NestedFlow Automation– Initial Setups

Creation Date: 9/29/2023
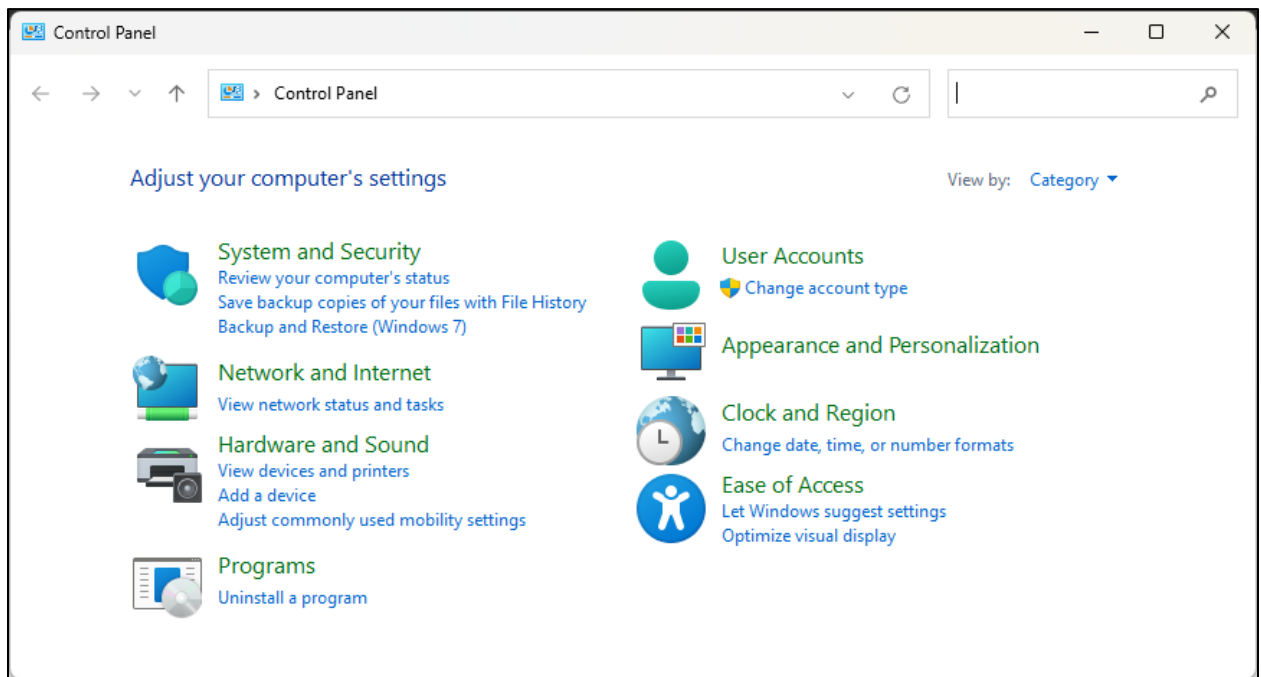
Table Of Contents

Introduction

This document depicts in detail the initial setups needed to use the NestedFlow Automation tool effectively. The setups involve:

- Accessibility Setups
- Web Automation Setups
- GitHub Setups (Optional)
- SQL Definitions (Optional)
- Database Setups (Optional)

Accessibility Setups

Java legacy desktop applications are automated using Java Access Bridge technology. For enabling that we need to perform the below steps

- Navigate to Control Panel

- Click **Ease of Access**
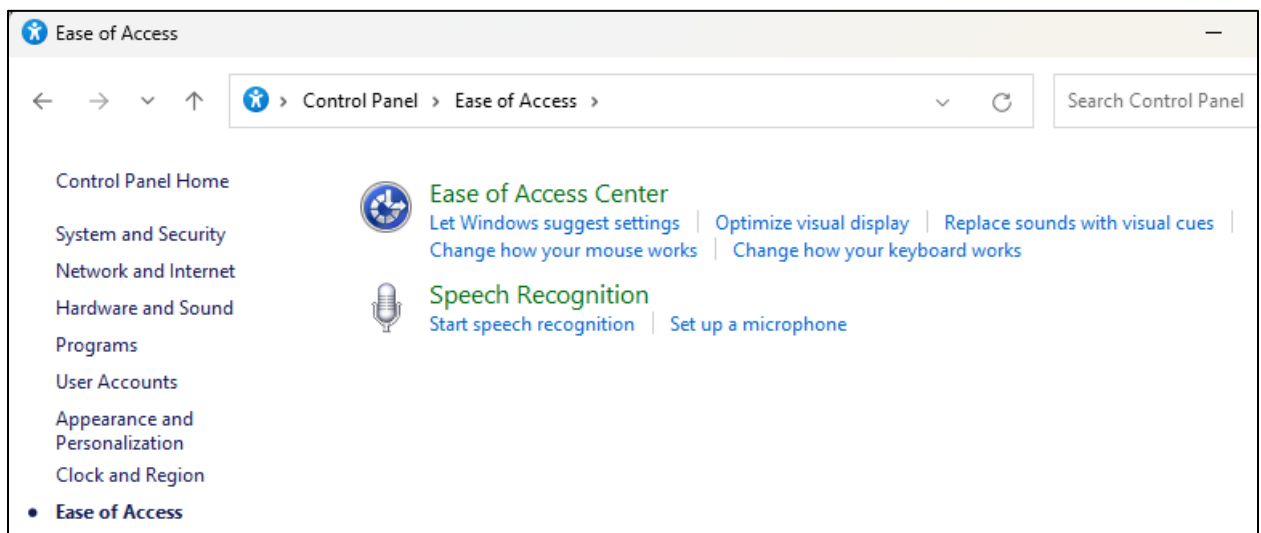
- Click on **Optimal visual display**

Ease of Access Center

Let Windows suggest settings | <mark>Optimize visual display</mark> | Replace sounds with visual cues |
Change how your mouse works | Change how your keyboard works
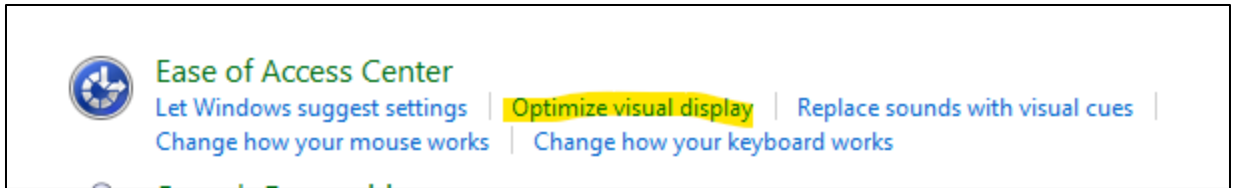
- ▪ Scroll down to the bottom of the page and Check "**Enable Java Access Bridge**" and click on **OK** button
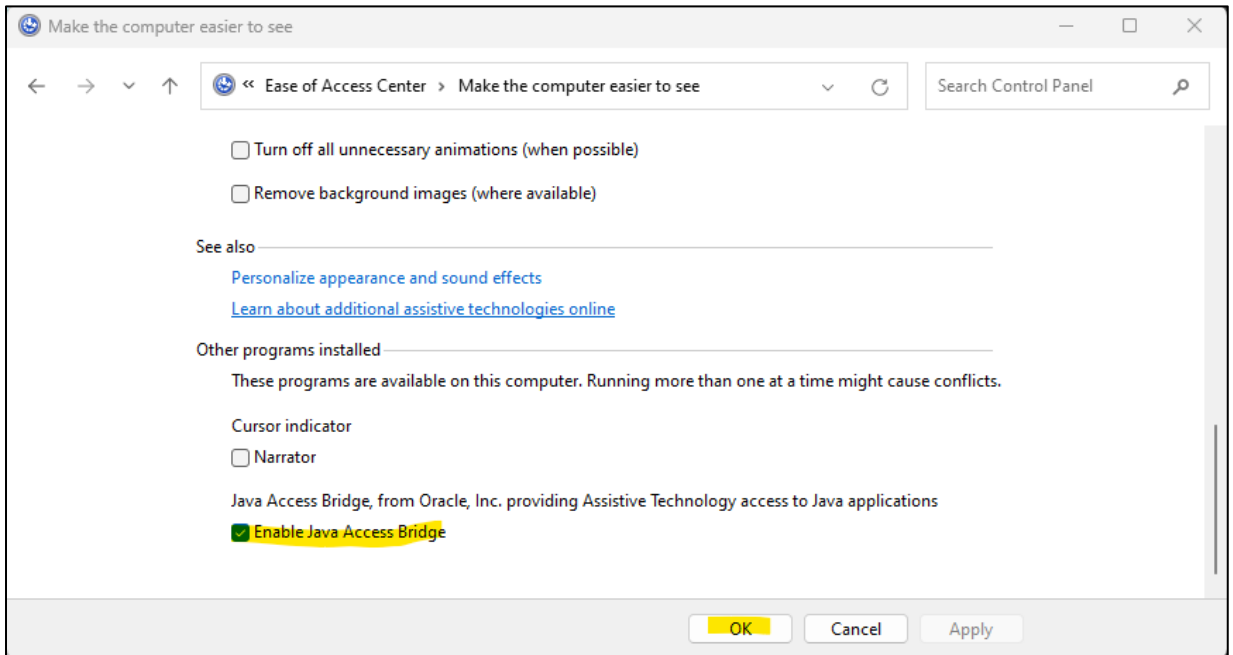
Web Automation Setups

NestedFlow Automation tool requires webdriver exe files for automating the HTML UI elements. We must download chromedriver.exe, msedgedriver.exe, IEDriverServer.exe and geckodriver.exe matching the current browser configuration on the machine.

- Open the NestedFlow Automation tool. Navigate to Tools menu and click on **Browser Version Check** menu option:
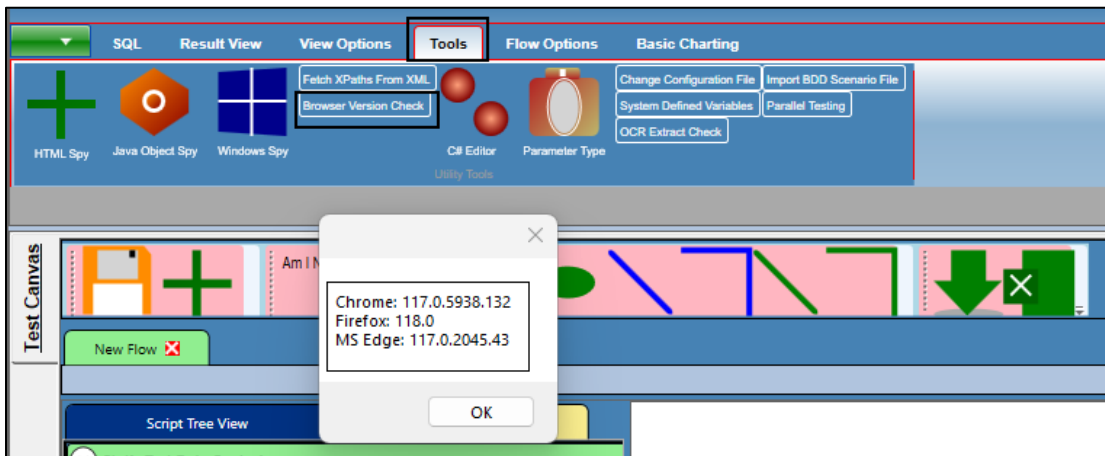
- Navigate to below websites to download webdriver exes
  - Edge: [Microsoft Edge WebDriver - Microsoft Edge Developer](#)
  - Firefox: [Releases · mozilla/geckodriver (github.com)](#)
  - Chrome: [ChromeDriver - WebDriver for Chrome - Downloads (chromium.org)](#)
    - If you are using [Chrome version 115 or newer](#), please consult the Chrome for Testing availability dashboard. This page provides convenient JSON endpoints for specific ChromeDriver version downloading.

      https://github.com/GoogleChromeLabs/chrome-for-testing#json-api-endpoints

- Download the exes and place in %APPDATA%/one/webdrivers

GitHub Setups

This is an optional setup. This is needed only if the test cases are needed to be hosted in GitHub. It requires the GitHub Token to be added in configuration file.

- Navigate to your Github page and login
- Navigate to settings
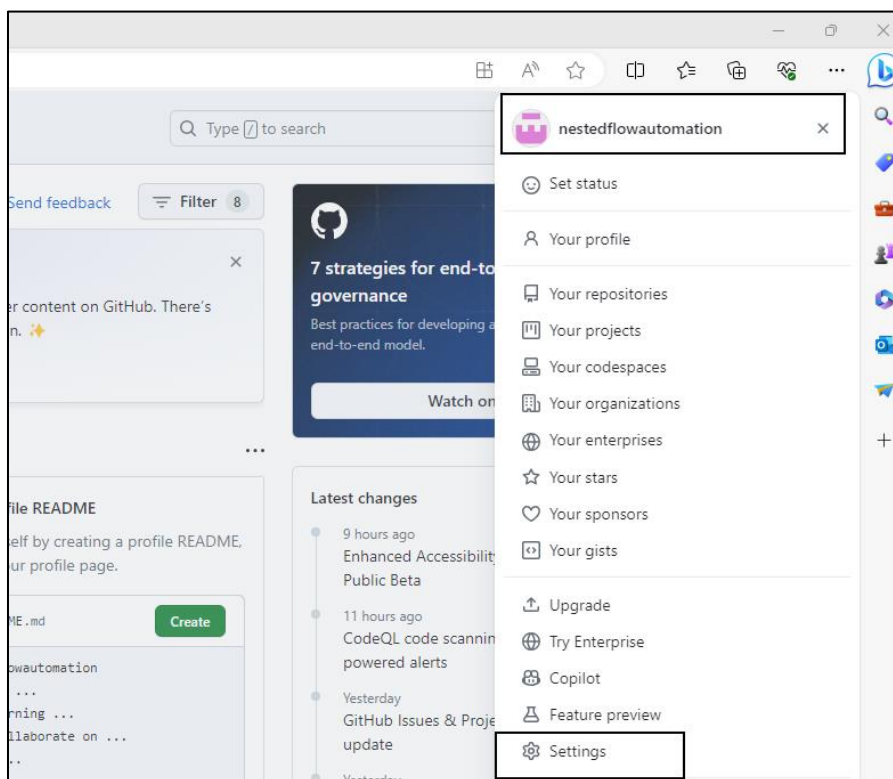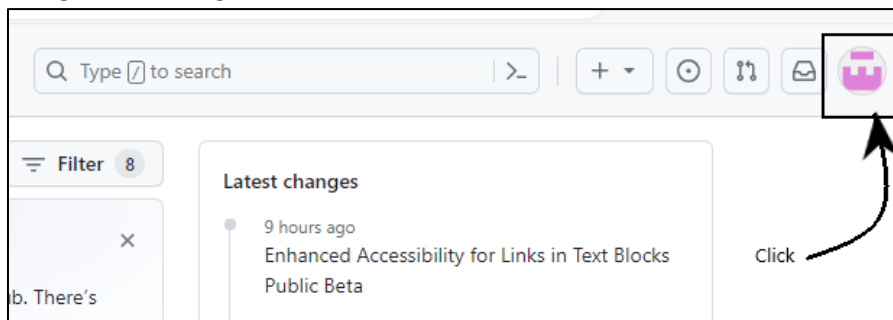
- Click on the **Developer Settings** in the bottom of the screen

- Click on **Personal access tokens**

- Click on **Tokens (Classic)**

- Choose **Generate new token (classic)**

- If it asks for credentials enter

- Enter the Name for the token

- Set Expiration to suitable value and check all possible checkboxes (both read and write rights are needed for the feature to work)

- Click on Generate Token

Note: Organization Github setups will also give option to configure SSO in the token setup without which it will not work

- Click on Copy token icon next to the token and it will copy to clipboard

- Open NestedFlow Automation tool. In the Ribbon menu choose Enter Github Token
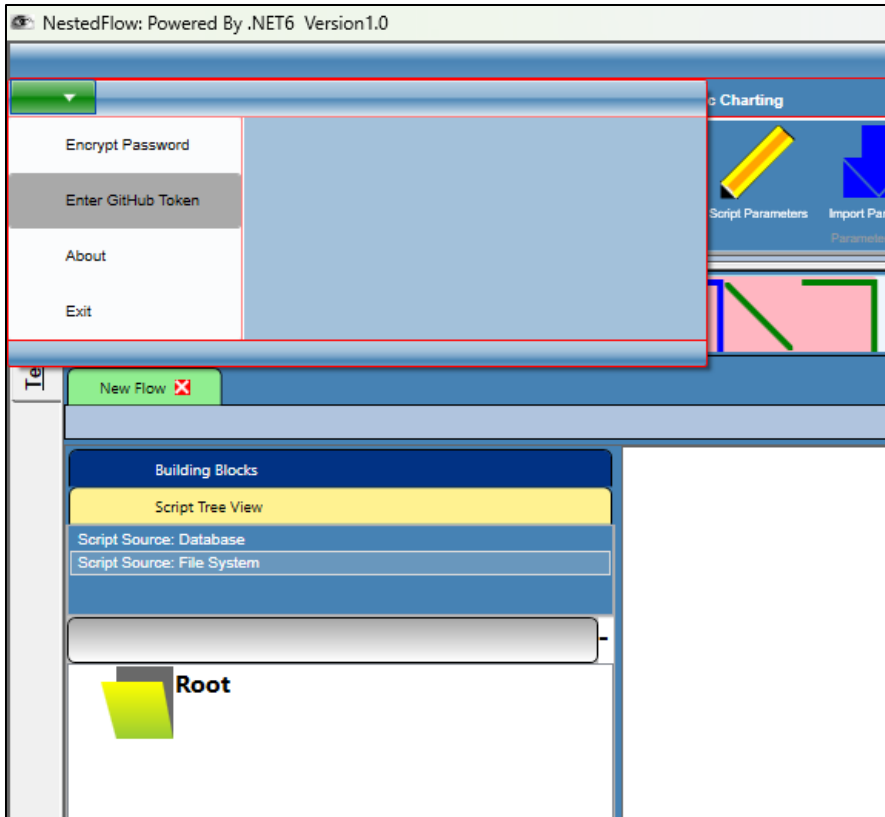
- Enter Token and click Ok button
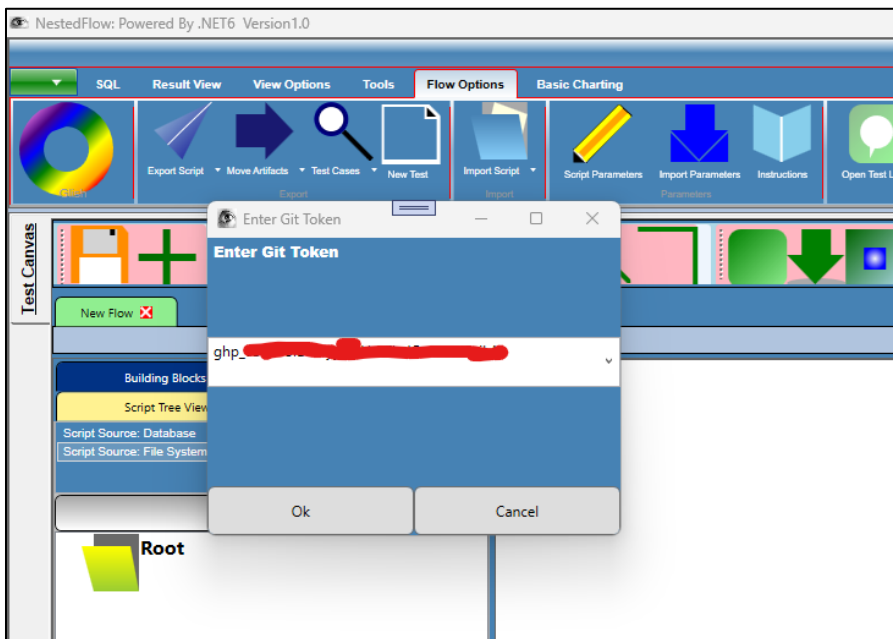
This step will update configuration file with the token

SQL Definitions

Tool allows the scripts/object files and batch files to be stored in MS SQL database. If you opt for that, you need to create a schema and below tables to make it work

- Create Schema:
  Creates schema needed to hold all the tables

  ```
  CREATE schema NESTEDFLOWAUTOMATION authorization dbo;
  ```

- Create NewDataSet Table
  Created for future enhancement purposes

  ```
  CREATE TABLE [NESTEDFLOWAUTOMATION].[newdataset]
  (
                  [SetName] VARCHAR(2000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
              , [TableName] VARCHAR(2000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
              , [Creation_Date] DATETIME NULL
              , [LastUpdate_Date] DATETIME NULL
              , [CreatedBy] VARCHAR(2500) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
              , [UpdatedBy] VARCHAR(2500) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
              , [Active] VARCHAR(1) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
  );
  ```

- Create NestedFlowFlowAttributes table
  Stores test step images. Used to create test case knowledge document

  ```
  CREATE TABLE [NESTEDFLOWAUTOMATION].[NestedFlowFlowAttributes]
  (
                  [FlowName] VARCHAR(3000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
              , [StepName] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
              , [BitMap] VARBINARY(MAX) NULL
  );
  ```

- Create NestedFlowMailingList table

  Created for future enhancement purposes

  ```
  CREATE TABLE [NESTEDFLOWAUTOMATION].[OneRoofMailingList]
  (
                  [mailID] VARCHAR(1000)   COLLATE SQL_Latin1_General_CP1_CI_AS NULL
              , [mailType] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
              , [creation_date] DATETIME NULL
              , [Createdby] VARCHAR(100) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
  );
  ```

- Create NestedFlowMailingData table
  Created for future enhancement purposes

  ```
  CREATE TABLE [NESTEDFLOWAUTOMATION].[NestedFlowMailingData]
  (
                  [mailID] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
              , [MailDisp] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
              , [Host] VARCHAR(100) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
              , [Port] INT NULL

  );
  ```

- Create NestedFlowglodcopyTable table

  Useful to generate custom datasets which can be used for testing

```sql
CREATE TABLE [NESTEDFLOWAUTOMATION].[NestedFlowgoldcopytable]
(
                [DataSetName] VARCHAR(100) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [DataSetID] VARCHAR(100) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Active] VARCHAR(1) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Creation_Date] DATETIME NULL
        , [Created_by] VARCHAR(100) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [last_updated_by] VARCHAR(100) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [last_update_date] DATETIME NULL
);
```

Create index on it

```sql
CREATE NONCLUSTERED INDEX [NestedFlowgoldcopyindex] ON
[NESTEDFLOWAUTOMATION].[NestedFlowgoldcopytable] ([DataSetID] ASC)
```

- Create NestedFlowgoldcopyseeddata table
  Useful to generate custom datasets which can be used for testing

```sql
CREATE TABLE [NESTEDFLOWAUTOMATION].[NestedFlowgoldcopyseeddata]
(
                [DataSetID] VARCHAR(100) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Attribute1] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Attribute2] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Attribute3] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Attribute4] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Attribute5] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Attribute6] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Attribute7] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Attribute8] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Attribute9] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Attribute10] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Attribute11] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Attribute12] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Attribute13] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Attribute14] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Attribute15] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Attribute16] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Attribute17] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Attribute18] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Attribute19] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Attribute20] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Attribute21] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Attribute22] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Attribute23] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Attribute24] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Attribute25] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Attribute26] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Attribute27] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Attribute28] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Attribute29] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Attribute30] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Attribute31] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
```

11

```sql
    , [Attribute32] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [Attribute33] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [Attribute34] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [Attribute35] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [Attribute36] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [Attribute37] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [Attribute38] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [Attribute39] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [Attribute40] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [Attribute41] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [Attribute42] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [Attribute43] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [Attribute44] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [Attribute45] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [Attribute46] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [Attribute47] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [Attribute48] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [Attribute49] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [Attribute50] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [Attribute51] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [Attribute52] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [Attribute53] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [Attribute54] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [Attribute55] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [Attribute56] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [Attribute57] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [Attribute58] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [Attribute59] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [Attribute60] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE61] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE62] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE63] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE64] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE65] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE66] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE67] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE68] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE69] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE70] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE71] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE72] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE73] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE74] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE75] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE76] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE77] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE78] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE79] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE80] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE81] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE82] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE83] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE84] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE85] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE86] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE87] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE88] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE89] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE90] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE91] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE92] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
```

```sql
    , [ATTRIBUTE93]  VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE94]  VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE95]  VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE96]  VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE97]  VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE98]  VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE99]  VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE100] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE101] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE102] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE103] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE104] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE105] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE106] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE107] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE108] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE109] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE110] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE111] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE112] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE113] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE114] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE115] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE116] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE117] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE118] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE119] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE120] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE121] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE122] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE123] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE124] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE125] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE126] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE127] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE128] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE129] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE130] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE131] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE132] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE133] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE134] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE135] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE136] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE137] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE138] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE139] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE140] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE141] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE142] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE143] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE144] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE145] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE146] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE147] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE148] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE149] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE150] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE151] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE152] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    , [ATTRIBUTE153] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
```

13

```sql
        , [ATTRIBUTE154] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE155] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE156] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE157] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE158] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE159] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE160] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE161] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE162] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE163] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE164] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE165] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE166] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE167] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE168] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE169] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE170] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE171] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE172] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE173] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE174] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE175] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE176] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE177] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE178] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE179] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE180] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE181] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE182] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE183] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE184] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE185] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE186] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE187] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE188] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE189] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE190] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE191] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE192] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE193] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE194] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE195] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE196] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE197] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE198] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE199] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE200] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE201] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE202] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE203] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE204] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE205] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE206] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE207] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE208] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE209] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE210] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE211] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE212] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE213] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ATTRIBUTE214] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
```

```sql
, [ATTRIBUTE215] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE216] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE217] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE218] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE219] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE220] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE221] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE222] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE223] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE224] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE225] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE226] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE227] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE228] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE229] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE230] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE231] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE232] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE233] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE234] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE235] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE236] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE237] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE238] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE239] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE240] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE241] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE242] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE243] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE244] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE245] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE246] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE247] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE248] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE249] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE250] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE251] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE252] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE253] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE254] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE255] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE256] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE257] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE258] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE259] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE260] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE261] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE262] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE263] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE264] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE265] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE266] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE267] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE268] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE269] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE270] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE271] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE272] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE273] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE274] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE275] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
```

15

```sql
, [ATTRIBUTE276] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE277] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE278] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE279] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE280] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE281] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE282] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE283] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE284] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE285] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE286] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE287] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE288] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE289] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE290] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE291] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE292] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE293] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE294] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE295] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE296] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE297] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE298] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE299] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE300] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE301] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE302] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE303] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE304] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE305] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE306] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE307] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE308] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE309] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE310] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE311] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE312] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE313] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE314] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE315] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE316] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE317] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE318] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE319] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE320] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE321] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE322] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE323] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE324] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE325] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE326] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE327] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE328] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE329] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE330] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE331] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE332] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE333] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE334] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE335] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE336] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
```

```sql
	,	[ATTRIBUTE337]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE338]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE339]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE340]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE341]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE342]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE343]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE344]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE345]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE346]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE347]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE348]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE349]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE350]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE351]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE352]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE353]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE354]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE355]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE356]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE357]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE358]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE359]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE360]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE361]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE362]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE363]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE364]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE365]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE366]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE367]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE368]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE369]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE370]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE371]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE372]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE373]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE374]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE375]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE376]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE377]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE378]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE379]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE380]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE381]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE382]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE383]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE384]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE385]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE386]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE387]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE388]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE389]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE390]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE391]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE392]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE393]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE394]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE395]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE396]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
	,	[ATTRIBUTE397]	VARCHAR(1000)	COLLATE	SQL_Latin1_General_CP1_CI_AS	NULL
```

```
, [ATTRIBUTE398] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE399] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE400] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE401] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE402] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE403] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE404] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE405] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE406] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE407] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE408] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE409] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE410] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE411] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE412] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE413] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE414] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE415] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE416] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE417] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE418] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE419] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE420] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE421] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE422] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE423] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE424] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE425] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE426] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE427] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE428] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE429] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE430] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE431] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE432] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE433] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE434] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE435] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE436] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE437] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE438] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE439] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE440] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE441] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE442] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE443] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE444] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE445] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE446] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE447] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE448] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE449] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE450] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE451] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE452] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE453] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE454] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE455] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE456] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE457] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
, [ATTRIBUTE458] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
```

```sql
                , [ATTRIBUTE459] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE460] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE461] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE462] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE463] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE464] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE465] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE466] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE467] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE468] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE469] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE470] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE471] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE472] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE473] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE474] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE475] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE476] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE477] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE478] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE479] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE480] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE481] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE482] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE483] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE484] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE485] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE486] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE487] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE488] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE489] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE490] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE491] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE492] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE493] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE494] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE495] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE496] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE497] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE498] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE499] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
                , [ATTRIBUTE500] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
    )
    ;
```

- Create NestedFlowseeddatacolumnMap table
  Stores custom dataset definitions

```sql
CREATE TABLE [NESTEDFLOWAUTOMATION].[NestedFlowseeddatacolumnMap]
(
              [DataSetID] VARCHAR(100) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
            , [Attrname] VARCHAR(100) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
            , [ColumnName] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
);
```

- Create NestedFlowExecutionRecords table
  Created for future enhancement purposes

```sql
CREATE TABLE [NESTEDFLOWAUTOMATION].[NestedFlowExecutionRecords]
```

```
(
                [RunID] VARCHAR(150) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
            , [RunName] VARCHAR(2000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
            , [seqid] INT NULL
            , [LogType] VARCHAR(100) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
            , [LogDate] VARCHAR(150) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
            , [LogText] VARCHAR(MAX) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
);
```

- Create NestedFlowExecution table
  Created for future enhancement purposes

```
CREATE TABLE [NESTEDFLOWAUTOMATION].[NextedFlowExecution]
(
                [RunID] VARCHAR(150) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
            , [RunName] VARCHAR(2000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
            , [RunBy] VARCHAR(2000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
            , [ScriptName] VARCHAR(5000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
            , [startdate] VARCHAR(100) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
            , [enddate] VARCHAR(100) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
);
```

- Create NestedFlowDirectory table

  Manages Directory tree
```
CREATE TABLE [NESTEDFLOWAUTOMATION].[NestedFlowDirectory]
(
                [Level] INT NULL
            , [Parent] VARCHAR(4000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
            , [FileID] VARCHAR(4000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
            , [Name] VARCHAR(4000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
            , [NodeType] VARCHAR(4000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
            , [UniqueStr] VARCHAR(7000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
            , [Checkedout] VARCHAR(20) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
            , [CheckedoutBy] VARCHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
);
```

- Create NestedFlowDirectoryHelp table

  Manages Directory tree
```
CREATE TABLE [NESTEDFLOWAUTOMATION].[NestedFlowDirectoryHelp]
(
                [HelperName] VARCHAR(5000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
            , [HelperText] XML NULL
);
```

- Create NestedFlowDBKeys table
  Currently unused. Created for future enhancement purposes

```
CREATE TABLE [NESTEDFLOWAUTOMATION].[NestedFlowDBKeys]
(
                [dbUser] VARCHAR(500) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
            , [dbPass] VARCHAR(500) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
)
;
```

- Create NestedFlowdotNetScript table
  Stores C# scripts

20

```sql
CREATE TABLE [NESTEDFLOWAUTOMATION].[NestedFlowdotNetScript]
(
                [ScriptID] INT NULL
              , [ScriptName] VARCHAR(2500) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
              , [ScriptMode] VARCHAR(2500) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
              , [ScriptType] VARCHAR(2500) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
              , [ExecOptions] VARCHAR(2500) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
              , [ScriptText] VARCHAR(MAX) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
              , [ExtraReferences] VARCHAR(MAX) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
              , [ExtraCS] VARCHAR(MAX) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
              , [Parameters] VARCHAR(MAX) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
              , [Creation_Date] DATETIME NULL
              , [LastUpdate_Date] DATETIME NULL
              , [CreatedBy] VARCHAR(2500) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
              , [UpdatedBy] VARCHAR(2500) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
);
```

- Create NestedFlowdataSet table
  Created for future enhancement purposes

```sql
CREATE TABLE [NESTEDFLOWAUTOMATION].[NestedFlowDataSet]
(
                [SetName] VARCHAR(2000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
              , [TableName] VARCHAR(2000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
              , [Creation_Date] DATETIME NULL
              , [LastUpdate_Date] DATETIME NULL
              , [CreatedBy] VARCHAR(2500) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
              , [UpdatedBy] VARCHAR(2500) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
              , [Active] VARCHAR(1) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
);
```

- Create NestedFlowNestedFlowObjectInfo table
  Used to store Automation object information optionally

```sql
CREATE TABLE [NESTEDFLOWAUTOMATION].[NestedFlowObjectInfo]
(
                [PageName] VARCHAR(2000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
              , [PageText] XML NULL
              , [Creation_Date] DATETIME NULL
              , [LastUpdate_Date] DATETIME NULL
              , [CreatedBy] VARCHAR(2500) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
              , [UpdatedBy] VARCHAR(2500) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
);
```

- Create NestedFlowFlowInfo table
  Stores Canvas test flows

```sql
CREATE TABLE [NESTEDFLOWAUTOMATION].[NestedFlowFlowInfo]
(
                [FlowName] VARCHAR(2000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
              , [FlowXML] XML NULL
              , [Creation_Date] DATETIME NULL
              , [LastUpdate_Date] DATETIME NULL
              , [CreatedBy] VARCHAR(2500) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
              , [UpdatedBy] VARCHAR(2500) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
);
```

- Create NestedFlowBatchExecList table
  Stores serial batch execution information

```sql
CREATE TABLE [NESTEDFLOWAUTOMATION].[NestedFlowBatchExecList]
(
                [FlowName] VARCHAR(2000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [FlowXML] XML NULL
        , [Creation_Date] DATETIME NULL
        , [LastUpdate_Date] DATETIME NULL
        , [CreatedBy] VARCHAR(2500) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [UpdatedBy] VARCHAR(2500) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
);
```

- Create UserInfo table
  Created for user access management if needed

```sql
CREATE TABLE [NESTEDFLOWAUTOMATION].[UserInfo]
(
                [UserName] VARCHAR(2000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ActiveFlag] VARCHAR(10) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Creation_Date] DATETIME NULL
        , [LastUpdate_Date] DATETIME NULL
        , [CreatedBy] VARCHAR(2500) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [UpdatedBy] VARCHAR(2500) COLLATE SQL_Latin1_General_CP1_CI_AS NULL

);
```

- Create RoleInfo table
  Stores allowed user roles

```sql
CREATE TABLE [NESTEDFLOWAUTOMATION].[RoleInfo]
(
                [RoleName] VARCHAR(2000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Creation_Date] DATETIME NULL
        , [LastUpdate_Date] DATETIME NULL
        , [CreatedBy] VARCHAR(2500) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [UpdatedBy] VARCHAR(2500) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
);
```

- Create UserRole table
  Stores user level roles

```sql
CREATE TABLE [NESTEDFLOWAUTOMATION].[UserRole]
(
                [UserName] VARCHAR(2000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [RoleName] VARCHAR(2000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [ActiveFlag] VARCHAR(10) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [Creation_Date] DATETIME NULL
        , [LastUpdate_Date] DATETIME NULL
        , [CreatedBy] VARCHAR(2500) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
        , [UpdatedBy] VARCHAR(2500) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
);
```

- Create NestedFlowFlowExecInfo table

  Created for future enhancement purposes

```sql
CREATE TABLE [NESTEDFLOWAUTOMATION].[NestedFlowFlowExecInfo]
(
                [OrigFlowName] VARCHAR(2000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
          , [FlowName] VARCHAR(2000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
          , [FlowXML] XML NULL
          , [CreationDate] DATETIME NULL
          , [LastUpdateDate] DATETIME NULL
          , [CreatedBy] VARCHAR(2000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
          , [UpdatedBy] VARCHAR(2000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
          , [status] VARCHAR(4000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
);
```

 Creating Index for the table

```sql
CREATE NONCLUSTERED INDEX [idx_lastname] ON
[NESTEDFLOWAUTOMATION].[NestedFlowFlowExecInfo] ([FlowName] ASC);
```

- Create NestedFlowFlowInfoExec table
  Created for future enhancement purposes

```sql
CREATE TABLE [NESTEDFLOWAUTOMATION].[NestedFlowFlowInfoExec]
(
                [FlowName] VARCHAR(2000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
          , [UserName] VARCHAR(2000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
          , [CreationDate] DATETIME NULL
          , [LastUpdateDate] DATETIME NULL
          , [CreatedBy] VARCHAR(2000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
          , [UpdatedBy] VARCHAR(2000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
);
```

- Create NestedFlowWebActions table
  Created for future enhancement purposes

```sql
CREATE TABLE [NESTEDFLOWAUTOMATION].[NestedFlowWebActions]
(
                [ActionIndex] INT NULL
          , [username] VARCHAR(2000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
          , [CreationDate] DATETIME NULL
          , [ReferBy] VARCHAR(50) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
          , [ReferText] VARCHAR(2500) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
          , [ActionName] VARCHAR(2000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
          , [Actionval] CHAR(1000) COLLATE SQL_Latin1_General_CP1_CI_AS NULL

);
```

- Create Required Sequences

```sql
CREATE SEQUENCE NESTEDFLOWAUTOMATION.LogSequence
    START WITH 1
    INCREMENT BY 1;

CREATE SEQUENCE NESTEDFLOWAUTOMATION.ScriptSequence
```

```sql
    START WITH 1
    INCREMENT BY 1;

CREATE SEQUENCE NESTEDFLOWAUTOMATION.ActionSequence
    START WITH 1
    INCREMENT BY 1;

create Sequence NESTEDFLOWAUTOMATION.SSNSEQ
start with 1
    MINVALUE 1
    MAXVALUE 2860816
increment by 1;
```

DataBase Steps

We need to update configuration file for enabling the tool to connect to MS SQL database in which the above objects are created. This is done to store entire test artifacts in the database which will help us enhance the test storage/execution/deployment activities. This is optional and can be skipped if the database option is not available. Because tool supports test cases in

- Local Windows machine
- Database
- GitHub

For documenting this we have created a locally hosted SQL server (but tool can connect to remote MS SQL too)

Connection details:

Schema: NESTEDFLOWAUTOMATION

ODBC Driver:

Search **ODBC Data Sources (32-bit)** in the windows programs and open it
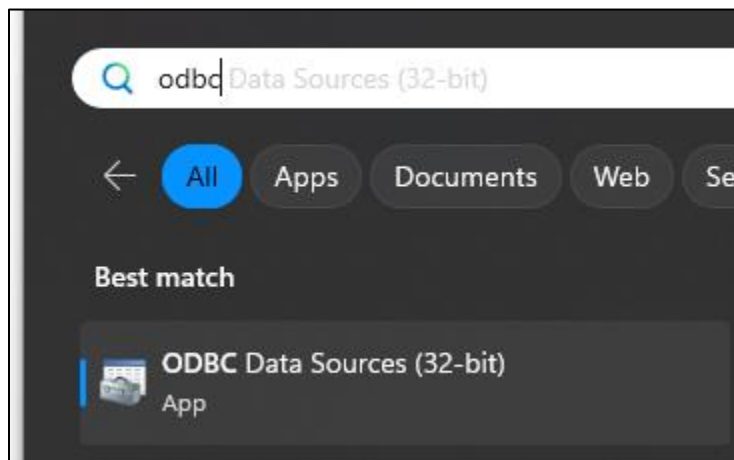
Navigate to Drivers Tab
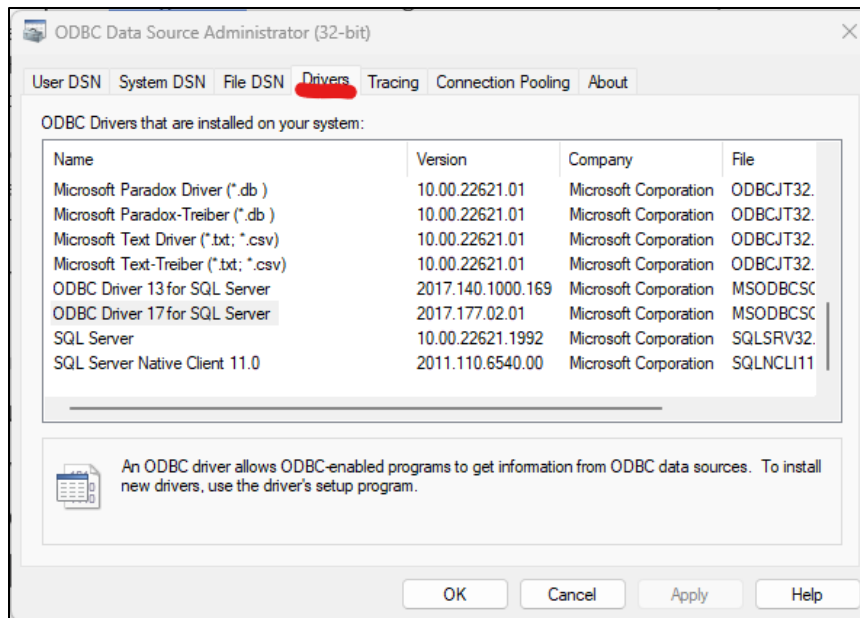
In this case the right driver is **ODBC Driver 17 for SQL Server**

Tree Mode: Script Source: Database

Database Name: Name of the database where the schema is created

DBUser: Blank if windows authentication is enabled

DBVault (Password): Blank if windows authentication is enabled

Navigate to %APPDATA%/one and open AppConfig.xml and perform the changes
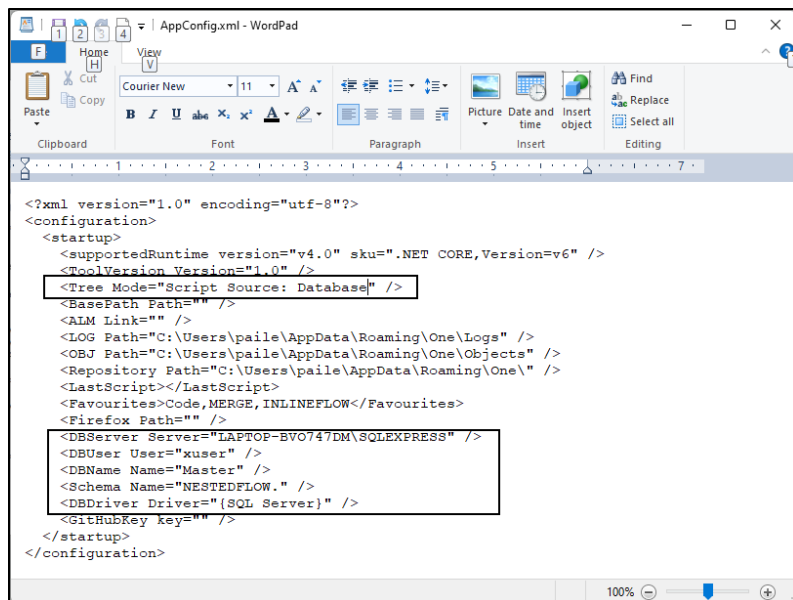
If you provide DBUser (When you don't want the windows authentication to work but use another generic user) , and leave the password blank, As soon as you login password entry will be prompted
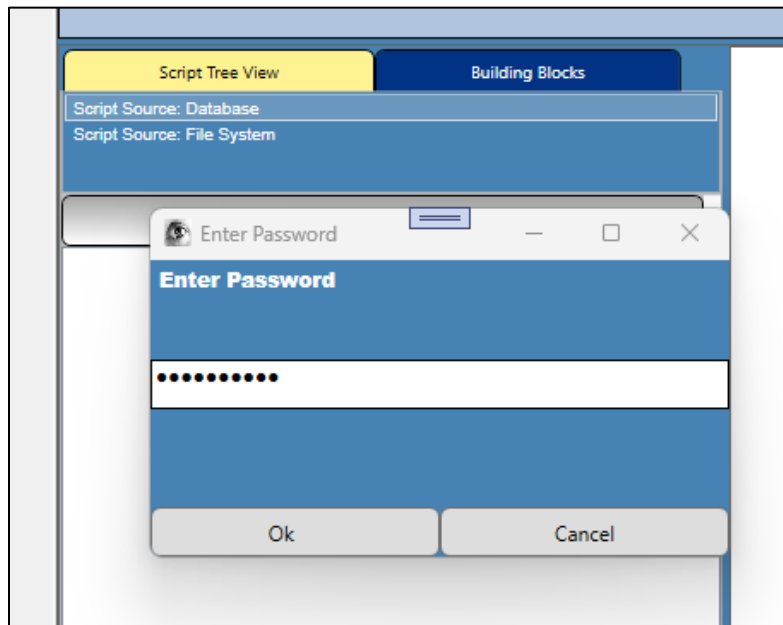
If you enter right password and click on **Ok** script tree will be displayed

You can also provide encrypted DB password in the config file if you don't want the Enter Password window to pop up every time. For that, create a new tag DBVault in the appconfig.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<configuration>
  <startup>
    <supportedRuntime version="v4.0" sku=".NET CORE,Version=v6" />
    <ToolVersion Version="1.0" />
    <Tree Mode="Script Source: Database" />
    <BasePath Path="" />
    <ALM Link="" />
    <LOG Path="C:\Users\paile\AppData\Roaming\One\Logs" />
    <OBJ Path="C:\Users\paile\AppData\Roaming\One\Objects" />
    <Repository Path="C:\Users\paile\AppData\Roaming\One\" />
    <LastScript></LastScript>
    <Favourites>Code,MERGE,INLINEFLOW</Favourites>
    <Firefox Path="" />
    <DBServer Server="LAPTOP-BVO747DM\SQLEXPRESS" />
    <DBUser User="xuser" />
    <DBName Name="Master" />
    <Schema Name="NESTEDFLOW." />
    <DBDriver Driver="{SQL Server}" />
    <DBVault vault=""/>
    <GitHubKey key="" />
  </startup>
</configuration>
```

Invoke **Encrypt Password** menu in ribbon controls

27
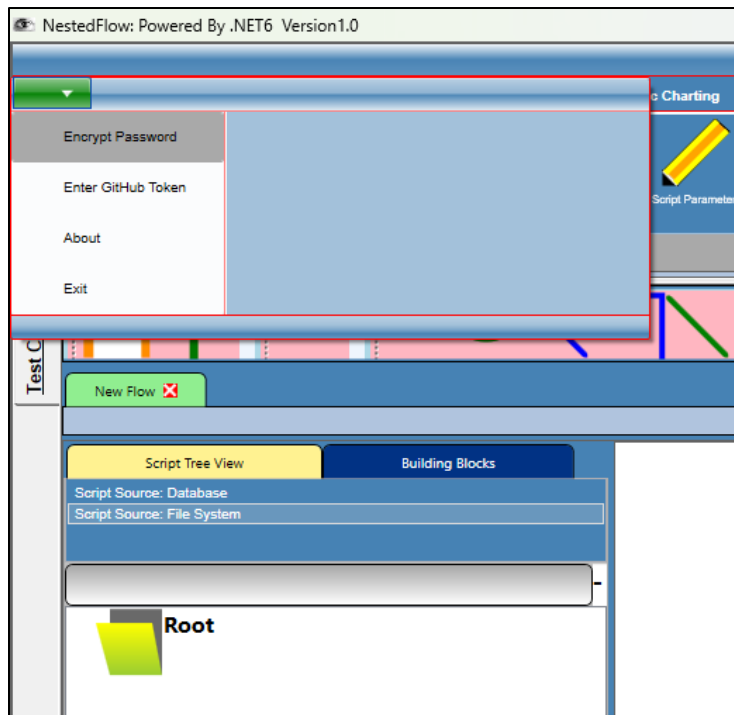
Enter the Password. Enter Alternate Key = **SERVERVAULT** and click on **Show**.
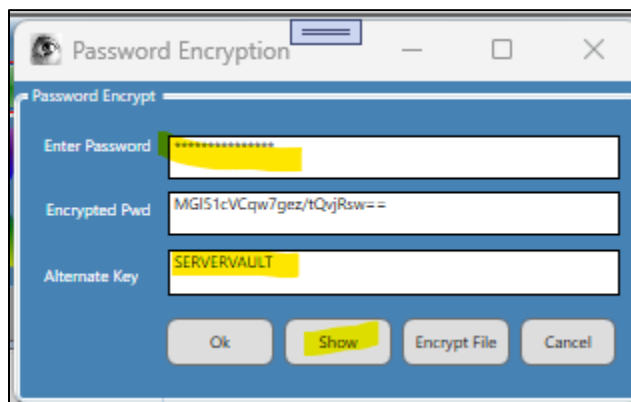
Encrypted Pwd field will display the encrypted password which can be entered in the config file

```xml
<?xml version="1.0" encoding="utf-8"?>
<configuration>
  <startup>
    <supportedRuntime version="v4.0" sku=".NET CORE,Version=v6" />
    <ToolVersion Version="1.0" />
    <Tree Mode="Script Source: Database" />
    <BasePath Path="" />
    <ALM Link="" />
    <LOG Path="C:\Users\paile\AppData\Roaming\One\Logs" />
    <OBJ Path="C:\Users\paile\AppData\Roaming\One\Objects" />
    <Repository Path="C:\Users\paile\AppData\Roaming\One\" />
    <LastScript></LastScript>
    <Favourites>Code,MERGE,INLINEFLOW</Favourites>
    <Firefox Path="" />
    <DBServer Server="LAPTOP-BVO747DM\SQLEXPRESS" />
    <DBUser User="xuser" />
    <DBName Name="Master" />
    <Schema Name="NESTEDFLOW." />
    <DBDriver Driver="{SQL Server}" />
    <DBVault vault="MGl51cVCqw7gez/tQvjRsw=="/>
    <GitHubKey key="" />
  </startup>
</configuration>
```