# **AS400 Smart Service Plugin**

### **Overview**

The AS400 Smart Service plugin allows us to establish connection and execute queries in AS400 Database. The As400 Database (formerly Db2 for LUW) is a relational database that provides sophisticated data management and analytics features for transaction-based workloads.

### **Features**

The AS400 Smart Service plugin contains the following smart services.

- 1. AS400 Execute Delete
- 2. AS400 Execute Insert
- 3. AS400 Execute Query
- 4. AS400 Execute Select
- 5. AS400 Execute Truncate
- 6. AS400 Execute Update

#### **AS400 Execute Delete**

This smart service allows you to execute delete queries in the specified AS400 database table.

#### **Parameters**

### **Inputs**

SI No	Parameter Name	Parameter Type	Description
1	Database Url	Text	The URL of the Database.
2	Use Per User Credentials	Boolean	Provide whether the SCS fields contain user specific credentials.
3	Scs Key	Text	The key value for the Secure Credential Store
4	Table Name	Text	The name of the table in which the query has to be executed.
5	Filter Expression	Text	The where condition can be specified.

### **Outputs**

- 1. **Error Message** The error message in case an error is encountered will be returned.
- 2. **Has Error Occurred** Indicates if an error has occurred.
- 3. **Result** On successful execution, the results of the query will be returned.

# **AS400 Execute Insert**

This smart service allows you to execute insert queries on the specified AS400 database table.

### **Parameters**

### **Inputs**

SI No	Parameter Name	Parameter Type	Description
1	Database Url	Text	The URL of the Database.
2	Use Per User Credentials	Boolean	Provide whether the SCS fields contain user specific credentials.
3	Scs Key	Text	The key value for the Secure Credential Store
4	Table Name	Text	The name of the table in which the query has to be executed.
5	Identifiers	Text	The columns where the values have to be inserted.
6	Values	Text	The values that are to be inserted into the table.

# **Outputs**

1. **Error Message** - The error message in case an error is encountered will be returned.

- 2. Has Error Occurred Indicates if an error has occurred.
- 3. **Result** On successful execution, the results of the query will be returned.

# **AS400 Execute Query**

This smart service allows you to execute any query on the specified AS400 database table.

#### **Parameters**

# **Inputs**

SI No	Parameter Name	Parameter Type	Description
1	Database Url	Text	The URL of the Database.
2	Use Per User Credentials	Boolean	Provide whether the SCS fields contain user specific credentials.
3	Scs Key	Text	The key value for the Secure Credential Store
4	Query	Text	The actual SQL query to be executed.

### **Outputs**

1. **Error Message** - The error message in case an error is encountered will be returned.

- 2. Has Error Occurred Indicates if an error has occurred.
- 3. **Result** On successful execution, the results of the query will be returned.

# **AS400 Execute Select**

This smart service allows you to execute select queries on the specified AS400 database table.

### **Parameters**

### **Inputs**

SI No	Parameter Name	Parameter Type	Description
1	Database Url	Text	The URL of the Database.
2	Use Per User Credentials	Boolean	Provide whether the SCS fields contain user specific credentials.
3	Scs Key	Text	The key value for the Secure Credential Store
4	Filter Expression	Text	The where condition can be specified.
5	Group By Expression	Text	The group by criteria can be specified.

	Aggregate Expression	Text	The having clause can be specified.
	Order By Expression	Text	The order by clause can be specified.
8	Columns	Text	The columns to be selected from the table.
9	Table Name	Text	The name of the table in which the query has to be executed.

### **Output**

- 1. **Error Message** The error message in case an error is encountered will be returned.
- 2. Has Error Occurred Indicates if an error has occurred.
- 3. **Result** On successful execution, the results of the query will be returned.

# **AS400 Execute Truncate**

This smart service allows you to execute truncate queries on the specified AS400 database table.

#### **Parameters**

### **Inputs**

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No	Name	Туре	
1	Database Url	Text	The URL of the Database.
2	Use Per User Credentials	Boolean	Provide whether the SCS fields contain user specific credentials.
3	Scs Key	Text	The key value for the Secure Credential Store
4	Table Name	Text	The name of the table in which the query has to be executed.

### **Outputs**

- 1. **Error Message** The error message in case an error is encountered will be returned.
- 2. Has Error Occurred Indicates if an error has occurred.
- 3. **Result** On successful execution, the results of the query will be returned.

# **AS400 Execute Update**

This smart service allows you to execute update queries on the specified AS400 database table.

#### **Parameters**

#### **Inputs**

SI No	Parameter Name	Parameter Type	Description
1	Database Url	Text	The URL of the Database.
2	Use Per User Credentials	Boolean	Provide whether the SCS fields contain user specific credentials.
3	Scs Key	Text	The key value for the Secure Credential Store
4	Table Name	Text	The name of the table in which the query has to be executed.
5	Set Values	Text	The set clause can be specified.
6	Filter Expression	Text	The where condition can be specified.

# **Outputs**

- 1. **Error Message** The error message in case an error is encountered will be returned.
- 2. Has Error Occurred Indicates if an error has occurred.
- 3. **Result** On successful execution, the results of the query will be returned.

### Values Guide For Parameters

# Filter Expression

The value for the Filter Expression parameter is the where clause without WHERE.

#### **Syntax**

Column1 operator value1 AND/OR Column2 operator value2 AND/OR ...

The operator can be any valid SQL operator used in WHERE clause like NOT, =, BETWEEN...AND..., LIKE, IN. The values must follow the SQL syntax.

**Example**: NAME = 'Test User' AND NOT ID = 2 OR AREA LIKE 'a%'

#### **Set Values**

The value for the Set Values parameter is the set clause without SET in the update query.

#### **Syntax**

Column1 = value1, Column2 = value2,...

**Example**: NAME = 'Test User', AREA = 'abc street'

#### **Group By Expression**

The value for the Group By Expression parameter is the group by clause in the query without GROUP BY.

#### **Syntax**

Column1, Column2,...

**Example**: NAME, AREA

### **Aggregate Expression**

The value for the Aggregate Expression parameter is the having clause in the query without HAVING.

#### **Syntax**

Any condition with or without aggregate functions.

**Example**: *COUNT(NAME)>5* 

### Order By Expression

The value for the Order By Expression is the order by expression in the query without the ORDER BY.

#### **Syntax**

Column1 ASC/DESC, Column2 ASC/DESC,... or Column1, Column2,... ASC/DESC

**Example**: NAME ASC, AGE DESC or NAME, AGE ASC

#### Columns

The value for the Columns parameter is the string with the list of columns to be selected separated by commas. If no value is provided by default all columns will be selected.

#### **Syntax**

column1, column2,...

**Example**: NAME, AGE, AREA

#### **Identifiers**

The value for the Identifiers is the list of columns separated by commas enclosed within brackets "()". It indicates the columns where the values have to be inserted.

The number columns must match with the number of values within each values set.

By default if no values are given the entire columns in the table will be expected to get a value to insert.

#### **Syntax**

(column1, column2, ...)

**Example**: (NAME, AGE, AREA)

#### **Values**

The value for the Values parameter is the list of values set where each set enclosed within brackets "()" corresponds to a row.

#### **Syntax**

```
(value1, value2, value3, ...), (value1, value2, value3, ...),...
```

#### **Example**

```
('Test User', 12) for a single row.
('Test User', 12), ('Test User2', 13)
```

Note: If "Allow users to set personal credential field values on the Third-Party Credentials settings page" options has been enabled in your the Use Per User Credentials parameter must have true as its value.