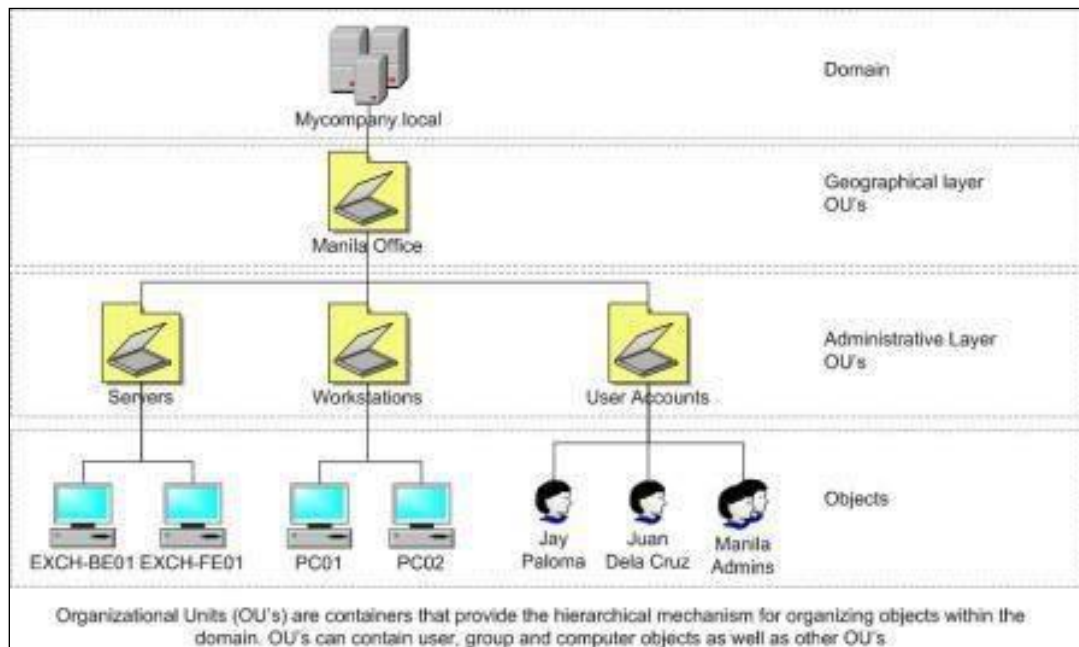Create at least 4 business units. Something like Accounting, Sales, etc.
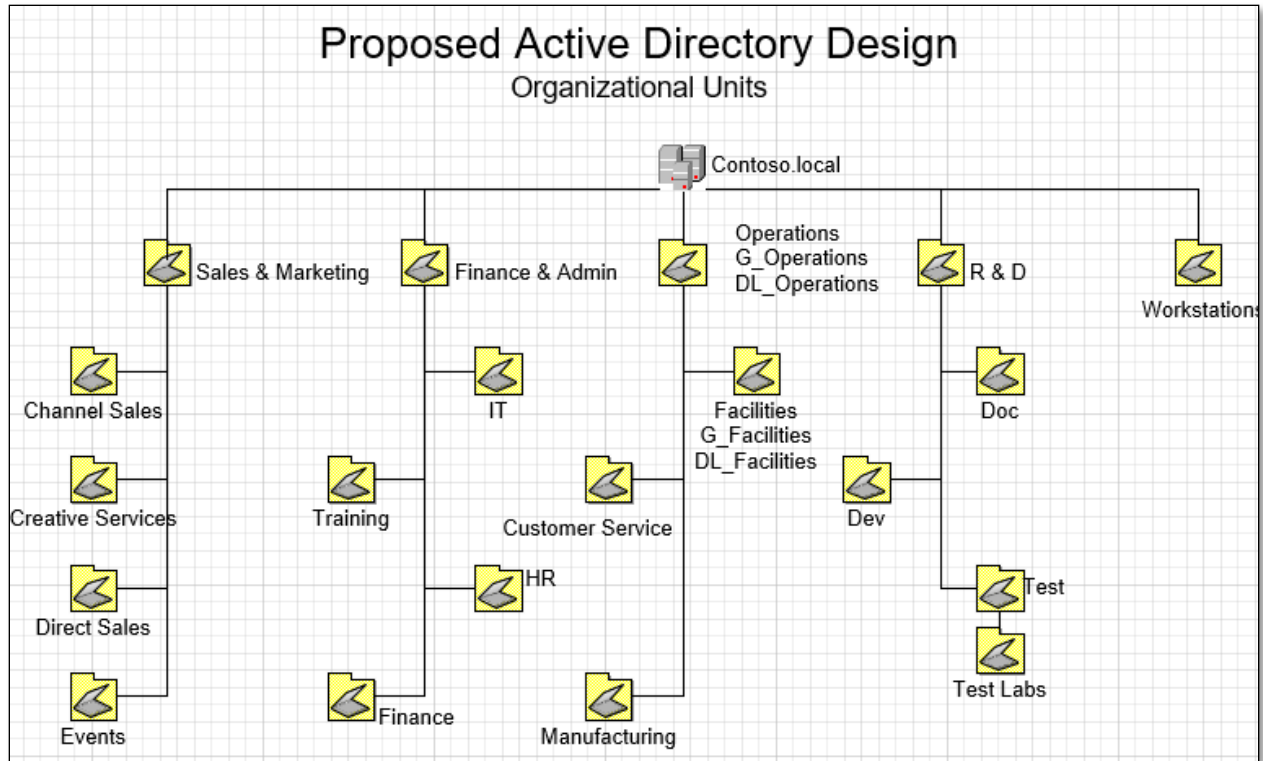
Diagramming Software

www.lucidchart.com has a free option for diagram software. You can also use yEd Graph Editor, Google Draw www.draw.io, SmartDraw Free, SmartArt in Word or any other diagramming software.

Read Some of the Following

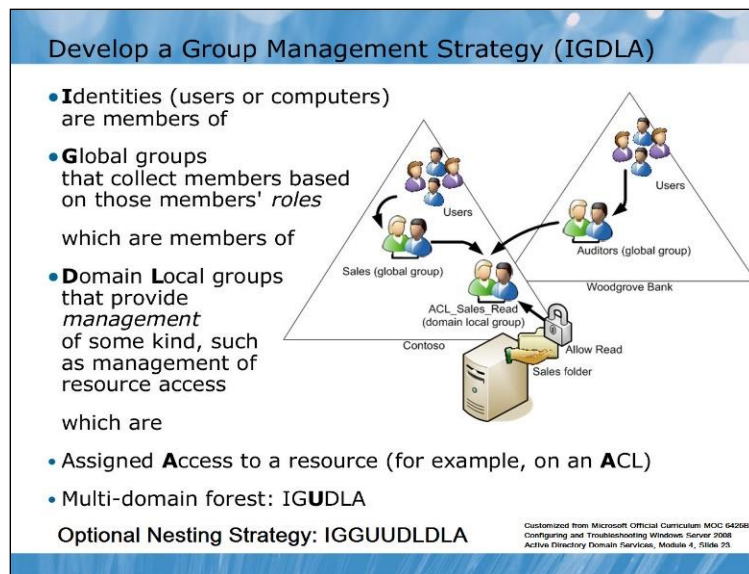Here are some articles and examples of Active Directory design. You can Google other articles and examples.

- https://technet.microsoft.com/en-us/magazine/2008.05.oudesign.aspx

- http://www.netid.washington.edu/documentation/domains/ouDesignGuidelines.aspx

- https://jpaloma.wordpress.com/2011/01/19/active-directory-organizational-unit-design-principles/

- http://www.grouppolicy.biz/2010/07/best-practice-active-directory-structure-guidelines-part-1/

Organizational Units (OU's) are containers that provide the hierarchical mechanism for organizing objects within the domain. OU's can contain user, group and computer objects as well as other OU's.

Proposed Active Directory Design
Organizational Units

Security Groups

Resource: http://blogs.msmvps.com/acefekay/2012/01/06/using-group-nesting-strategy-ad-best-practices-for-group-strategy

Unless you have multiple domains, this is the preferred sequence of user groups for resource management.

Users >> Global Groups >> Domain Local Groups >> Resources

Role Based Security Groups

We can create role based groups to help day to day administration. Role groups such as these are based on their business functions. Some of these will parallel our OU and Shared Folder structure.

- Sales

- Marketing

- Accountants

- Managers

- Accounting Managers

- Sales Managers

- Executives

Global Group Naming Convention

Global Groups typically hold users. This is just one example of a naming convention. Whatever you do, be consistent.

You can create a Global Group (G) for the accountants that need Modify Access. Modify is the most common access needed by a user.

G_Accountants

This is an example for the accountants that only need Read access.

G_Accountants_Read
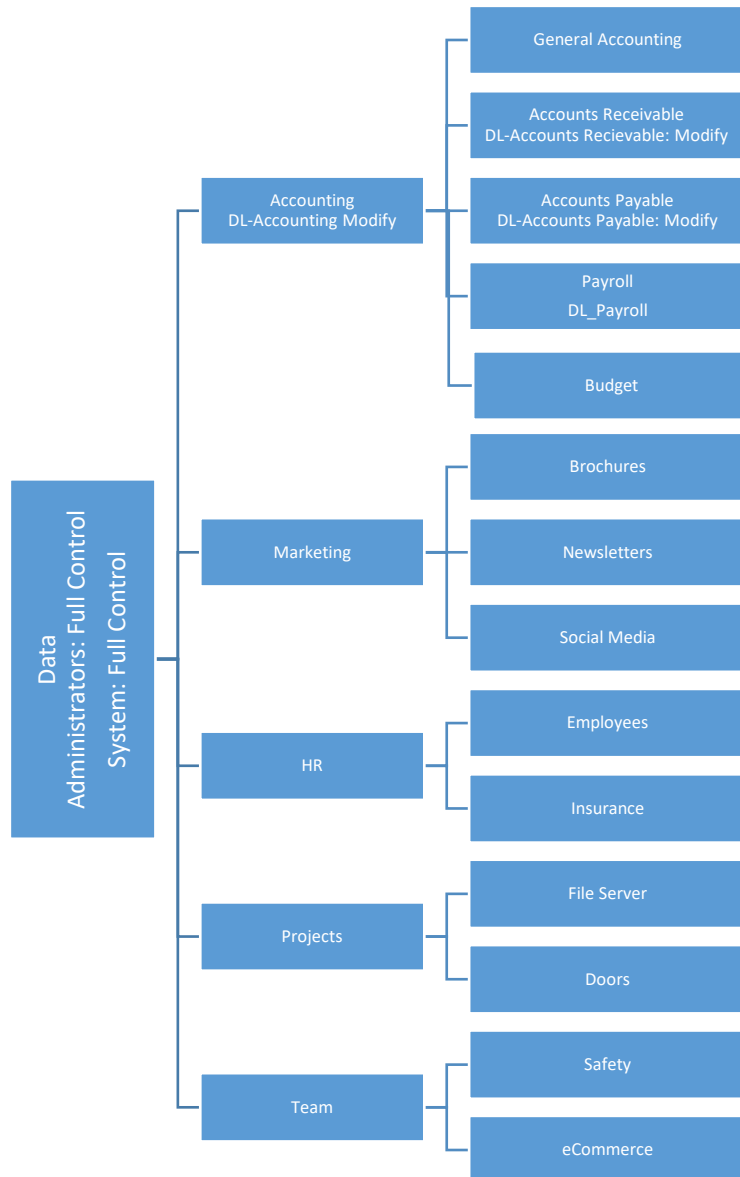
Domain Local Group Naming Convention

Domain Local Groups typically hold Global Groups of users, and are used to control access to resources. These groups can be named on share names. This is an example of a domain local group that is used to control access to the Accounting shared folder.
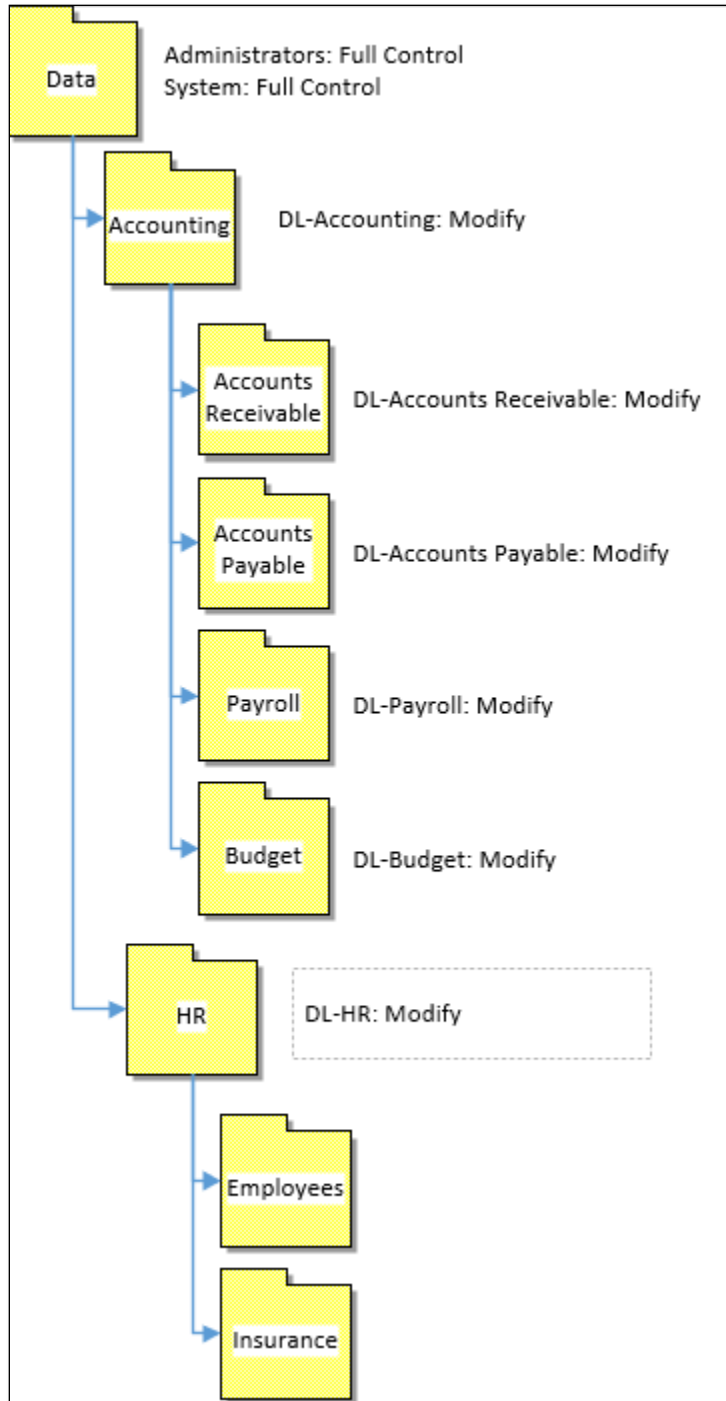
DL_Accounting

DL_Accounting_Read

Folder Structure, Shares, and Security Groups

The OU structure, Security Groups and server folders and shares should be consistent for easy management. Here are some examples, you may want to do some further research. You can use Word's Smart Art feature and use a Horizontal Hierarchy to model your folders, shares, and security or use a diagramming software.

The diagram shows a folder hierarchy with permissions:

- **Data** — Administrators: Full Control / System: Full Control
  - **Accounting** — DL-Accounting: Modify
    - **Accounts Receivable** — DL-Accounts Receivable: Modify
    - **Accounts Payable** — DL-Accounts Payable: Modify
    - **Payroll** — DL-Payroll: Modify
    - **Budget** — DL-Budget: Modify
  - **HR** — DL-HR: Modify
    - **Employees**
    - **Insurance**

Submit Assignment

We want a minimum of 4 business units in this design.

1. Create an Active Directory Design

2. Create a Folders, Shares, Security Groups Design

Attach a Word document with screenshots of your designs to the assignment.