

## **NDS College Bowl Questions**

### **Bindery**

Which file(s) are the bindery objects stored in?

They are stored in the directory files.

What objects can be represented in bindery services?

NDS Leaf objects, including user, group, print server, and print queue objects.

How is the Admin object different from the bindery Supervisor?

Unlike the Supervisor object in the bindery, the attributes of the Admin object in the Directory can be modified and the object can be deleted completely from the Directory.

What is a bindery context?

Bindery context is the container(s) in which bindery services are available.

How many containers can the bindery context hold?

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## **NDS College Bowl Questions**

### **Install**

Must I rewrite my user login scripts when I upgrade my NetWare 3 server to a NetWare 4 server? Why or why not?

No, the installation NLM will take care of this for you.

When you install a server in NetWare 4.02 or 4.1, does the Install utility place a partition on the new server, and when does it create a new partition?

A new partition is created by the installation process only when a new tree is being added to the environment. All other cases the server and server context is added to an existing partition.

A replica of the partition containing the server's context is placed on the server if one of the following criteria is met:

There are less than three servers in the replica ring for that partition.  
The server is being upgraded from 3.x to 4.1 or 4.02

How are trustee rights preserved when Directory Services is removed?

A file is created that maps the object name to object ID. This file is called `uninstal.ds`.

## **NDS College Bowl Questions**

### **Name**

What does the beginning dot mean when attached to a NDS name?

The beginning dot anchors the name at the root of the tree

How would you refer to an object that is two levels above your current context?

Place two trailing dots at the end of the relative distinguished name.

What happens if someone tries to create an "Alias" of an object that is already an "Alias"?

It is possible to create an alias of an alias. When you create an alias that points to an alias the Directory detects that the object is an alias and will point the new alias to the real object that the original alias points to.

What is the difference between a typeless name and a typeful name? Can they be mixed?

A typeful name contains the type of object as well as the name. A typeless name does not contain the type of object in the name.

## **NDS College Bowl Questions**

### **NetSync**

How many Netware 3 servers running NETSYNC can a Netware 4 server manage?

12 Netware 3 servers

How many Netware 3 servers running NETSYNC can share the same bindery context?

Minimum requirement is one Netware 4 server supporting every 12 Netware 3 servers, but there can be more than one Netware 4 server supporting the same bindery context. This means that it is limited only by the number of NetWare 4 servers in the tree.

What objects or properties, if any, are automatically synchronized to NDS when they are changed on a NetWare 3 server running NETSYNC?

Yes, passwords.

If I change bindery objects on a NetWare 3 server running NETSYNC, how do I synchronize those changes with NDS?

Reupload the data

**NDS College Bowl Questions**  
**Partition**

What determines a partition's name ?

The name of the root most container object.

Can I give administration rights to a portion of the tree without giving rights to perform partition operations?

Yes

Can a partition contain objects that are located in another partition? Why, or why not?

No, because you can not have overlapping partitions.

## **NDS College Bowl Questions Repair**

What do errors -601, -602, and -603 mean?

- 601 No Such Object
- 602 No Such Attribute
- 603 No Such Value

You see the message "Time\_Not Synchronized" on the DTrace screen. When you type time the server appears to be in synch with the network time. What is the problem?

Synchronization process encountered a timestamp in the past - the server time has probably been set backwards.

How do you update Directory Services in NetWare 4.1?

You copy the DS.NLM to the SYS:System directory, unload and reload DS.NLM, without downing the server.

How do you check a server's synchronization state?

Use the option in DSREPAIR main menu called replica synchronization

How do you delete trustees for deleted or invalid objects?

Run DSREPAIR in unattended mode

What causes an error -631?

There is no writeable replica of the bindery context on that server

I try to create a new partition and partmanger tells me that the partition is busy. How do I resolve this problem?

Use DSREPAIR advanced options and then abort the partition operation. This will undo what was done in the first partition operation. You will need to correct that error and then continue with the partition operation.

## **NDS College Bowl Questions**

### **Replication**

What are the four replica types?

1. Master.
2. Read/Write.
3. Read Only.
4. Subordinate Reference.

Can a user authenticate to the network when only read-only replicas are accessible?

No

What is the difference between a replica and a partition?

A partition is a logical division of the tree. A replica is an instance of a partition that is stored on a server.

Where are subordinate references located?

On every server where the parent partition is but the child partition is not.

What are the benefits of NDS being partitioned and replicated?

Partitioning- scalable, put data where it is needed, ease of admin  
Replicated - fault tolerance, performance.

What are the rights needed to place a replica on a server?

Server- Write rights  
Container - Write rights at the partition root

What is the replica ring?

A list of servers that contain an replica of that partition

## **NDS College Bowl Questions**

### **Schema**

What is the schema, and what is its relationship to the Directory?

The schema is the set of rules that govern the Directory's structure.

What are unknown objects? Do they always indicate an error condition?

An object that is missing a mandatory attribute. No, the database may still be synchronizing the information.

How will new NDS-aware products add new object types to the NDS database?

The products will extend the schema by adding new object classes and attributes.

In the schema, what is the difference between an effective class and a non-effective class?

An effective class is a type of object that an instance of it can be found in the database.

A non-effective class is a grouping of attributes which can be added to an effective class (ie Resource, Partition).

What objects in the NDS tree do I require rights to if I want to extend the schema?

Administrative rights on the root object acl - write rights to the acl of the root.



## NDS College Bowl Questions Security

1. Which of the following is not an object right?

- a. Browse.
- b. Create.
- c. Delete.
- d. Erase.
- e. Supervisor.

D-Erase

2. What is a property right?

A property right controls a trustee's access to specific information (attribute or property) associated with the object.

3. Which of the following is not a property right?

- 1. Compare
- 2. Read
- 3. Create
- 4. Add/Delete Self

3 - Create

4. What is an ACL? What does it do?

Access Control List, which defines which other objects in the Directory can access that object and its properties.

5. My object is .CN=Mickey.OU=World.O=Disney.L=Orlando.L=Florida.C=US. What other NDS objects am I security equivalent to?

.OU=World.O=Disney.L=Orlando.L=Florida.C=US  
.O=Disney.L=Orlando.L=Florida.C=US  
.L=Orlando.L=Florida.C=US  
.L=Florida.C=US  
.C=US  
[Public]  
[Root]

6. My object is moved from .OU=World.O=Disney.L=FL.C=US to .OU=Land.O=Disney.L=CA.C=US. An alias in the World container references the new

location of my object. Have my security equivalences changed? If so, which ones have changed and why?

.OU=World.O=Disney.L=FL.C=US was deleted.  
.O=Disney.L=Fl.C=US was deleted.  
.L=FL.C=US was deleted.  
.OU=World.O=Disney.L=Fl.C=US was deleted.  
.OU=Land.O=Disney.L=CA.C=US was added.  
.O=Disney.L=CA.C=US was added.  
.L=CA.C=US was added.  
All other were left the same.

7. Which statement is true if the [Root] object is made a trustee to an object in NDS?

- a. Anything connected to the network is granted rights.
- b. All objects in the Directory tree are granted rights.
- c. Only objects immediately in the [Root] are granted rights.
- d. The [Root] cannot be made a trustee in NDS.

B - All objects...

8. Which NDS rights can be inherited?

- A. Object rights
- B. All Property Rights
- C. Selected Property Rights

A & B - Both can be inherited

## **NDS College Bowl Questions**

### **Synchronization**

1. Why is time synchronization important for Directory Services?

Changes to DS must be made in chronological order to maintain a consistent view of the data.

2. DS separates changes to the NDS database into two types and synchronizes them at different rates. What are these two types of changes?

Slow sync (occurs within 5 minutes after a change) and fast sync (occurs within 10 seconds after a change)

3. Which objects and attributes are designated to synchronize slowly?

No objects but the following attributes are sync'ed in the slow sync process - Login time, login date, net address.

4. During synchronization, how does a replica determine what changes to send to the other servers?

Sync up to attribute. This tells the sync process the time of the last change with that replica.

5. Having two levels of synchronization gives NDS what advantages?

Performance, Efficiency, less overhead