

Database Testing Interview Questions

1. What we normally check for in the Database Testing?

In DB testing we need to check for,

1. The field size validation
2. Check constraints.
3. Indexes are done or not (for performance related issues)
4. Stored procedures
5. The field size defined in the application is matching with that in the db.

2. What is Database testing?

Data base testing basically include the following.

- 1)Data validity testing.
- 2)Data Integrity testing
- 3)Performance related to data base.
- 4)Testing of Procedure, triggers and functions.

for doing data validity testing you should be good in SQL queries

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For performance related things you should have idea about the table structure and design.

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3. How to Test database in Manually? Explain with an example

Observing that operations, which are operated on front-end is effected on back-end or not.

The approach is as follows :

While adding a record thr' front-end check back-end that addition of record is effected or not. So same for delete, update,..... Ex:Enter employee record in database thr' front-end and check if the record is added or not to the back-end(manually).

4. What is data driven test?

An1:

Data driven test is used to test the multinumbers of data in a data-table, using this we can easy to replace the parameterers in the same time from deferent locations.

e.g: using .xsl sheets.

An2:

Re-execution of our test with different input values is called Re-testing. In validate our Project calculations, test engineer follows retesting manner through automation tool.Re-teting is also called DataDriven Test. There are 4 types of datadriven tests.

1) Dynamic Input submission (key driven test) : Sometimes a test engineer conducts retesting with different input values to validate the calculation through dynamic submission. For this input submission, test engineer use this function in TSL script-- create_input_dialog ("label");

2) Data Driven Files Through FLAT FILES (.txt,.doc) : Sometimes testengineer conducts re-testing depends on flat file contents. He collect these files from Old Version databases or from customer side.

3)Data Driven Tests From FRONTEND GREAVES : Some times a test engineer create automation scripts depends on frontend objects values such as (a) list (b) menu (c) table (d) data window (5) ocx etc.,

4)Data Driven Tests From EXCEL SHEET : sometimes a testengineer follows this type of data driven test to execute their script for multiple inputs. These multiple inputs consists in excel sheet columns. We have to collect this testdata from backend tables .

5. How to check a trigger is fired or not, while doing database testing?

It can be verified by querying the common audit log where we can able to see the triggers fired.

6. How to Test Database Procedures and Triggers?

Before testing Data Base Procedures and Triggers, Tester should know that what is the Input and out put of the procedures/Triggers, Then execute Procedures and Triggers, if you get answer that Test Case will be pass other wise fail.

These requirements should get from DEVELOPER

7. Is a "A fast database retrieval rate" a testable requirement?

No. I do not think so. Since the requirement seems to be ambiguous. The SRS should clearly mention the performance or transaction requirements i.e. It should say like 'A DB retrival rate of 5 micro sec'.

8. How to test a DTS package created for data insert update and delete? What should be considered in the above case while testing it? What conditions are to be checked if the data is inserted, updated or deleted using a text files?

Data Integrity checks should be performed. If the database schema is 3rd normal form, then that should be maintained. Check to see if any of the constraints have thrown an error. The most important command will have to be the DELETE command. That is where things can go really wrong. Most of all, maintain a backup of the previous database.

9. How to test a SQL Query in Winrunner? without using DataBase CheckPoints?

By writing scripting procedure in the TCL we can connect to the database and we can test data base and queries.

The exact process should be:

1) connect to the database

```
db_connect("query1", DRIVER={drivername}; SERVER=server_name; UID=uidname; PWD=password; DBQ=database_name ");
```

2) Execute the query

```
db_execute_query("query1", "write query u want to execute");
```

-Condition to be mentioned-

3) disconnect the connection

```
db_disconnect("query");
```

10. How do you test whether a database is updated when information is entered in the front end?

It depends on your application interface.. 1. If your application provides view functionality for the entered data, then you can verify that from front end only. Most of the time Black box test engineers verify the functionality in this way. 2. If your application has only data entry from front end and there is no view from front end, then you have to go to Database and run relevant SQL query. 3. You can also use database checkpoint function in WinRunner.

11. How do you test whether the database is updated as and when an information are added in the front end? Give me an example?

It depends on what level of testing you are doing. When you want to save something from front end obviously, it has to store somewhere in the database

You will need to find out the relevant tables involved in saving the records.

Data Mapping from front end to the tables. Then enter the data from front end and save.

Go to database, fire queries to get the same data from the back end.

12. What steps does a tester take in testing Stored Procedures?

First the tester should go through the requirement, as to why the particular stored procedure is written for.

Then check whether all the required indexes, joins, updates, deletions are correct comparing with the tables mentioned in the Stored Procedure. And also he has to ensure whether the Stored Procedure follows the standard format like comments, updated by, etc.

Then check the procedure calling name, calling parameters, and expected responses for different sets of input parameters.

Then run the procedure yourself with database client programs like TOAD, or mysql, or Query Analyzer

Rerun the procedure with different parameters, and check results against expected values.

Finally, automate the tests with WinRunner.

13. What are the different stages involved in Database Testing

verify field level data in the database with respect to frontend transactions

verify the constraint (primary key, foreign key)

verify the performance of the procedures

verify the triggers (execution of triggers)

verify the transactions (begin, commit, rollback)

14. How to use sql queries in WinRunner/QTP

in QTP

using output database check point and database check point ,

select SQL manual queries option

and enter the "select" query to retrieve data in the database and compare the expected and actual

15. what is database testing and what we test in database testing?

Ans1:

Database testing is all about testing joins, views, imports and exports , testing the procedures, checking locks, indexing

etc. Its not about testing the data in the database.
Usually database testing is performed by DBA.

An2:

Database testing involves some in depth knowledge of the given application and requires more defined plan of approach to test the data.

Key issues include:

- 1) Data Integrity
- 2) Data Validity
- 3) Data Manipulation and updates

Tester must be aware of the database design concepts and implementation rules.

An3:

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16. What SQL statements have you used in Database Testing?

The most important statement for database testing is the SELECT statement, which returns data rows from one or multiple tables that satisfies a given set of criteria.

You may need to use other DML (Data Manipulation Language) statements like INSERT, UPDATE and DELETE to manage your test data.

You may also need to use DDL (Data Definition Language) statements like CREATE TABLE, ALTER TABLE, and DROP TABLE to manage your test tables.

You may also need to some other commands to view table structures, column definitions, indexes, constraints and store procedures.

17. How to test data loading in Data base testing?

You have to do the following things while you are involving in Data Load testing.

1. You have know about source data (table(s), columns, datatypes and Constraints)
2. You have to know about Target data (table(s), columns, datatypes and Constraints)
3. You have to check the compatibility of Source and Target.
4. You have to Open corresponding DTS package in SQL Enterprise Manager and run the DTS package (If you are using SQL Server).
5. Then you should compare the column's data of Source and Target.
6. You have to check the number to rows of Source and Target.
7. Then you have to update the data in Source and see the change is reflecting in Target or not.
8. You have to check about junk character and NULLs.

18. What is way of writing testcases for database testing?

An1:

You have to do the following for writing the database testcases.

1. First of all you have to understand the functional requirement of the application thoroughly.
2. Then you have to find out the back end tables used, joined used between the tables, cursors used (if any), triggers used(if any), stored procedures used (if any), input parameter used and output parameters used for developing that requirement.
3. After knowing all these things you have to write the testcase with different input values for checking all the paths of SP. One thing writing testcases for backend testing not like functional testing. You have to use white box testing techniques.

An2:

To write testcase for database its just like functional testing.

1.Objective:Write the objective that you would like to test. eg: To check the shipment that i load thru xml is getting inserted for particular customer.

2.Write the method of input or action that you do. eg:Load an xml with all data which can be added to a customer.

3.Expected :Input should be viewd in database. eg: The shipment should be loaded sucessfully for that customer,also it should be seen in application.4.You can write ssuch type of testcases for any functionality like update,delete etc.

An3:

At first we need to go through the documents provided.

Need to know what tables, stored procedures are mentioned in the doc.

Then test the functionality of the application.

Simultaneously, start writing the DB testcases.. with the queries you have used at the backend while testing, the tables and stored procedures you have used in order to get the desired results. Triggers that were fired. Based on the stored procedure we can know the functionality for a specific piece of the application. So that we can write queries related to that. From that we make DB testcases also.

19;What is Database testing?

An1:

here database testing means test engineer should test the data integrity, data accessing, query retrieving, modifications, updation and deletion etc

An2:

Database tests are supported via ODBC using the following functions:

SQLOpen, SQLClose, SQLError, SQLRetrieve, SQLRetrieveToFile, SQLExecQuery, SQLGetSchema and SQLRequest. You can carry out cursor type operations by incrementing arrays of returned datasets.

All SQL queries are supplied as a string. You can execute stored procedures for instance on SQL Server you could use "Exec MyStoredProcedure" and as long as that stored procedure is registered on the SQL Server database then it should execute however you cannot interact as much as you may like by supplying say in/out variables, etc but for most instances it will cover your database test requirements

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An4:

Data base testing generally deals with the following:

- a)Checking the integrity of UI data with Database Data
- b)Checking whether any junk data is displaying in UI other than that stored in Database
- c)Checking execution of stored procedures with the input values taken from the database tables
- d)Checking the Data Migration .
- e)Execution of jobs if any

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An1:

In DB testing we need to check for,

1. The field size validation
2. Check constraints.
3. Indexes are done or not (for performance related issues)
4. Stored procedures
5. The field size defined in the application is matching with that in the db.

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Database testing involves some indepth knowledge of the given application and requires more defined plan of approach to test the data. Key issues include :

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