By OnlineInterviewQuestions.com

SISS Interview Questions

SISS is a field that many companies are looking forward to hiring eligible professionals. It is called the SQL Server Integration Services. This is a version of Microsoft's SQL Server. This is a plus point for candidates who are already familiar with the SQL and SQL Server. Several organizations are looking for both freshers and experienced personnel to handle this position. So, we have gathered some of the most common **SISS Interview Questions** to guide candidates. It is important to understand the use of SISS before we go into the article. SISS is used for the migration of data and also for data transformation. A business can frame workflow applications and implement data integration in a big way. With SISS and its tools, data extraction, loading, and transformation are made simple.

Also, it is easy to install and learn about the different data warehouse tools it offers. A number of graphical tools, debugging packages, and wizard-building platforms are also available. We can develop simple ETL (Extraction, Transformation, and Loading) packages to assist a project. In this article, we will explore many such topics that are important in a SISS interview. This will give an idea for database managers to answer both technical and conceptual parts of the interview.

Q1. Name the important components of the SISS package

The **components in SISS** include the data flow, control flow, package explorer, and event handler. All of these components come in the package after installing the SISS application from Microsoft. Other important components include the runtime engine, flow pipeline engine, SISS window service, and SISS object model. We use a runtime engine to manage the workflow of the SISS package. The flow pipeline engine helps to transform the source data to its respective destination. It also helps with in-memory transformations.

Q2. Tell about the SISS package

The **SISS package** is available for installation online and it is an organized set of connections. These connections include event handlers, data flow elements, control events, variables, parameters, and other configurations. SISS provides both graphical tools and programming tools. So, these can be assembled using either of the tools.

Q3. What is the type of containers that can be used in the SISS package?

Containers are helpful in grouping different tasks together. Each one of them has a purpose that helps in performing various tasks. Here is a list of containers.

- **Loop containers**

When we have to execute a particular task a fixed number of times, this container is used. If we need to start a loop 5 times, then we can specify the number while using this container. This saves time as we need not repeatedly do the same task 5 times. We also need not declare 5 different packages to complete the task.

- **For each loop container**

If the number of times a task is to be executed and we are unaware of the exact number, then this container is used. When we execute such a task, each and every folder is selected. Then the task takes place one by one. As soon as it is complete, we are informed that the task is complete.

- **Sequence containers**

These are used when we have to group two or more similar tasks. It is a simple container in the SISS package.

- **Task host containers**

A task host container is a default container in SISS. This is not found in the toolbox as does not need any implementation. This automatically gets assigned to each task that is performed.

Q4. What is a task in SISS?

In SISS, we define a **task** to be the work that needs to be completed for a particular command. This is very similar to the tasks in programming languages. In these languages, a task is done when code is given as input. Similarly, there are two types of tasks in SISS and they are database maintenance tasks, and control flow tasks.

Q5. What are the differences between union all and merge operation in SISS?

The main differences between union all and merge operations in SISS are as follows -

Merge	Union all
Data that is stored in two different paths can be merged into one using the Merge option	Union all is also used to merge two or more data from different paths into one
Before executing, sorting transformation should be applied. This helps to sort the data before merging	Sorting transformation is not required for the union of all functions
The metadata of this type should be the same for all data	In union, all options, and all data from different sources are transformed and then displayed as a single set.

Q6. Name the different types of data viewers in SISS

In SISS, there four types of data viewers. We can display data in the form of histograms, scatter plots, grids and column charts. This is an advantage because of it easier to understand than tables.

Q7. Where can we save the SISS package after installing it?

After we install the SISS package, it can be saved on locations including Package Storage, File System, and SQL Server.

Q8. Explain about precedence constraint in SISS

In any coding language or back-end application, a task is executed only after satisfying a set of parameters. Only then the task is assigned on a path that is suitable to complete the given command. In SISS too there are parameters that define the path of a task. A precedence constraint is a task sequence that is defined by a logical statement or a command. It is in this sequence a task is being performed. We can also use a connector to connect these tasks and precedence constraints.

- **Completion**

It is mandatory for the preceding container to get executed completely. The result may be a success or a failure. Only when it is completed, the current workflow starts preceding.

- **Success**

If the preceding container has completed execution and is also successful, then it is represented by a green line.

- **Failure**

When the preceding container is executed but failed then it is marked with a red line.

Q9. Explain the use of data profiling

It is very important to analyze the source data before proceeding with tasks. In SISS, we can analyze and organize the given data. This is called data profiling. There is a list of steps followed in data profiling. It includes identifying and cleaning the data, finding the number of true value and null values, etc. This gives a better understanding of the source data and is helpful in creating the database destination design schema. This is usually done at the beginning of the project. This gives an idea on how to proceed with the project and how long will it take to complete.

Q10. How do we deploy SISS?

After installing the SISS package, we convert them into an executable package that can be used to implement SISS functions. This process is called the deployment of the SISS package. Additionally, there is a deployment utility that allows us to deploy the package from any location.

- To deploy we can use the following steps.
- Right-click on the project integration and then select their properties.
- Here click 'True' and create the deployment utility option. Once the changes are made, we can close this window and right-click on the project to build it.
- We can open the bin folder, the deployment folder is created. This is located in the main project location that was created earlier. Then double click on the .manifest file to find the deploy package on the SQL server.

Q11. What are the types of connections that work with SISS?

There are a number of connections that can be used on SISS. This includes XML, Excel, .netSQL client, flat file, ODBC and OLEDB.

Q12. What are the different types of variables in SISS?

As SISS is a database server, variables are highly essential. It is used to store the value of a particular data. Only when the variable and data type is assigned, the input data is valid to get stored. There are two types of variables in SISS which are system variable and user variable.

Q13. Explain about breakpoint and checkpoint in SISS?

A breakpoint is used during the development of the SISS package. Sometimes it is also used when troubleshooting in the SISS package. If we wish to pause the execution process during development, then breakpoint is used.

A checkpoint is used when a project fails. This feature restarts the project all over again. While executing, checkpoint keeps saving information about the execution package. It gets deleted if the project is successful otherwise it repeats the project again.

Q14. What is execute package task?

Execute package task is used to create a parent package which is later used to develop child packages. As the package keeps growing, there is a lot of advantages while creating child packages. Configuration properties are present in the executive package which makes it reliable. We can also separate the workflows and make development shorter than before. Testing of the project is made simple too.

Q15. Explain event logging property and logging in SISS?

Each and every task in the SISS package has a logging mode. This is a property that is exclusive for every task. The values accepted for this property will include enabled, disabled and UseParentSetting.

- Enabled, as the name suggests is used to enable the component or task.
- Disabled will disable the components.
- UseParentSetting is used to modify or optimize the parent setting.
- Logging, on the other hand, is done for events like onWarning and onError. This can be used for any type of file that is used on SISS.

Q16. What are the types of flow in SISS?

There are two types of flow in SISS, they are data flow and control flow.

- **Control flow** is a great feature in SISS that can link two or more tasks together. Linking is done both logically and graphically. Later these are programmed graphically only. There three common connectors which are a success, failure and complete. For other complex control flow integrations, FX (an expression) is used.
- **Data flow** is executed along with the data flow engine that helps in transformation. When this is added in the package, we can use the Edit, Transform and Load (ETL) function.

Q17. Explain the types of transformations in SISS?

In SISS, there are a lot of sub-transformations. The main types include business intelligence transformations, row transformations, row-set transformations, and split transformations. A number of custom transformations can also be used. These transformations come with in-memory commands so that we need not use any SQL scripts. Other essential transformations in SISS include synchronous and asynchronous transformations.

Q18. What is the use of solution explorer?

When we need to modify the project, data source views, data sources, and other files, we can use solution explorer. All that we perform on SISS is stored here that can be accessed for modification.

Q19. What is the package and project in SISS?

A package is an object that is used to implement the ETL functionality. Whereas a project is a container that is used to develop the SISS packages.

Q20. What is the use of ignoring failure option?

If we use the ignore failure option in a transformation, the error in it is ignored. It then proceeds to the next transformation. This is helpful because we skip the need for failing a package. Instead, the error is redirected to some other transformation. This is used when the project is to be completed soon.

Please Visit OnlineInterviewquestions.com to download more pdfs