IP Office Contact Center – IVR Editor Scenarios Task Based Guide

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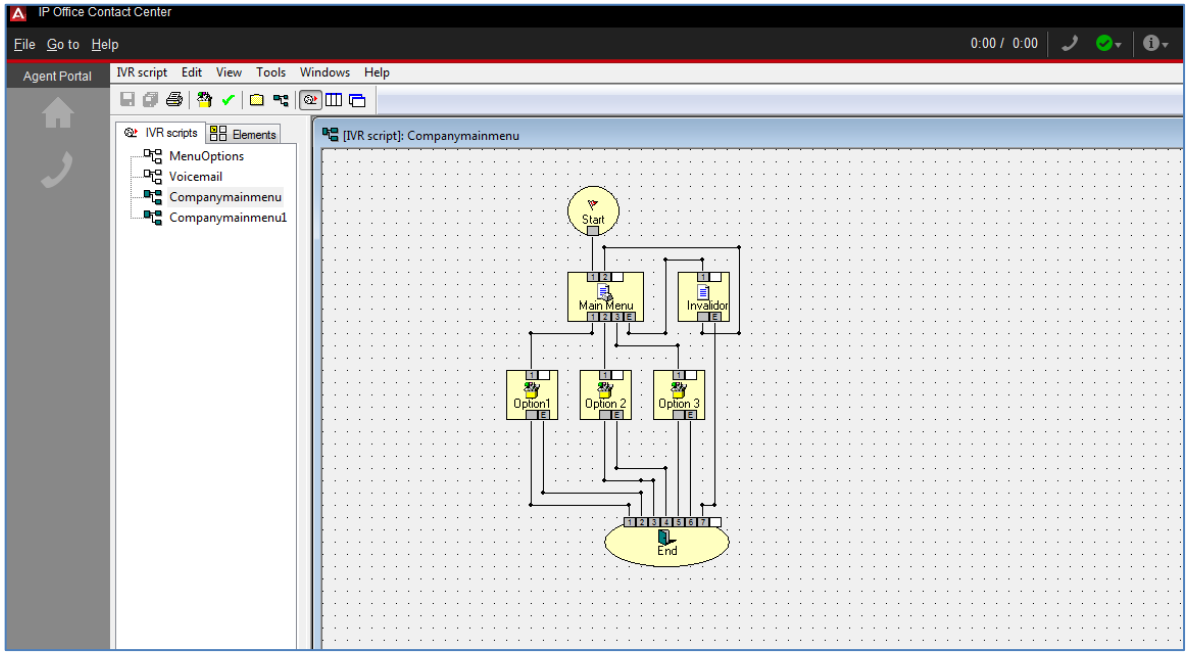
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IVR Editor

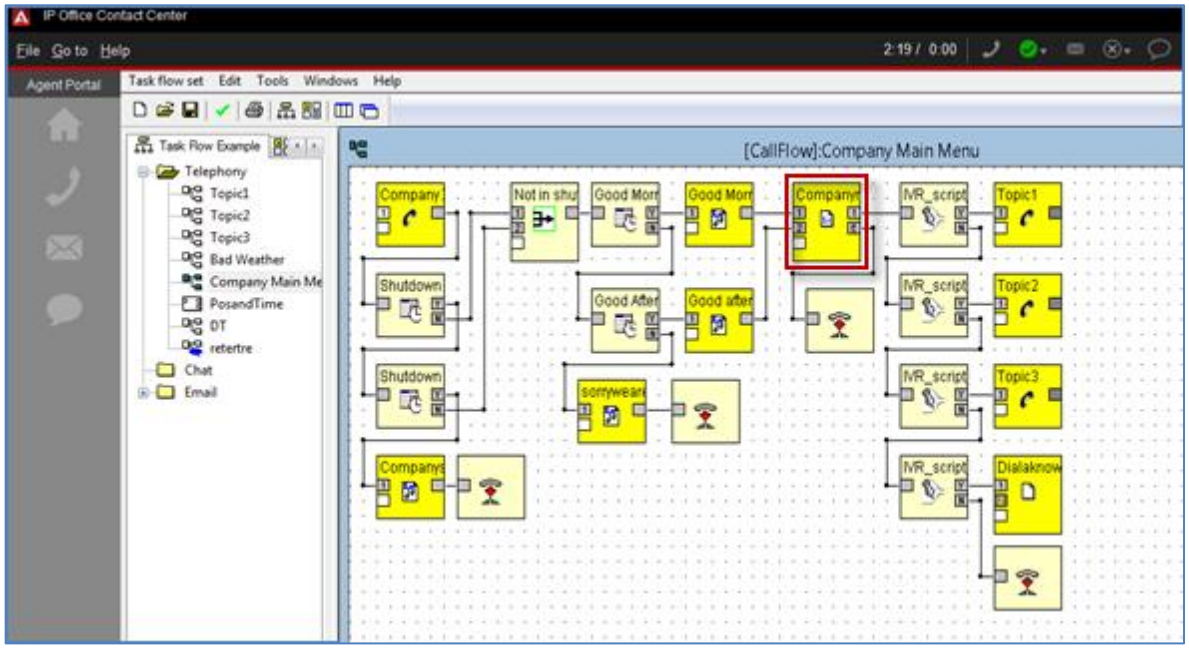
Overview

The IP Office Contact Centre System can be configured to utilize a variety of Voice Control features including the play back of recorded announcements and prompts, text to speech utilization and read and right access to ODBC data sources.

To provide these features, the IP Office Contact Centre IVR Editor is used.



IVR scripts can be created within the IVR editor and referenced within Task Flow Editor Call Flows.



Once configured, the IVR will query and determine which process has been requested from the IP Office Contact Centre Server. For example, it can determine which announcements are to be played to a caller. It can determine and provide customers with menu choices from which a selection can be made. It will respond to any customer input values that for example, have been entered from the keypad of a customer's telephone. It can query an ODBC database to provide IP Office Contact Centre Agents with customer details stored within a database record.

During the above processes, the call control remains within the configured Call Flow and the IVR script is referenced as an integral part of that call flow. If however the automatic agent feature is utilized the call is no longer under the control of the call flow.

IVR Editor Required Information

IVR Editor is a utility accessible from within the IP Office Contact Centre User Interface. Therefore the User Interface must first have been installed on the User's PC and the User account assigned the required Privileges to use IVR Editor.

Note: For details relating to Privileges and Authorizations, please refer to the *IP Office Contact Centre Telephony User Interface Configuration* Task Based Guide.

In the following series of examples, we will examine IVR Editor and how it can be configured and utilized within Task Flow Editor to provide various call routing scenarios.

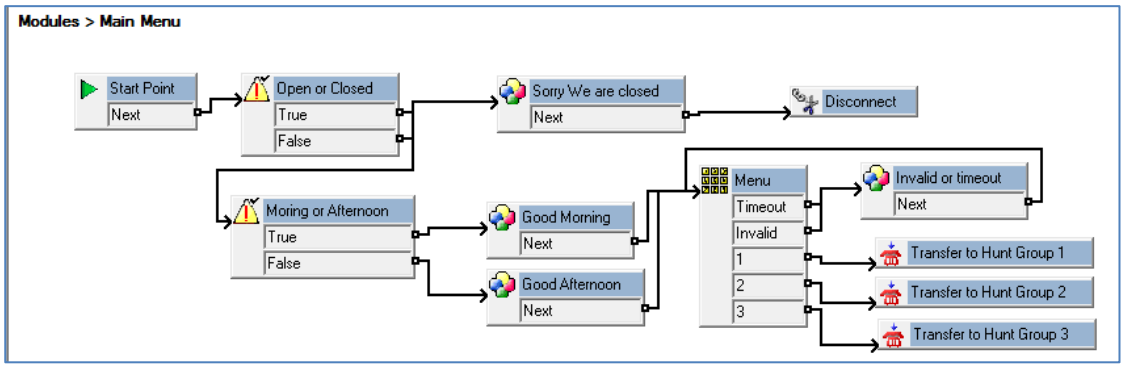
Creating a Standard Auto Attendant Menu.

The following example, illustrates the configuration of a standard “Auto Attendant Menu” offering customers three options that once selected, will direct the call to specific agent groups. The call flow will play greetings to the customer based on the time of day, when the Company is in a Shutdown period and will also prompt the caller if they have made an invalid selection.

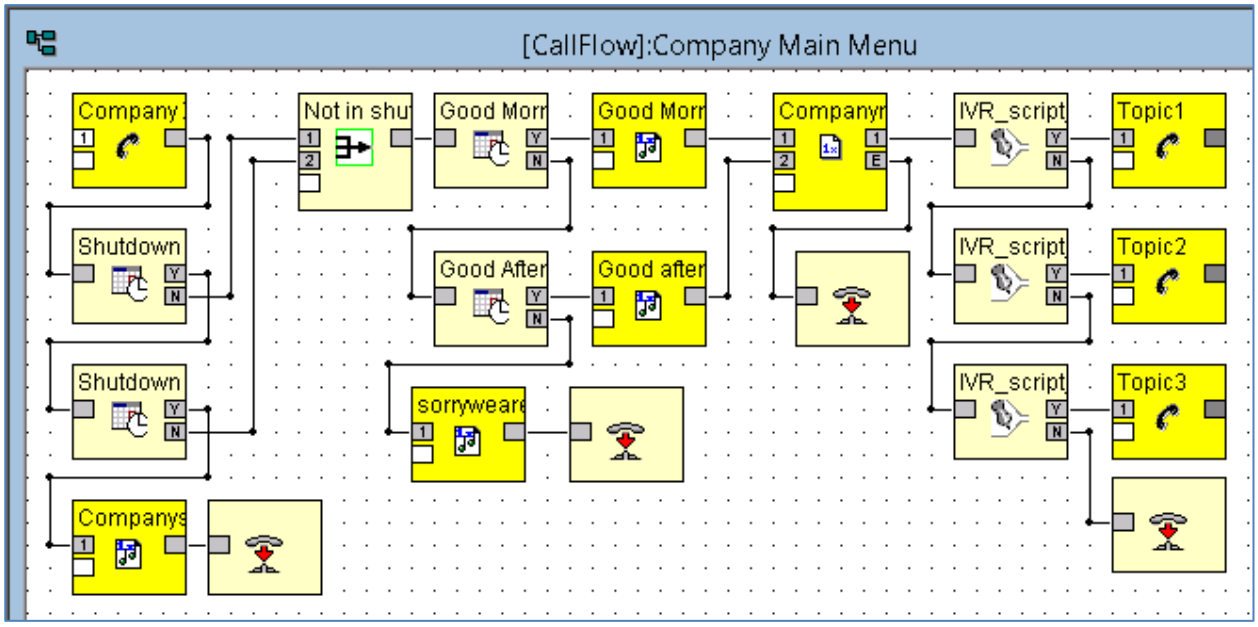
During the creation of this call flow, a number of IP Office Contact Centre facilities will be used including Task Flow Editor and IVR Editor.

Once configured, the IP Office Contact Centre call flow will provide features similar to the Voicemail Pro module depicted below.

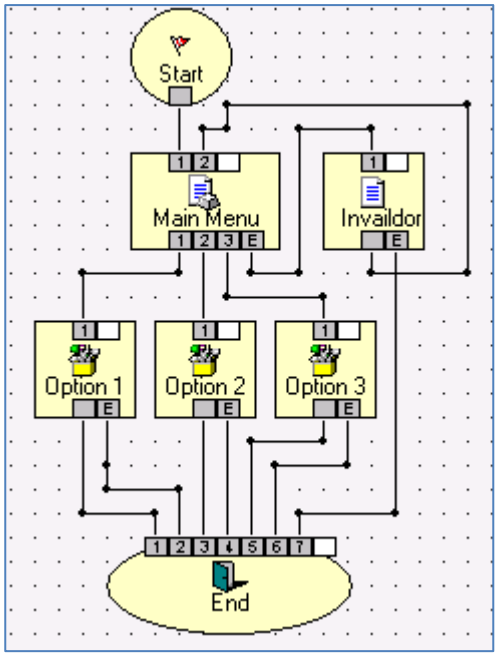
Voicemail Pro Module



IP Office Contact Centre Call Flow



IVR Script

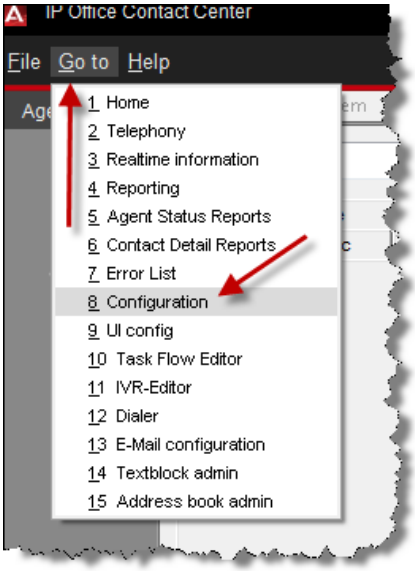


In this example, a new Topic will be created to be utilized by this call flow.

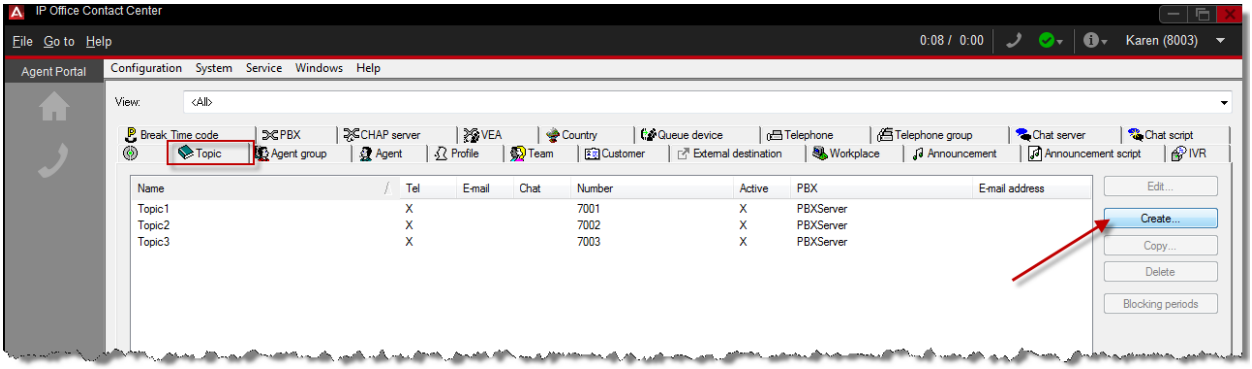
1. Login to the IP Office Contact Centre with an account that has full administrative privileges and authorizations.



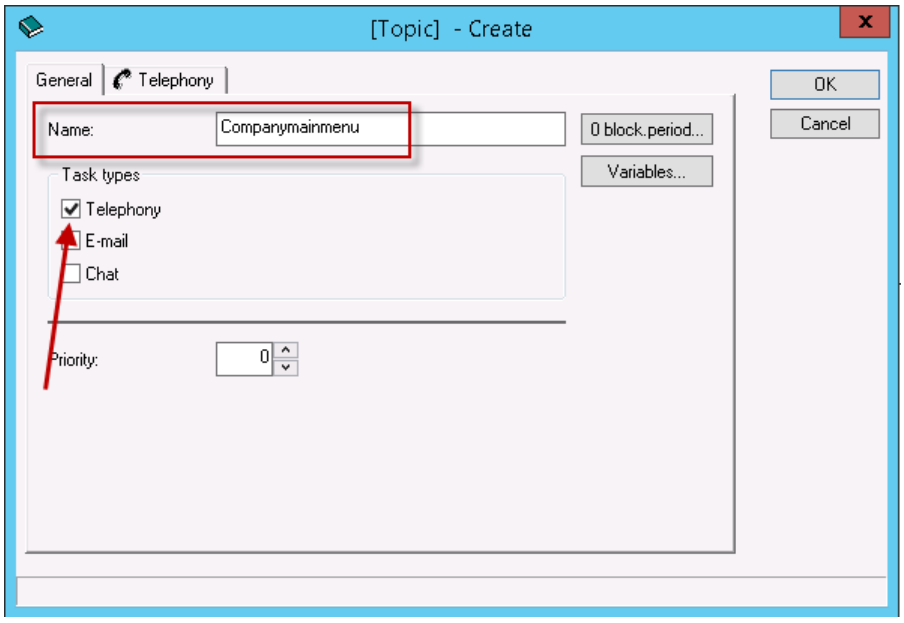
2. From the **Go to** menu select **Configuration**.



3. Select the **Topic** tab and click the **Create** button.



4. Enter a **Name** for the new Topic. Click the **Telephony Task Type**



5. Click the **0 block.period** button.

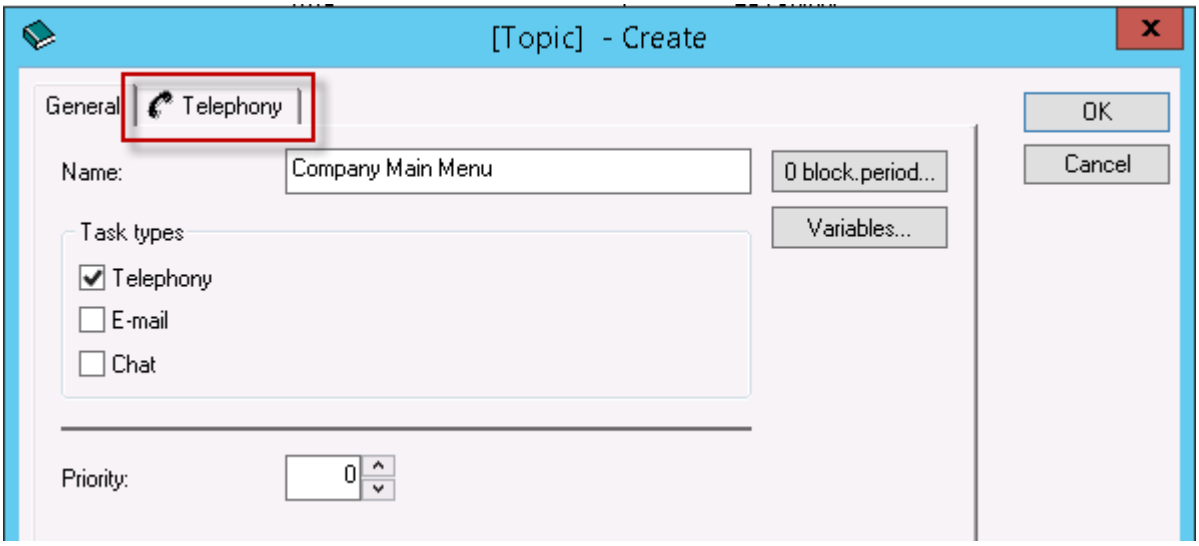
6. The system uses block periods to allow the calls to be routed when the topic is not available. For example, holiday periods or company shutdown.

   In this example, the Company is closed during a shutdown from 1st June-15th June. The Company's normal working hours are 08:30-17:30 Monday to Friday.

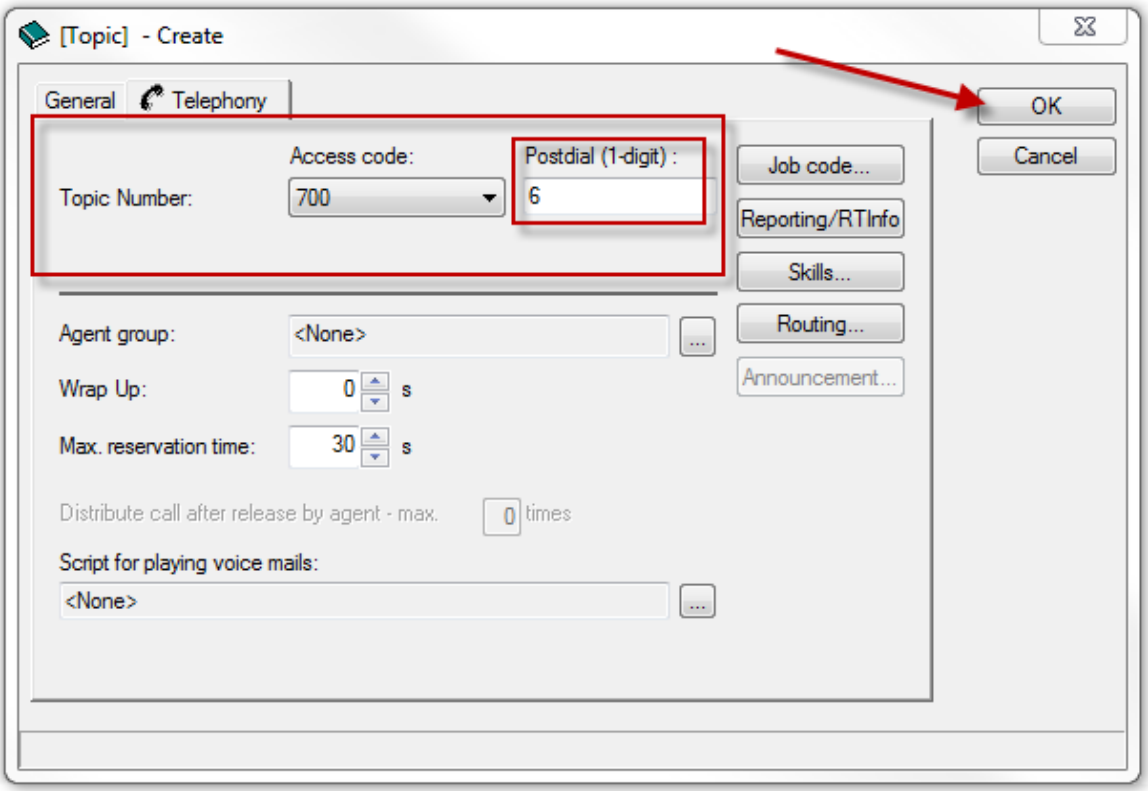
   This requires the configuration of one blocking period:

   - Yearly From 30th June 17:30 till 16th June 08:30

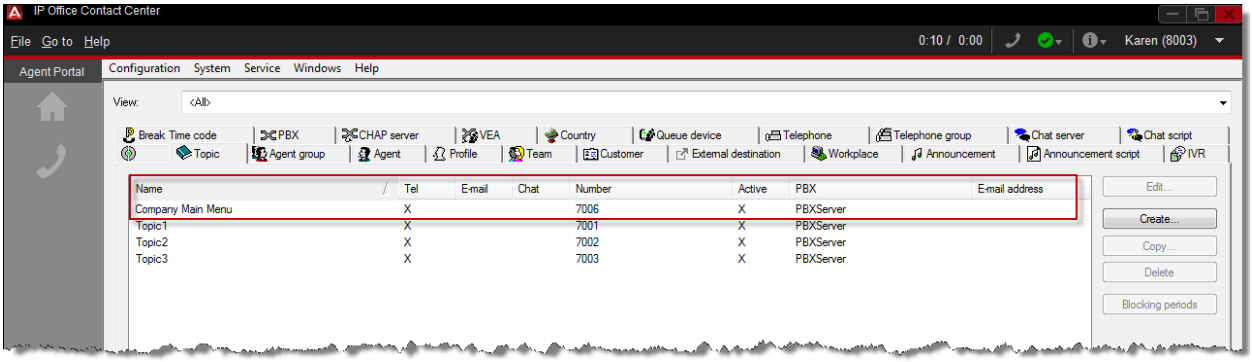
7. Click the **Telephony** tab.



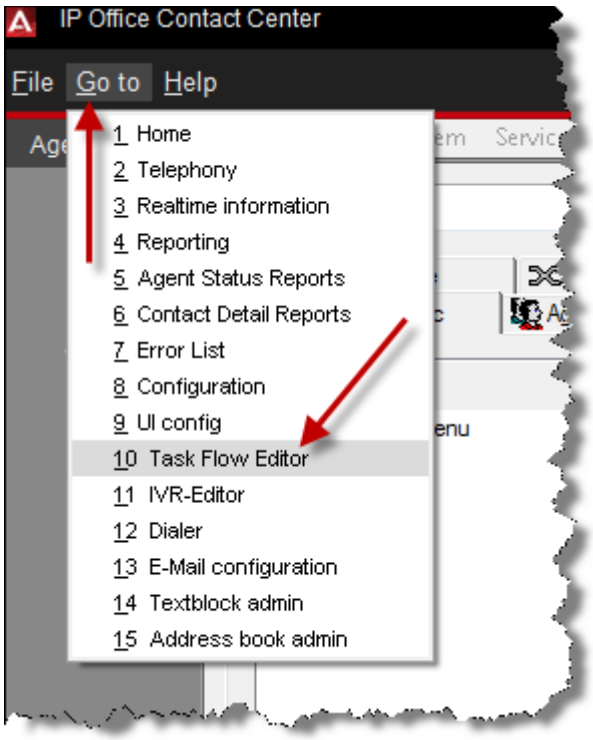
8. Enter the **Postdial** single digit and then click the **OK** button



9. The new Topic is displayed.

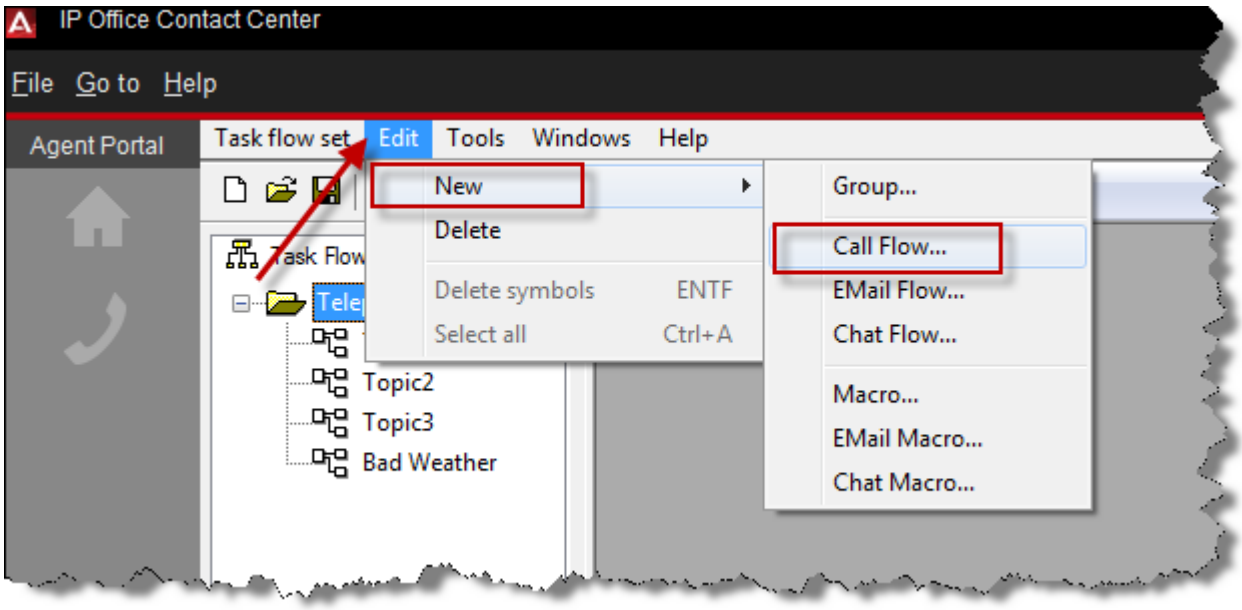


10. From the **Go to** menu click **Task Flow Editor**.

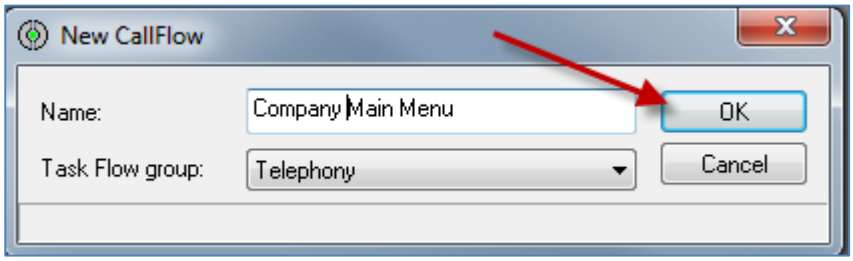


In this example, a new call flow will be created. Alternatively the elements could be added to an existing Call Flow.

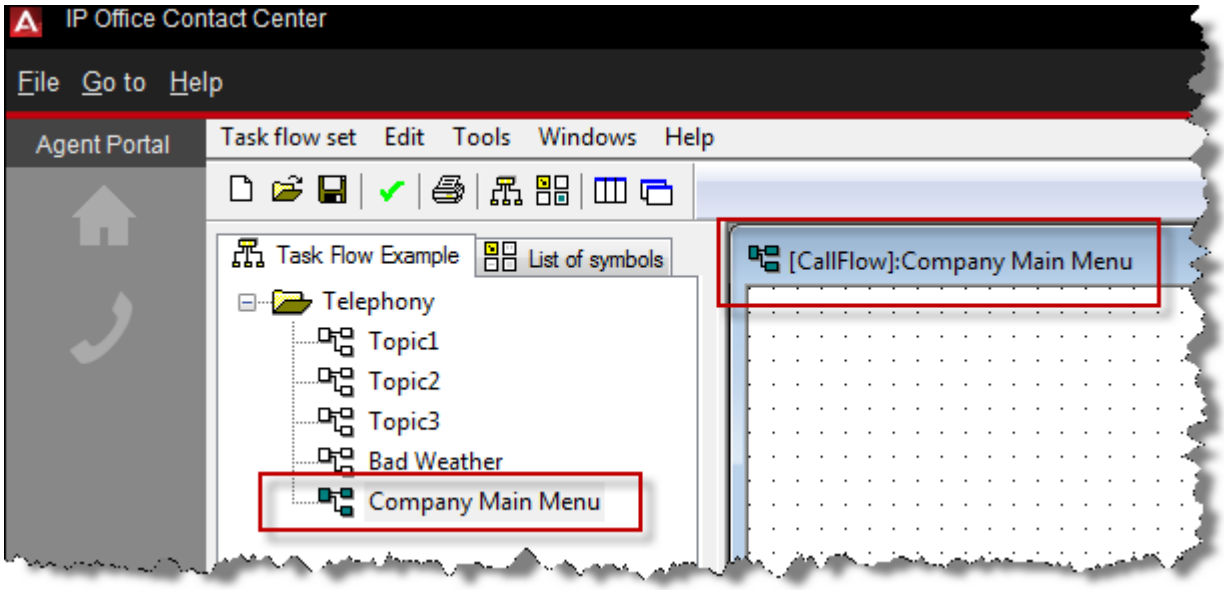
11. Select the **Edit** button and click **New – Call Flow**.



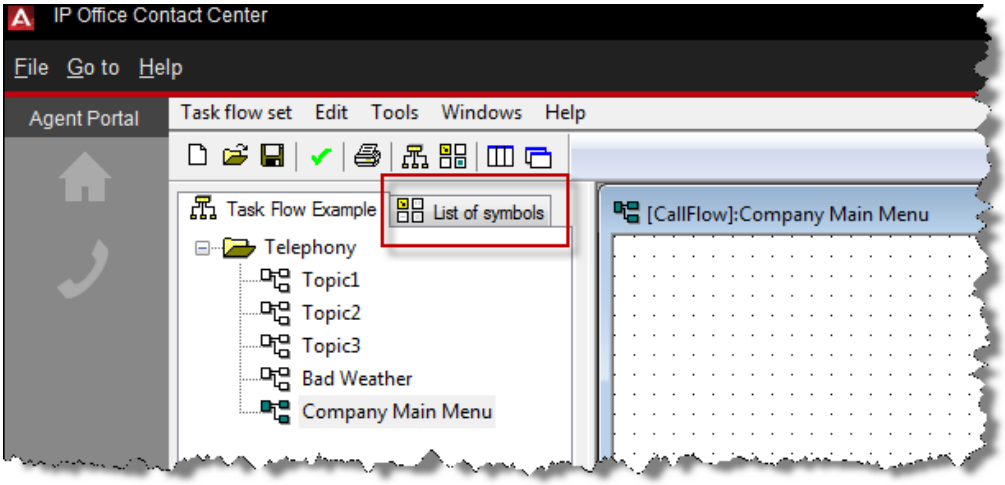
12. Enter a **Name** for your new call flow and click the **OK** button.



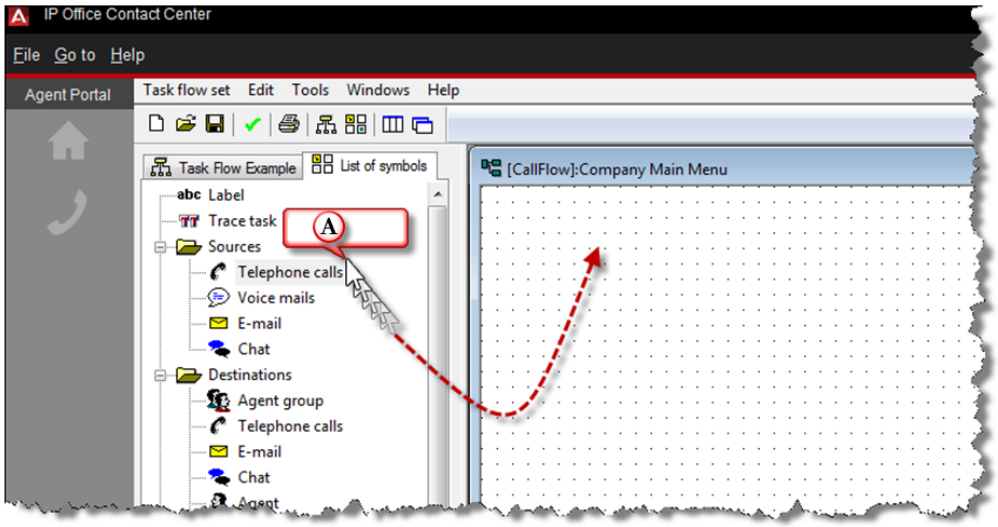
13. The new Task flow is displayed.



14. Click the **List of symbols** tab.

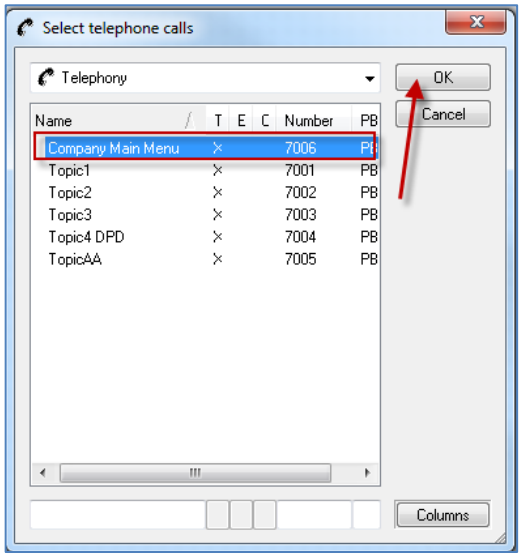


15. Select and drag the **Telephone calls** element into call flow Working Area.

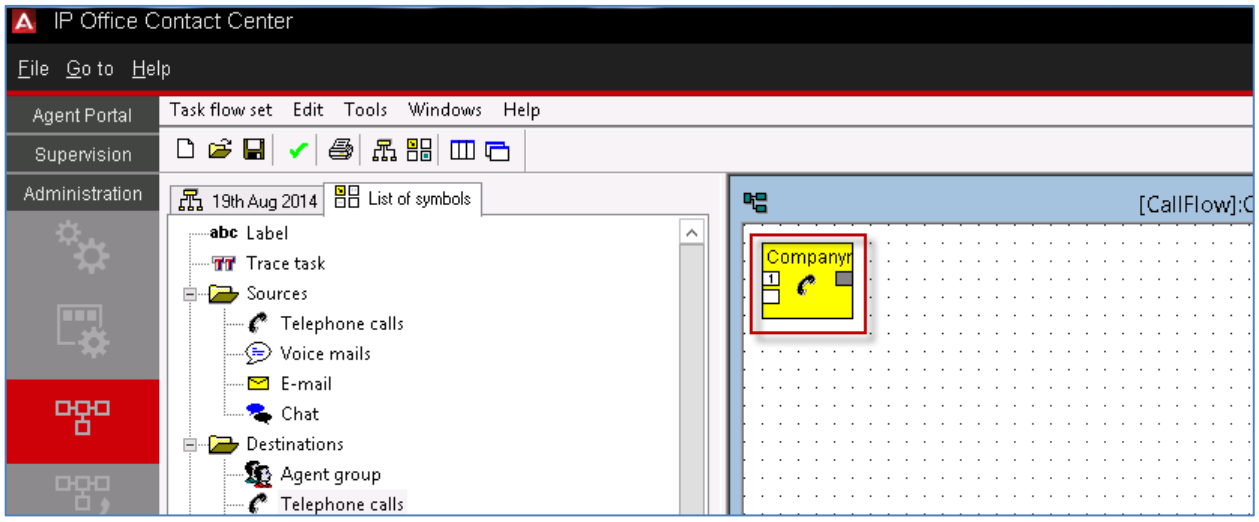


A. Click and drag

16. Select the **Name** of the New Topic and click the **OK** button.

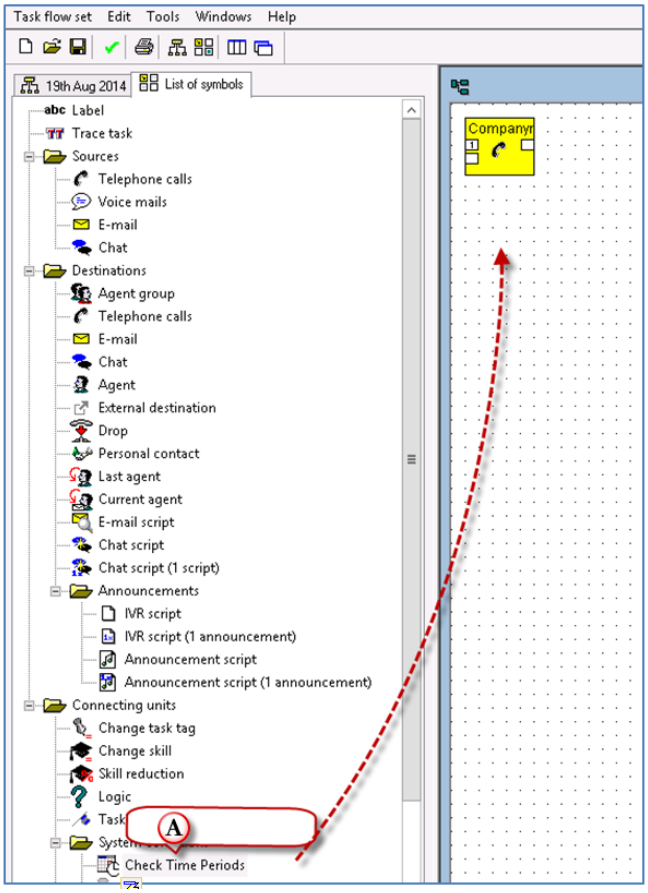


17. The element is displayed.



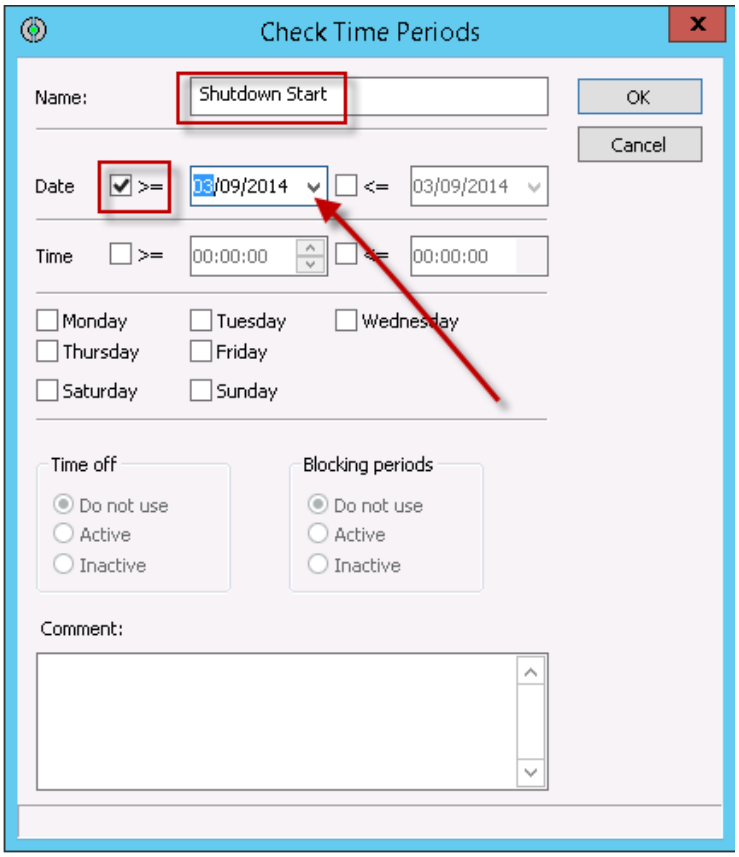
A **Check Time Period** element will be used to check the time and date. In this configuration example, the company is open Monday to Friday 08:30-17:30 and has a Company shutdown each year from 1st July till 15th July.

18. Drag the **Check Time Period** element into the Call flow Working Area.

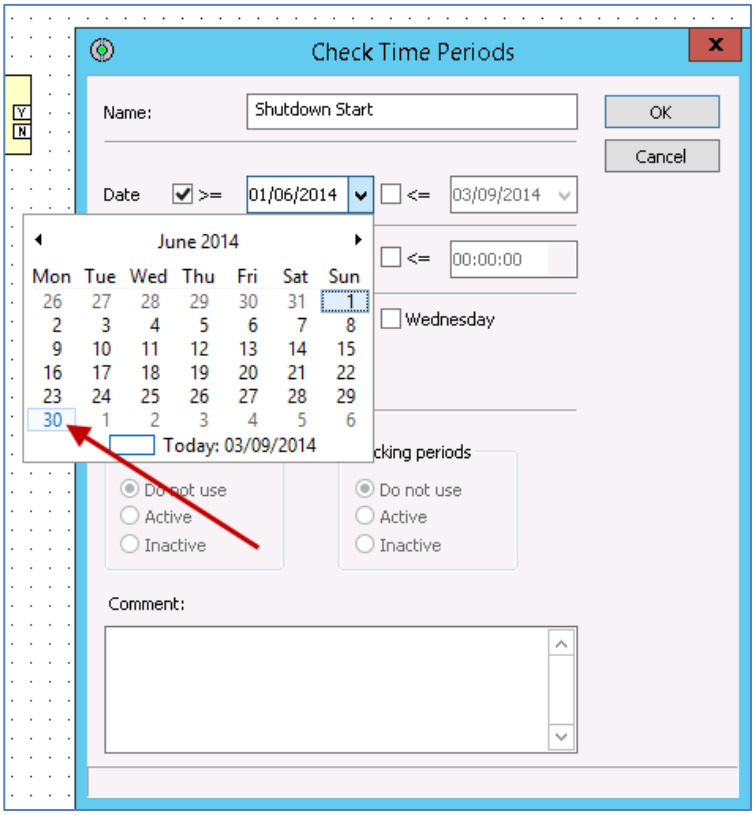


A. Click and drag.

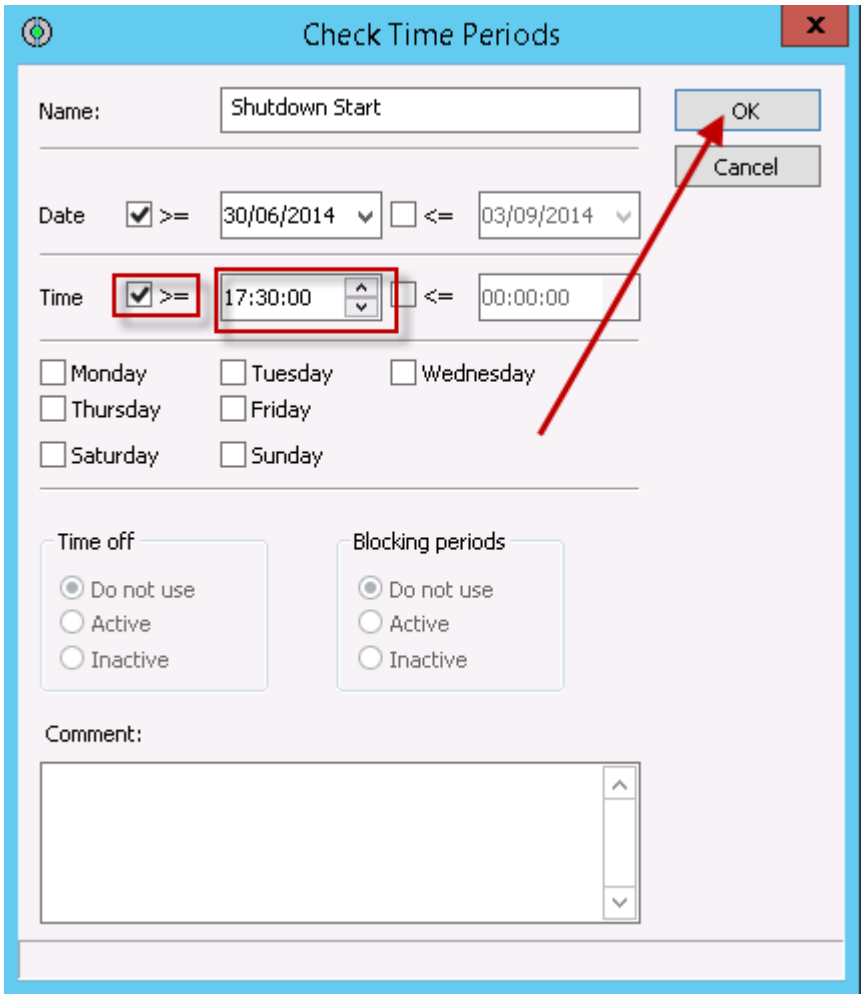
19. Enter a **Name** for the Check Time Periods element and then click the **Date box >=.** Use the pull down option to display the calendar.



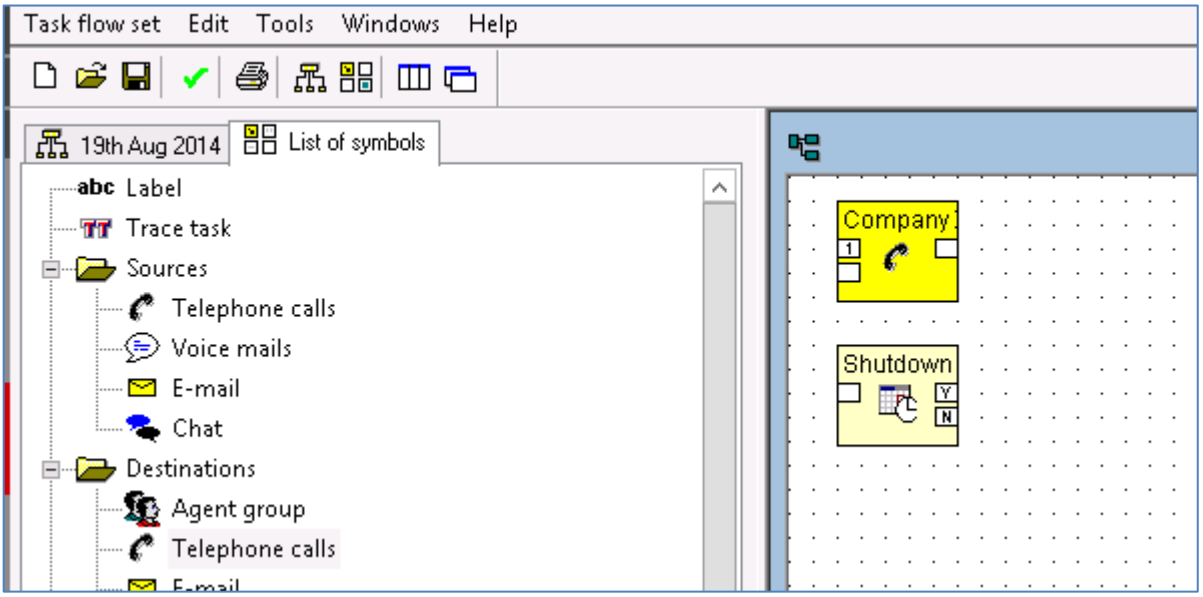
20. Select the **30th of June 2014** from the calendar.



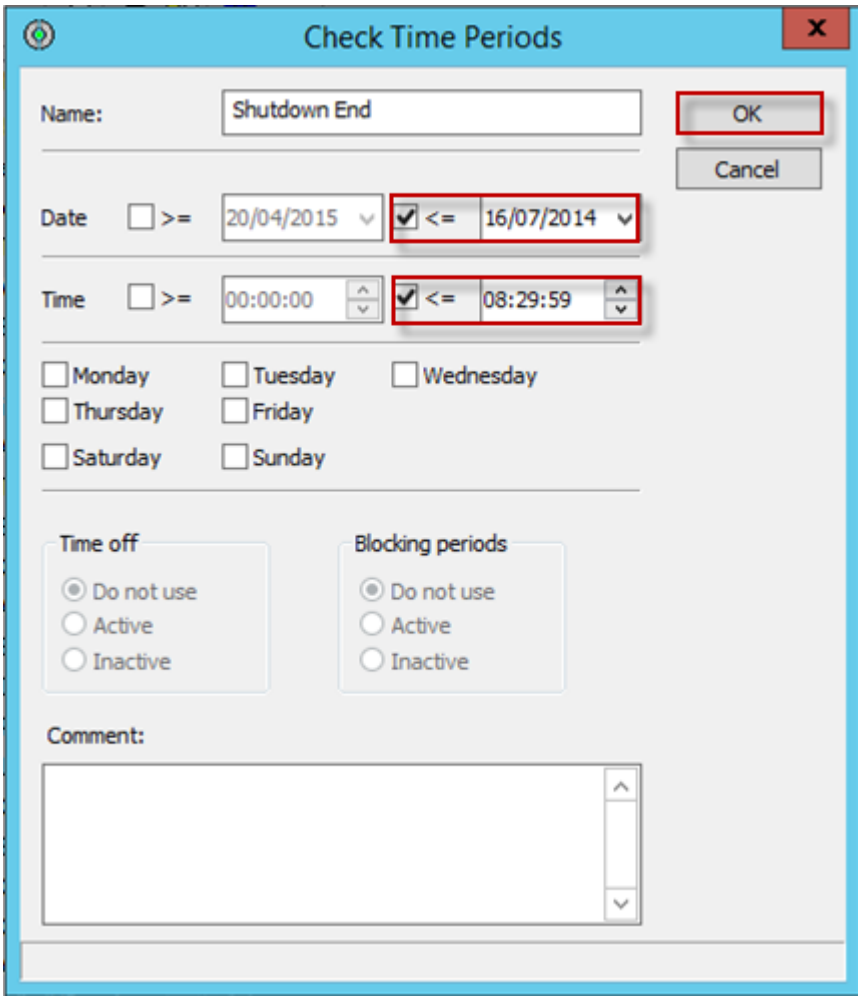
21. Click the **Time box >=** and then enter the time **17:30:00** then click the **OK** button.



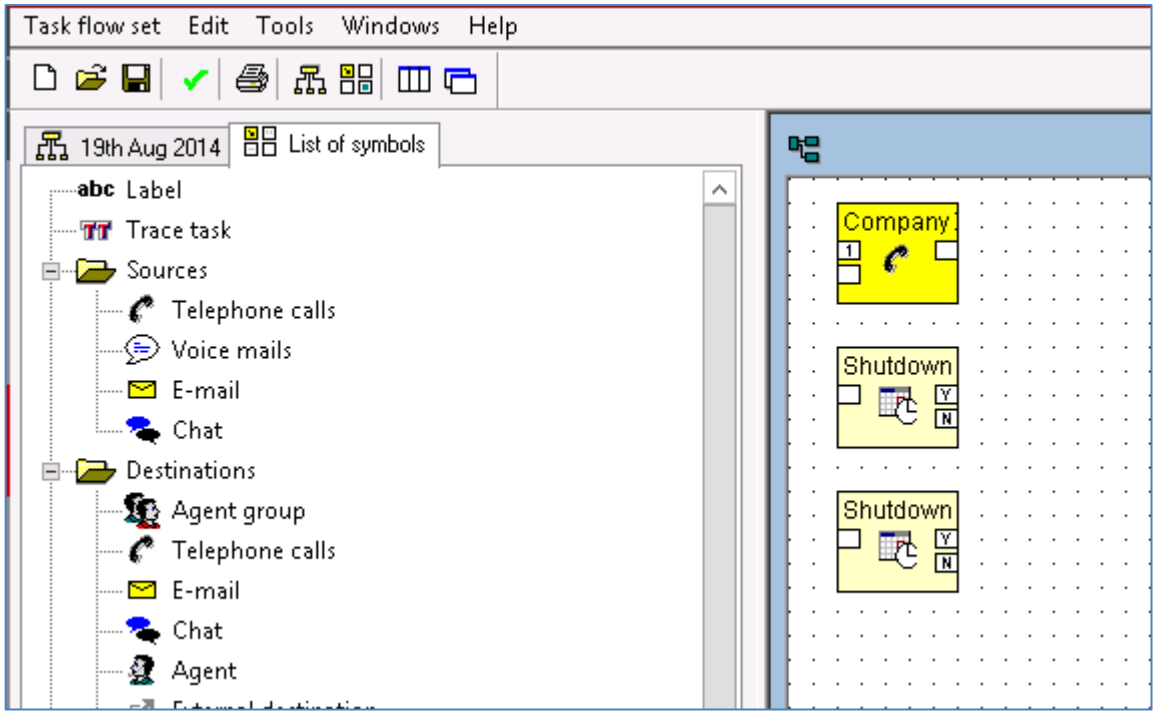
22. The Check Time element for the start of the company shutdown is now in place. Next drag an additional **Check time** element into the Call flow working area that will be used to end the company shutdown.



23. Using the **<= Date and time boxes**, create a Check time period for the Shutdown End time and then click the **OK** button.



24. The Shutdown end Check time element is now displayed.



25. The announcement wave files that the customer is going to use during the Task Flow Editor can now be a copied to the IP Office Contact Centre server.

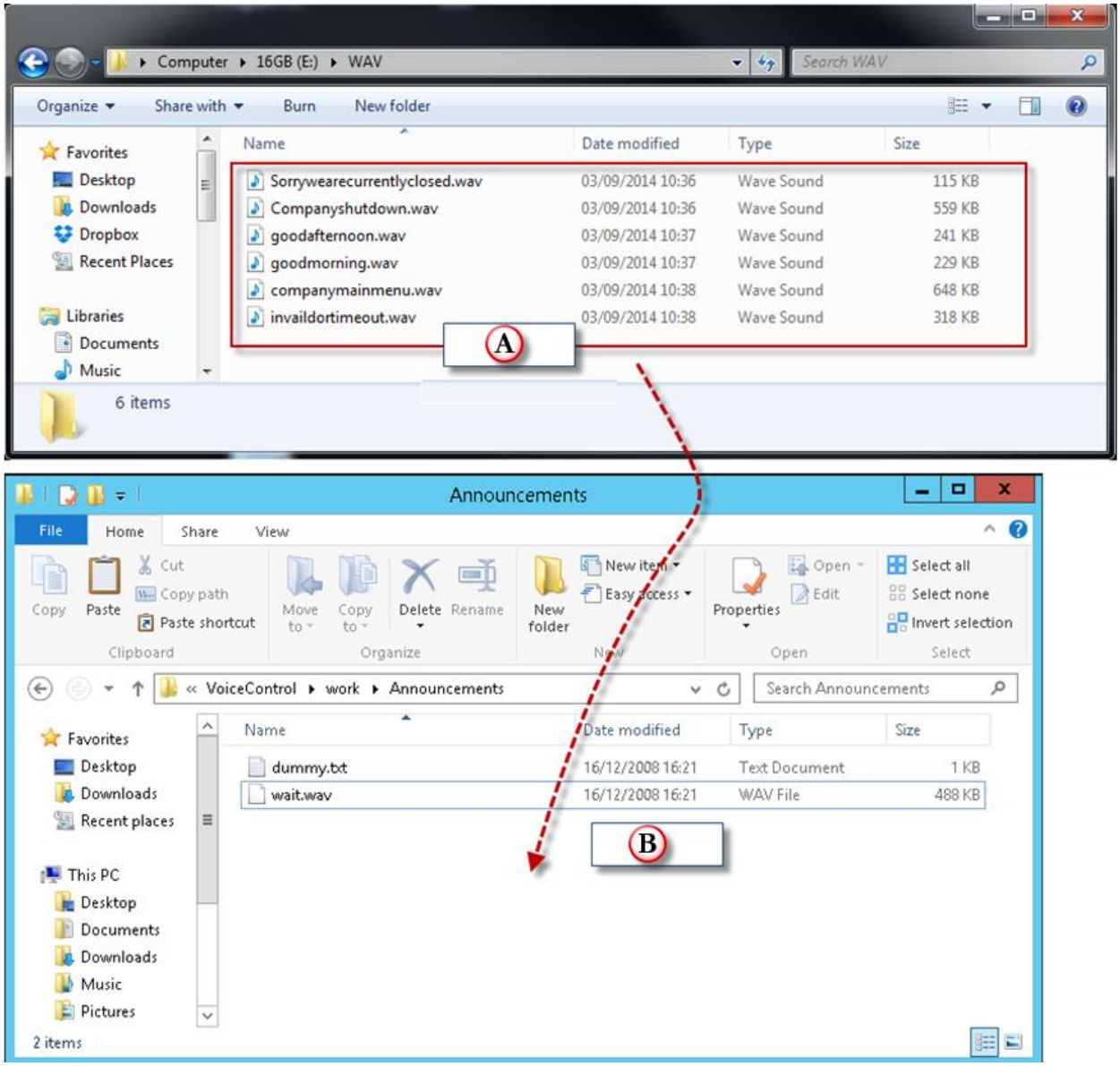
Note: The WAV file must be in the following format: PCM 8.0kHz 16Bit Mono

Note: WAV files from an existing IP Office Voicemail Pro can be used.

To copy the WAV from offline:

26. From the server's desktop, open **Windows Explorer**.
27. The Announcements to be used within IVR Editor and Task Flow Editor should be copied to this folder.

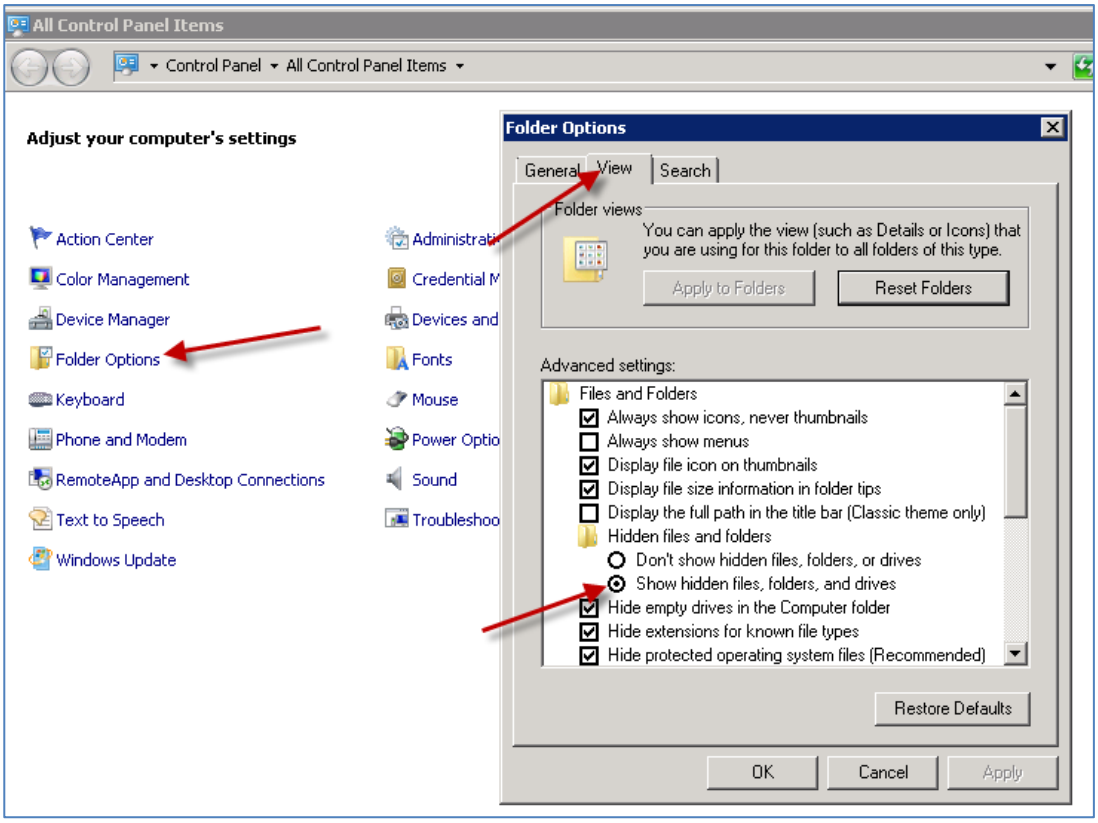
    C:\ProgramData\Avaya\IP Office Contact Center\VoiceControl\work\Announcements



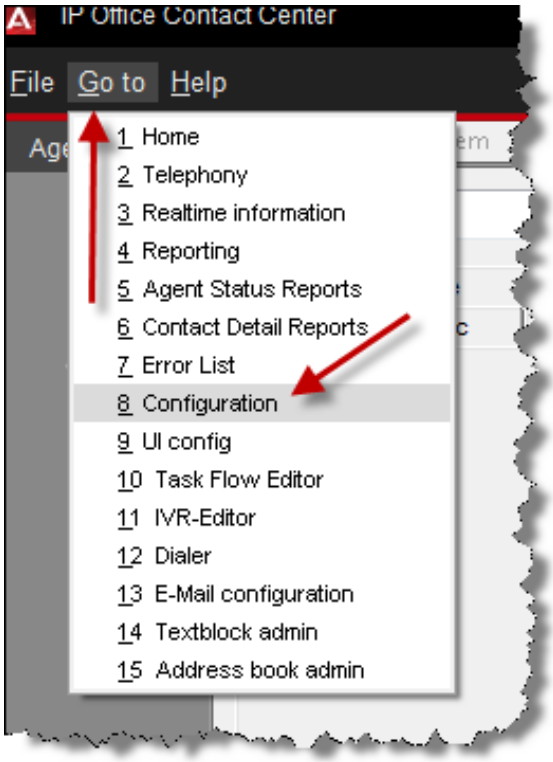
A. Copy

B. Paste

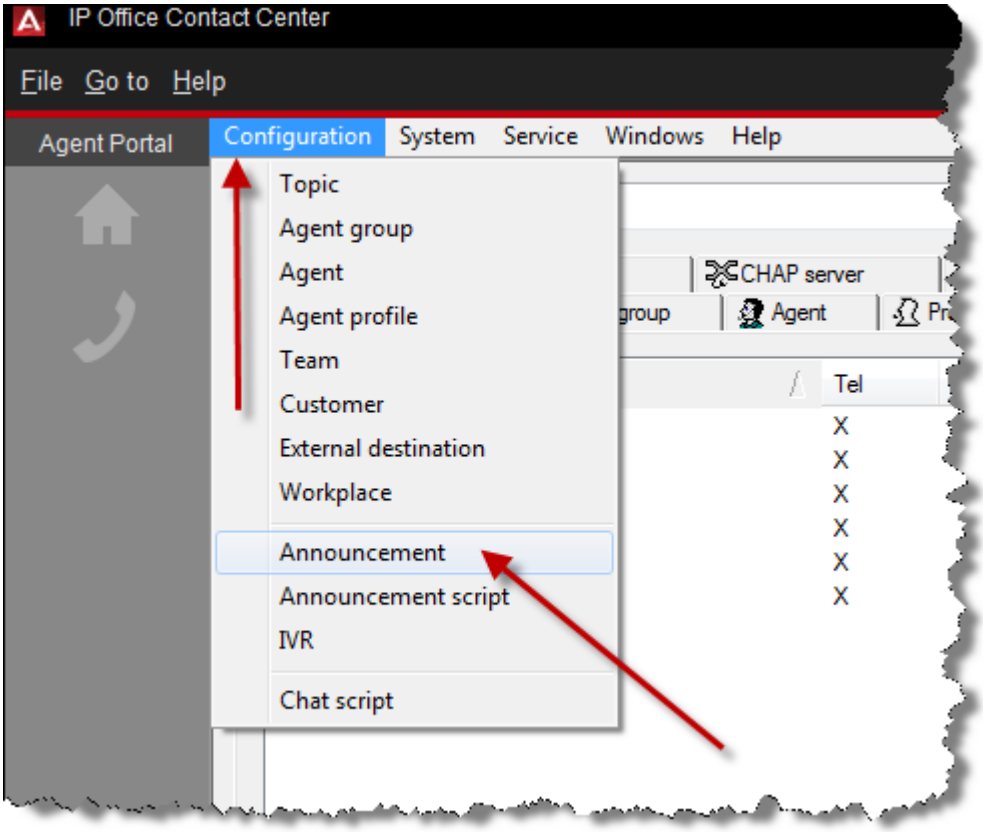
Note: You may have to enable hidden files on the Server to view this path.



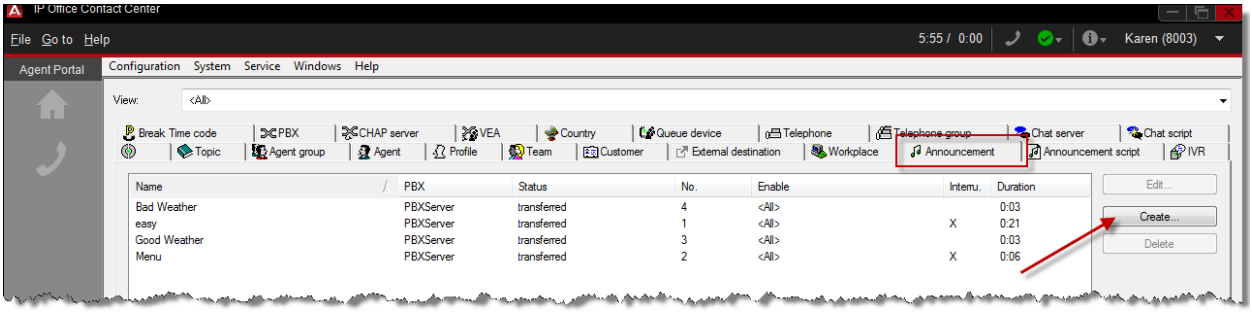
28. Now that the WAV files have been copied, we need to configure IP Office Contact Centre so that they can be utilized.
29. From the **Go to** menu select **Configuration.**



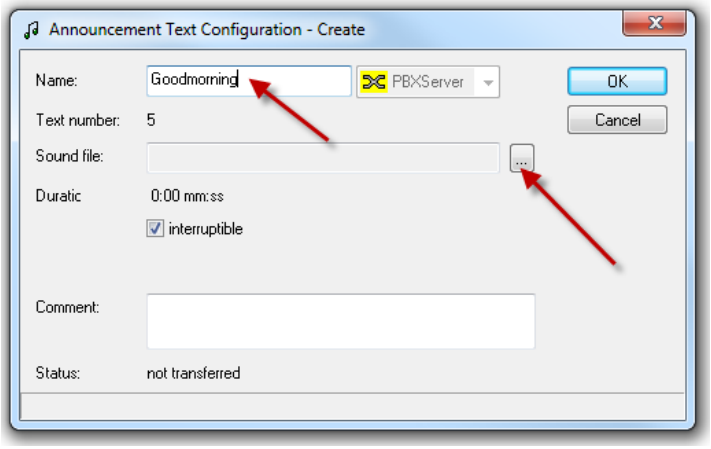
30. Click **Configuration** and then select **Announcement.**



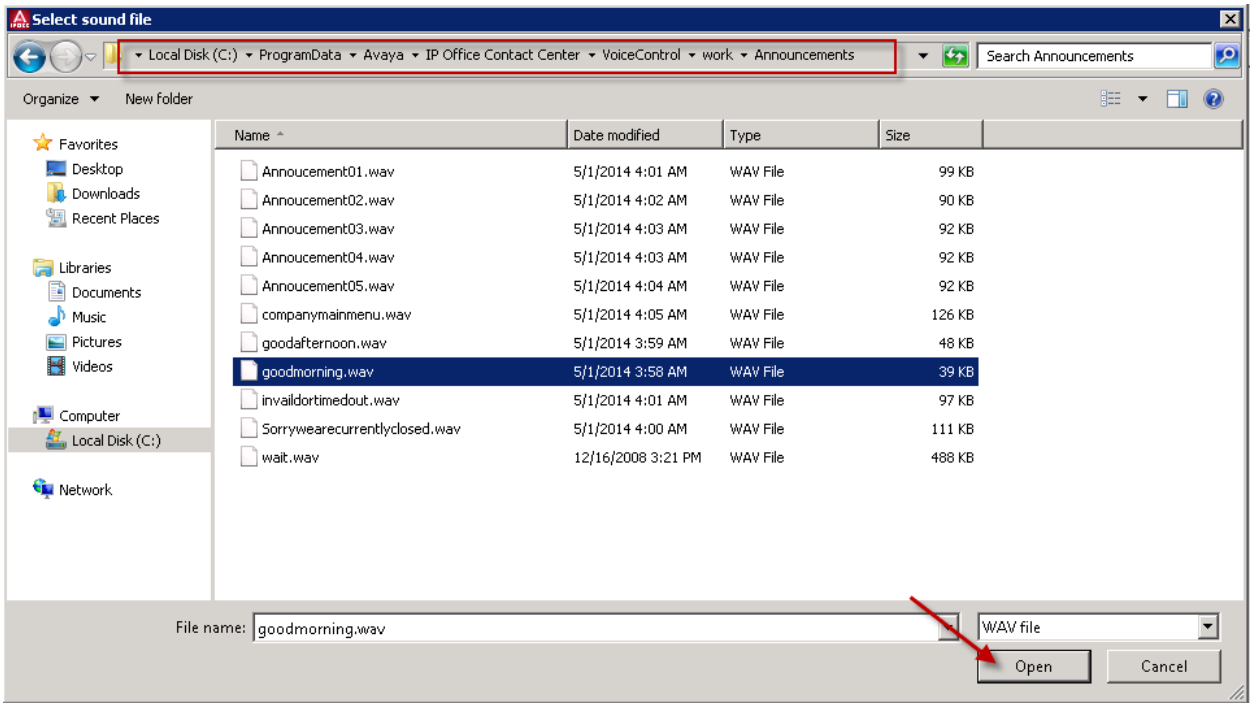
31. Click the **Create** button.



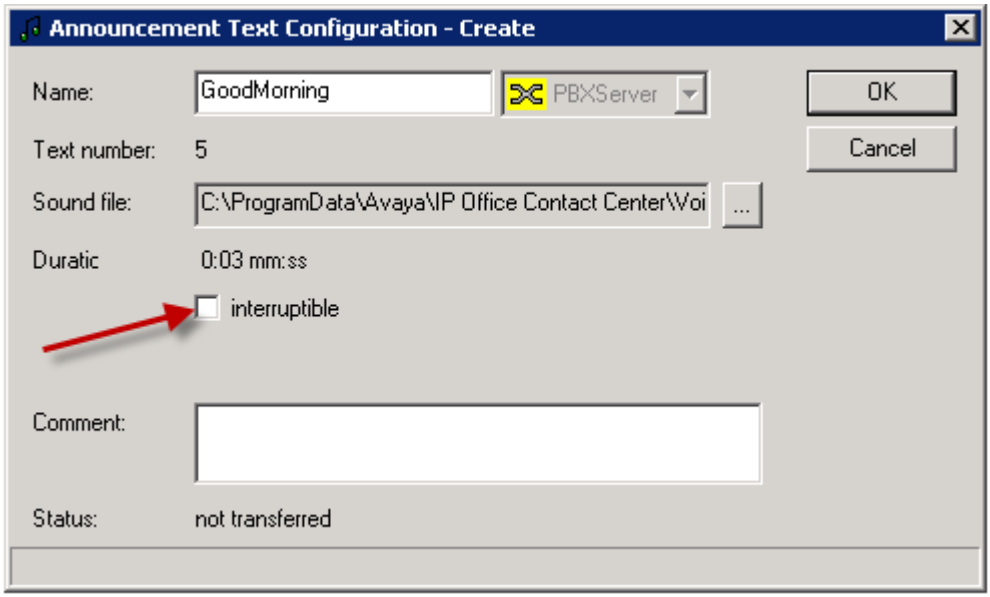
32. Name the Announcement, for example Goodmorning and then click the browser button.



33. Browse to the location on the IP Office Contact CentreS when the customer WAV files are located. Then select the goodmorning.wav file and click the **Open** button.

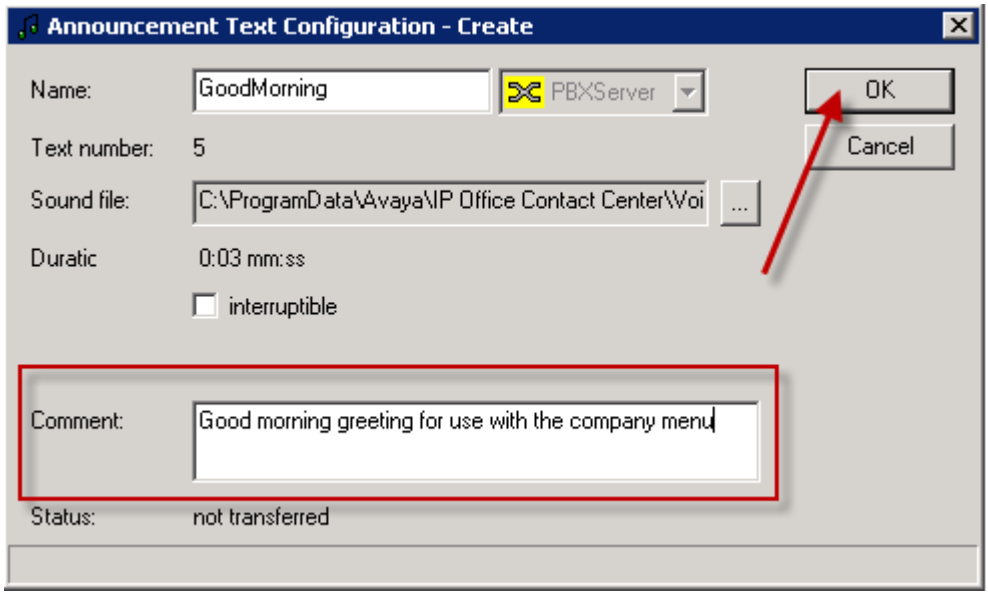


34. As this greeting is required to be played in full, deselect the **interruptible** check box and give a Comment to help the customer.

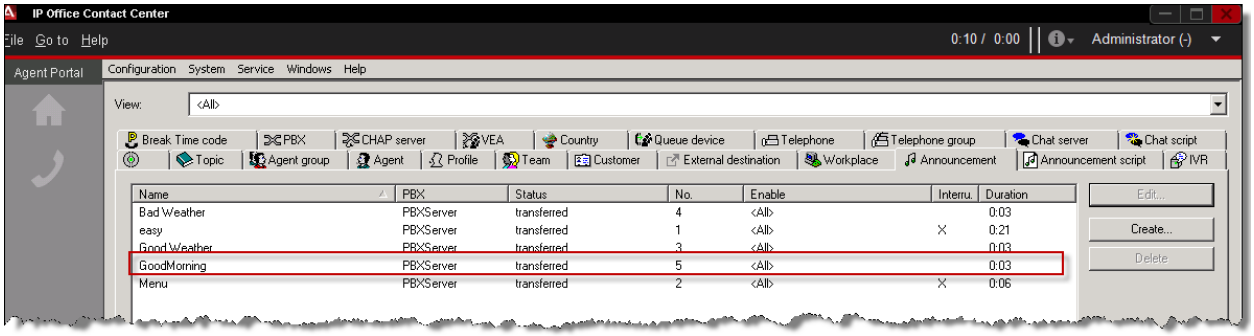


Note: In circumstances where an announcement file or Text to Speech announcement is being utilized and the announcement is required to be heard in full, it is recommended that the interruptible check box is cleared i.e. set to non-interruptible.

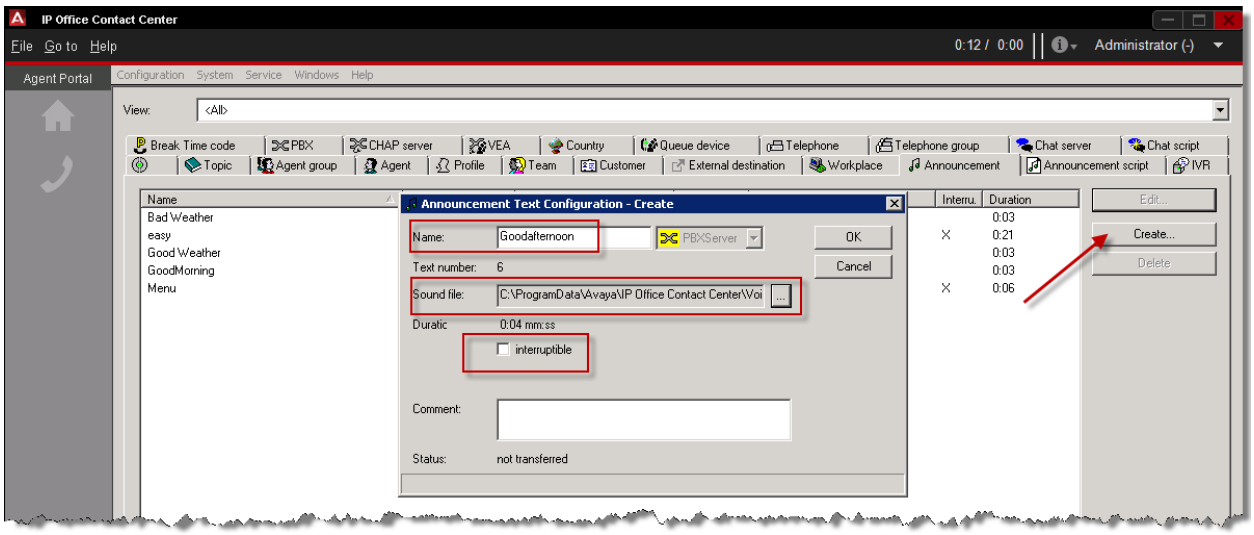
35. A **Comment** can be added to describe this greeting. Then click the **OK** button.



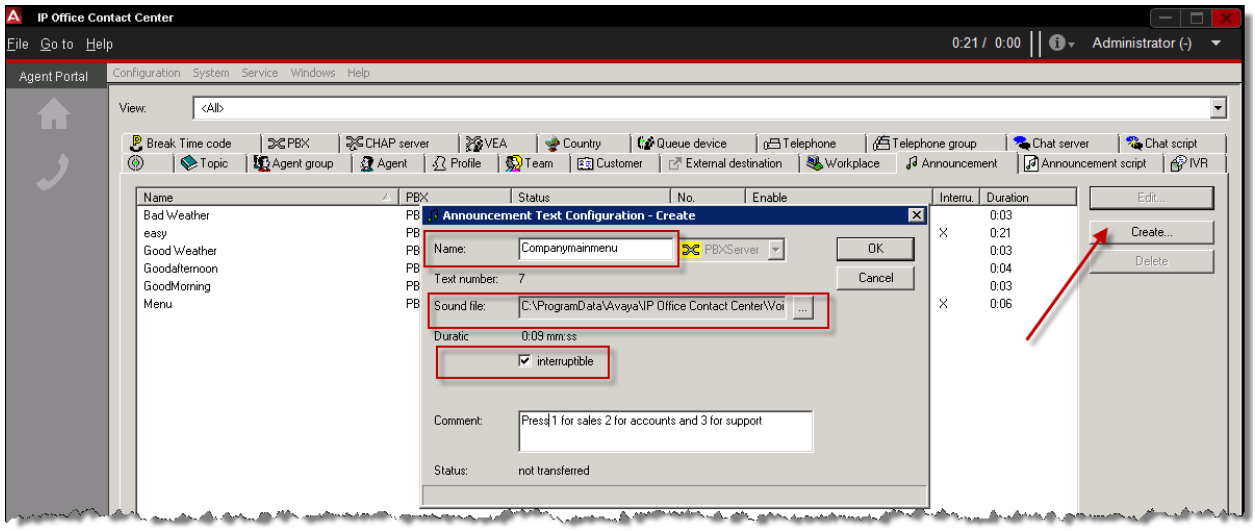
36. The configured announcement is displayed.



37. Following the same process, click the **Create** button and add another **Announcement** for the Good Afternoon announcement.

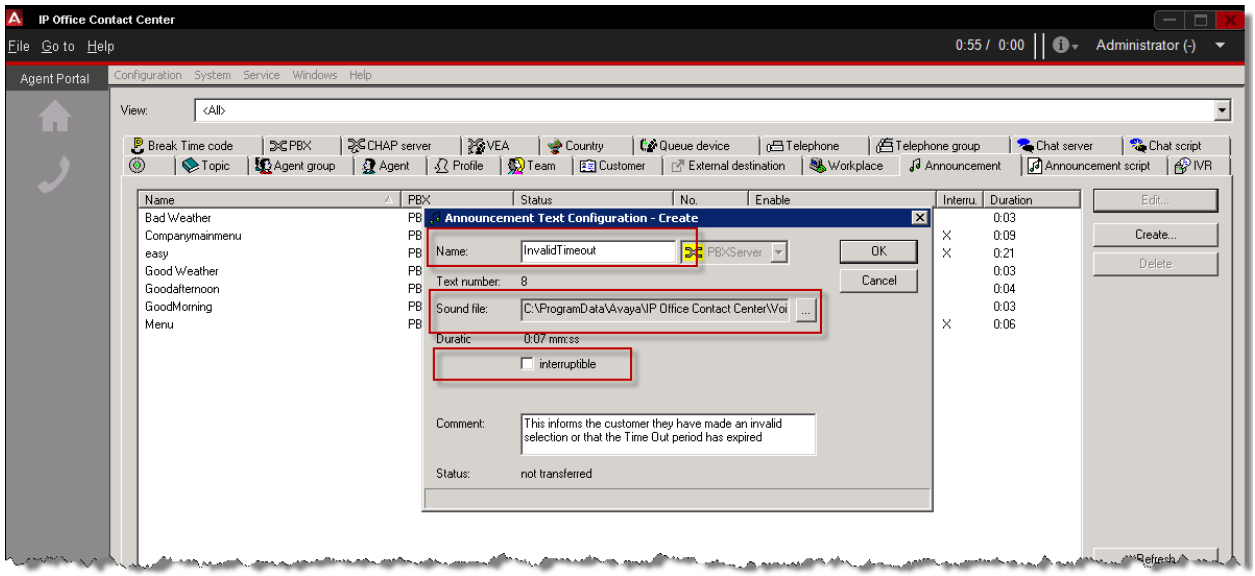


38. We will now add the other Announcements that will be used in this Call flow. The Company main menu announcement is interruptible. This will allow a customer to select an option in order for their call to be routed to the required destination.

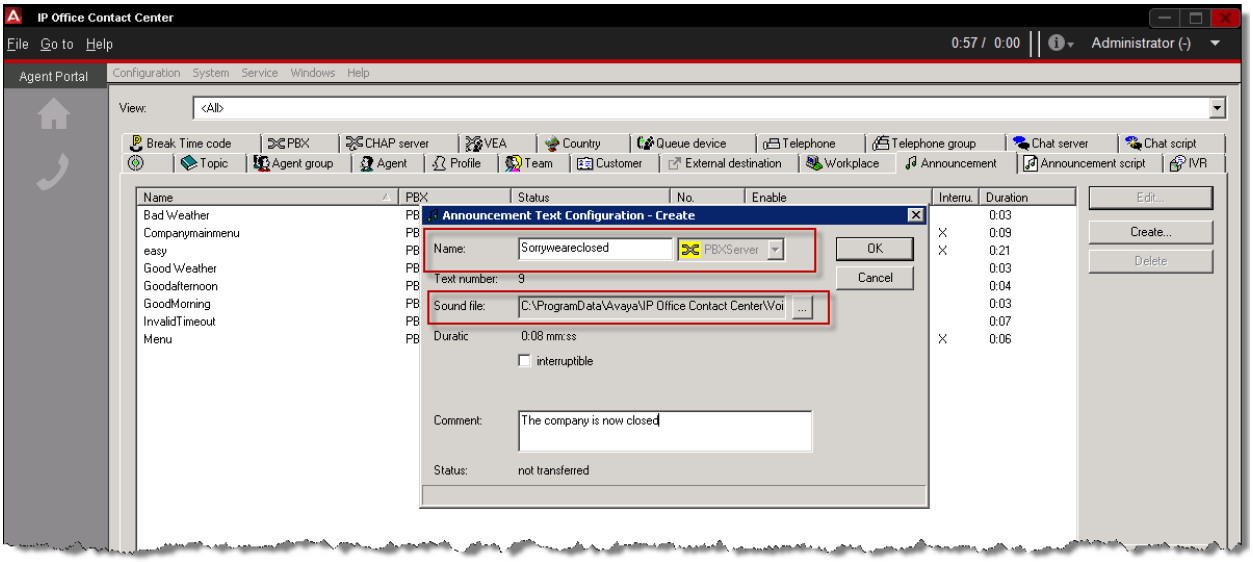


Additional announcements can be created that will inform customers that they have made an invalid choice in the menu or that they have gone beyond the Timeout period. A ‘company closed’ message will also be added.

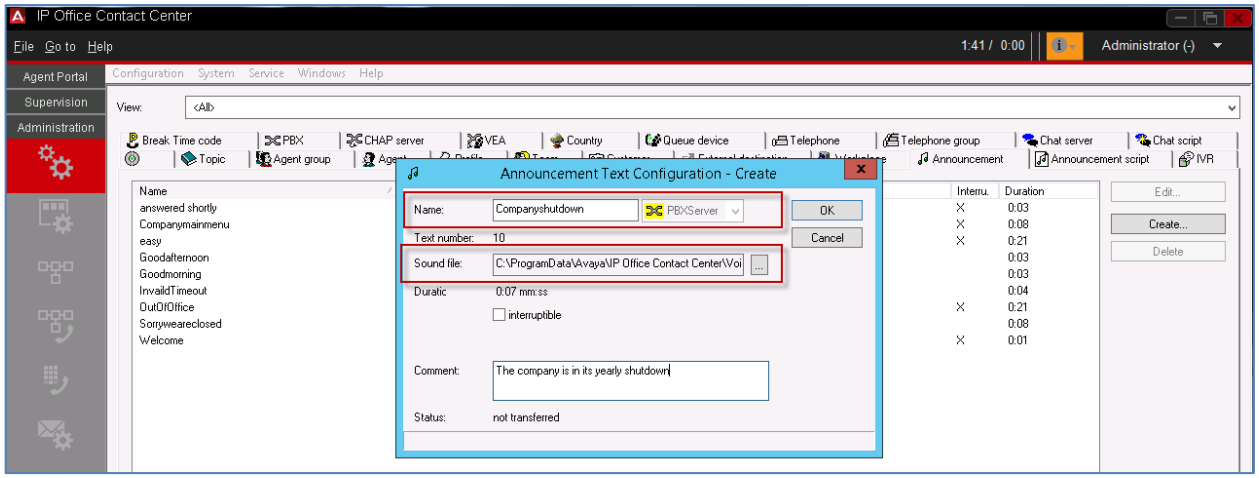
Announcement – Invalid Timeout



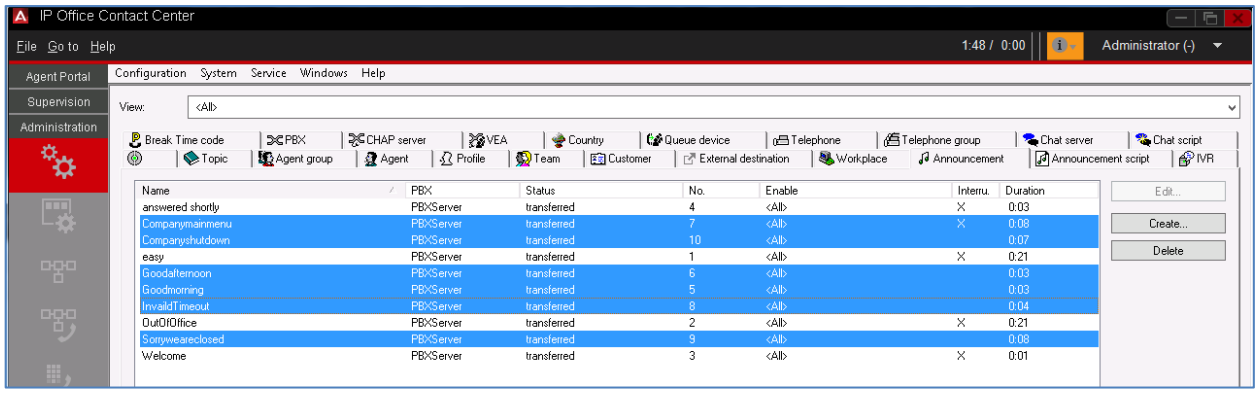
Announcement - Sorry We Are Closed



Announcement – Company Shutdown



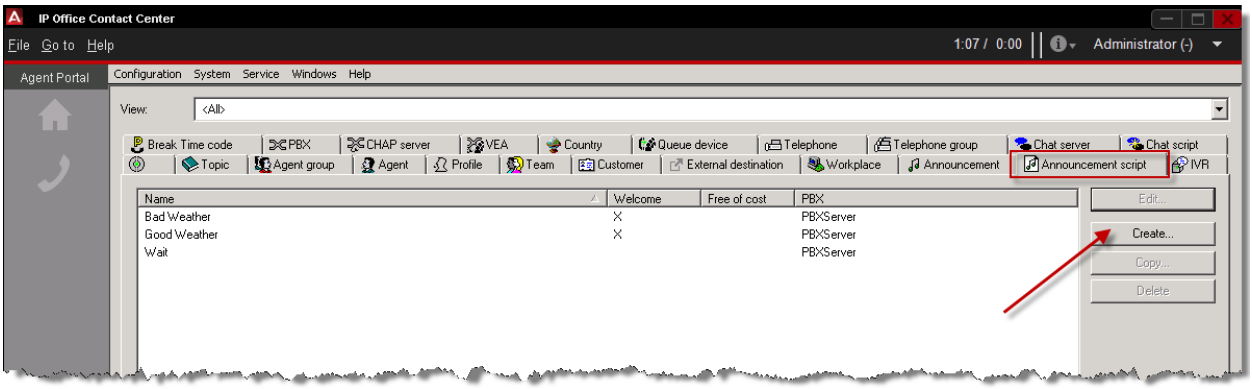
39. One configured, the required announcements are displayed.



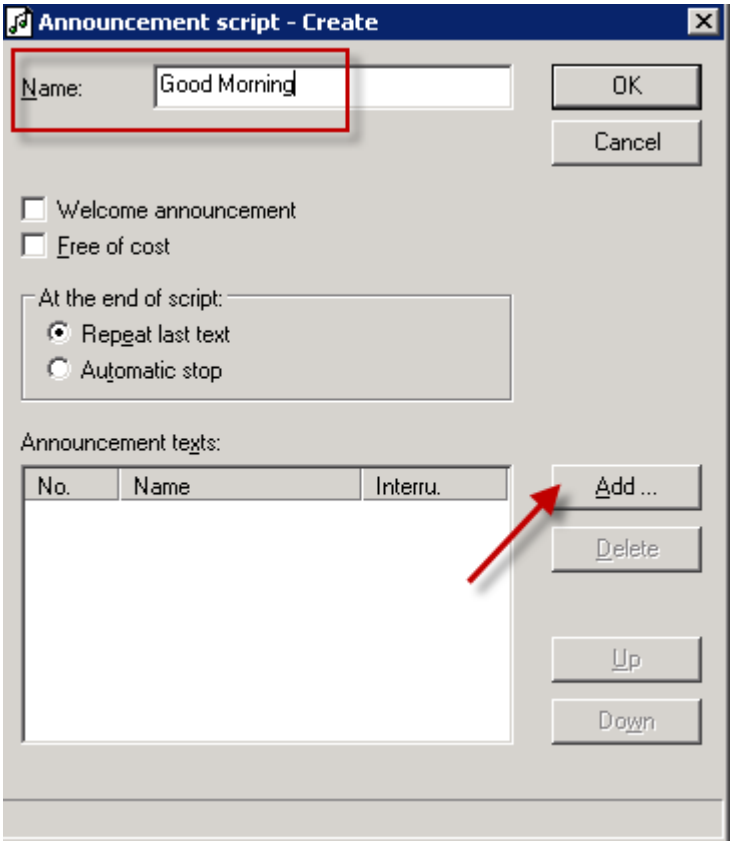
Adding the Announcements to Announcement Scripts for use in Task Flow Editor Call Flows

To reference and play announcements within Call flows, they must be added to an announcement script. Each script allows up to five announcements to be played.

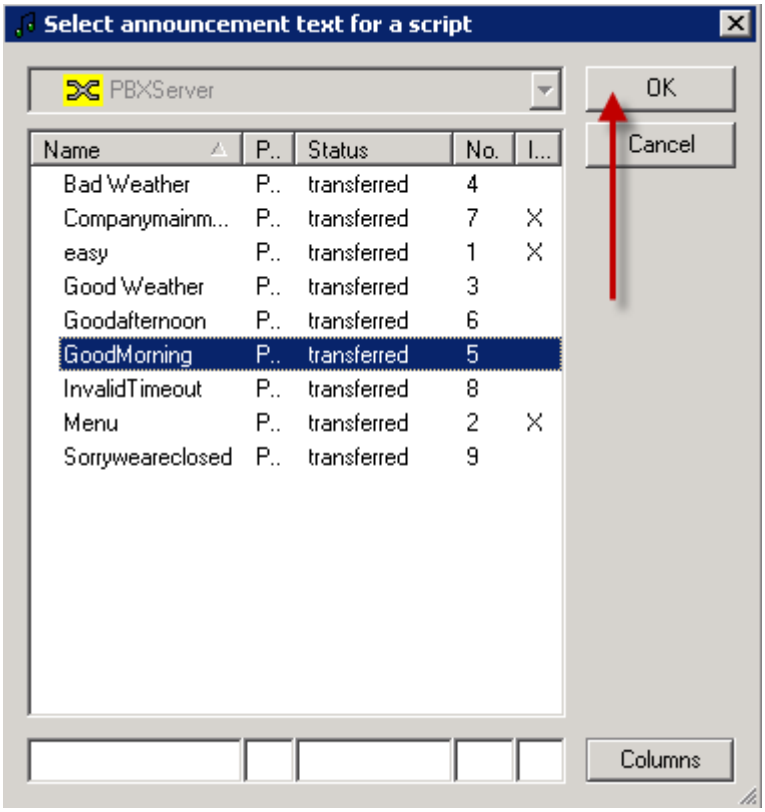
40. Click the **Announcement script** tab. Click the **Create** button.



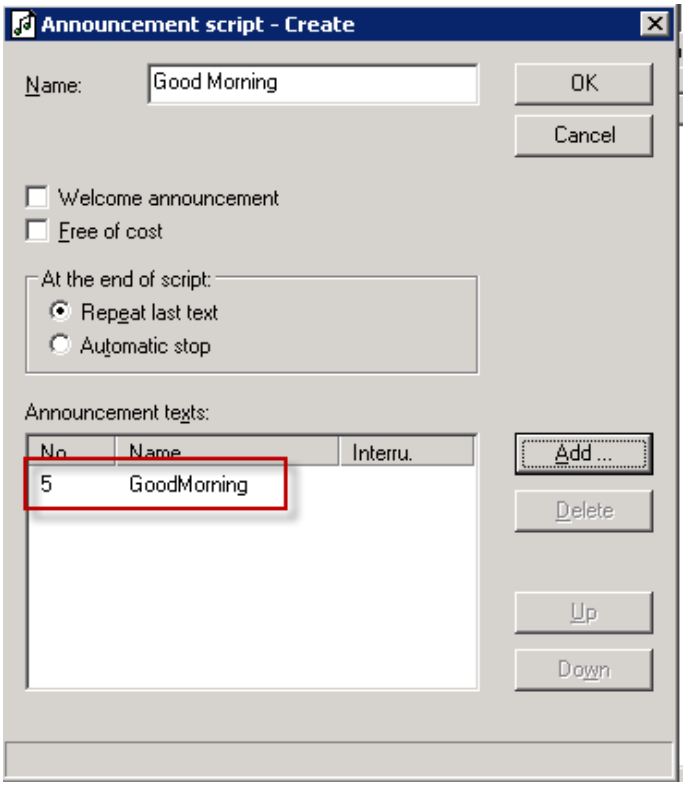
41. Enter a name for the Announcement script e.g. “Goodmorning”. Then click the **Add** button



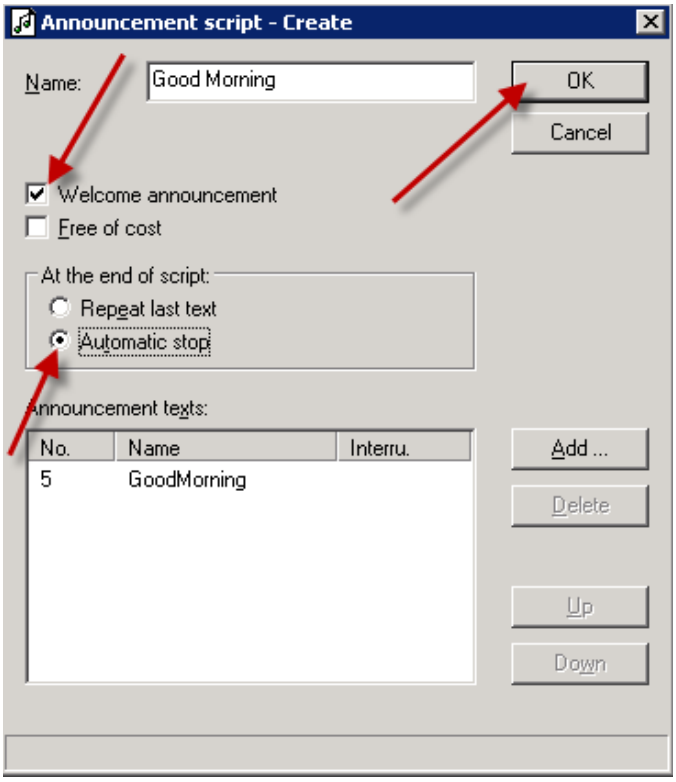
42. Then select the **announcement text** and click the **OK** button.



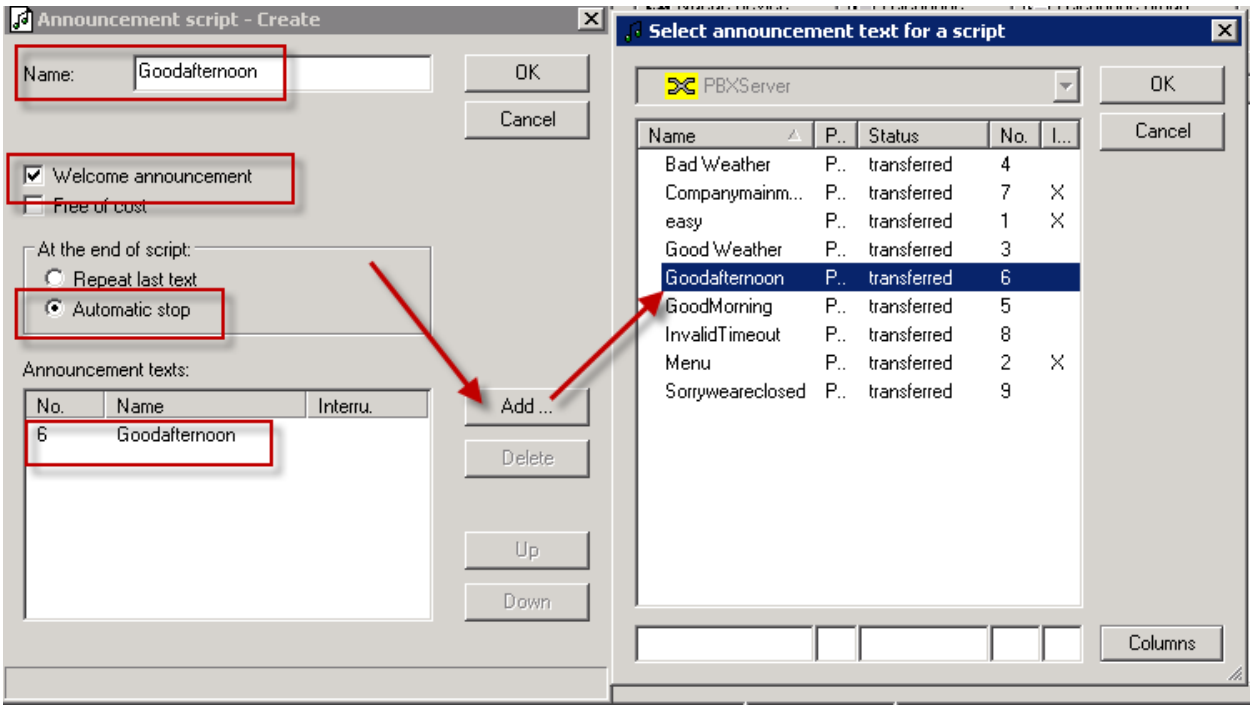
43. The Announcement text is displayed.



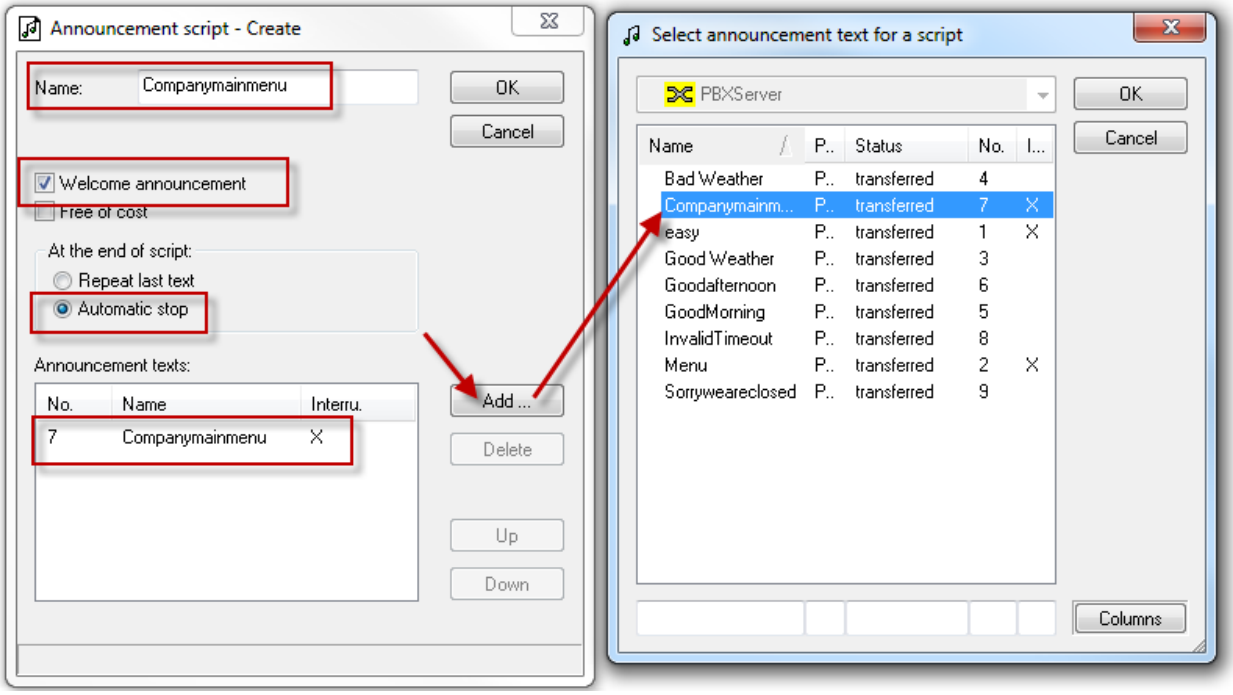
44. Click the **Welcome announcement** check box (not counted as wait time in reporting) and select the **Automatic stop** radio button(the script stops when all the announcements are play). Click the **OK** button.



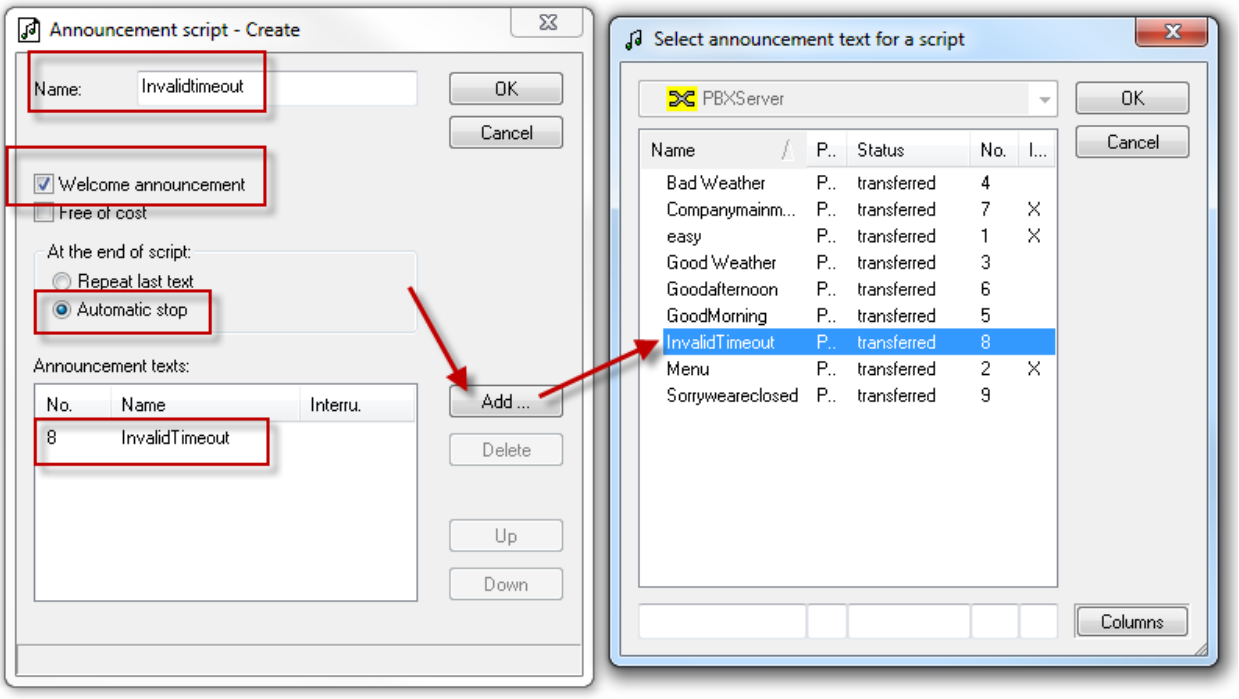
45. Repeat this process and create another script for the **Goodafternoon** announcement.



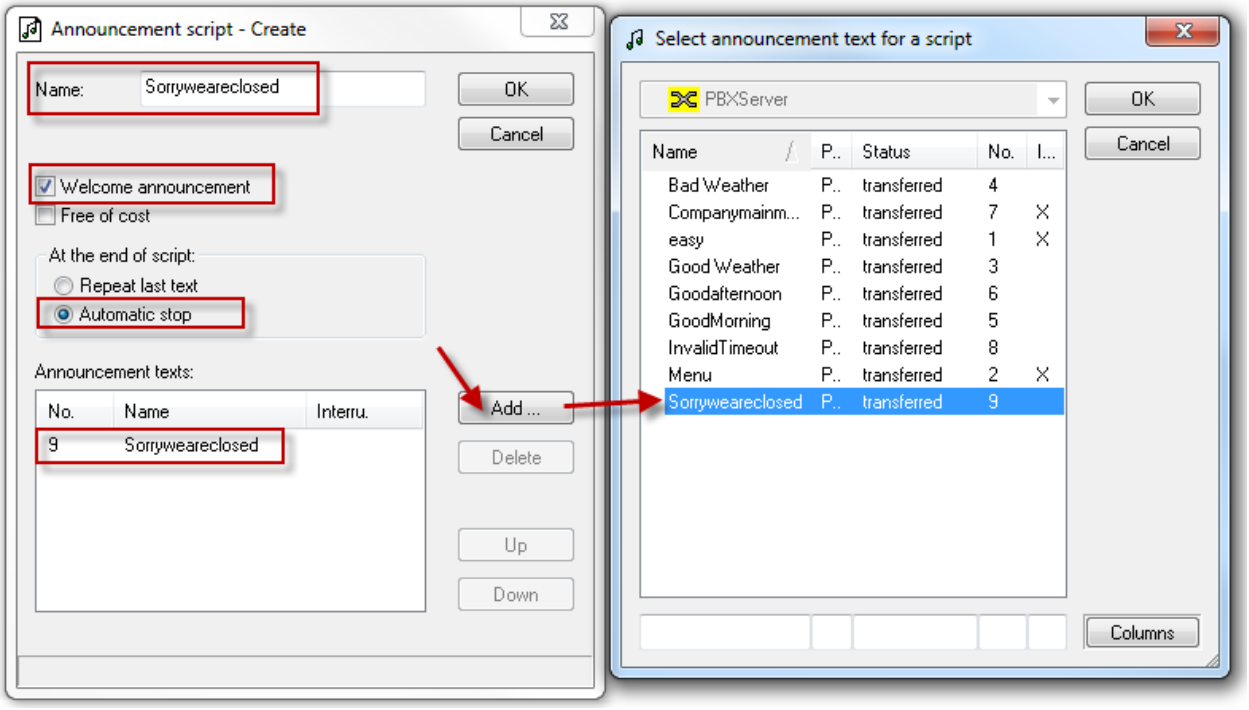
46. Add an Announcement script for the **Companymainmenu** announcement.



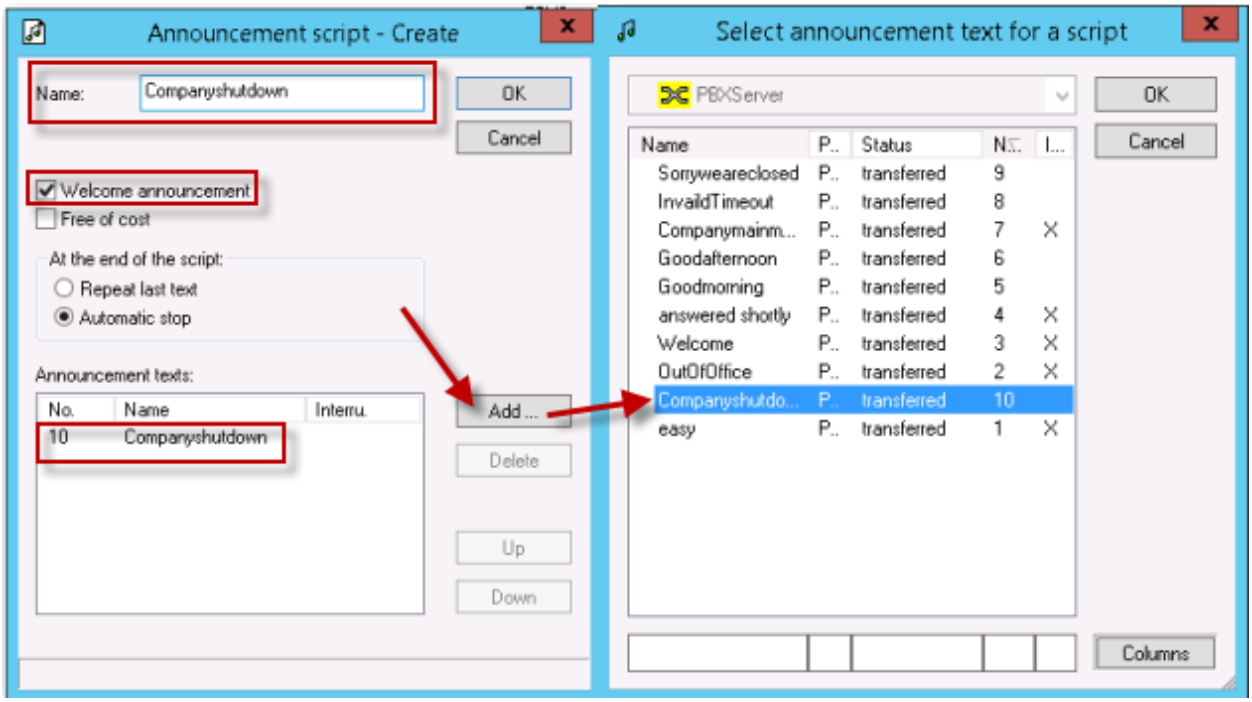
47. Create an announcement script for the **Invalidortimeout** announcement



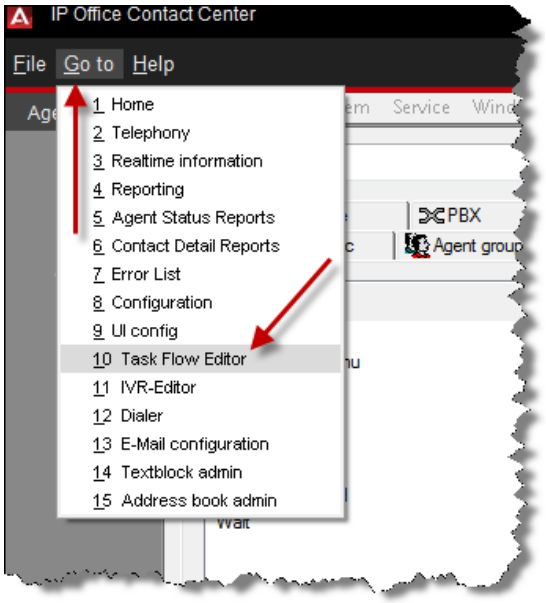
48. Create an announcement script for the **sorryweareclosed** announcement.



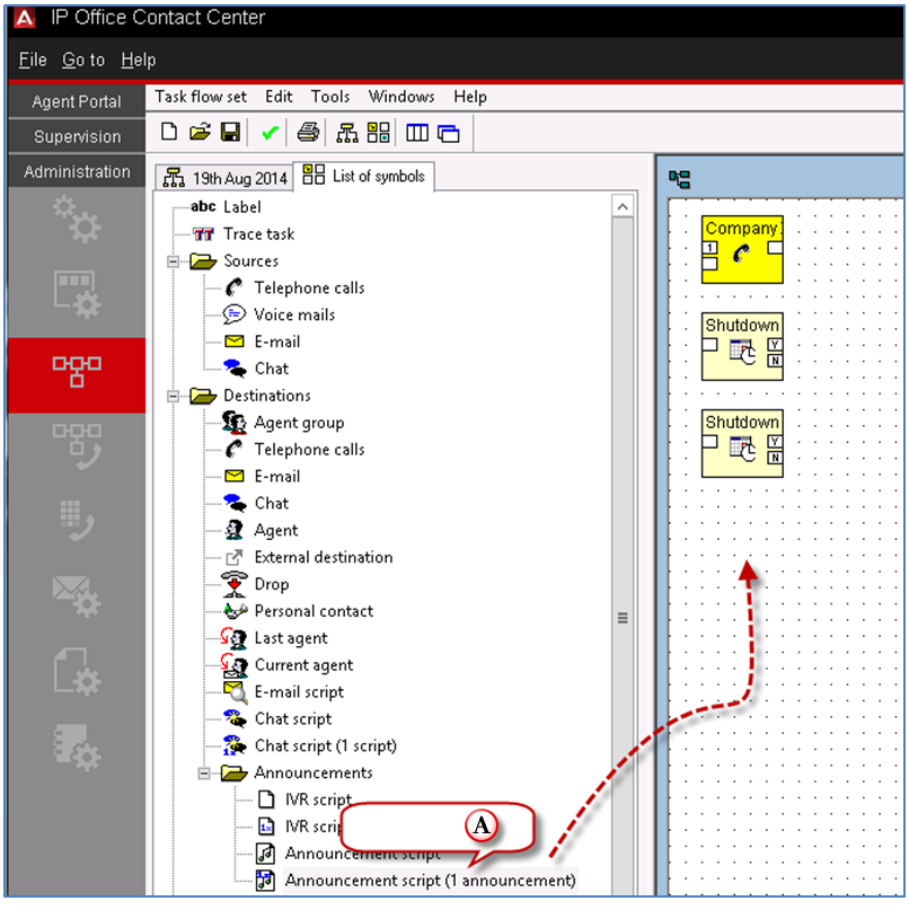
49. Create an announcement script for the **Companyshutdown** announcement



50. Once the Announcement scripts have been created, return to **Task Flow Editor** by selecting **Go to** followed by **Task flow** editor.

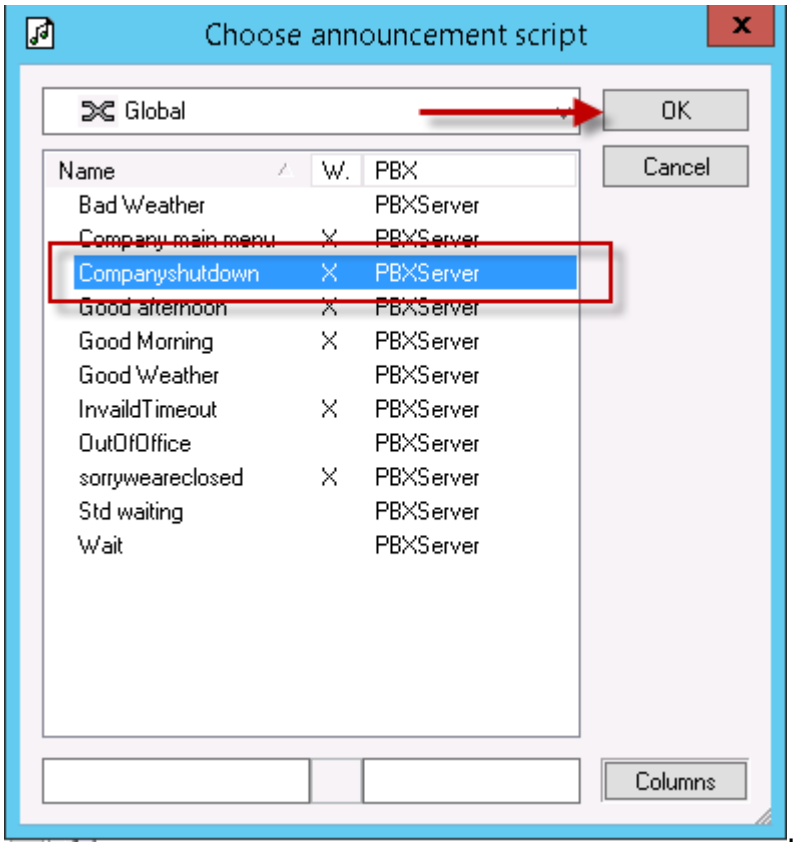


51. In this example, the customer requires a message to be played to callers when they call within the company's shutdown period. This will be achieved by using an element to play an Announcement script. Drag an **Announcement script (1 announcement)** element into the call flow Working Area.

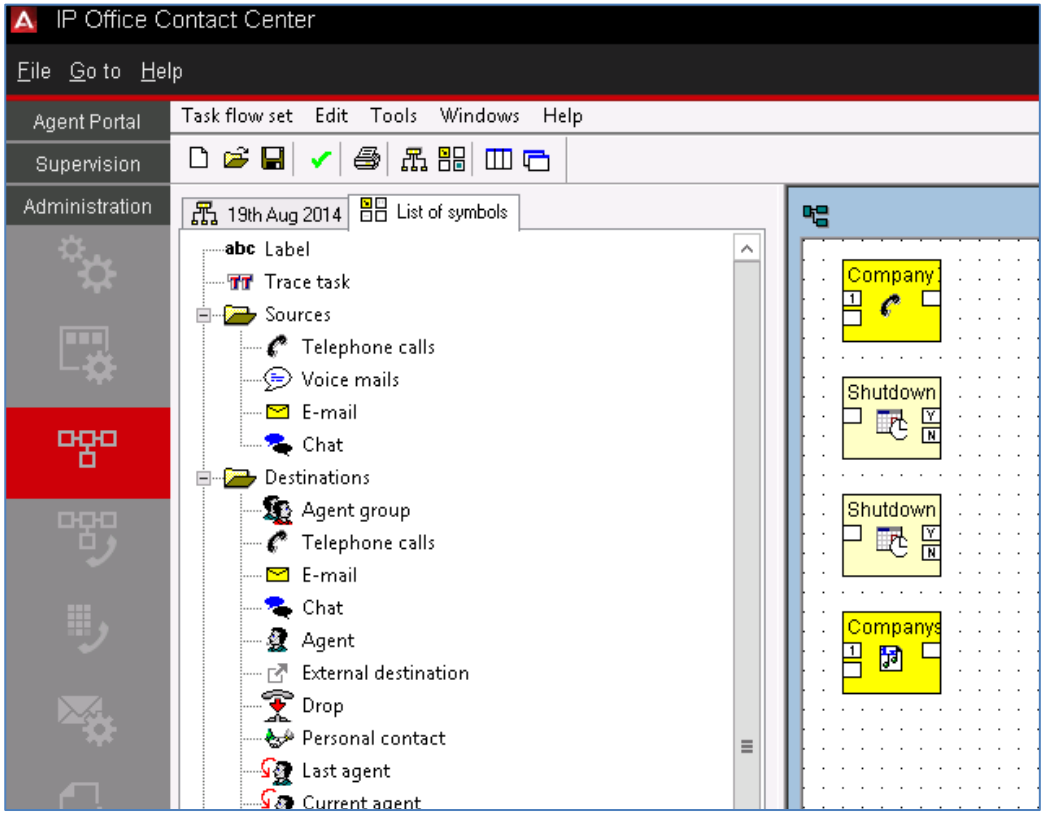


A. Click and drag.

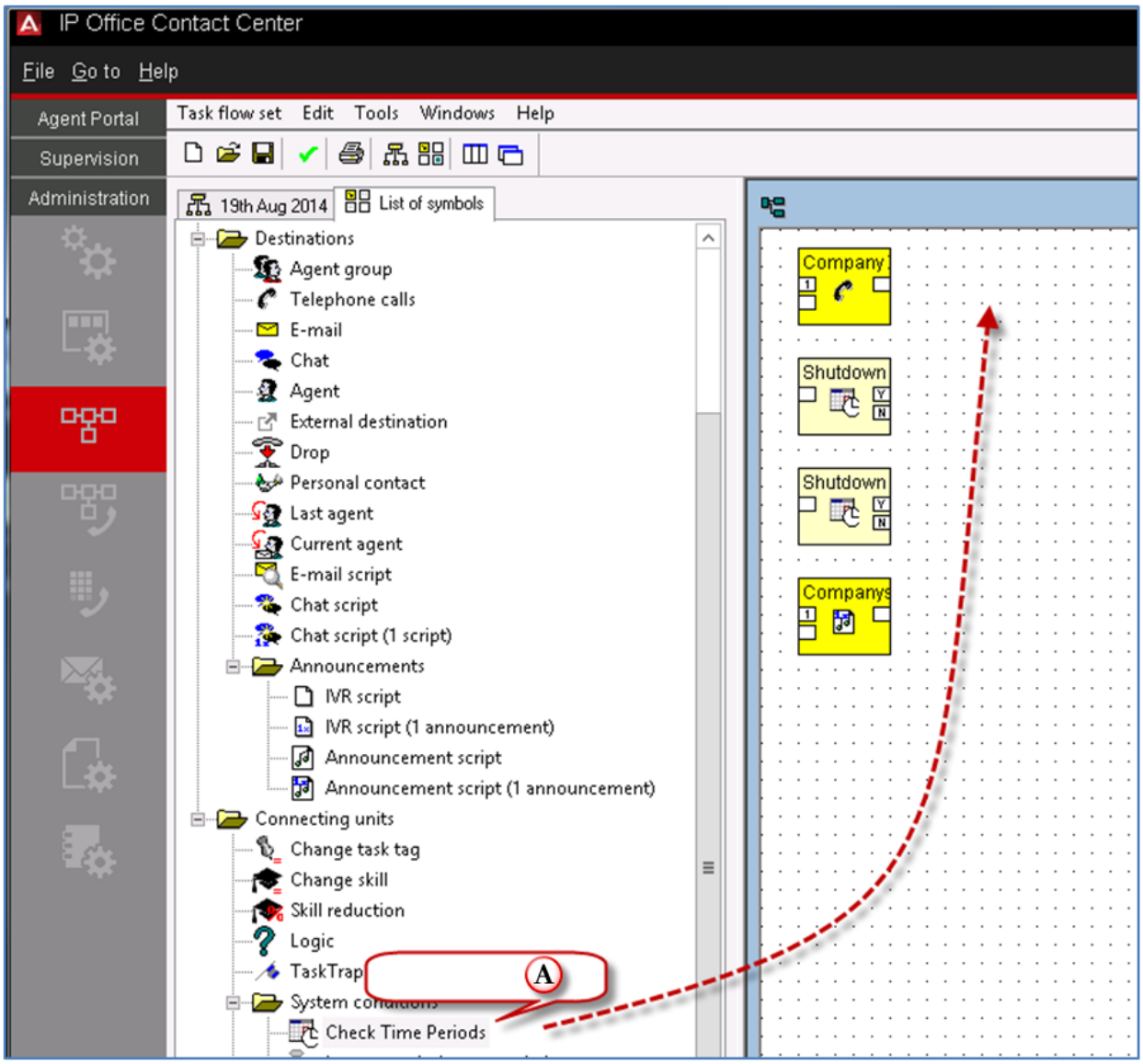
52. Select the **Companyshutdown** announcement script and then click the **OK** button.



53. The **Announcement script (1 announcement)** element is displayed.

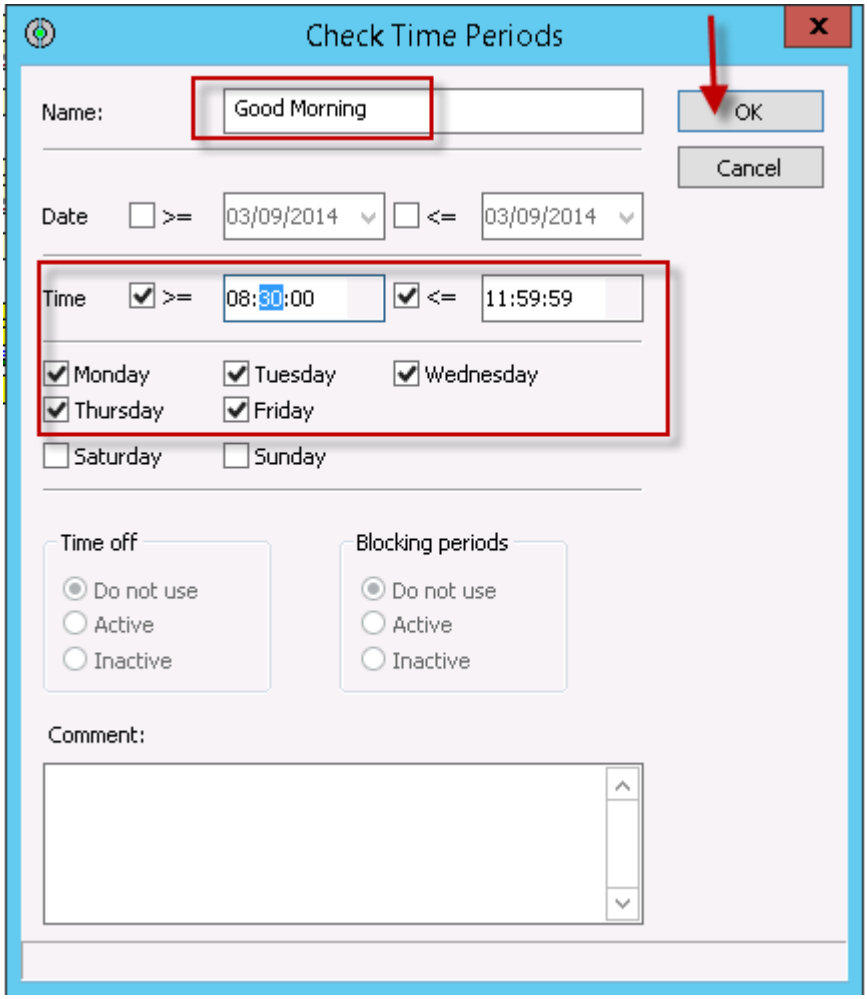


54. The customer requires a Good Morning or Good Afternoon Greeting to be played depending on the time period, before callers are presented with the 'Menu' options. A **Check Time Periods** element can be utilized to achieve this. Drag the **Check time Periods** element to the call flow Working Area.

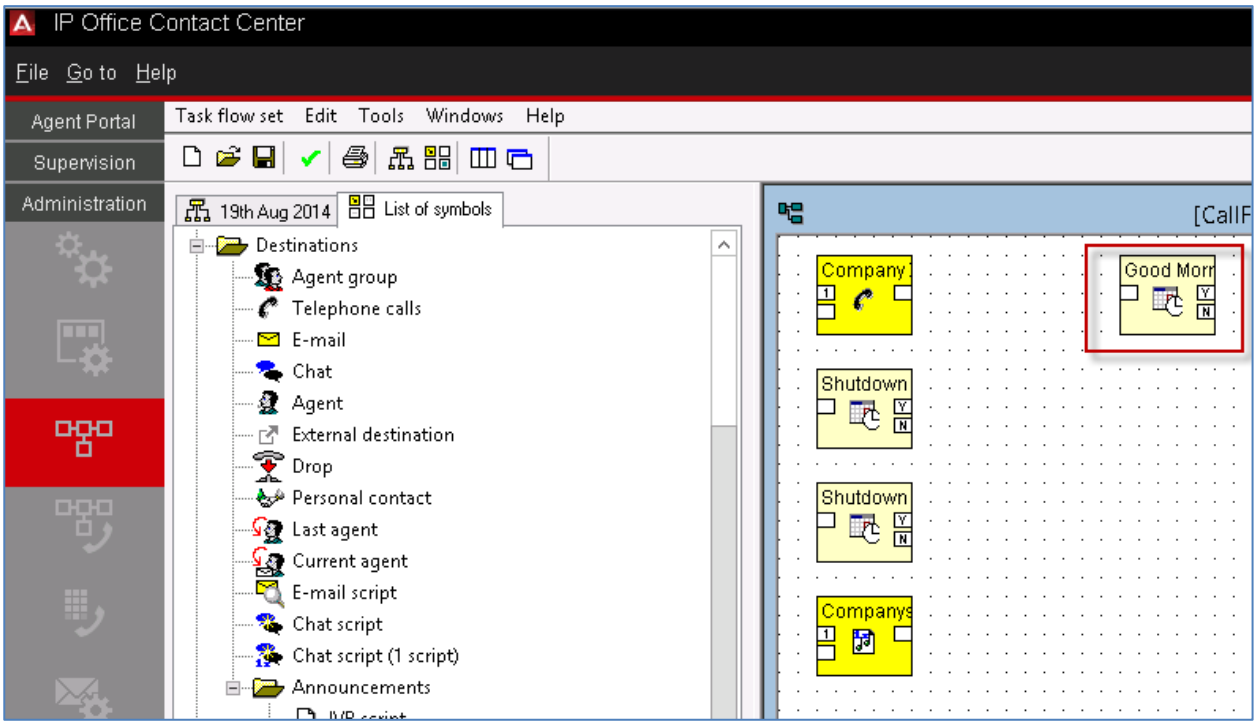


A. Click and drag.

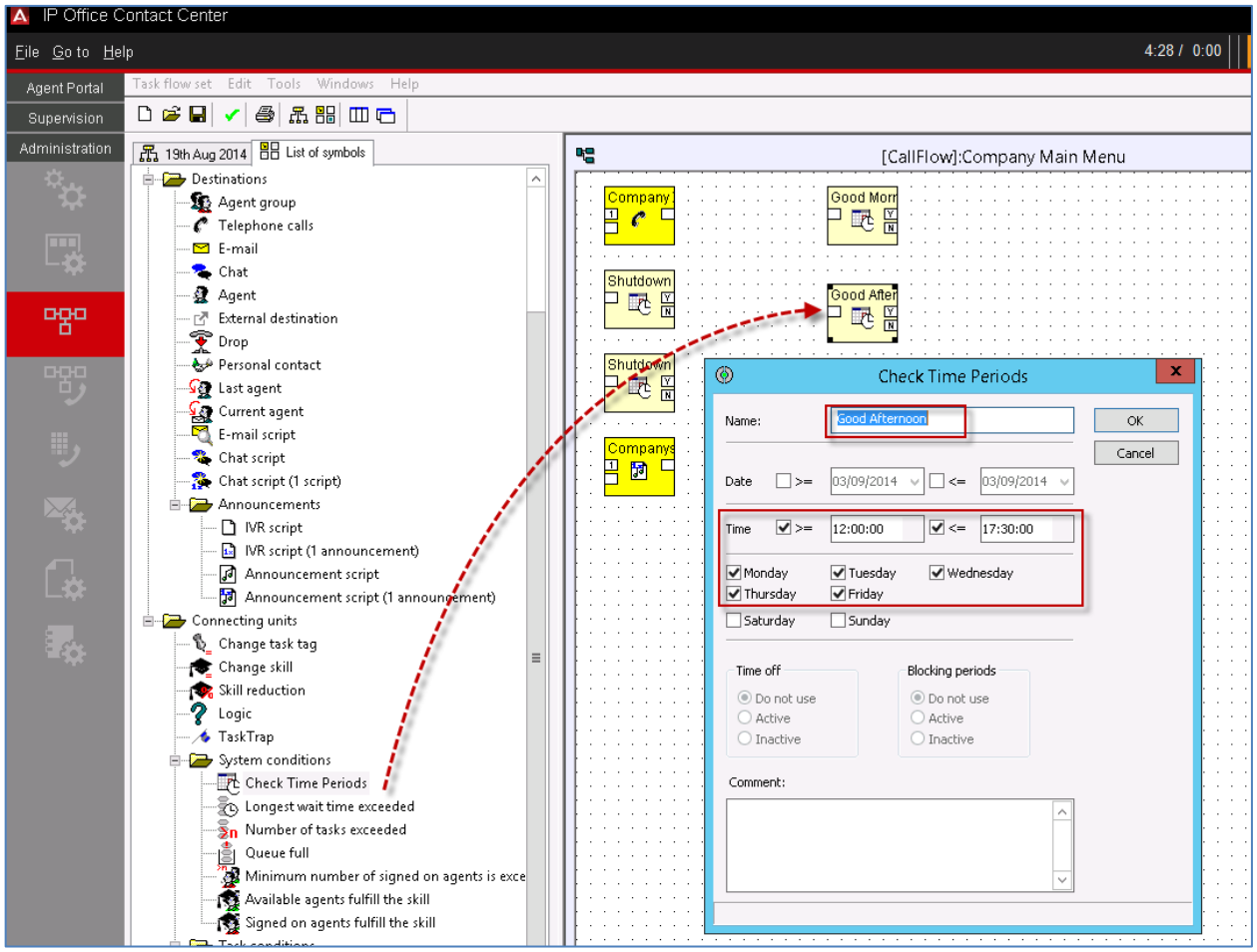
55. Name the Check Time Period "**Good Morning**". Alter the start and end times as required and select the days of the week when the message should be played. Click the **OK** button when complete.



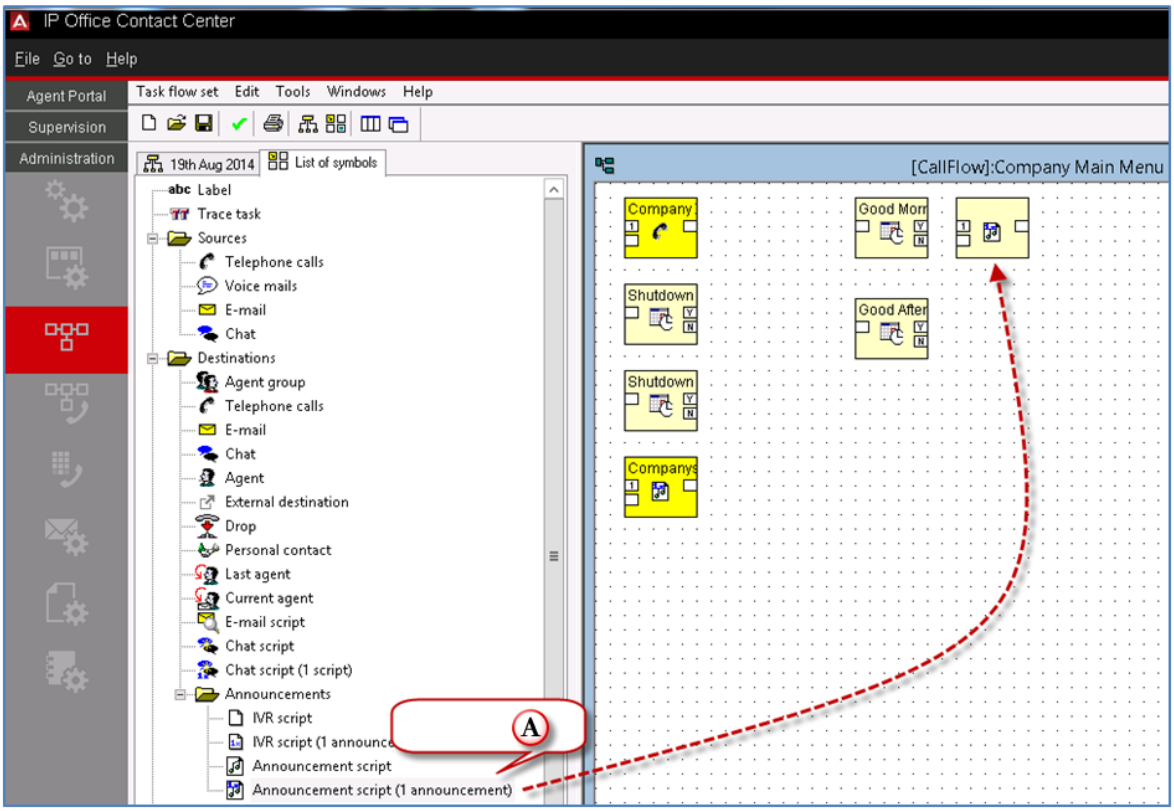
56. The configured element is displayed.



57. Configure another **Check Time Period** for the **Good Afternoon Period**.

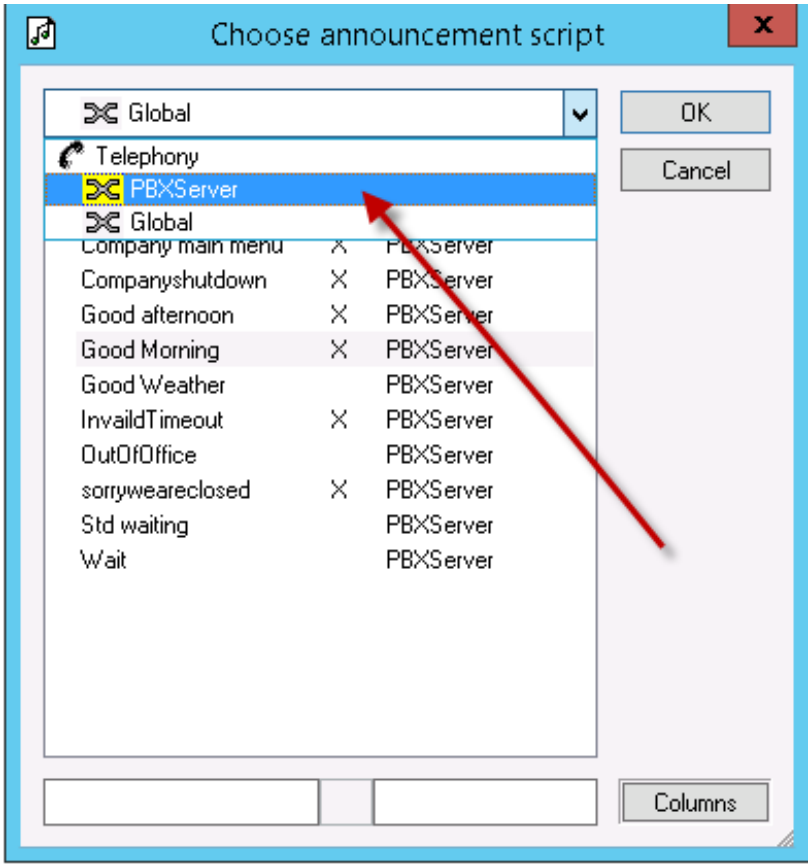


58. We will now use an element to play an Announcement script. Drag **an announcement script (1 announcement)** element into the call flow Working Area.

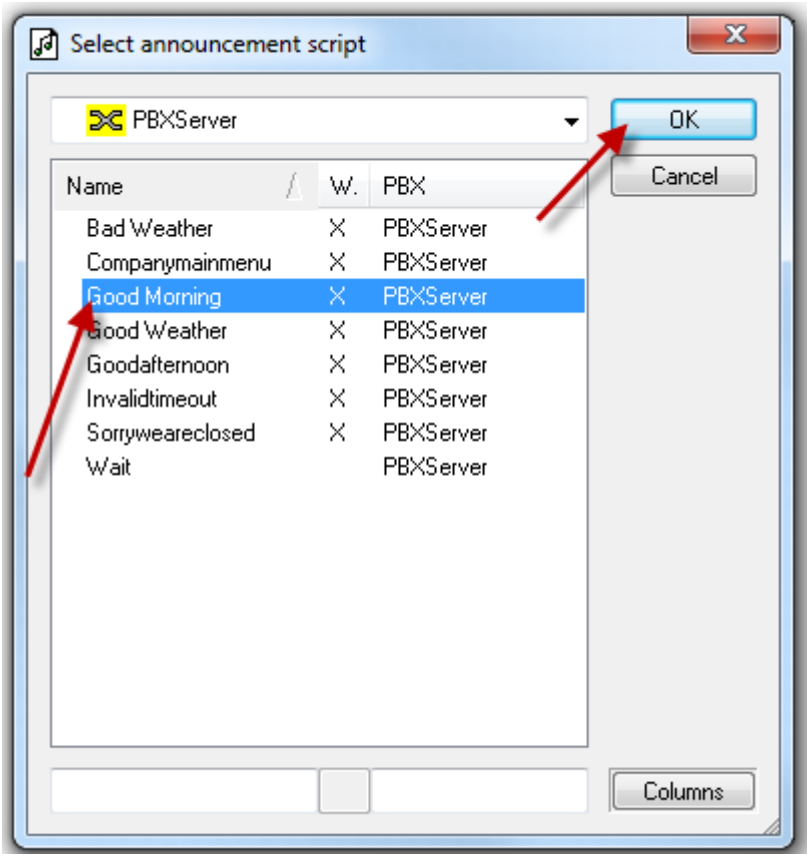


A. Click and drag

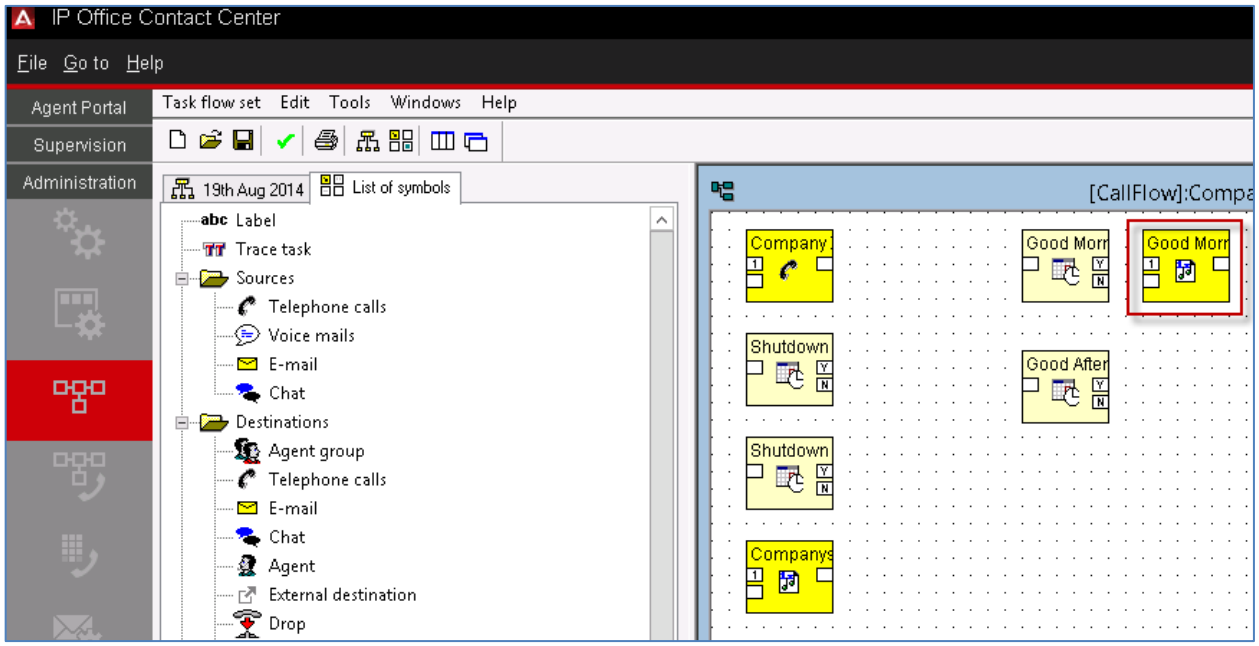
59. From the drop down box select **PBXServer**.



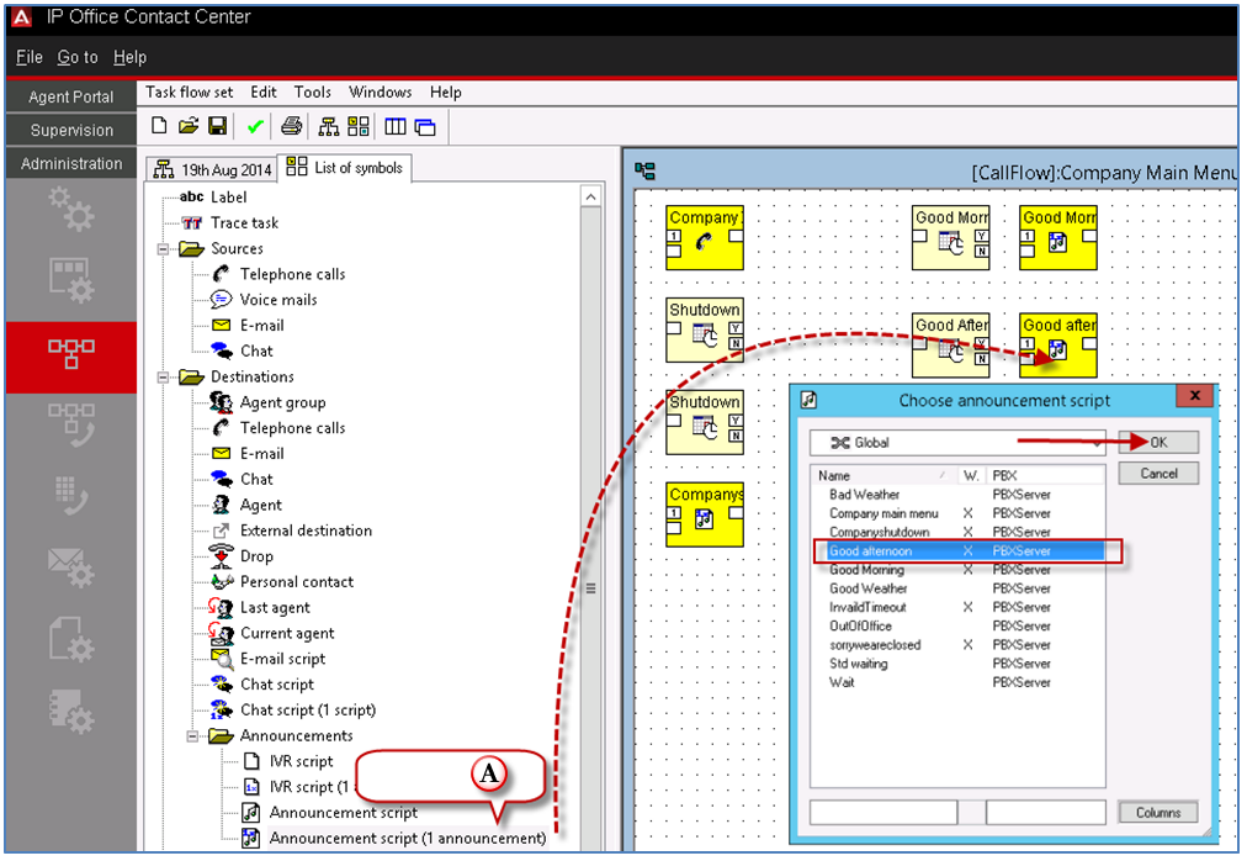
60. Select the **Goodmorning** announcement script and click the **OK** button.



61. The announcement script element is displayed.

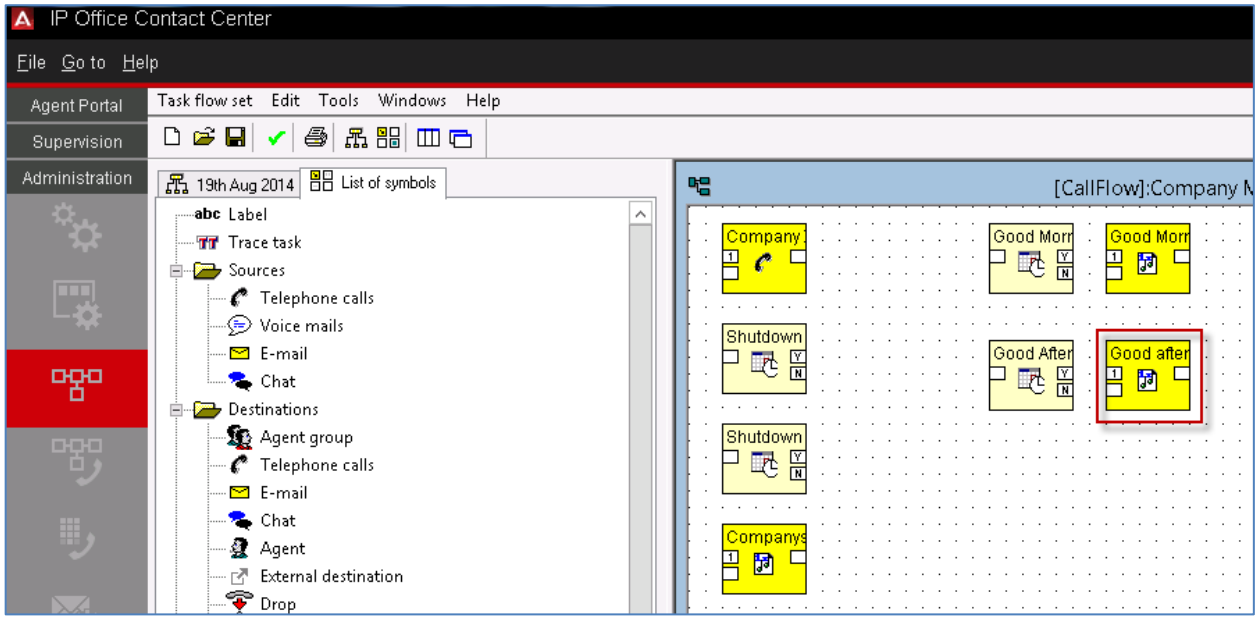


62. Repeat this process to create another announcement script for the **Goodafternoon** announcement.

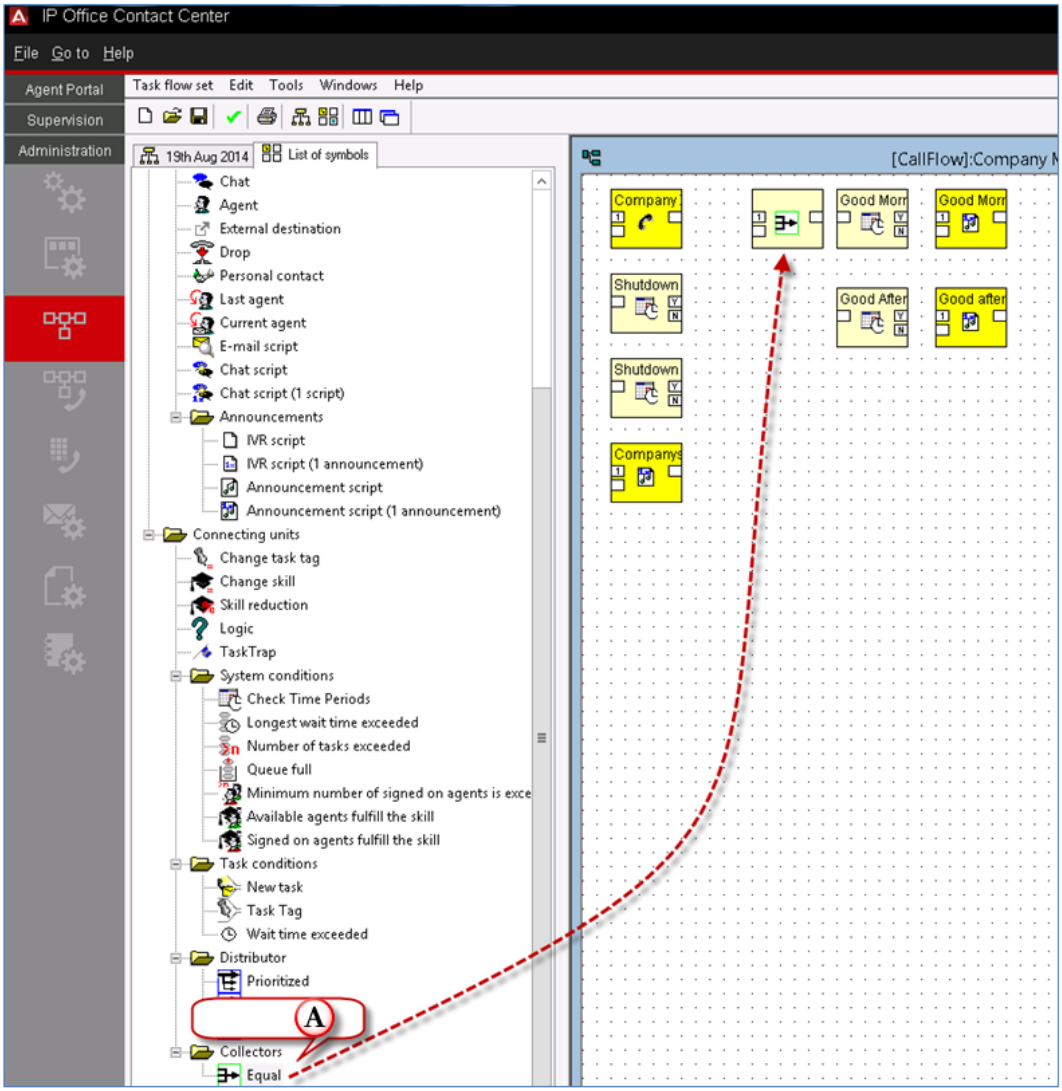


A. Click and drag.

63. The configured element is displayed.

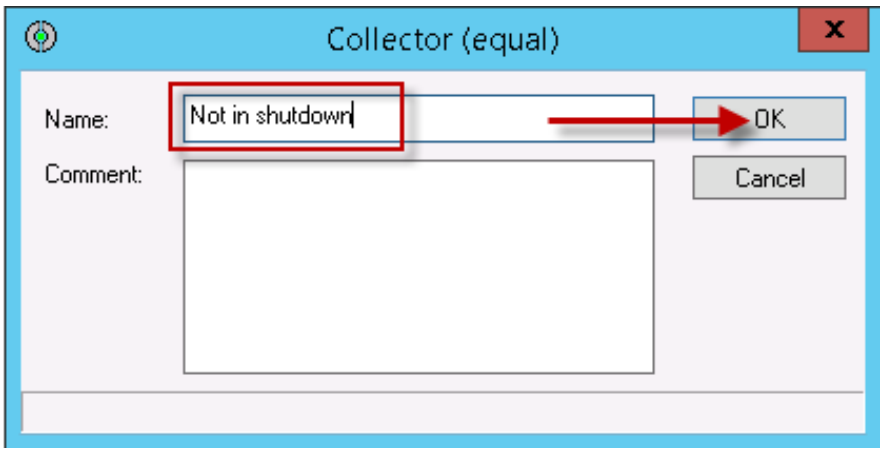


64. To connect both shutdown check time periods to a single point a **Collector** element can be used. Drag the **Equal** collector into the call flow working area.

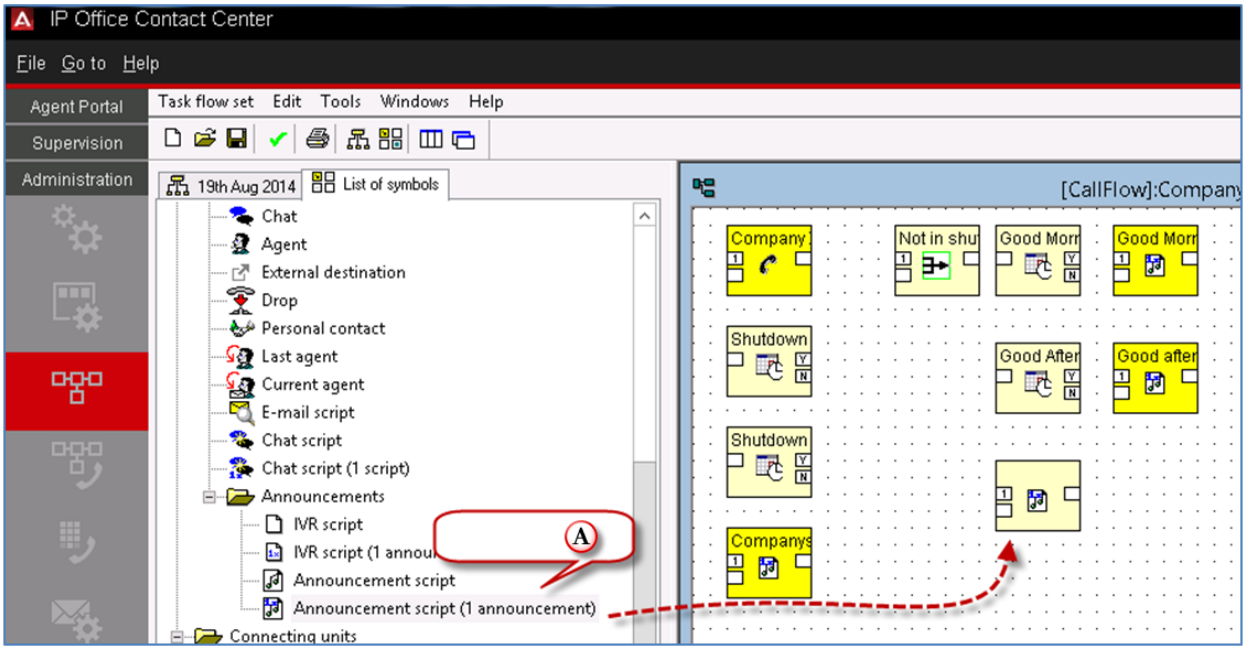


A. Click and drag.

65. In the Name field type **Not in shutdown** and then click the **OK** button.

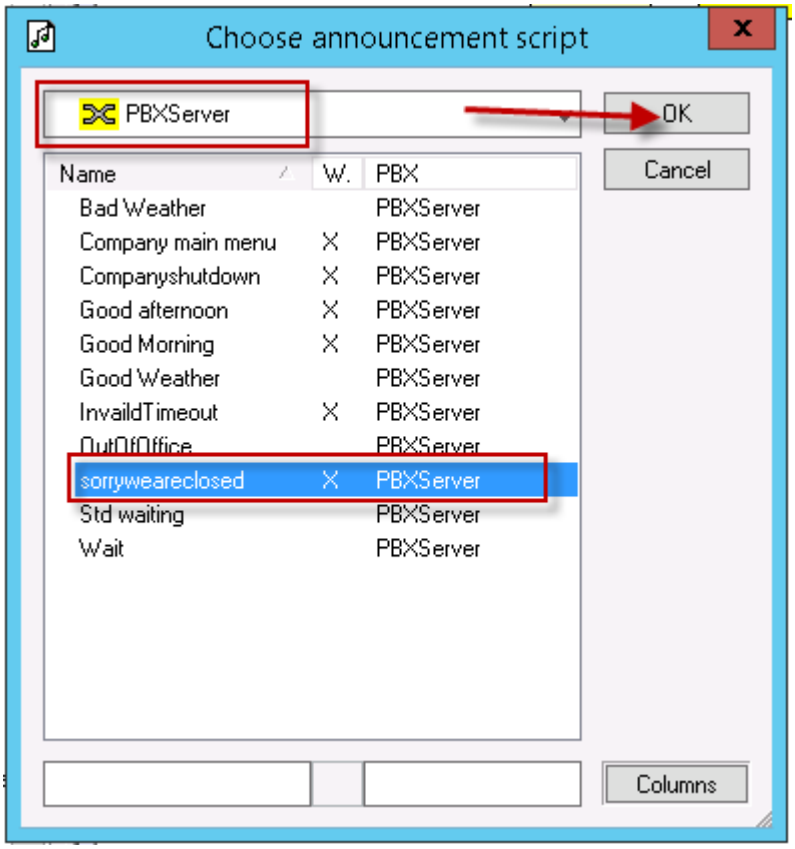


66. An Announcement script (1 announcement) element is required to play a message that will inform callers that the company is currently closed. Drag the element into the call flow window.

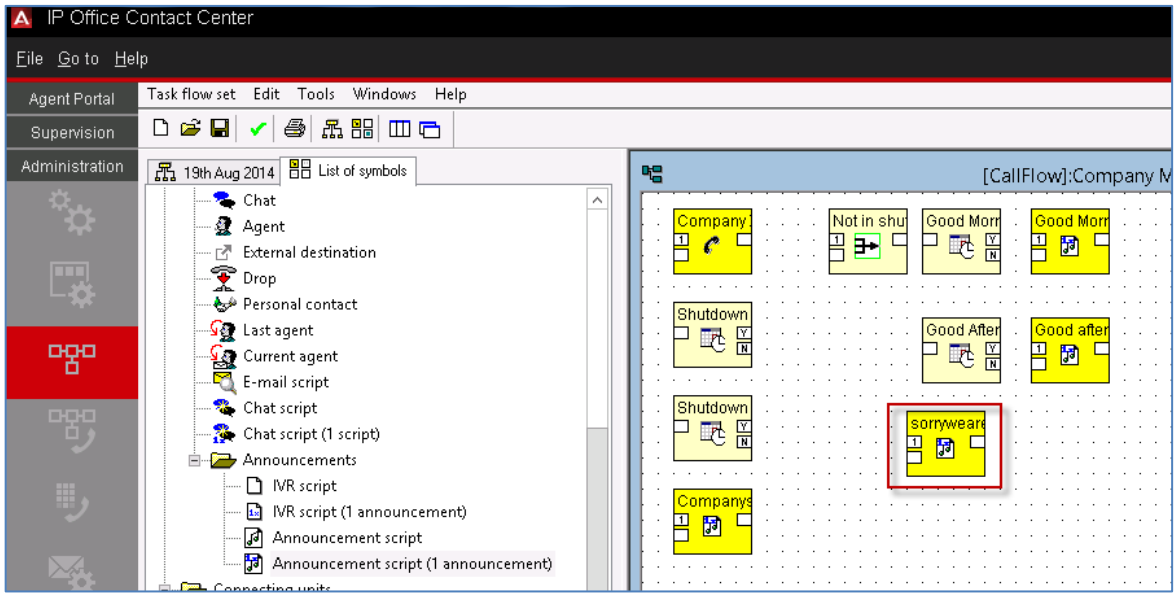


A. Click and drag.

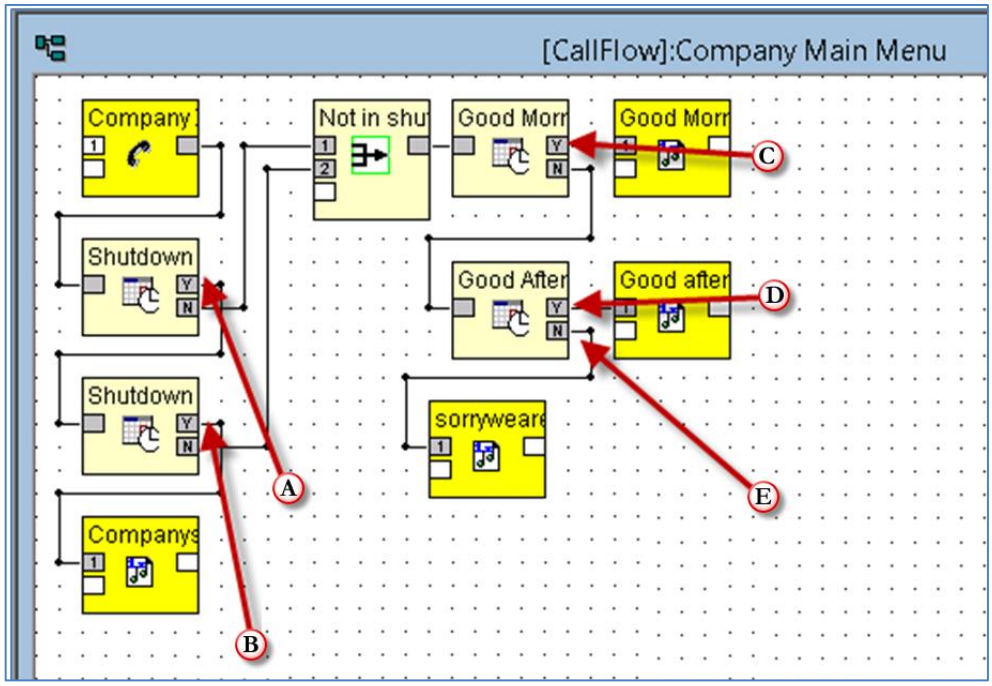
67. Click the drop down arrow and select **PBXServer** and then select the **sorrywearеclosed** announcement script. Click the **OK** button.



68. The Announcement script (1annoucement) is displayed.



69. Connect the elements as illustrated below.



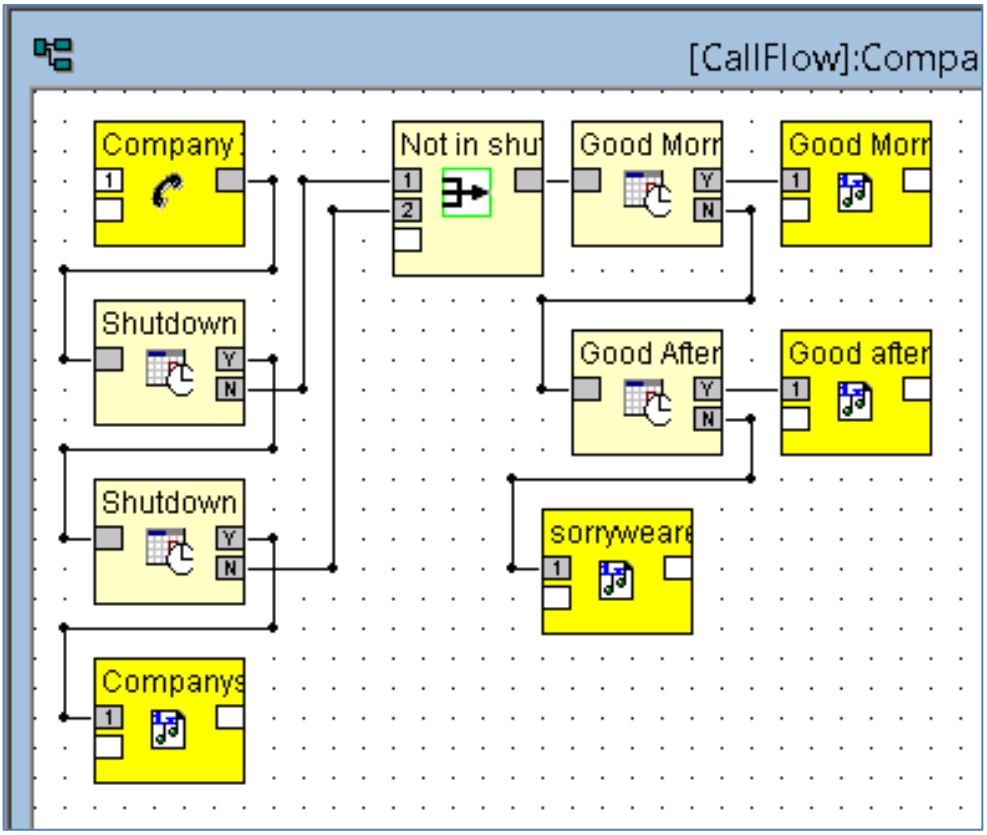
A. If Shutdown Start Time Period applies “Y Exit” go to the Shutdown ends Check Time Period.

B. If Shutdown End Time Period applies “Y Exit” go to the announcement script Companyshutdow.

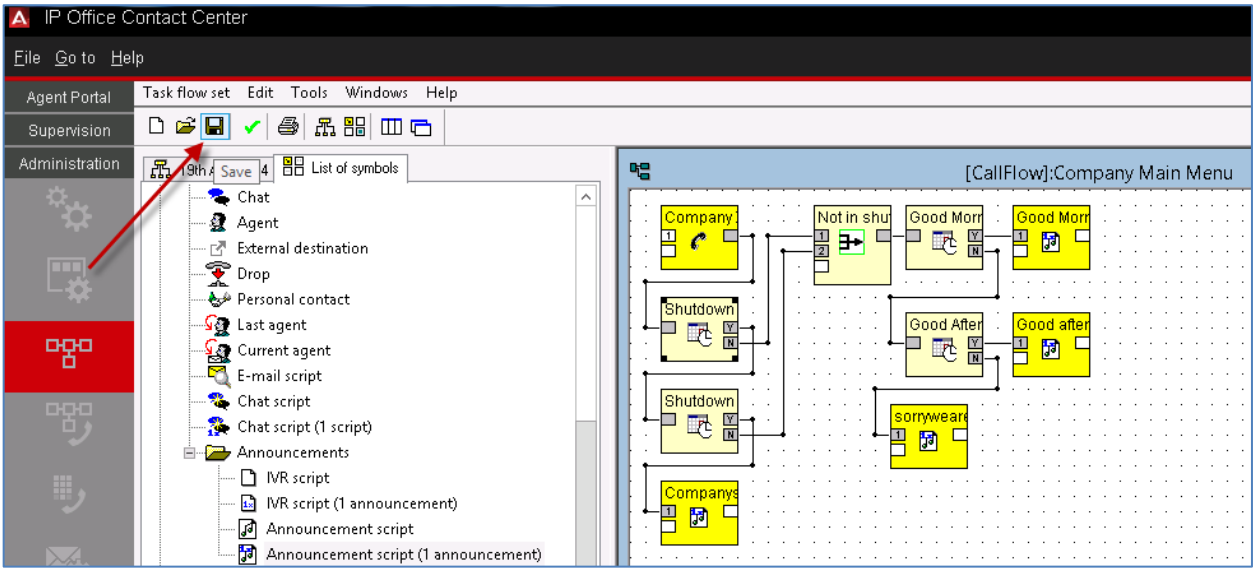
C. If Good Morning Time Period applies “Y Exit” go to the announcement script good morning

D. If Good Afternoon Time Period applies “Y Exit” go to the announcement script good afternoon.

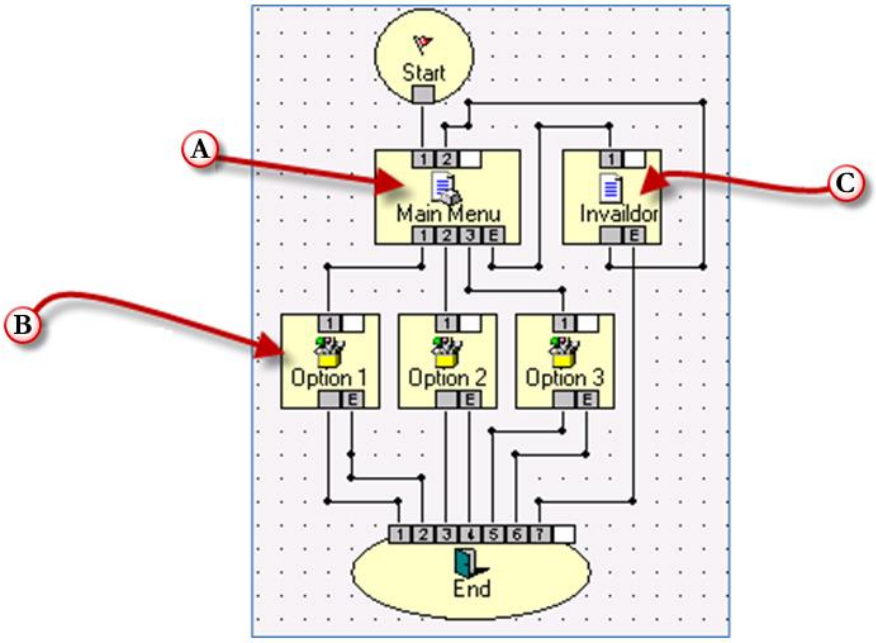
E. If Good Afternoon Time Period applies “N Exit” go to the announcement script sorrywareclosed



70. Save the call flow.



The next process involves creating a ‘Menu’ using IVR Editor that will provide the caller with three selectable options, as illustrated below.



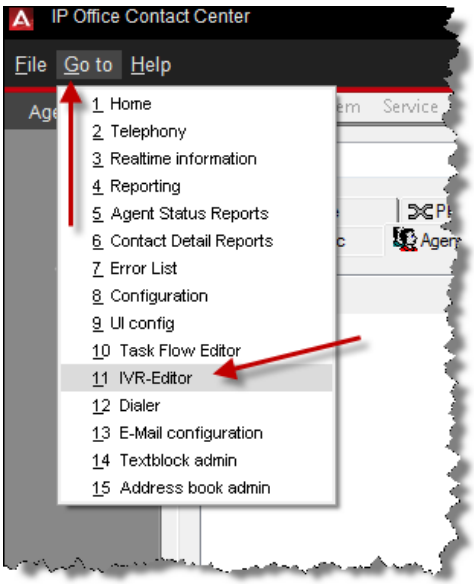
A. Menu “Press 1 for Sales, 2 for Admin and 3 for Support” utilizing an **Announcement plus DTMF** element.

B. **Variable** elements used to reference options 1,2 and 3 in the “Menu”

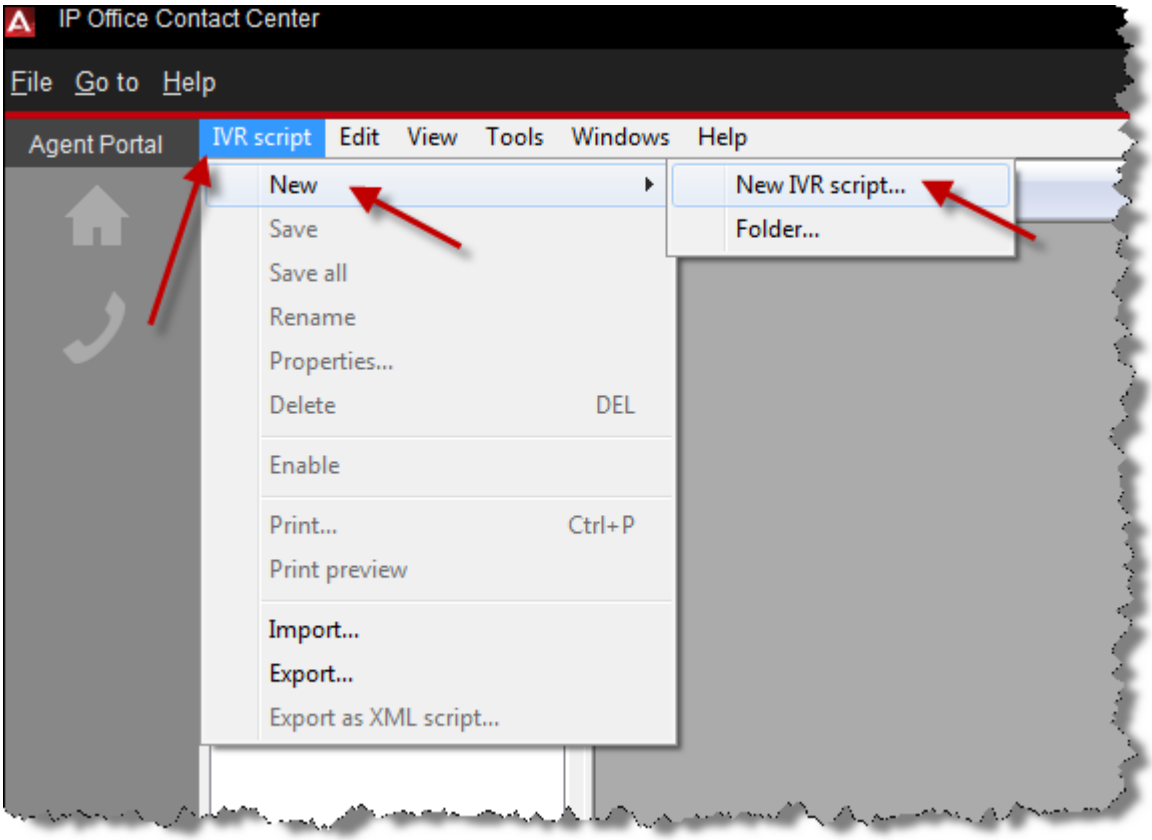
C. **Invalid Entry Announcement**

IVR Editor will be used to create the ‘Menu’ and the option to change the value of the variable, which is used in the Task flow to select the correct path for the call.

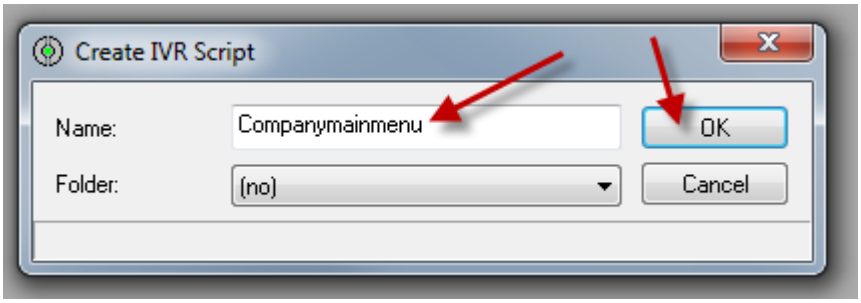
1. Select Go to followed by IVR-Editor.



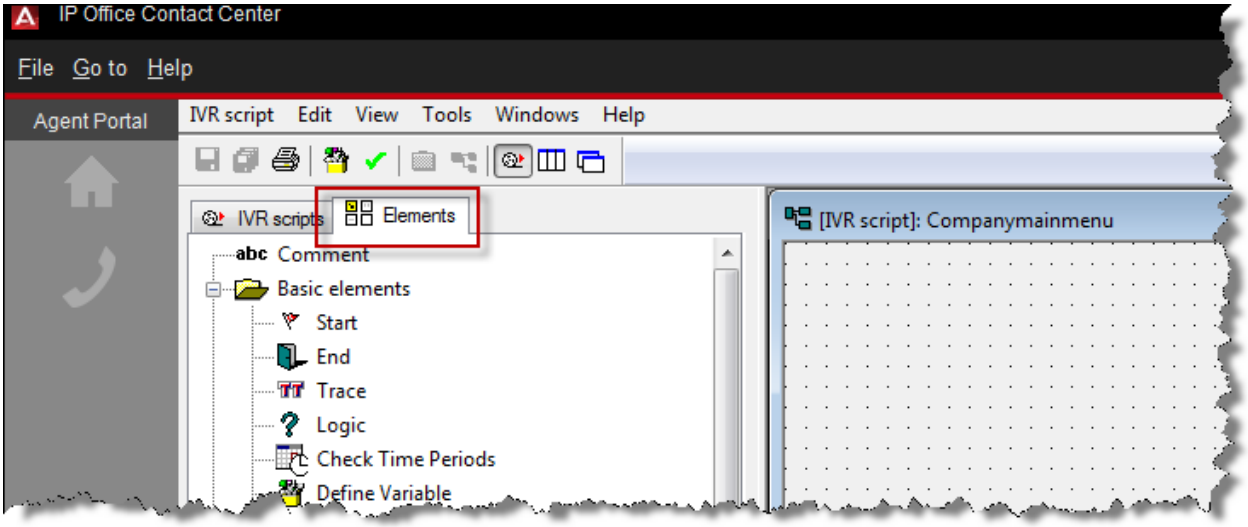
2. Select **IVR script** followed by **New** , **New IVR script**



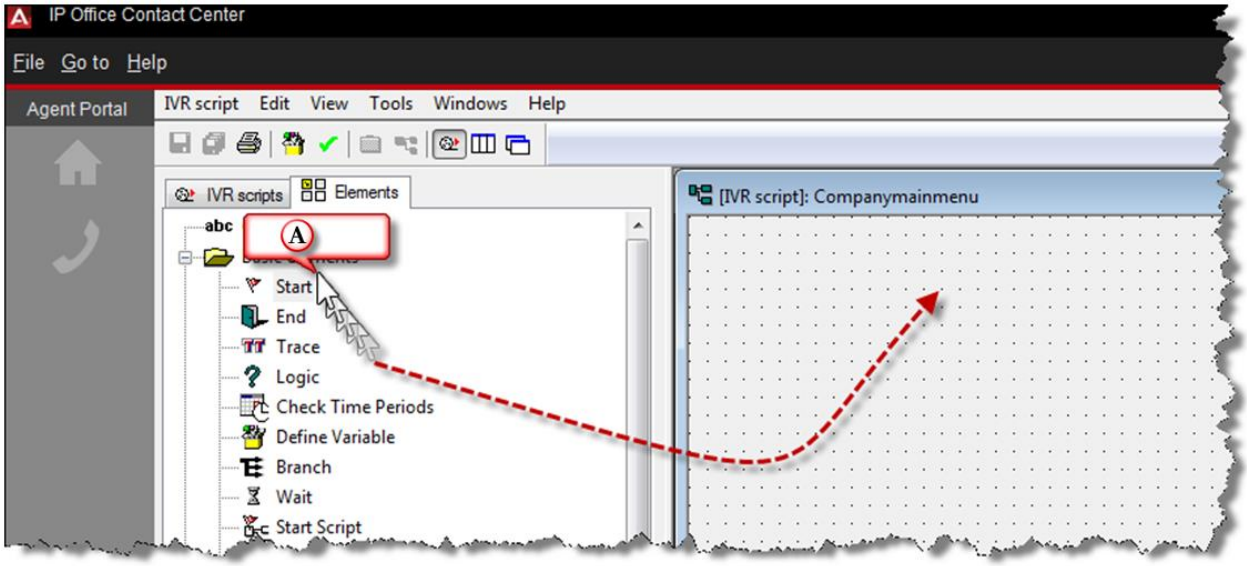
3. Enter a **Name** for the IVR Script for example, **Companymainmenu** and then click the **OK** button.



4. Click the **Elements** tab.

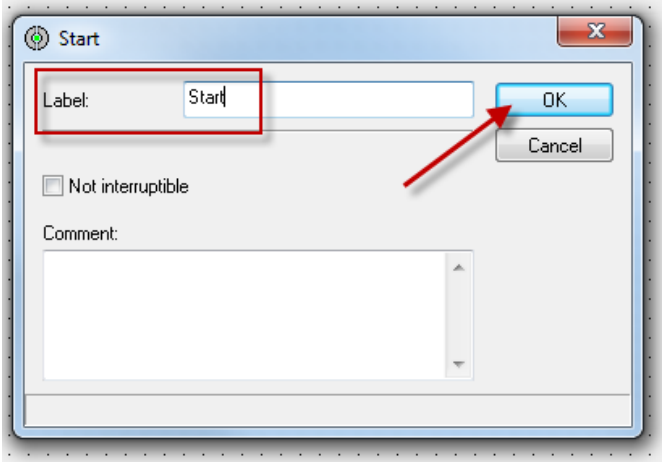


5. Drag a **Start** element into the IVR script Working Area.

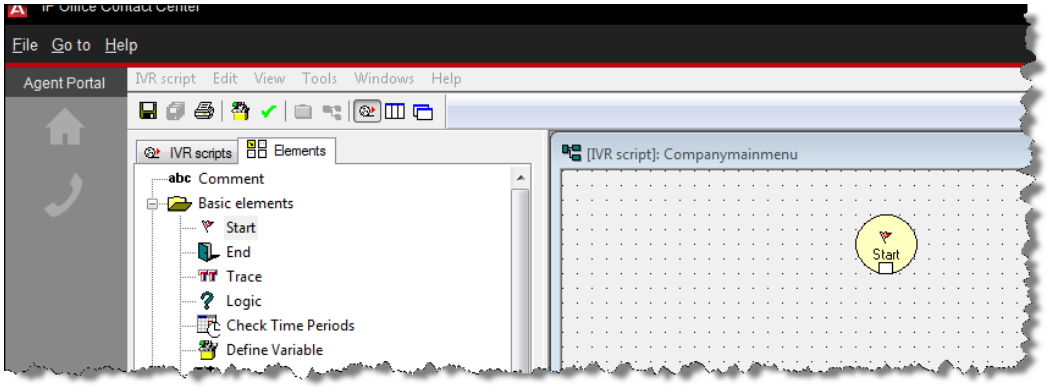


A. Click and drag.

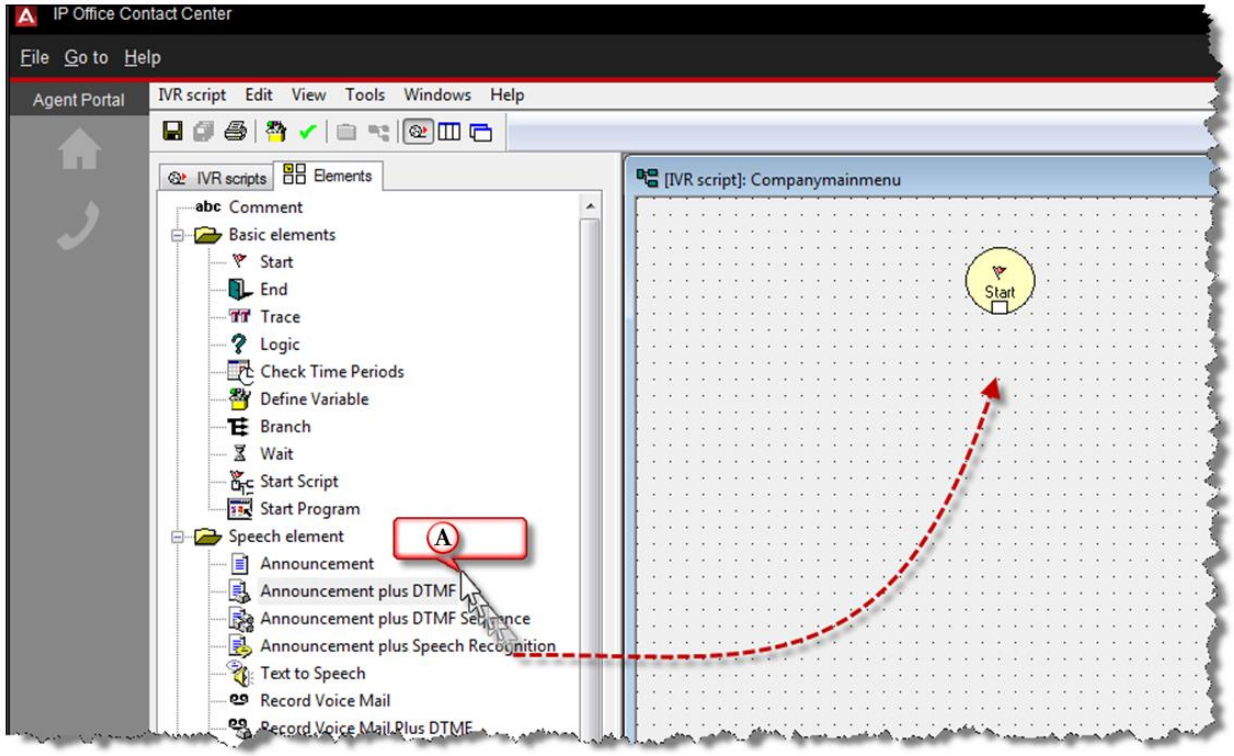
6. Enter **Start** as the **Label** and click the **OK** button



7. The **Start** element is displayed.

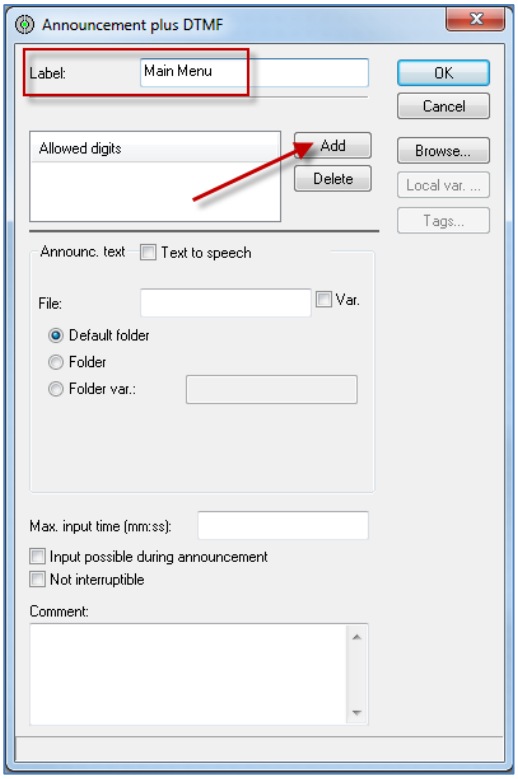


8. Now we will create the ‘menu choice’ option. Drag the **Announcement plus DTMF** element into the call flow Working Area.

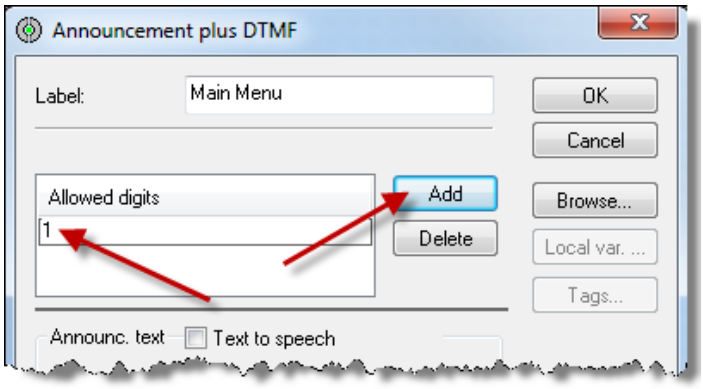


A. Click and drag.

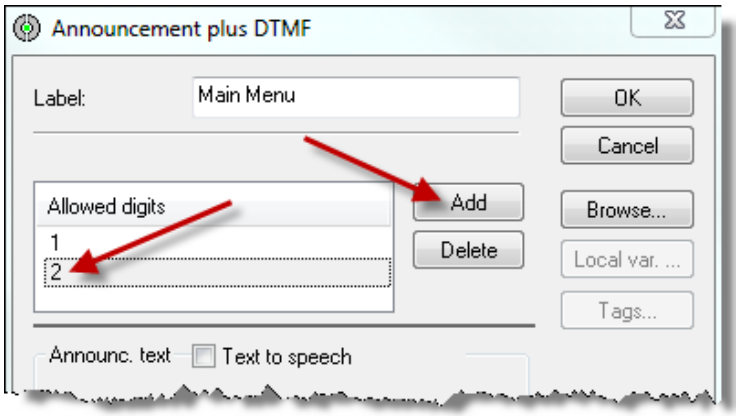
9. Enter a **Label** for your element e.g. **Main Menu** and then click the **Add** button.



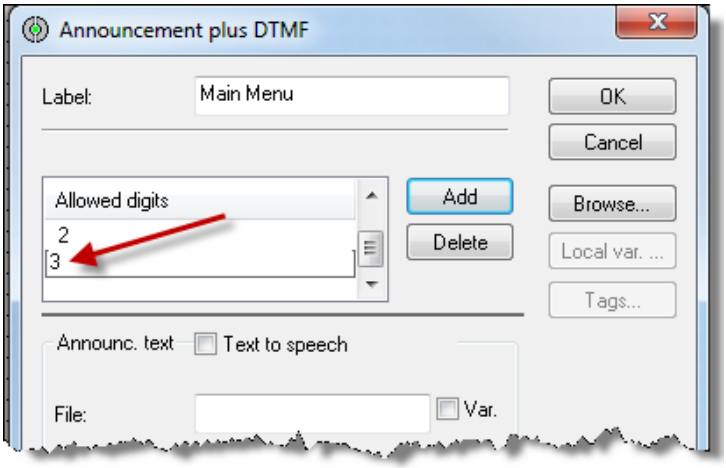
10. We can now enter the digits the caller can select from the menu. Enter **1** and then press the **Add** button again.



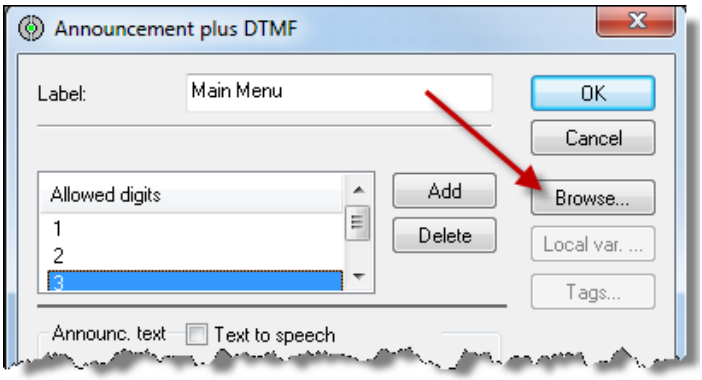
11. Enter **2** and press the **Add** button again.



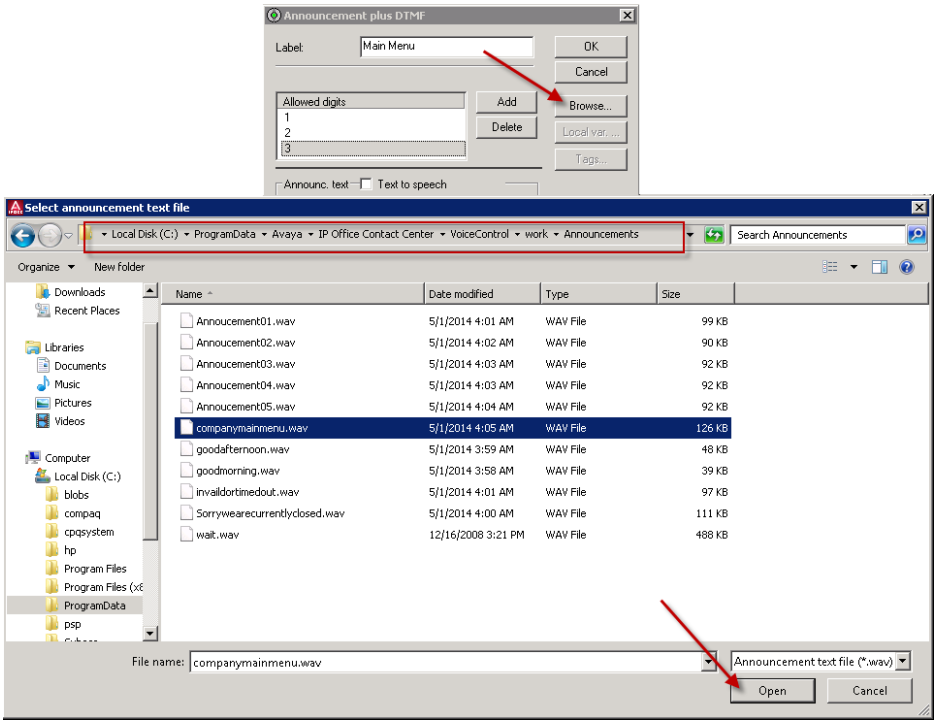
12. Enter **3**



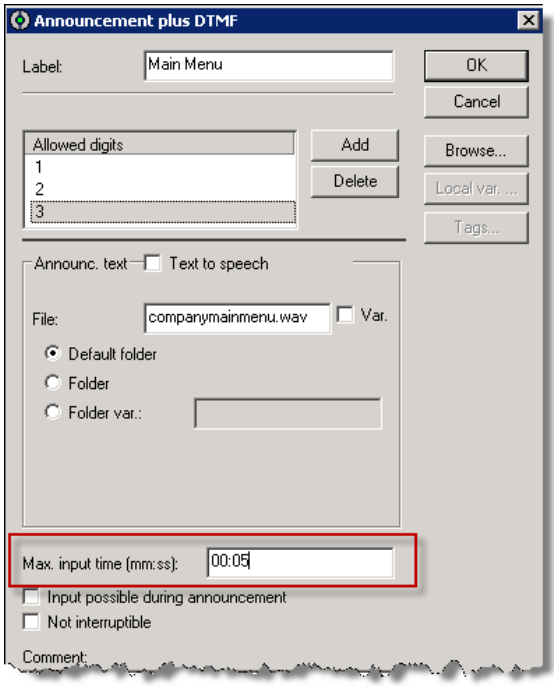
13. Click the **Browse** button.



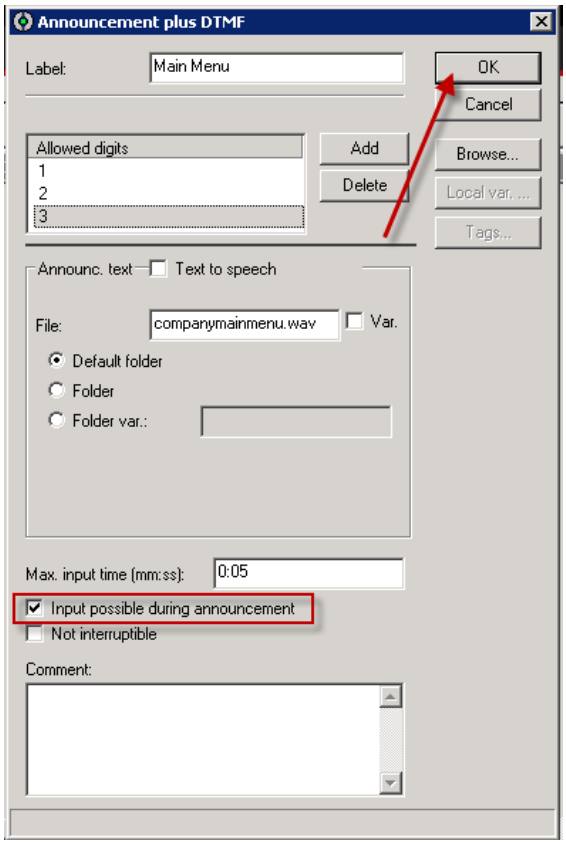
14. Browse to the location of the Customers WAV files that were previously loaded on to the server and click the Wav file to be used with this 'Menu'. Then click the **Open** button.



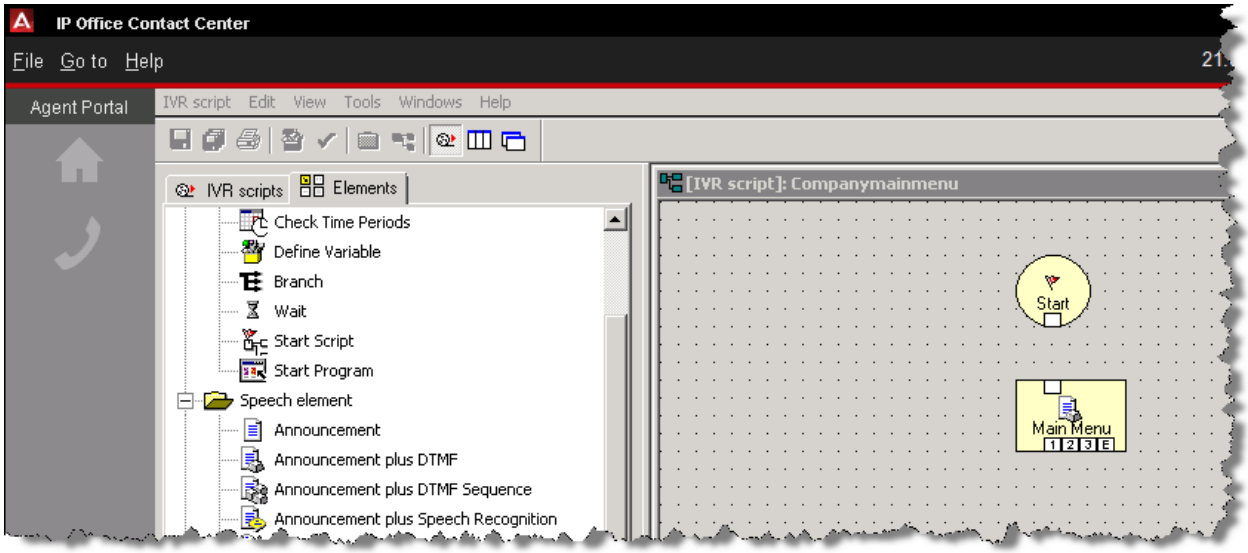
15. The WAV file is displayed. The customer must be allowed time to enter a digit in response to the 'Menu' prompt. Therefore enter 00:05 in the **Max. input time [mm:ss]** field.



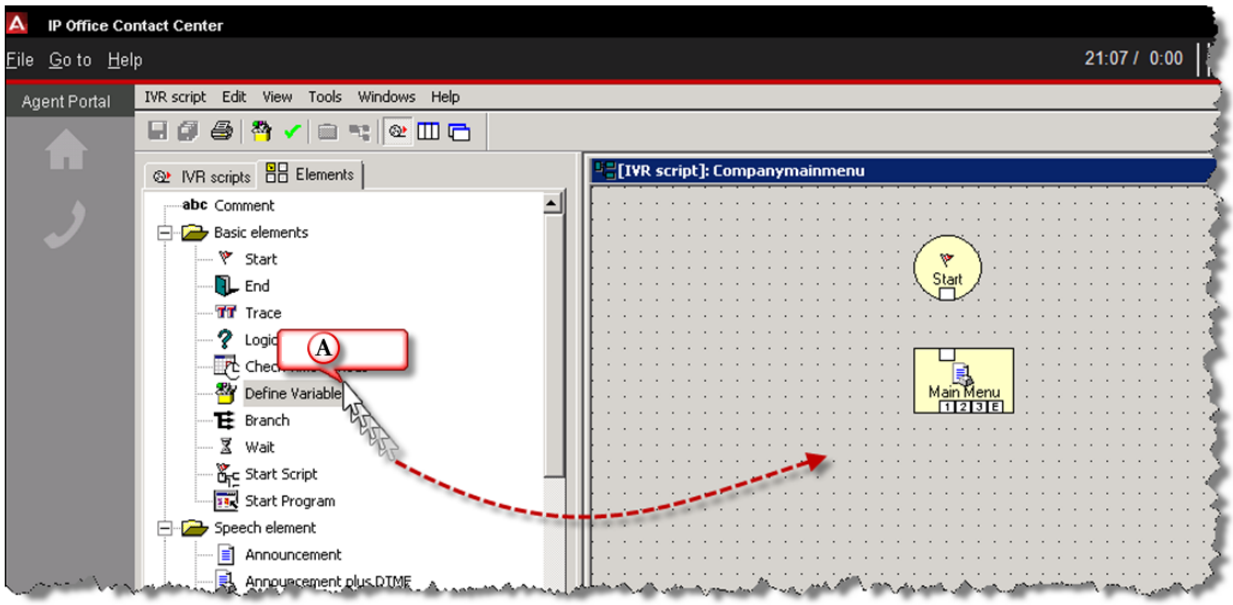
16. Select the **Input possible during announcement** check box. This will allow the caller to make a selection from the 'Menu' without having to listen to the complete menu. Then click the **OK** button.



17. The configured **Announcement plus DTMF** element is displayed.

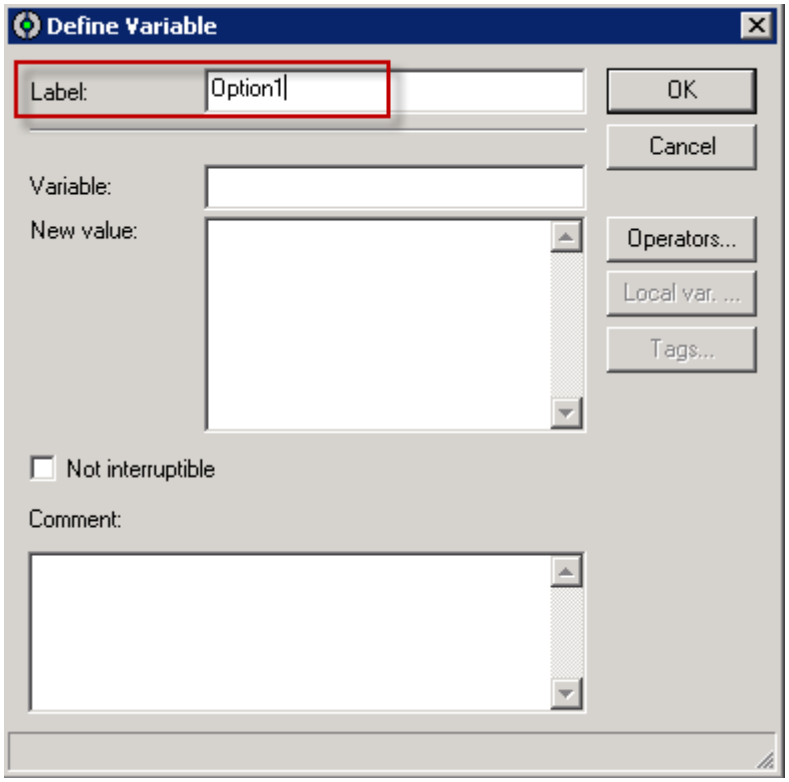


18. Now we need to use a **Define Variable** element, to store the customer's 'Menu' selection that can be used in the Task flow. Drag a **Define Variable** element to the IVR script Working Area.

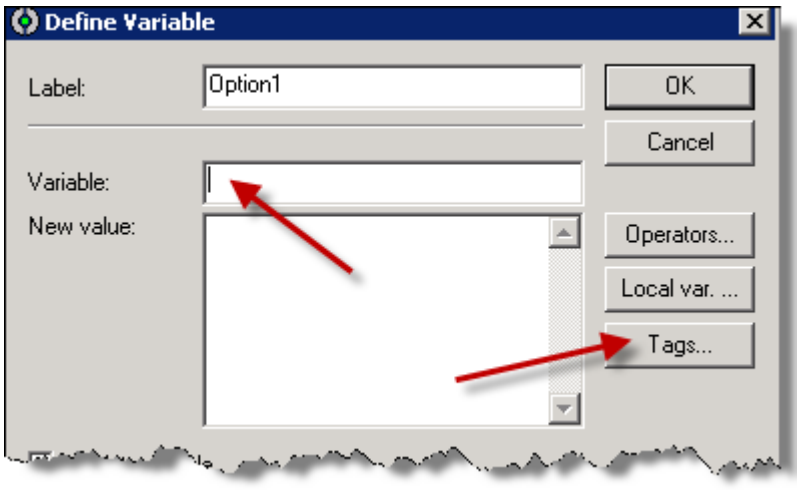


A. Click and drag.

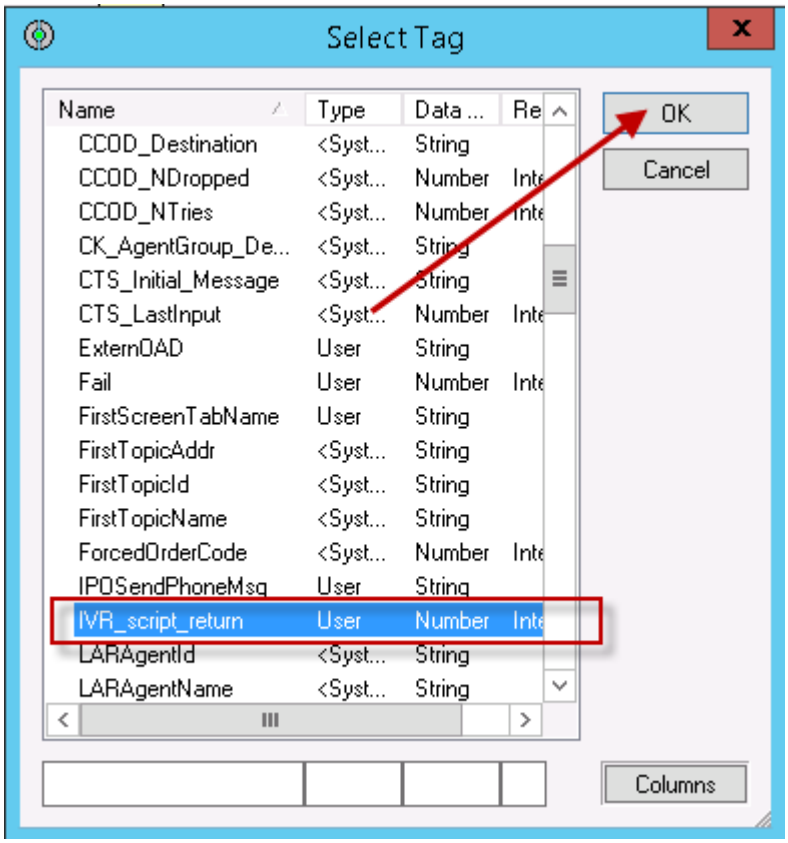
19. Enter a **Label** for the element for example Option 1.



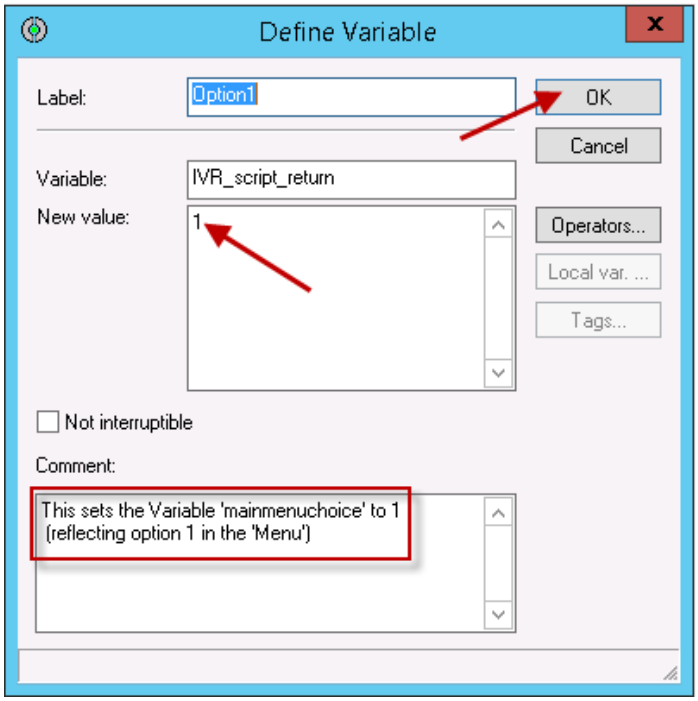
20. Then click in the **Variable** field and then click the **Tags…** button.



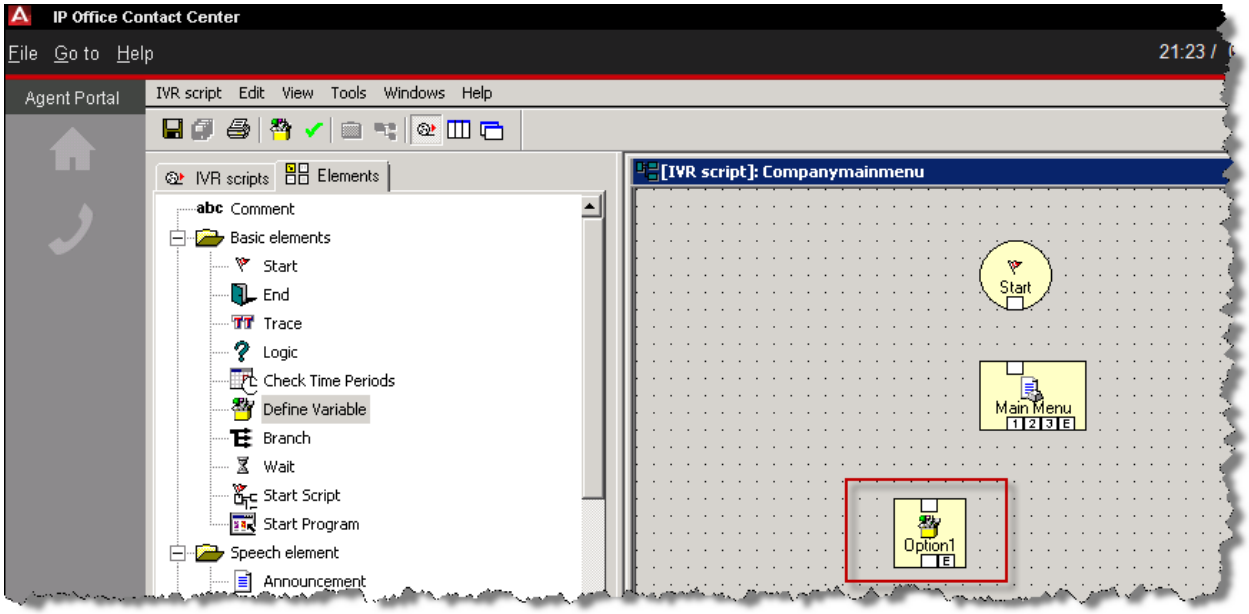
21. Select the tag **IVR_script_return** and then click the **OK** button.



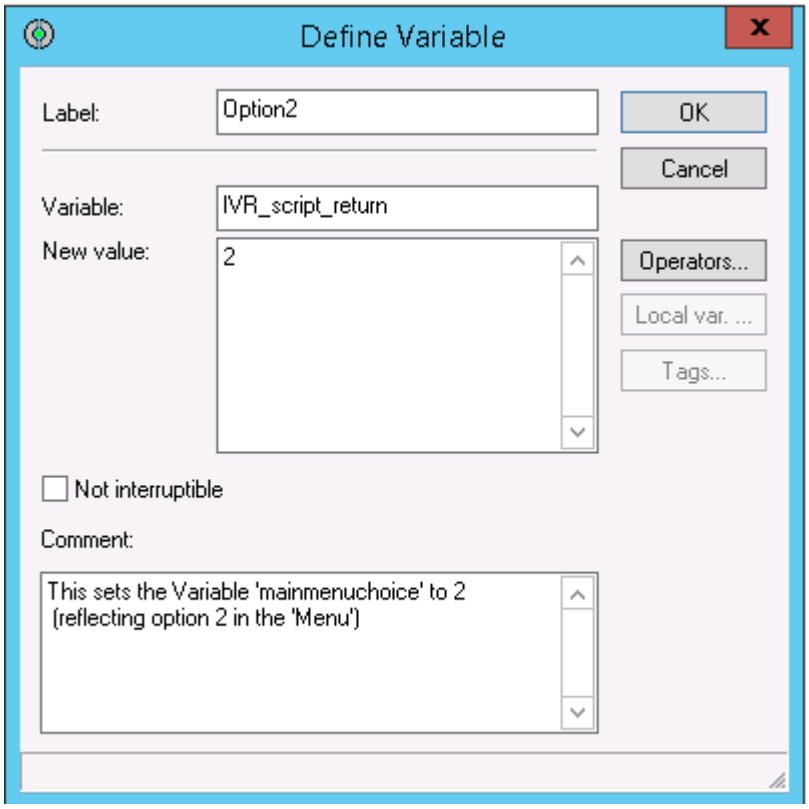
22. The Variable has now been added. Enter 1 in the **New Value** field. This relates to 'Menu' option 1. It is good practice to add a **Comment** to identify the purpose of this variable. Then click the **OK** button.

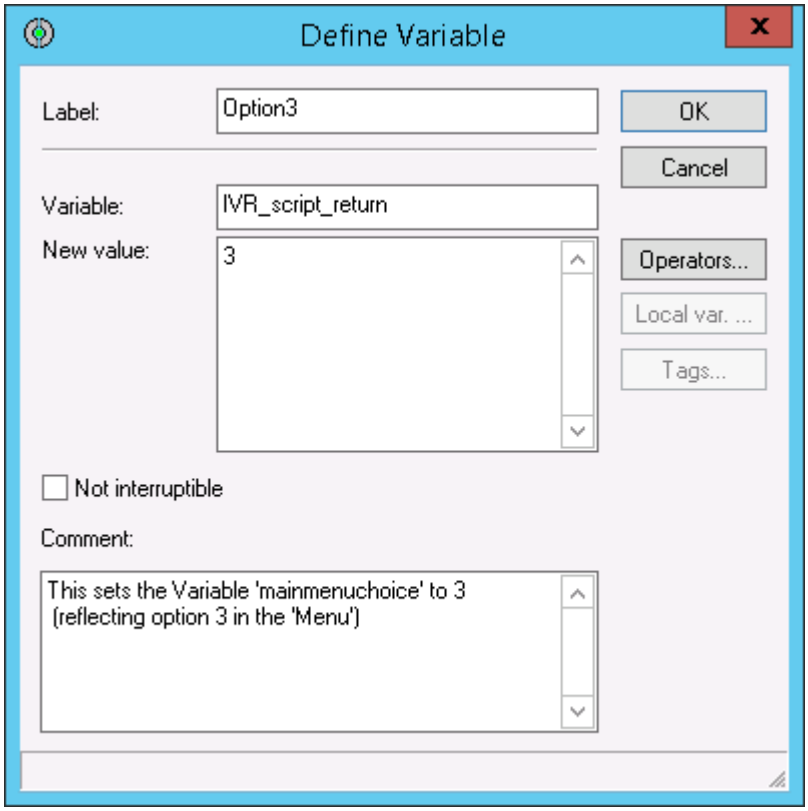


23. The configured variable is displayed.

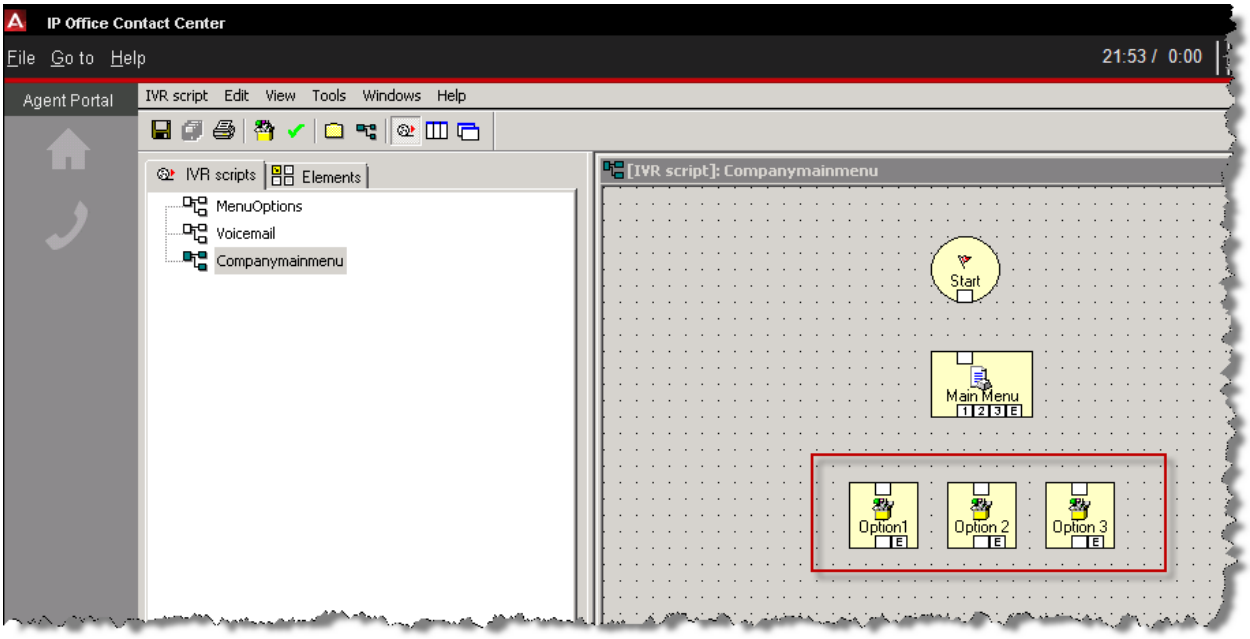


24. Repeat this process to create the other two Variables for ‘Menu’ options 2 and 3.

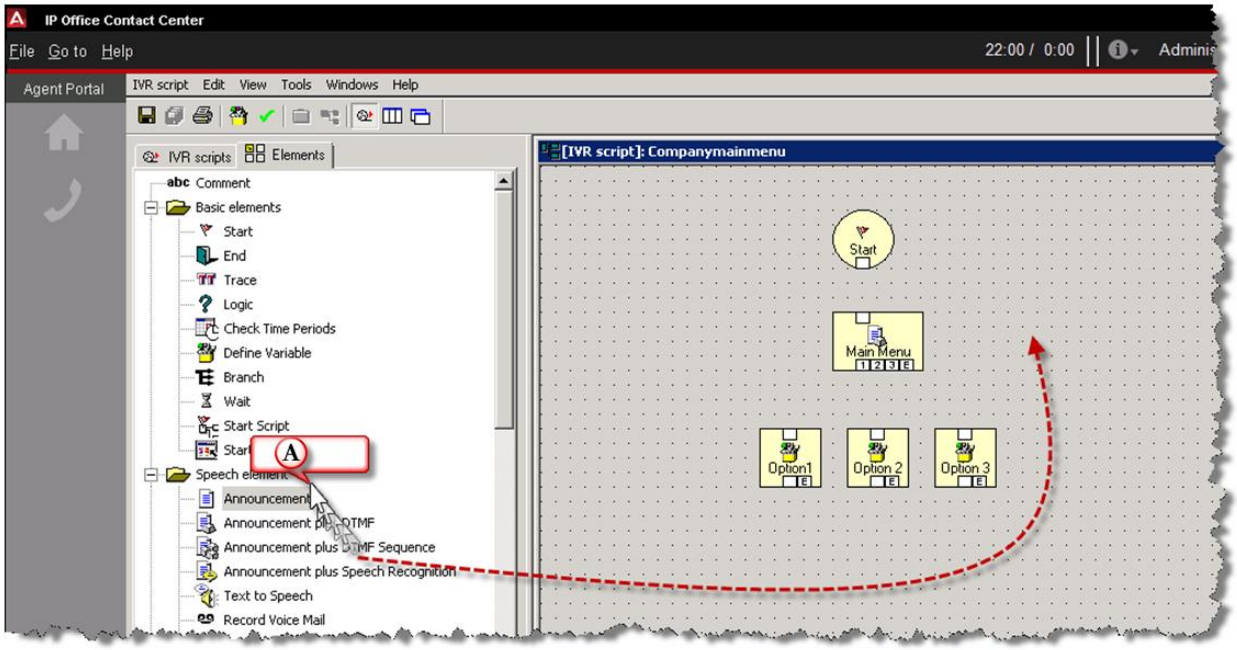




25. The configured elements are displayed.

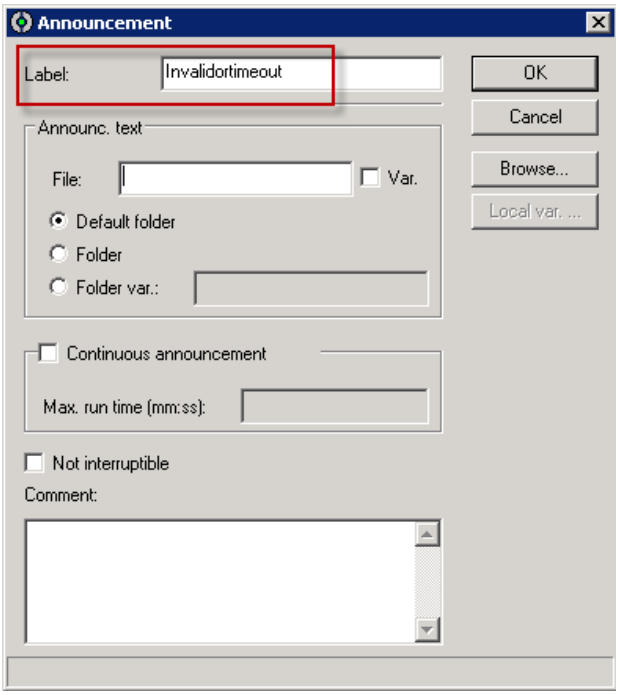


26. We will now add an ‘Invalid Selection’ announcement that was previously recorded and uploaded to the IP Office Contact Centre server. This announcement will be played if the customer does not select an option within 5 seconds or if they make an invalid choice. Drag an **Announcement** element onto the IVR script Working Area.

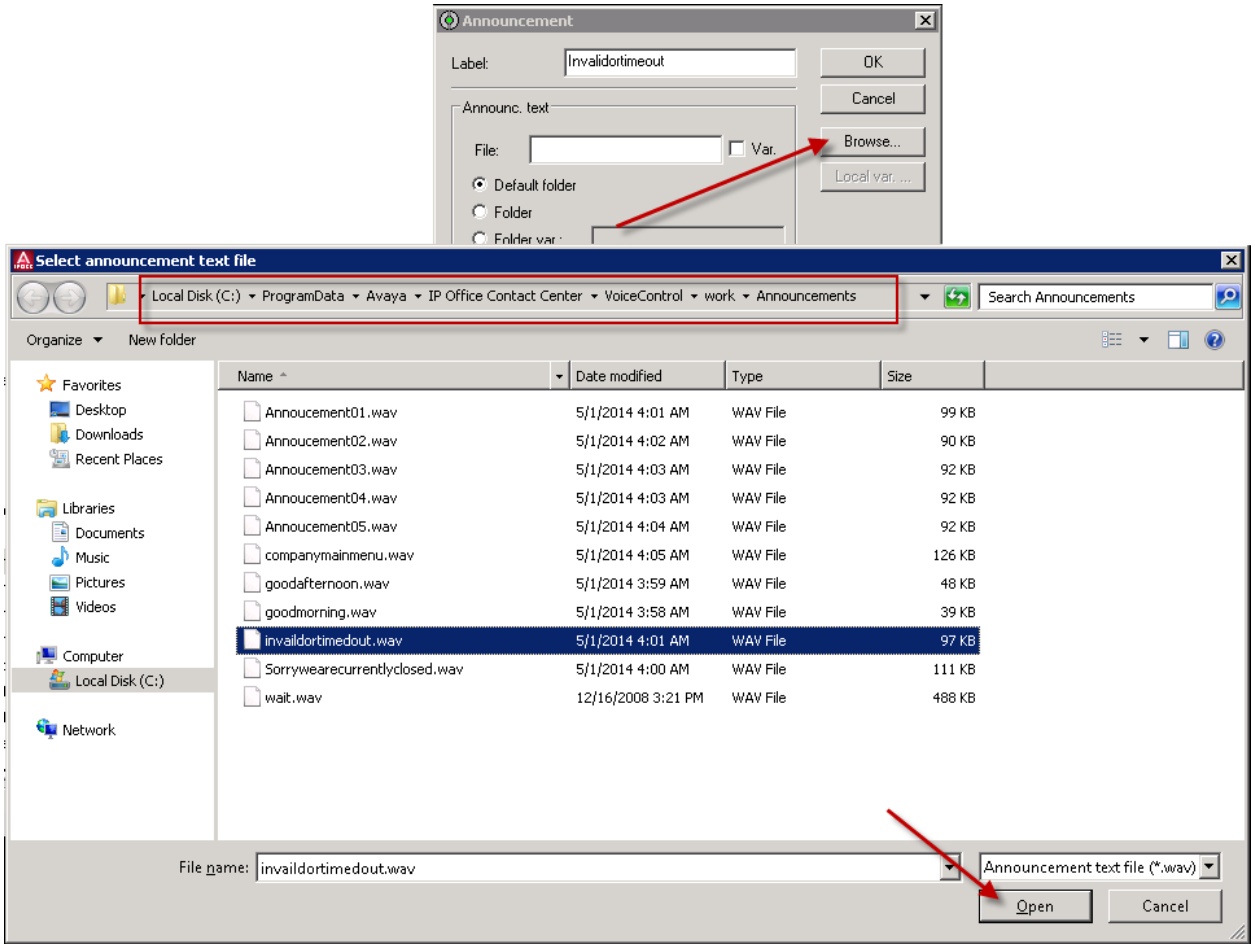


A. Click and drag.

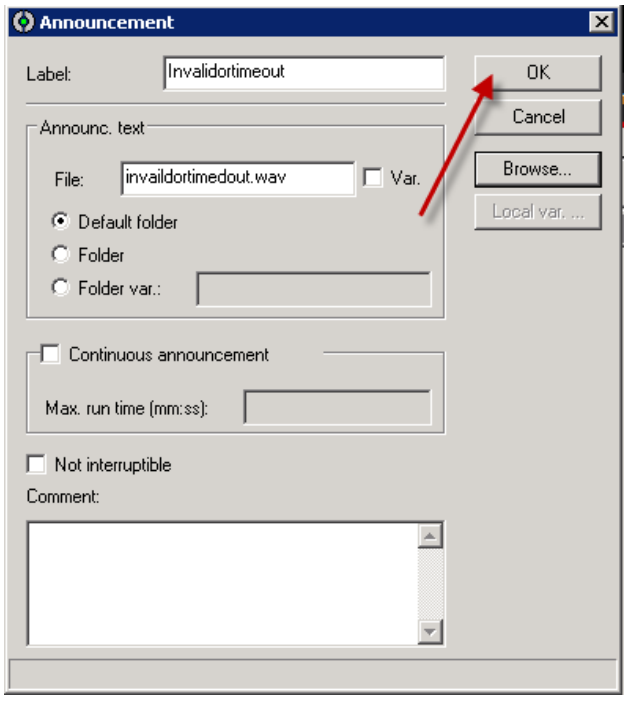
27. Enter a Label for the announcement. For example **Invalidortimeout**.



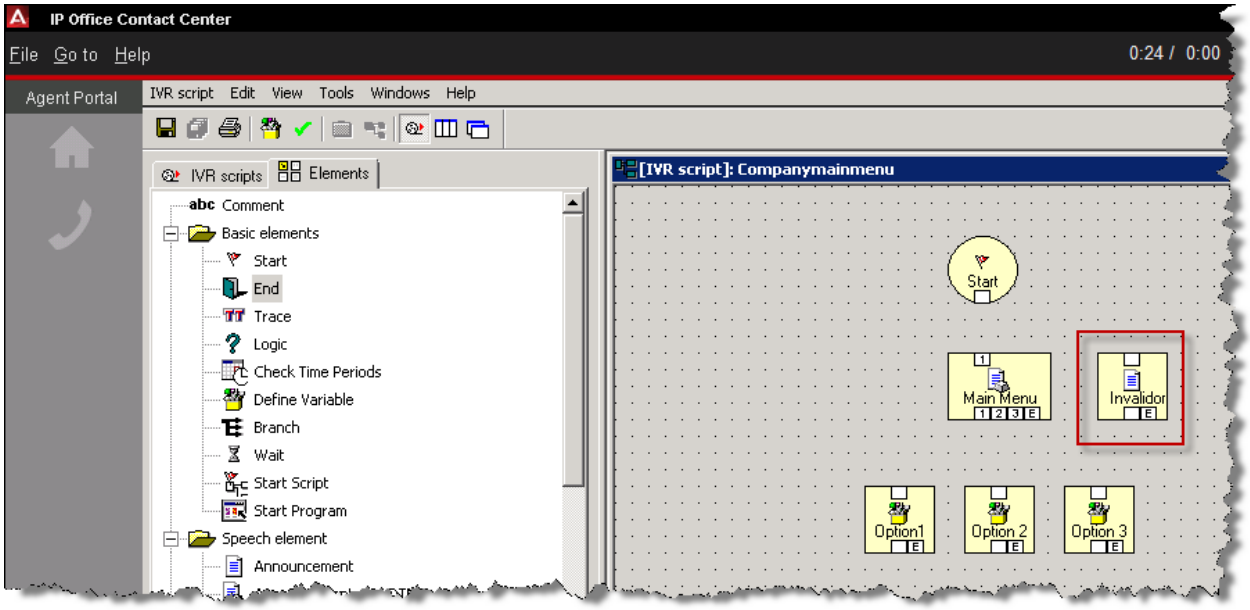
28. Click the **Browse** button and browse to the location of the recorded announcement file that was previously copied to the IP Office Contact Centre server. Click the **Open** button.



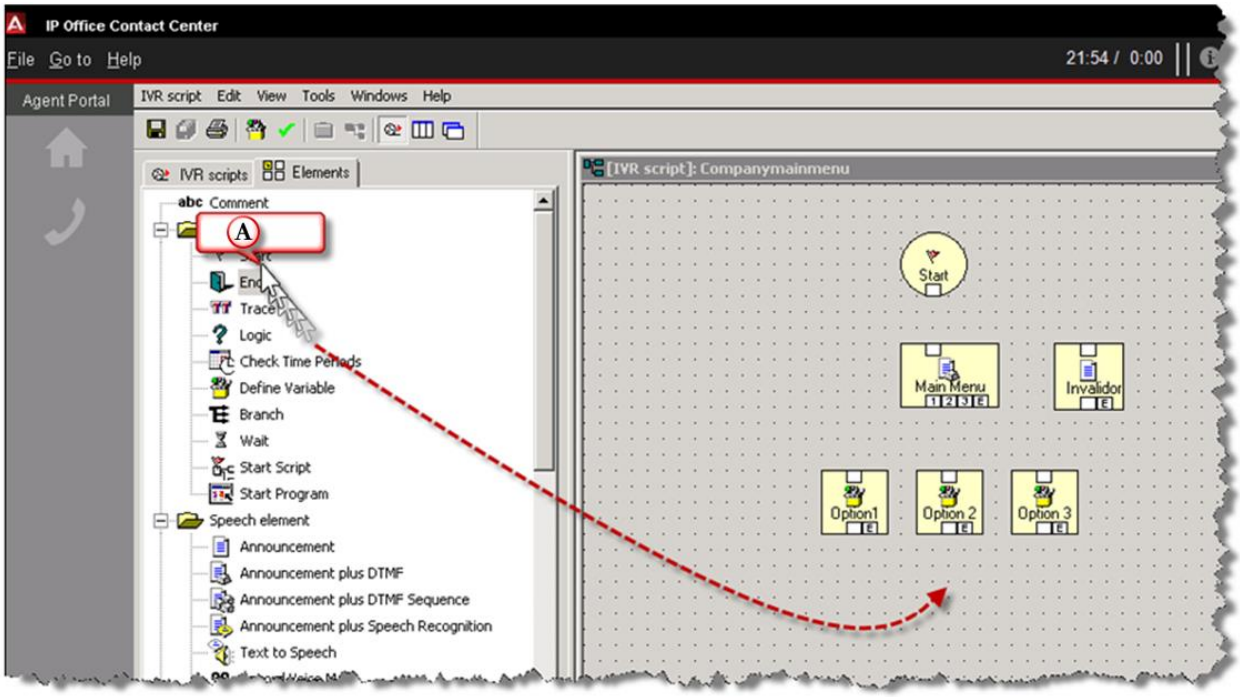
29. The announcement is displayed. Click the **OK** button.



30. The configured element is displayed.

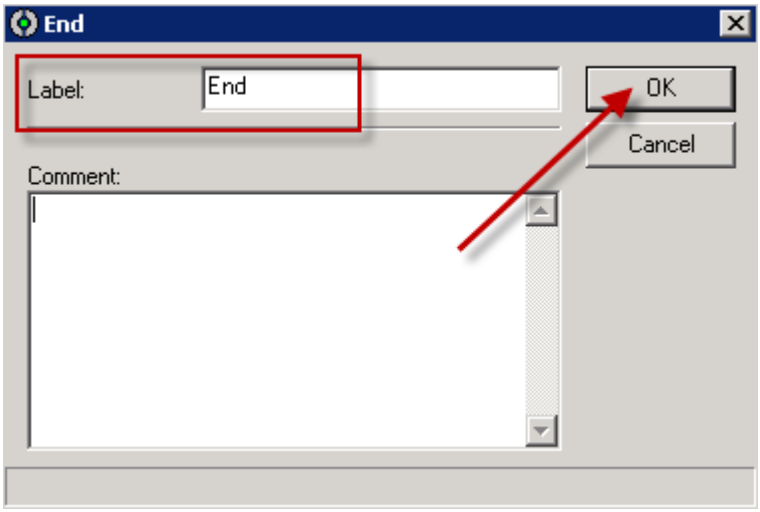


31. An **End** element is required to finish the IVR script. Drag the **End** element into the IVR Working Area.

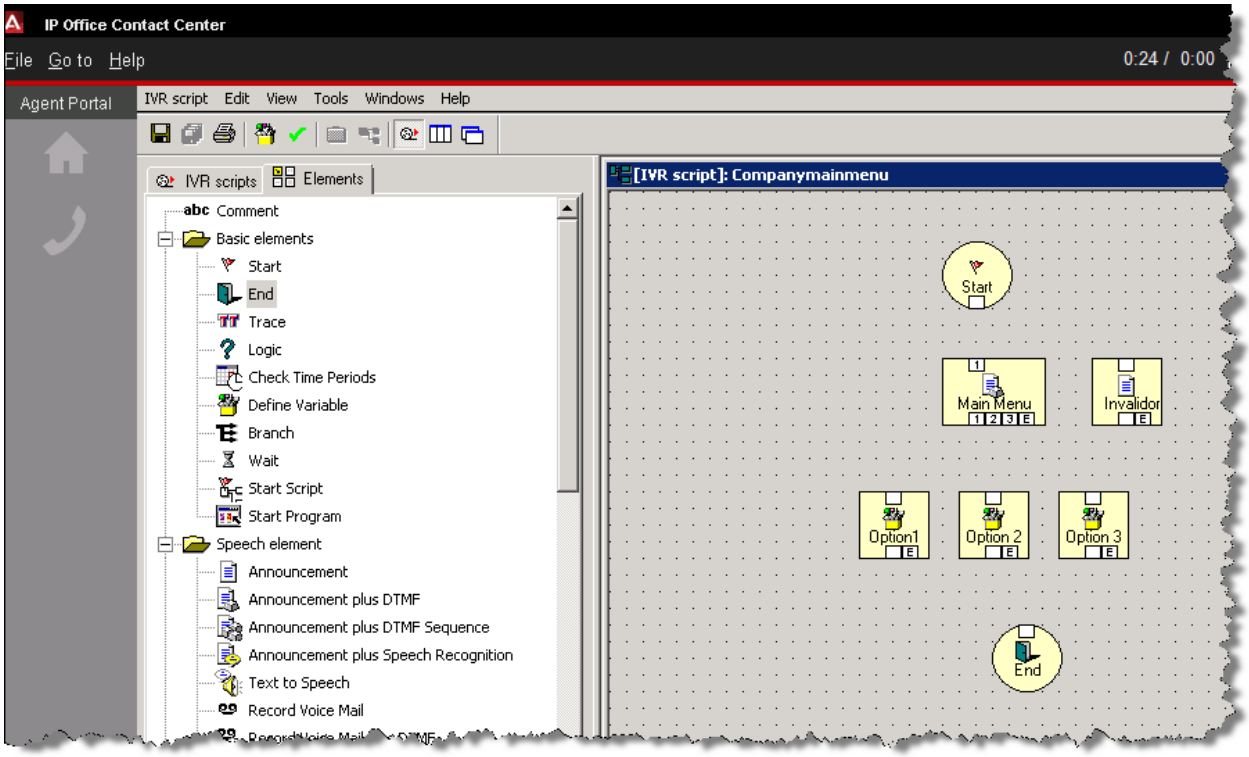


A. Click and drag.

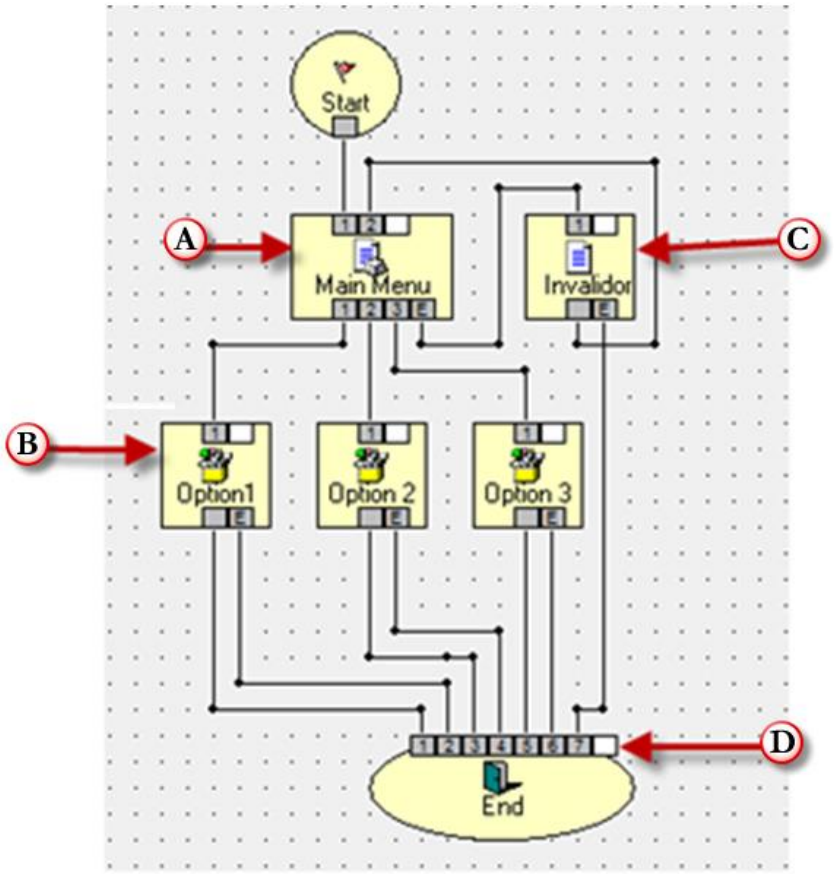
32. Enter a Label for example **End** and click the **OK** button.



33. The configured IVR script is displayed.



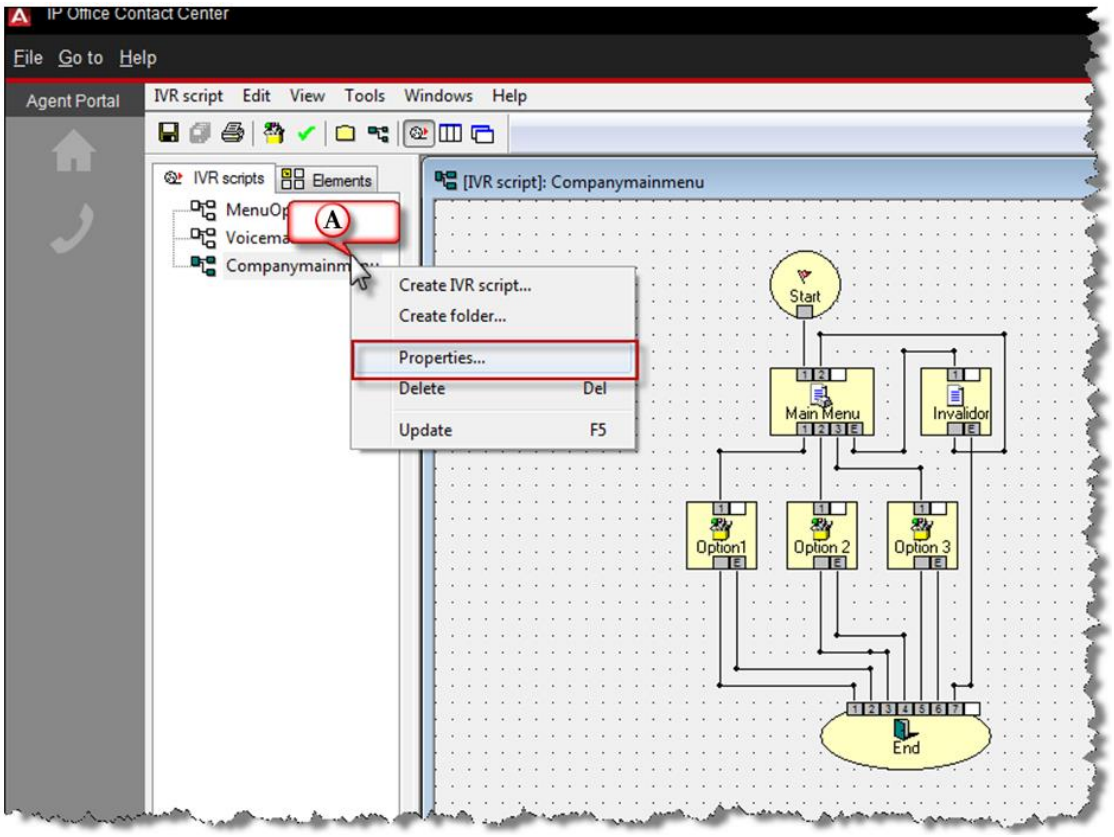
34. Connect the IVR elements as indicated below.



A. Menu “Press 1 for Sales, 2 for Admin and 3 for Support”. Utilizing an **Announcement plus DTMF** element.
B. **Variable** elements used to reference options 1,2 and 3 in the “Menu”
C. Invalid Entry Announcement
D. Each elements Error “E” connector must be linked to the **End** element

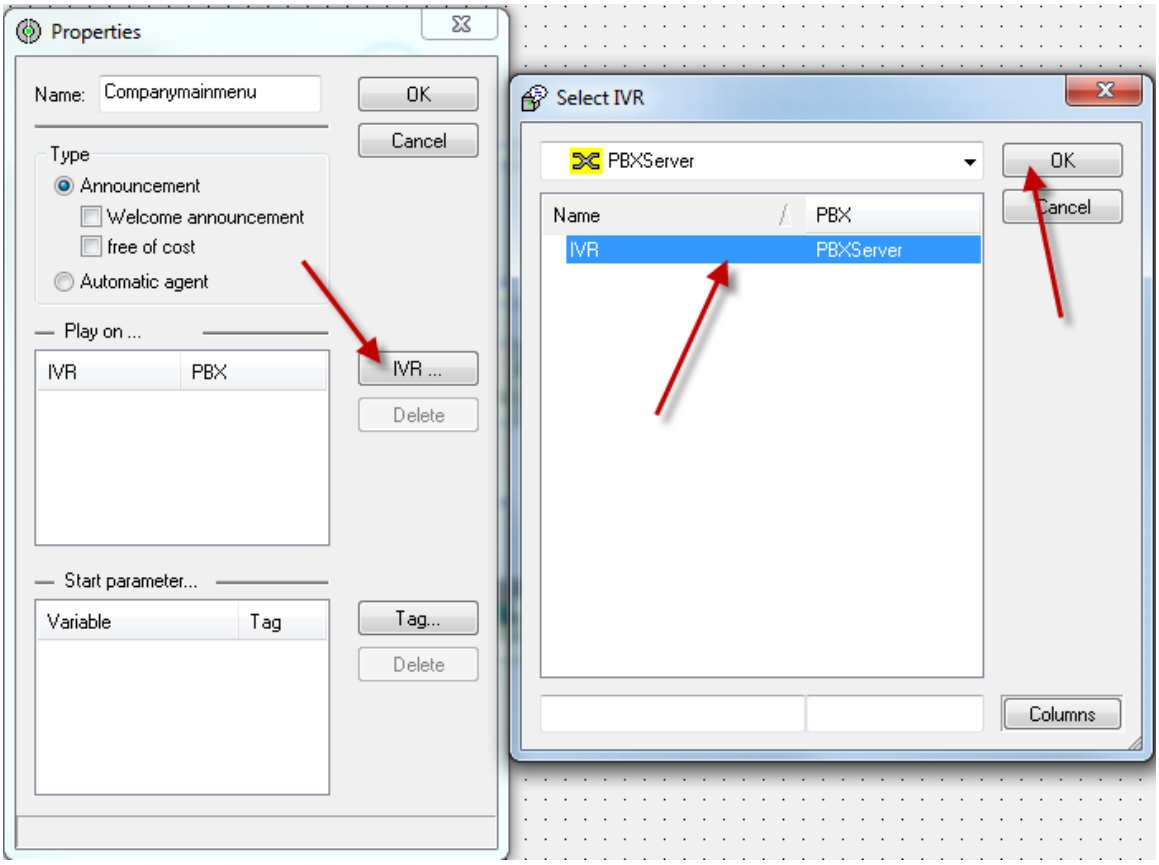
The IVR script must now be enabled before it can be used by the PBX.

35. From the IVR Scripts tab, right click on the IVR script and select **Properties**.

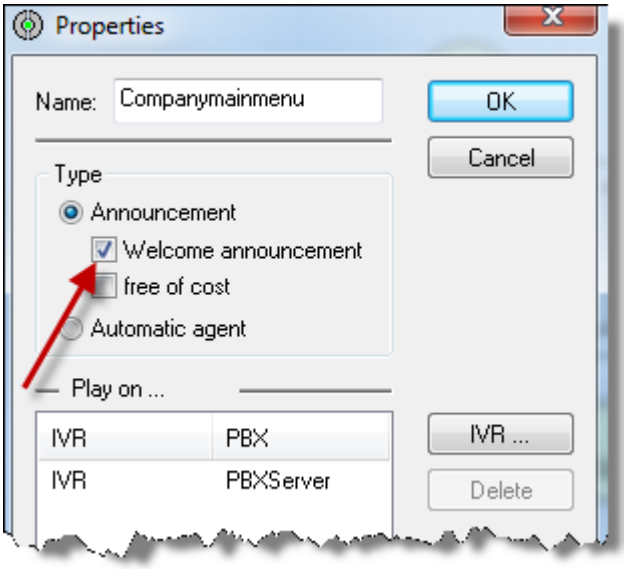


A. Right click.

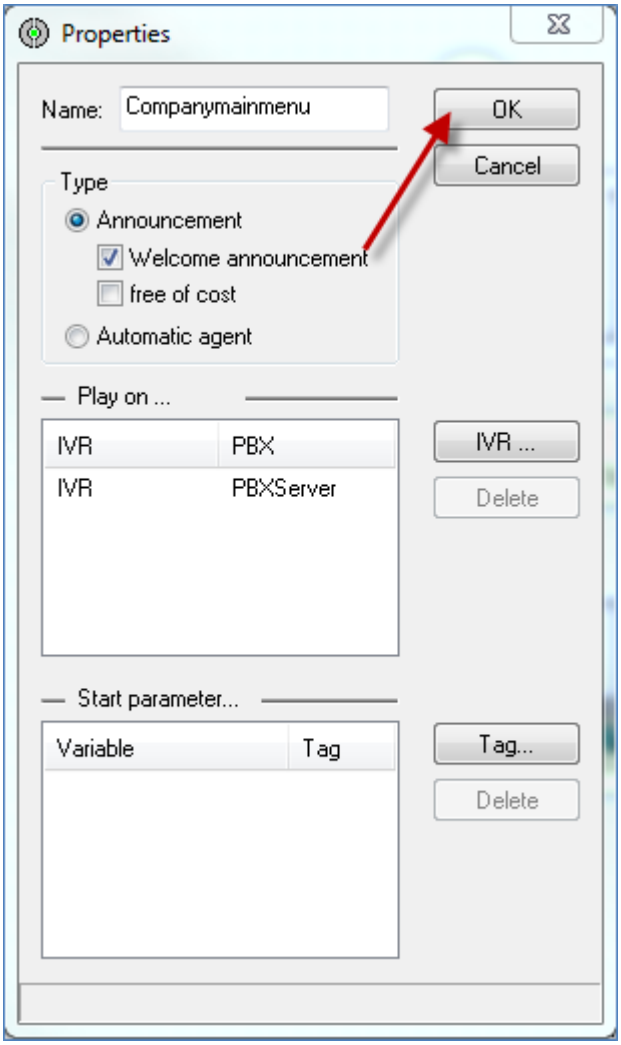
36. Click the **IVR…** button. From the drop down list, select **PBXServer.** Then select the IVR and click the **OK** button.



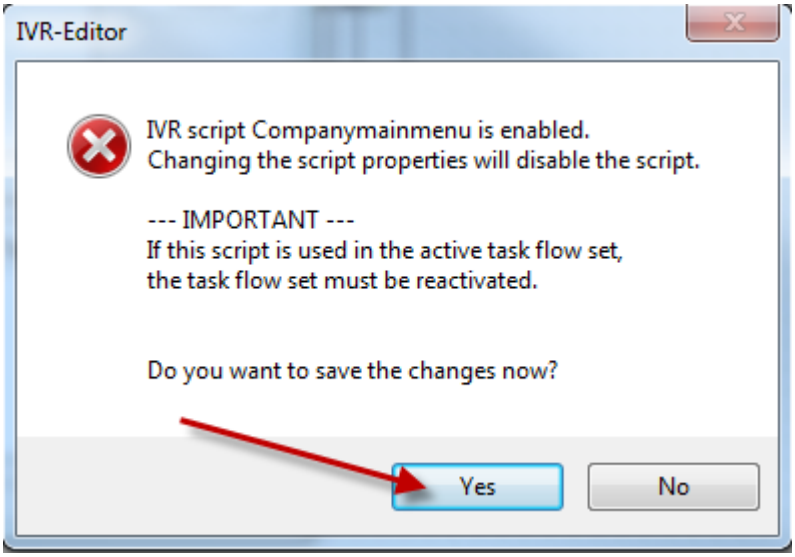
37. The IVR is now selected, click the **Welcome Announcement** check box.



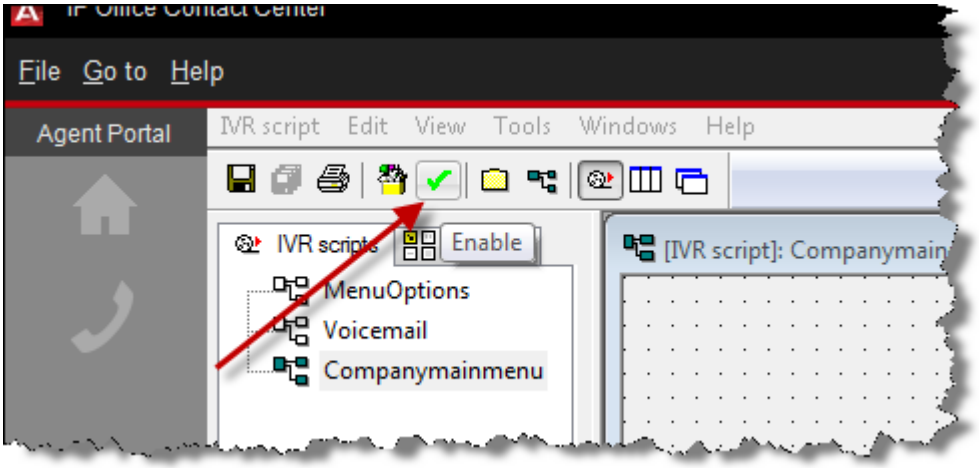
38. Click the **OK** button.



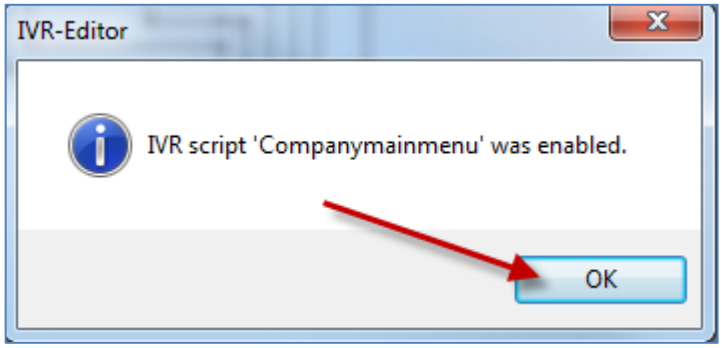
39. Click **Yes** when prompted.



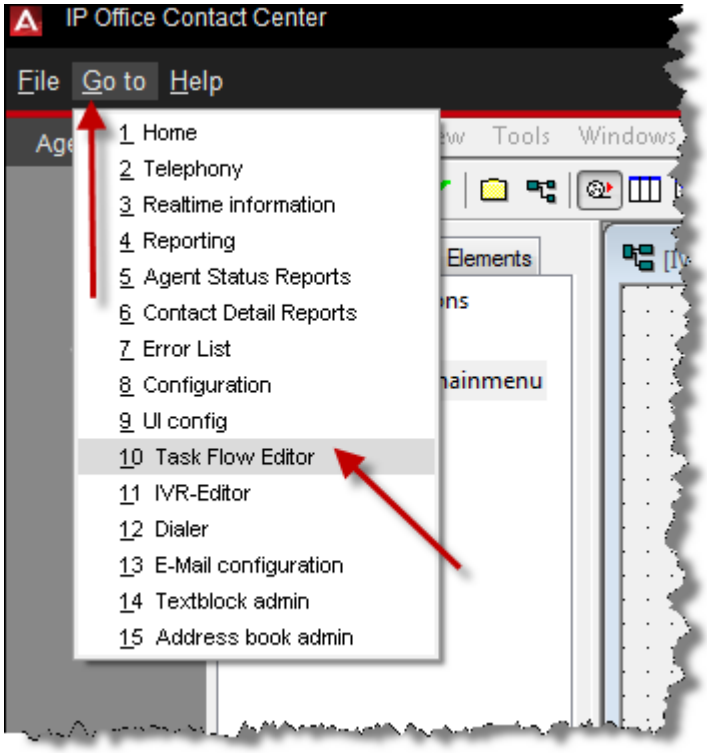
40. Click the **Enable** button.



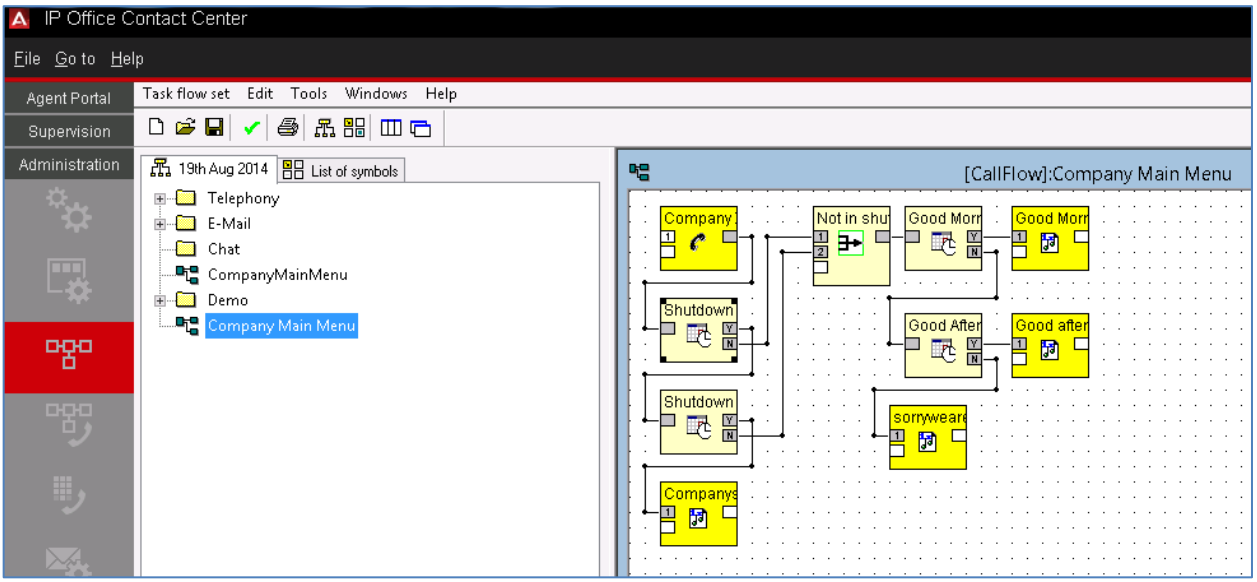
41. The IVR script is now enabled, click the **OK** button.



42. From the **Go to** menu click **Task Flow Editor**.

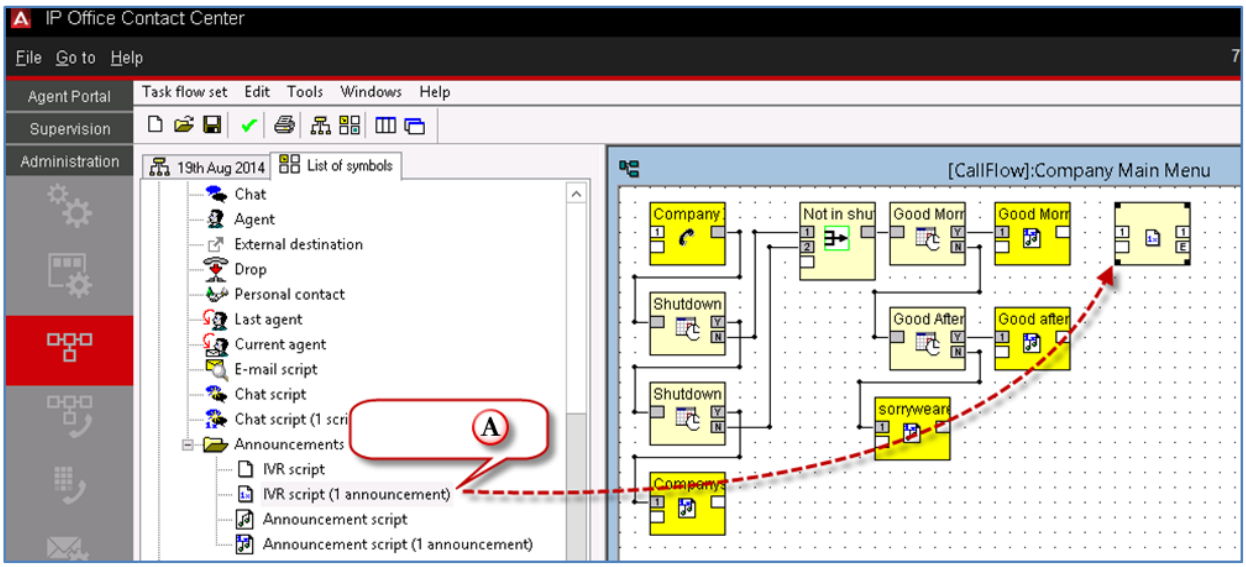


43. Make sure you access the Call Flow that was previously configured.



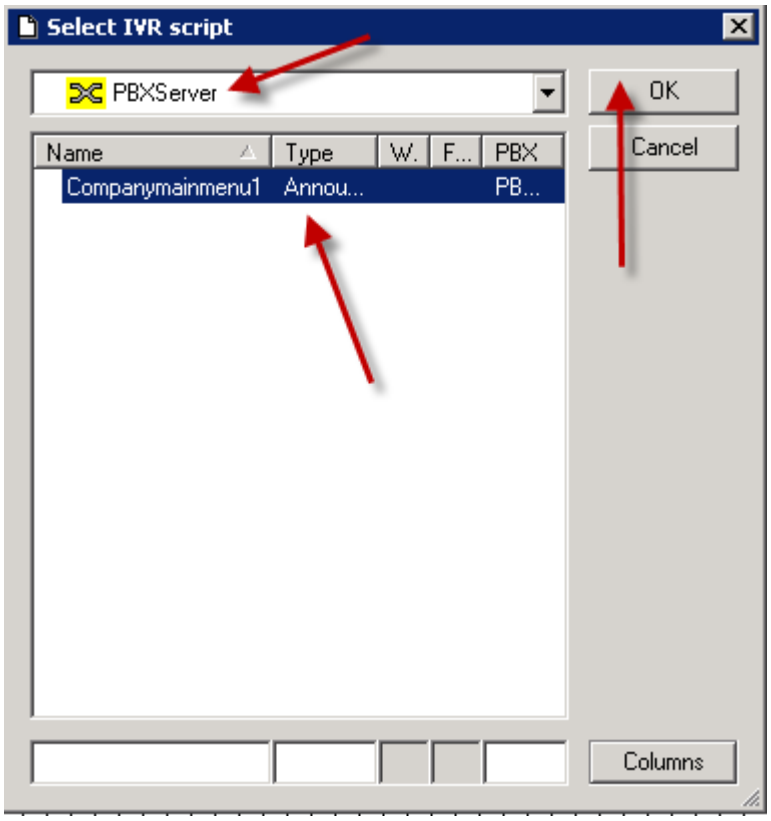
The next step in the Call flow will be to send the call to the IVR, so that the Menu WAV file is played and the menu choice of the customer is stored in the Variable.

44. This can be achieved using the **IVR-Script (1 announcement)** element. Drag this element into the Call flow Working Area.

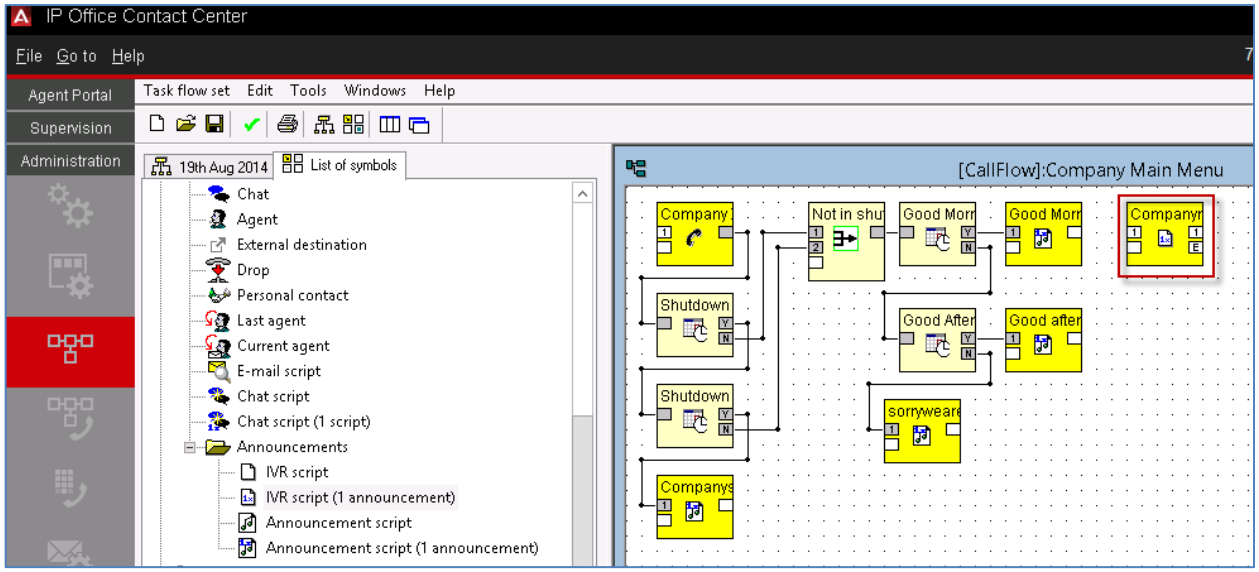


A. Click and drag.

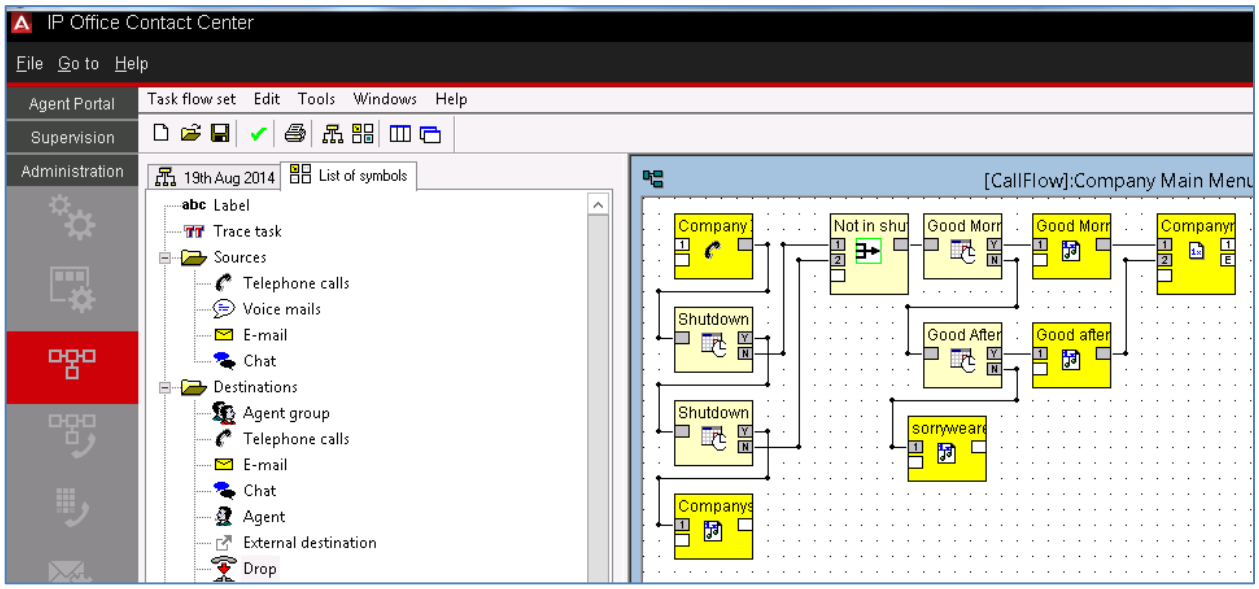
45. From the drop down list, select **PBXServer** and then select the **Companymainmenu** IVR Script. Click the **OK** button.



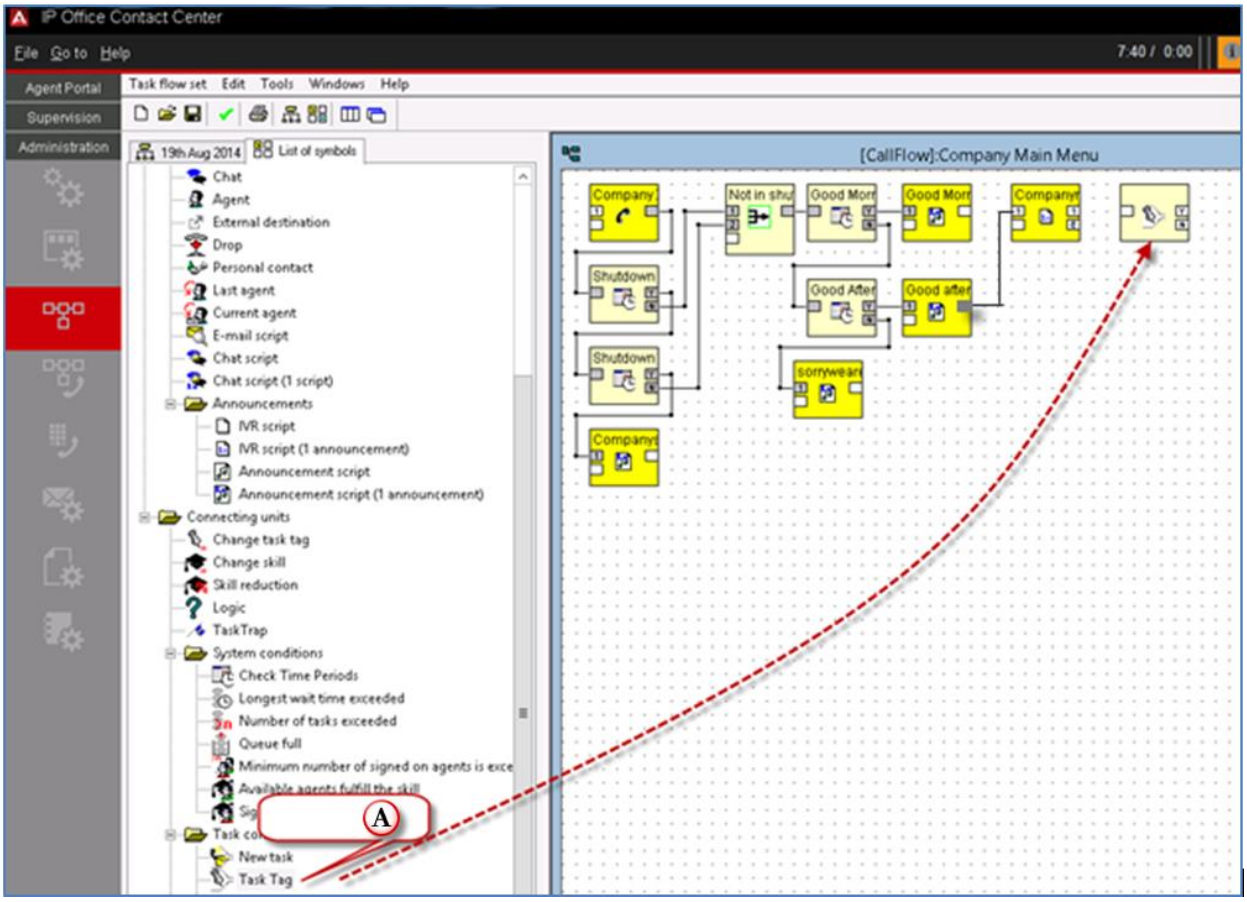
46. The configured element is displayed.



47. Connect up the new IVR script (1 announcement).

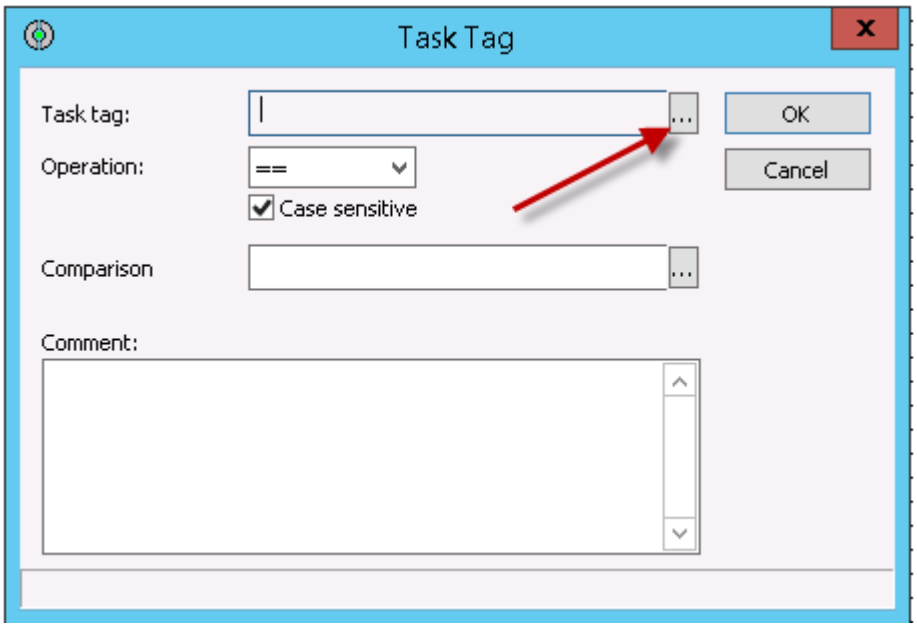


48. A **Task tag** element will be used to route the call depending on the menu option selected by the customer. Drag the **Task Tag** element into the CallFlow Working Area.

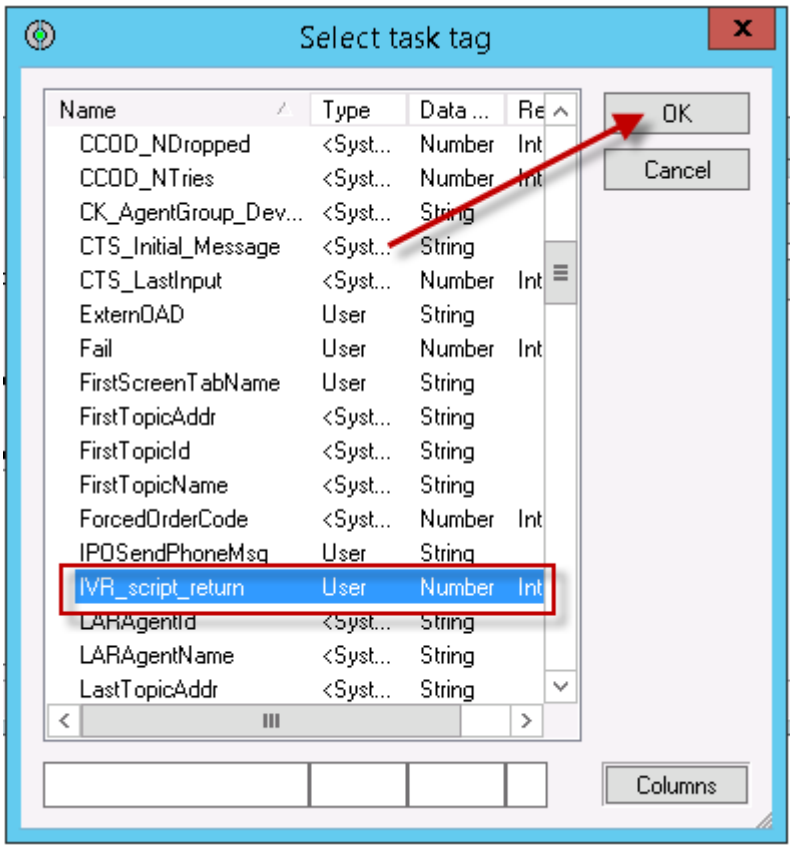


A. Click and drag.

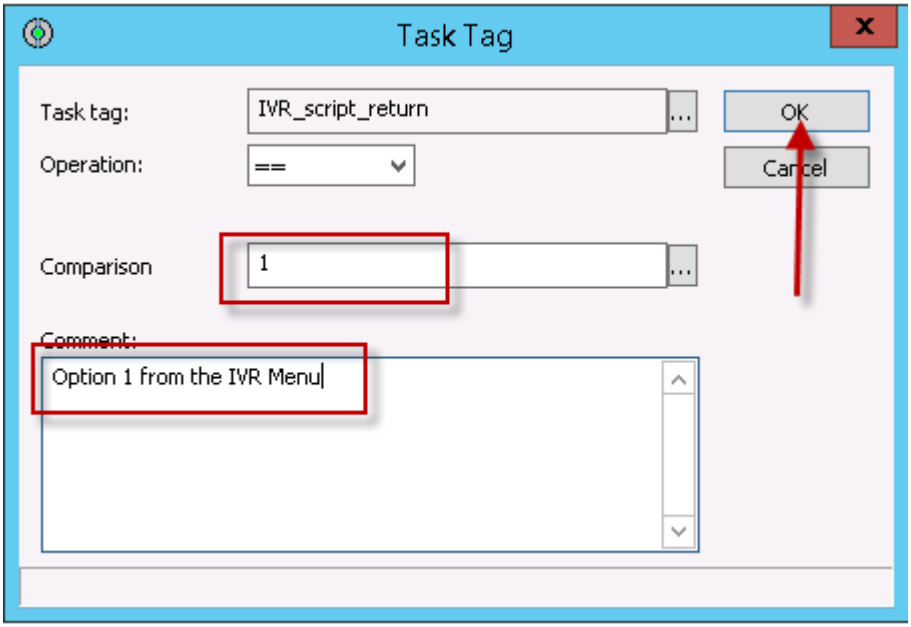
49. Then select the Task **tag…** button.



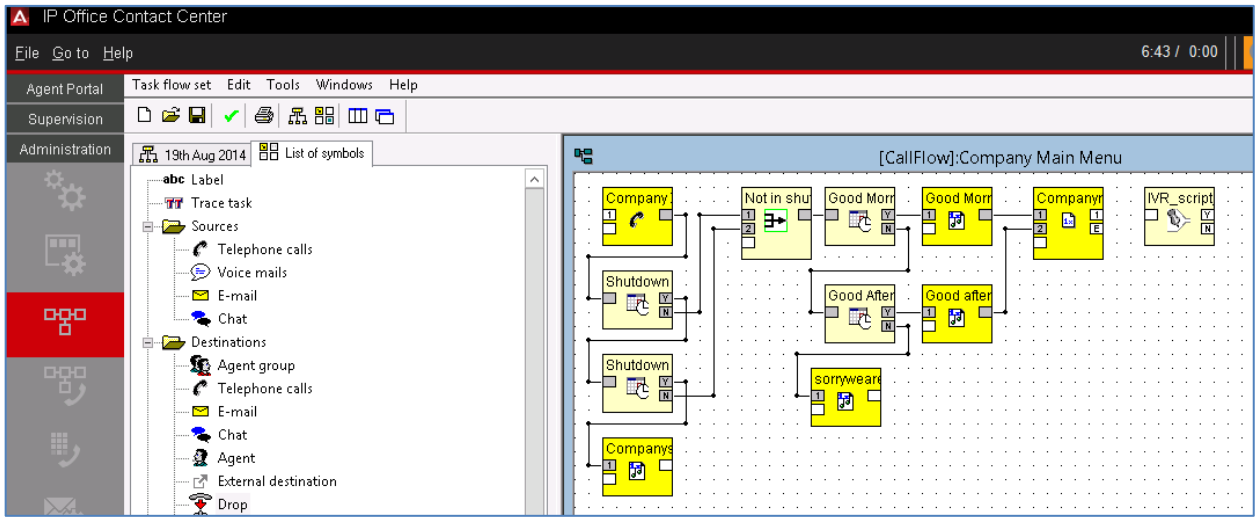
50. Choose the **IVR_script_return.task** tag and then click the **OK** button.



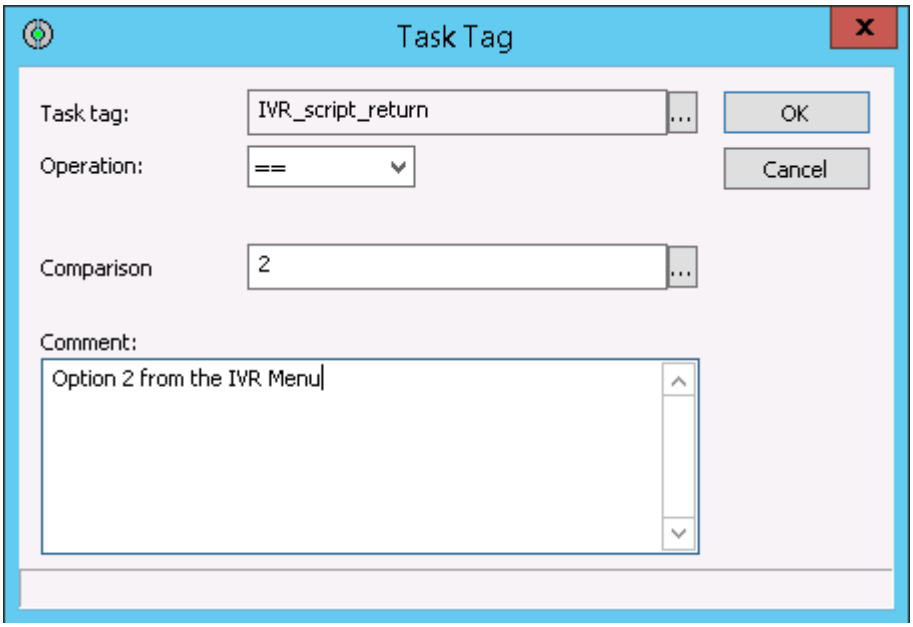
51. In the **Comparison** field type **1** and in the Comment field enter **Option 1 from the IVR Menu**. Click the **OK** button.

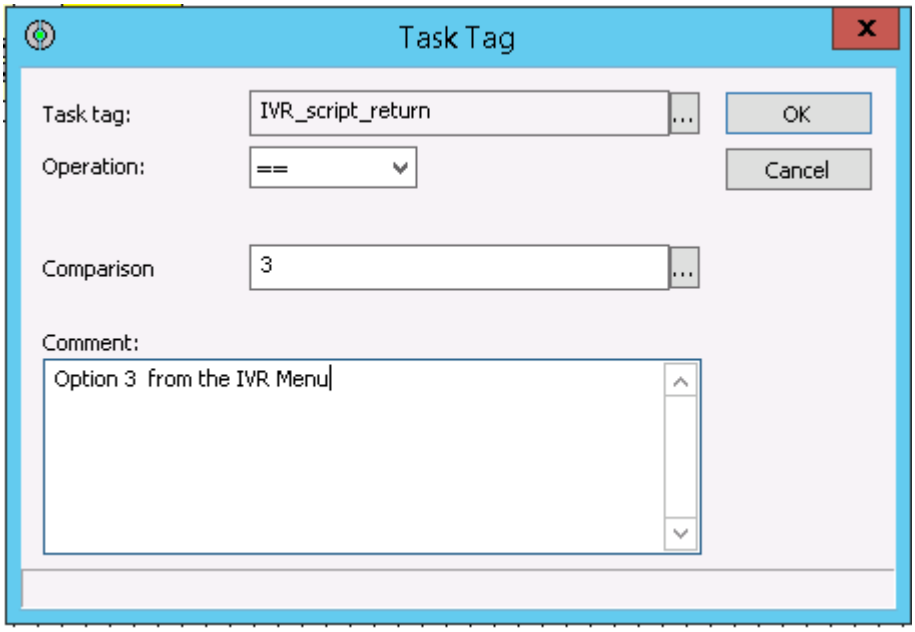


52. The Task tag element is displayed.

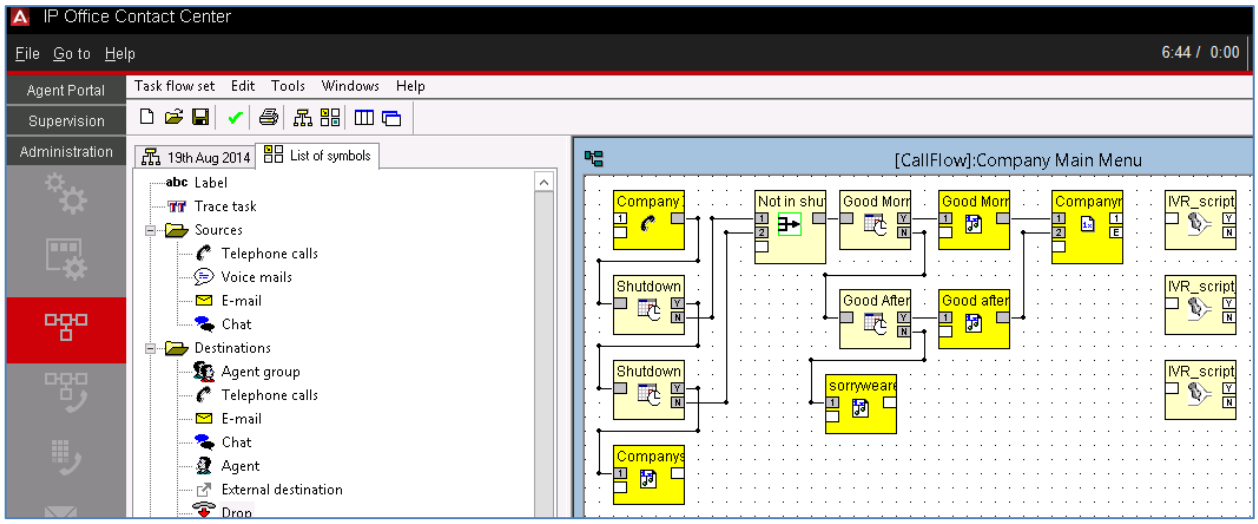


53. Repeat the process for option **2** and option **3**.

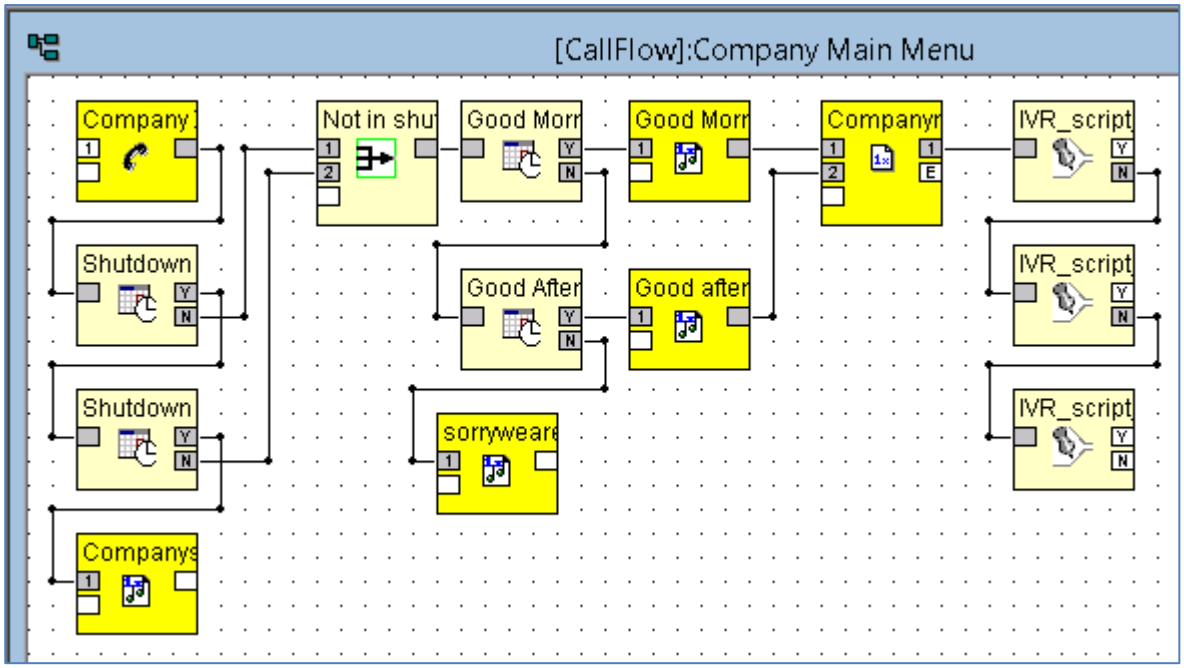




54. The new Task tag elements are displayed.

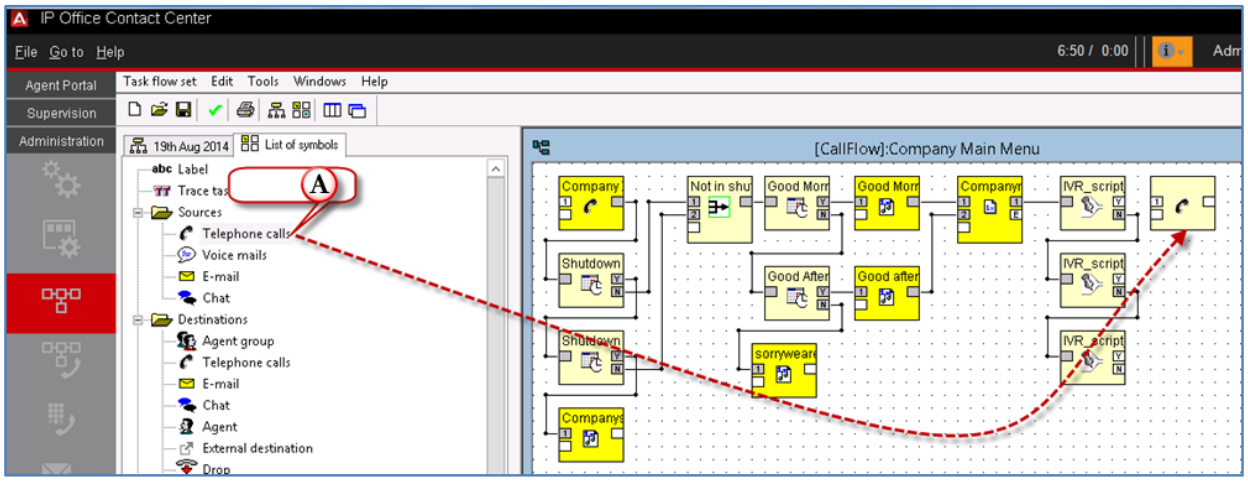


55. Connect the elements as illustrated below.



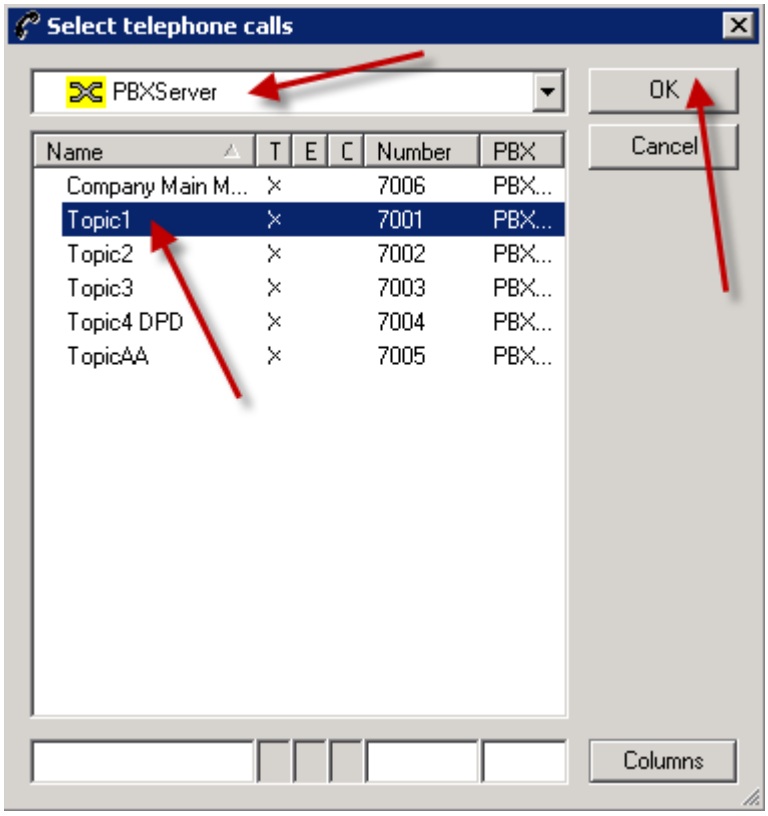
56. Additional elements are required to direct the caller to the correct location depending on the chosen Options i.e. Option 1 goes to Topic 1 and option 2 goes to topic 2, etc. To do this we will use existing topics that have default call flows that were created as part of the IP Office Contact Center installation.

57. Drag the **Telephone Calls** element into the CallFlow Working Area.

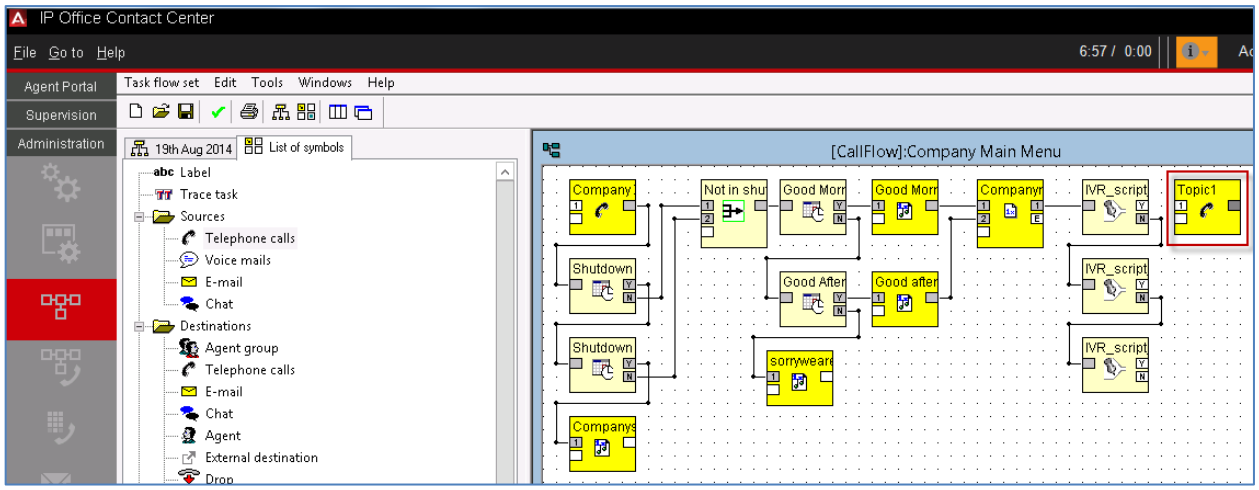


A. Click and drag.

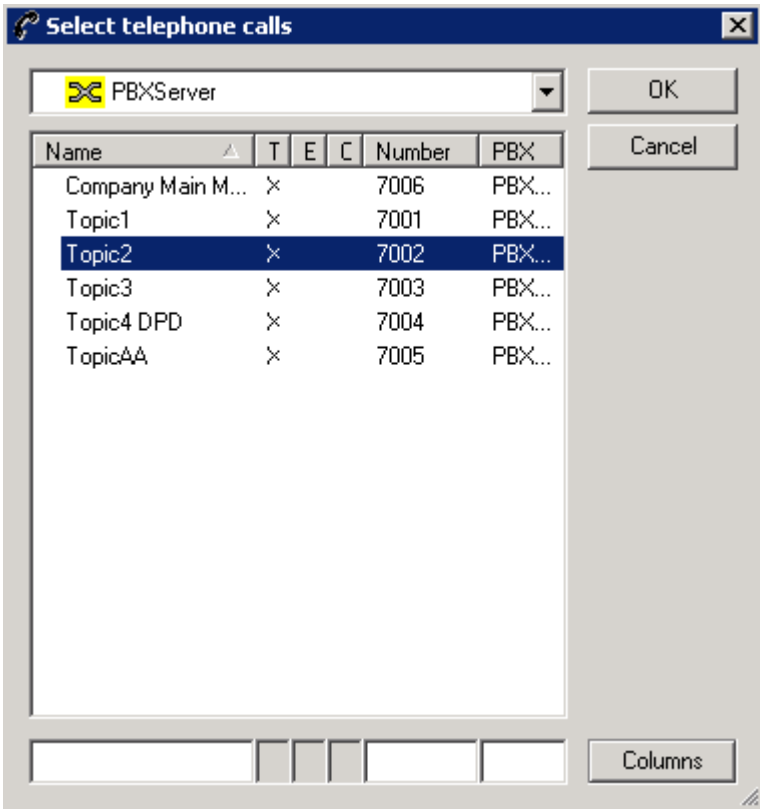
58. From the drop down list, select **PBXServer** then select Topic 1. (the default topic in this example). Click the **OK** button.

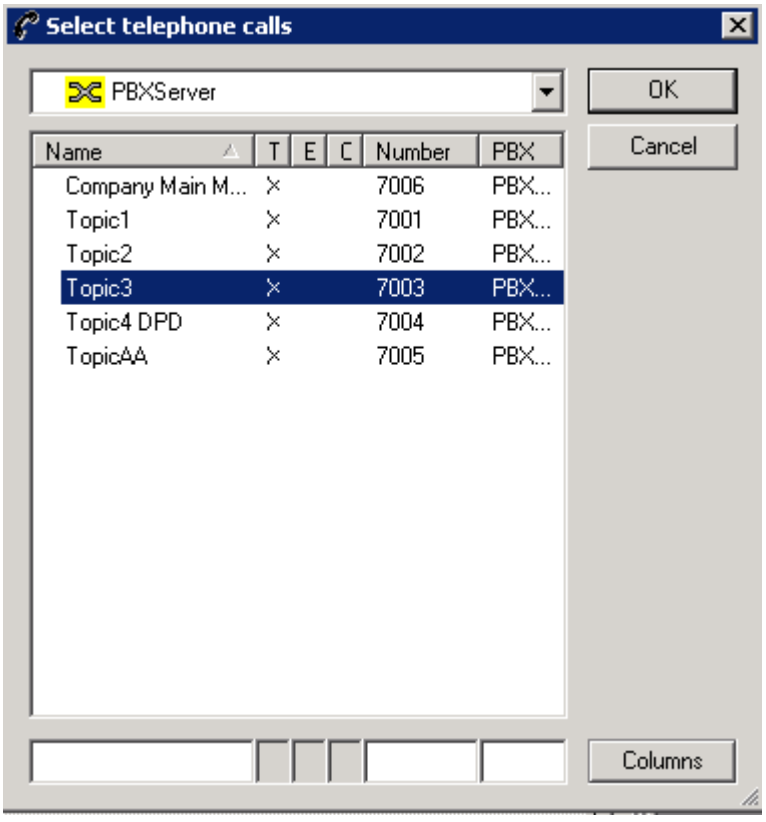


59. The configured element is displayed.

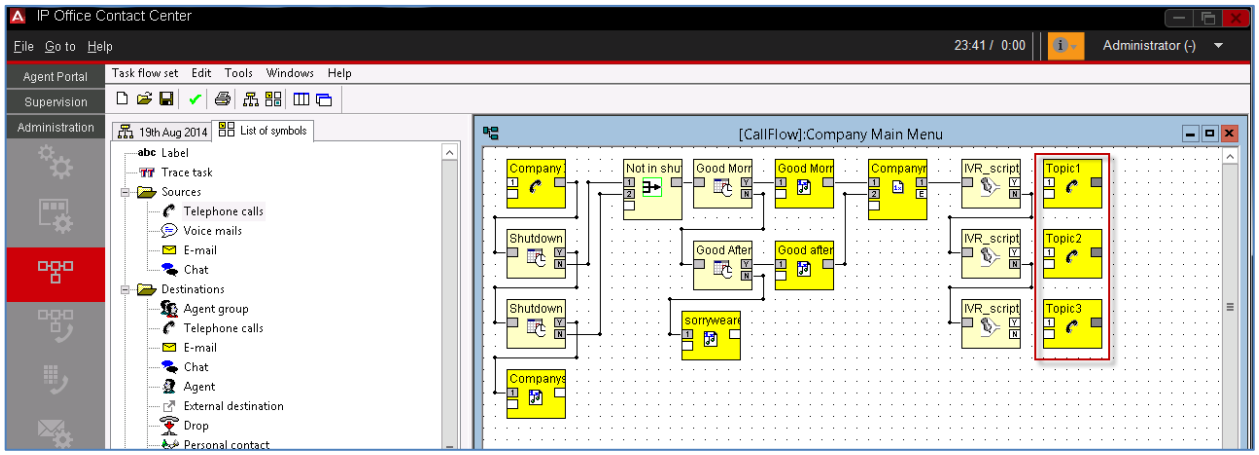


60. Repeat this process to add Topics 2 and 3 as **Telephone Calls** elements.

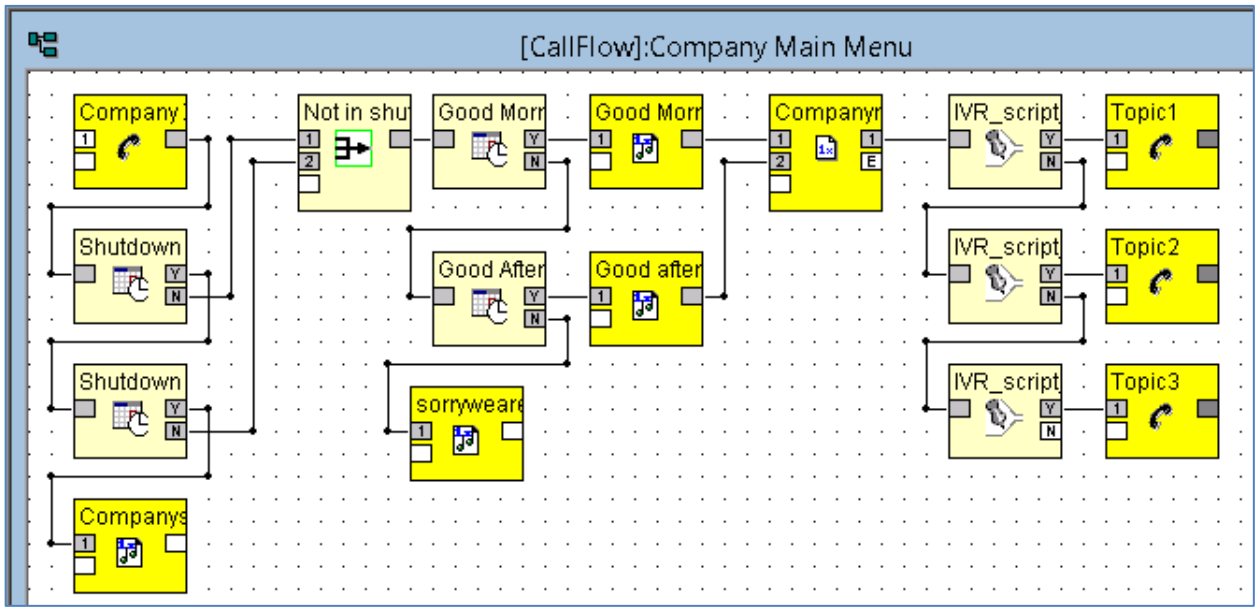

Select telephone calls
PBXServer
OK
Cancel
Name
T
E
C
Number
PBX
Company Main M...
7006
PBX...
Topic1
7001
PBX...
Topic2
7002
PBX...
Topic3
7003
PBX...
Topic4 DPD
7004
PBX...
TopicAA
7005
PBX...
Columns


Select telephone calls
PBXServer
OK
Cancel
Name
T
E
C
Number
PBX
Company Main M...
7006
PBX...
Topic1
7001
PBX...
Topic2
7002
PBX...
Topic3
7003
PBX...
Topic4 DPD
7004
PBX...
TopicAA
7005
PBX...
Columns

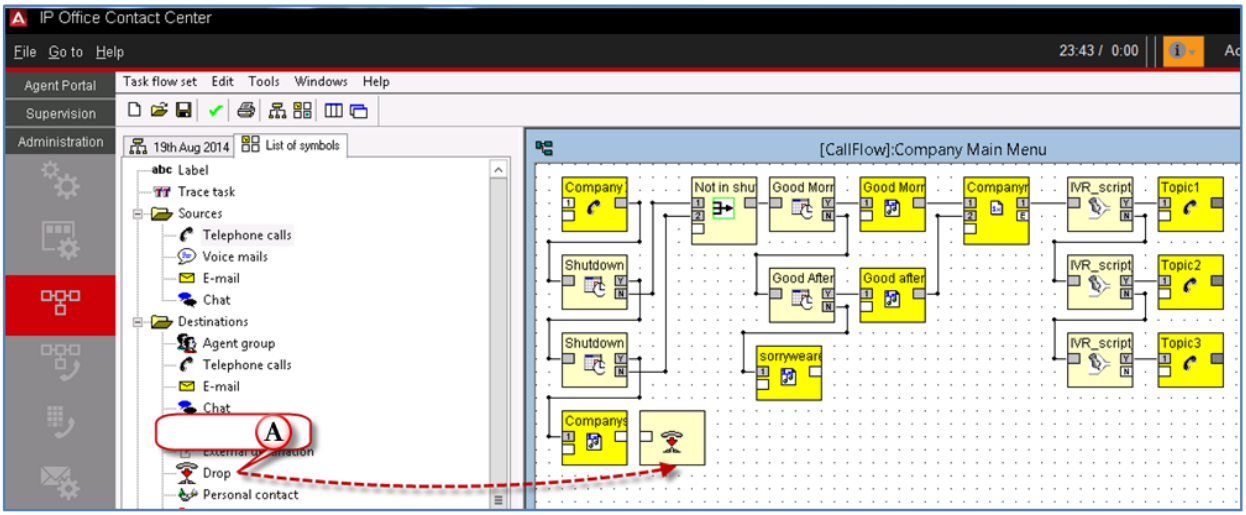
61. The configured elements are displayed.



62. Connect the elements as illustrated below.

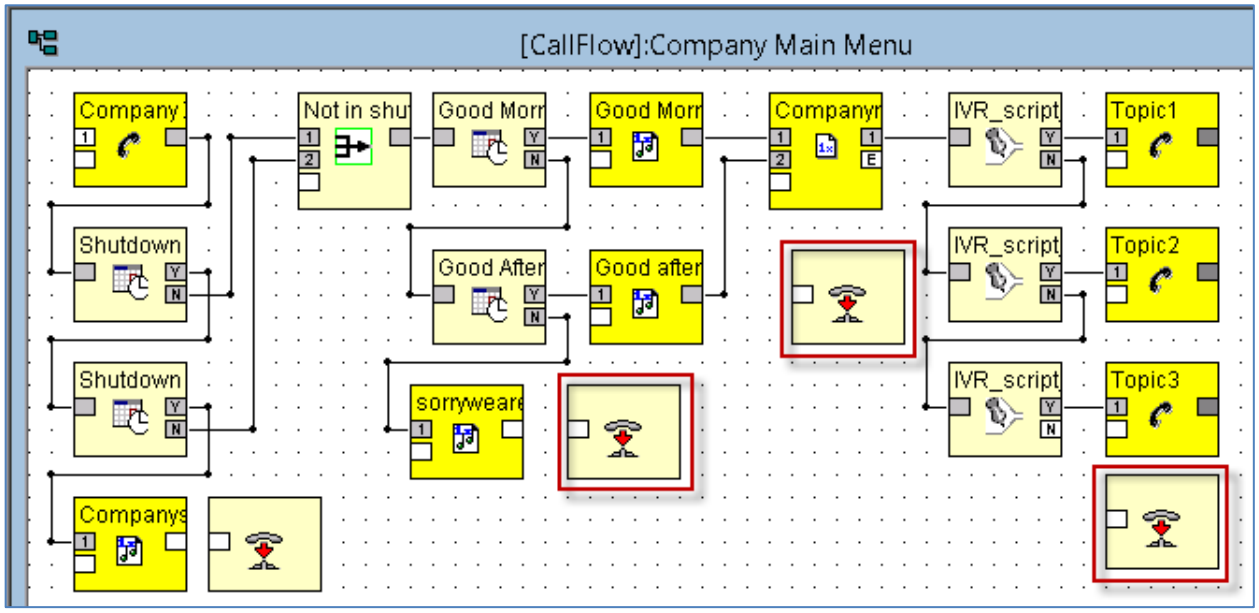


63. We now need to close the empty element connections with Drop elements to disconnect the caller. Drag the Drop element into the Call flow window.

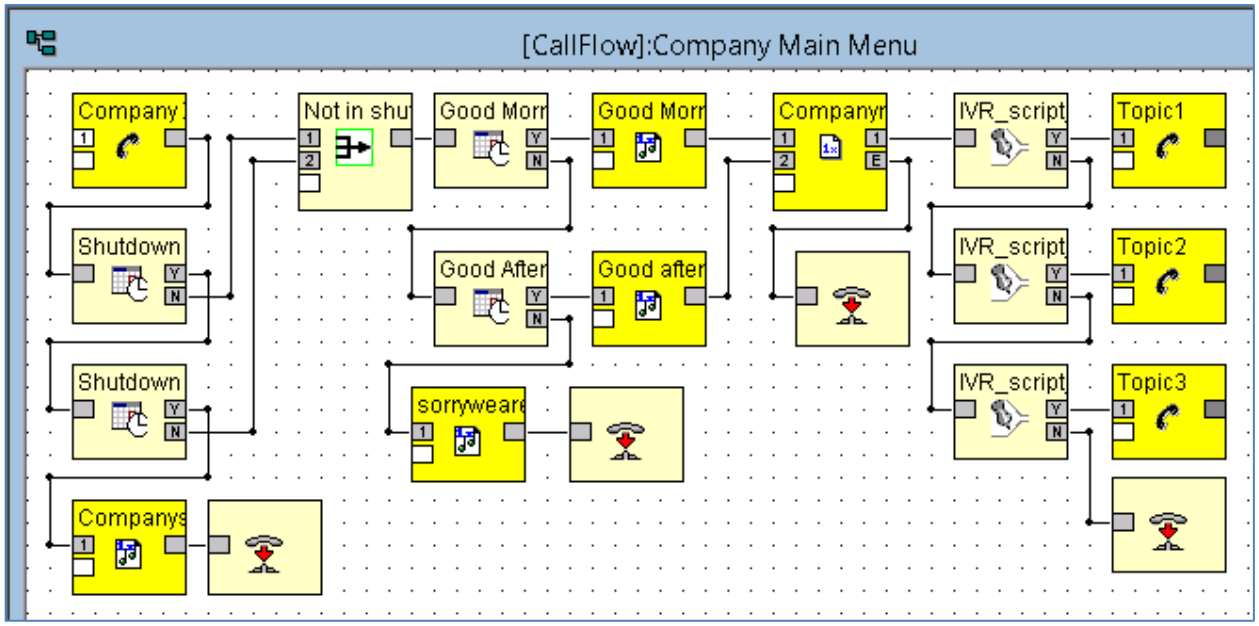


A. Click and drag.

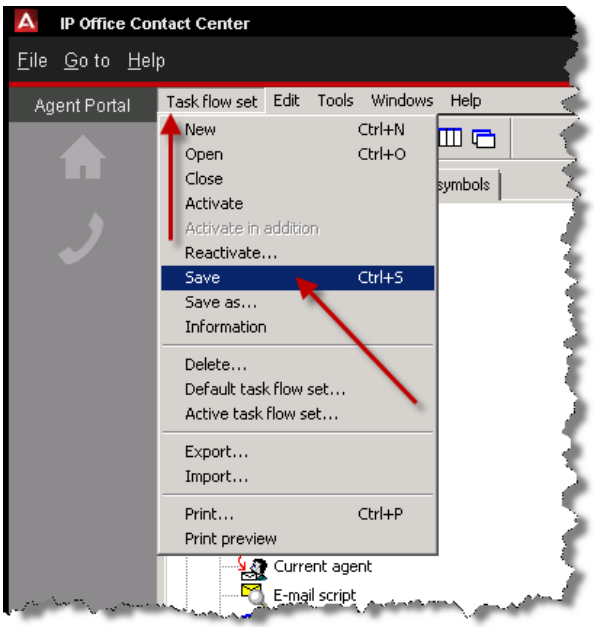
64. Repeat the process to close all of the open connections.



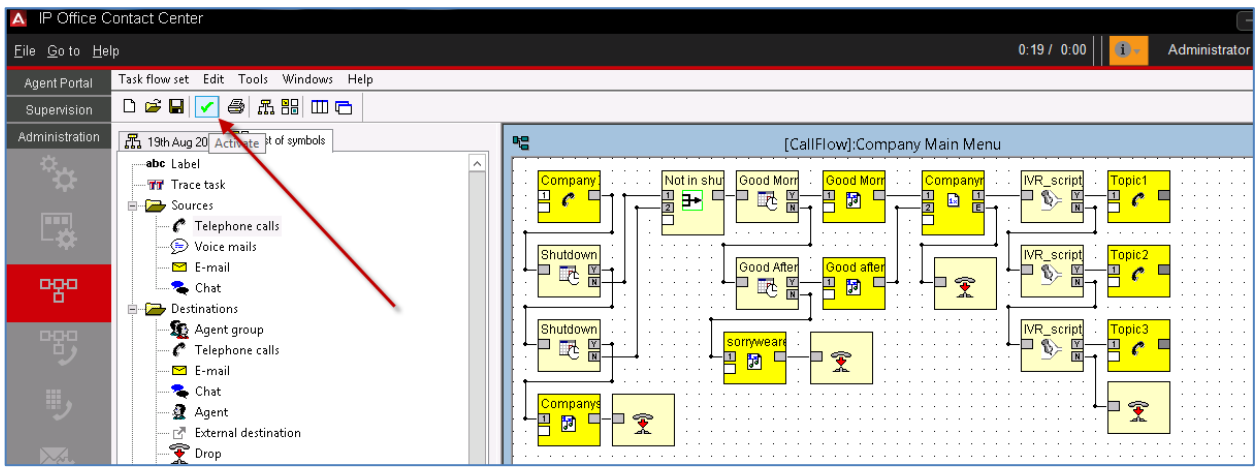
65. Connect the new **Drop** elements.



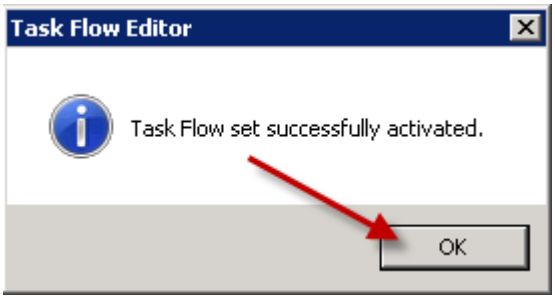
66. Click Task flow set and select **Save.**



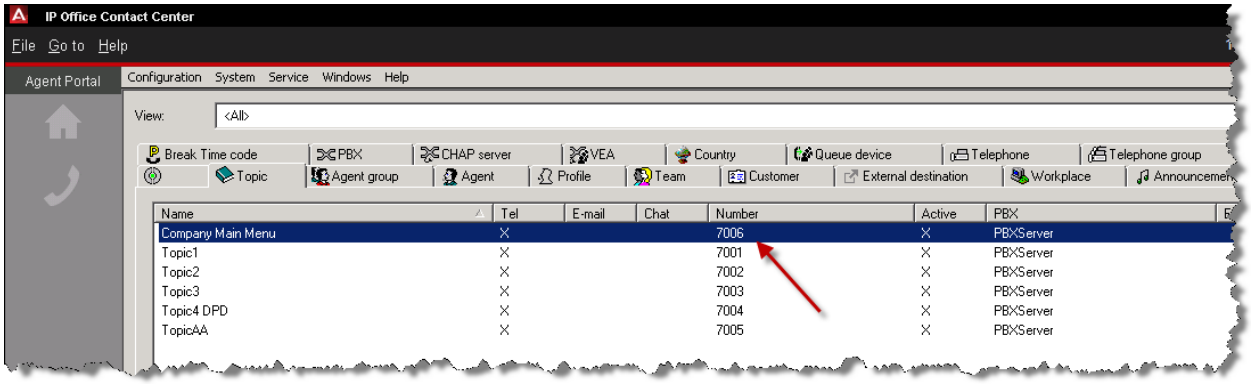
67. **Activate** the task flow set.



68. Task Flow Editor will check the call flow for errors. Click the **OK** button.



69. The Call flow can be tested internally be dialing the Topic Number



70. An Incoming Call Route can be created within IP office Manger to allow the new Company Menu to be linked to an external number. Please refer to the ***IP Office Contact Centre Incoming Call Access - Assigning an IP Office Incoming Call Route to a Topic*** **section of IPOCC 9.1.2 FP Task Flow Editor - Telephony Task Based guide**.

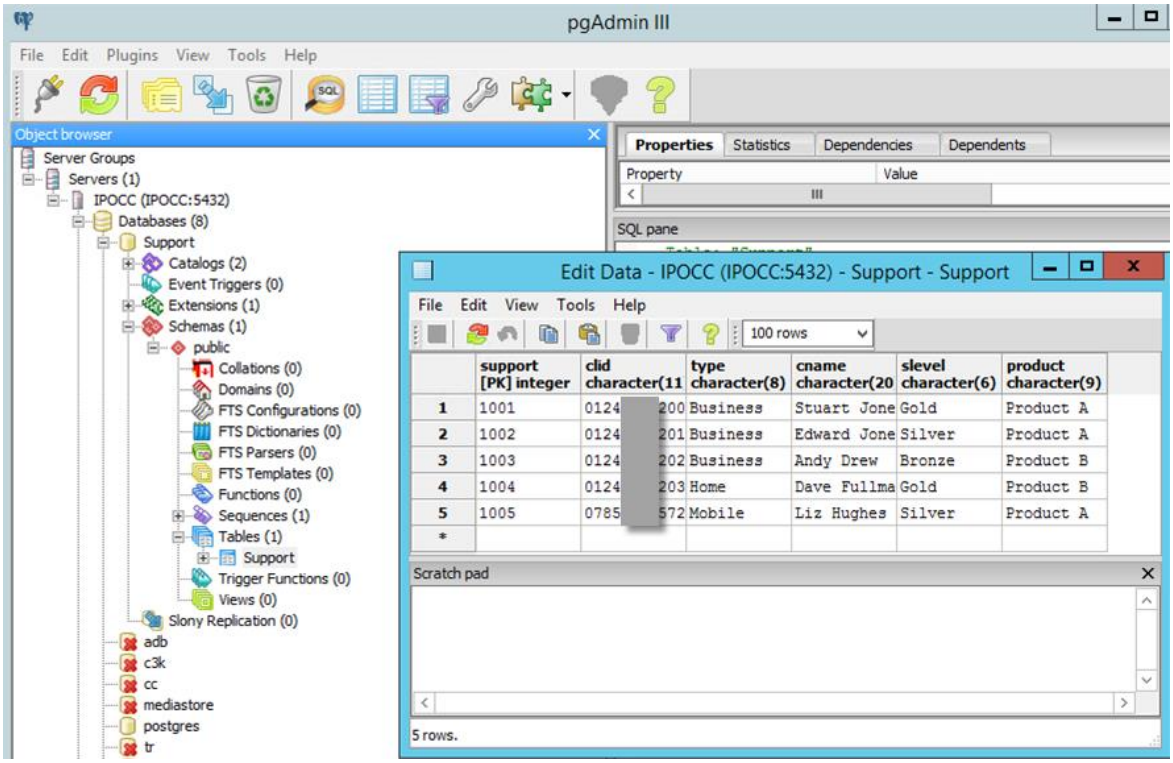
IVR Database Integration Example

The following example relates to a scenario where a customer offers various levels of IT support to their clients. They wish to determine what level of support callers to their support desk have for example Bronze, Silver or Gold along with details of the product they have previously purchased.

Their support records are contained within a database. The customer requires the information to be referenced from the database and displayed on the IP Office Contact Centre agents User Interface, as the support calls are distributed.

An IVR Script will be created to query the database to check for a Support contract and inform the Agent dealing with the call, which product and what level of support has been purchased.

The Customers database contains the following details that will be referenced in the IVR.



Agent User Interface

There are a number of factors that will determine the type of customer information that is displayed on the agent's User interface. When the call is distributed to the agent, they will be presented with caller information before they answer the caller.

Below are the four incoming call scenarios:

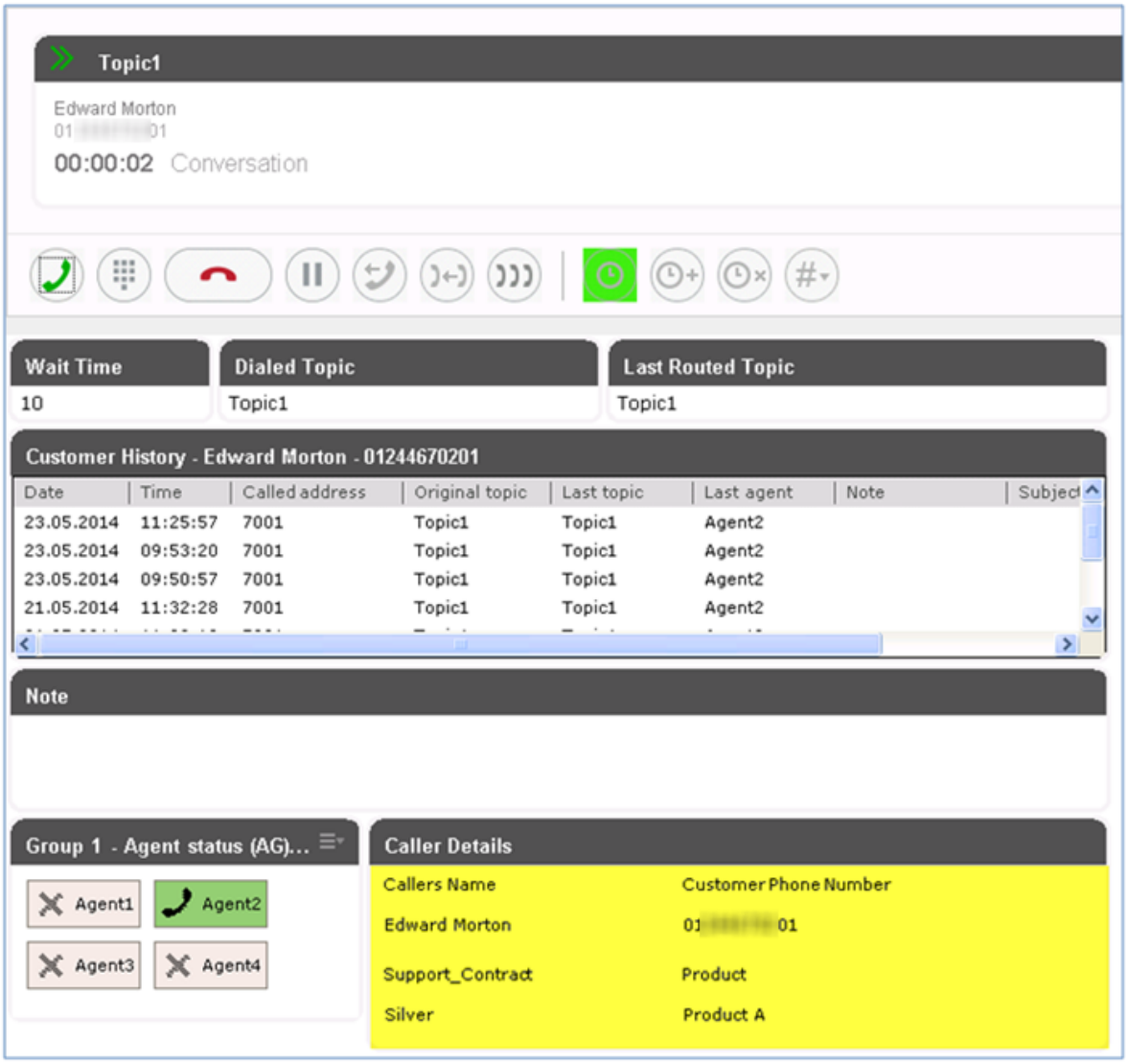
1. Incoming call with CLID that can be matched to a CLID in the customer data base. This will display the CLID and Callers name. As well as the Support contact level and which product the caller has previously purchased.

2. Incoming call with CLID that is not matched to a CLID in the customer data base. Therefore the caller is prompted to enter a support contract number (four digits). If this number is matched in the customer's database, this will display the CLID (non database) and Callers name. As well as the Support contact level and which product the caller has previously purchased.

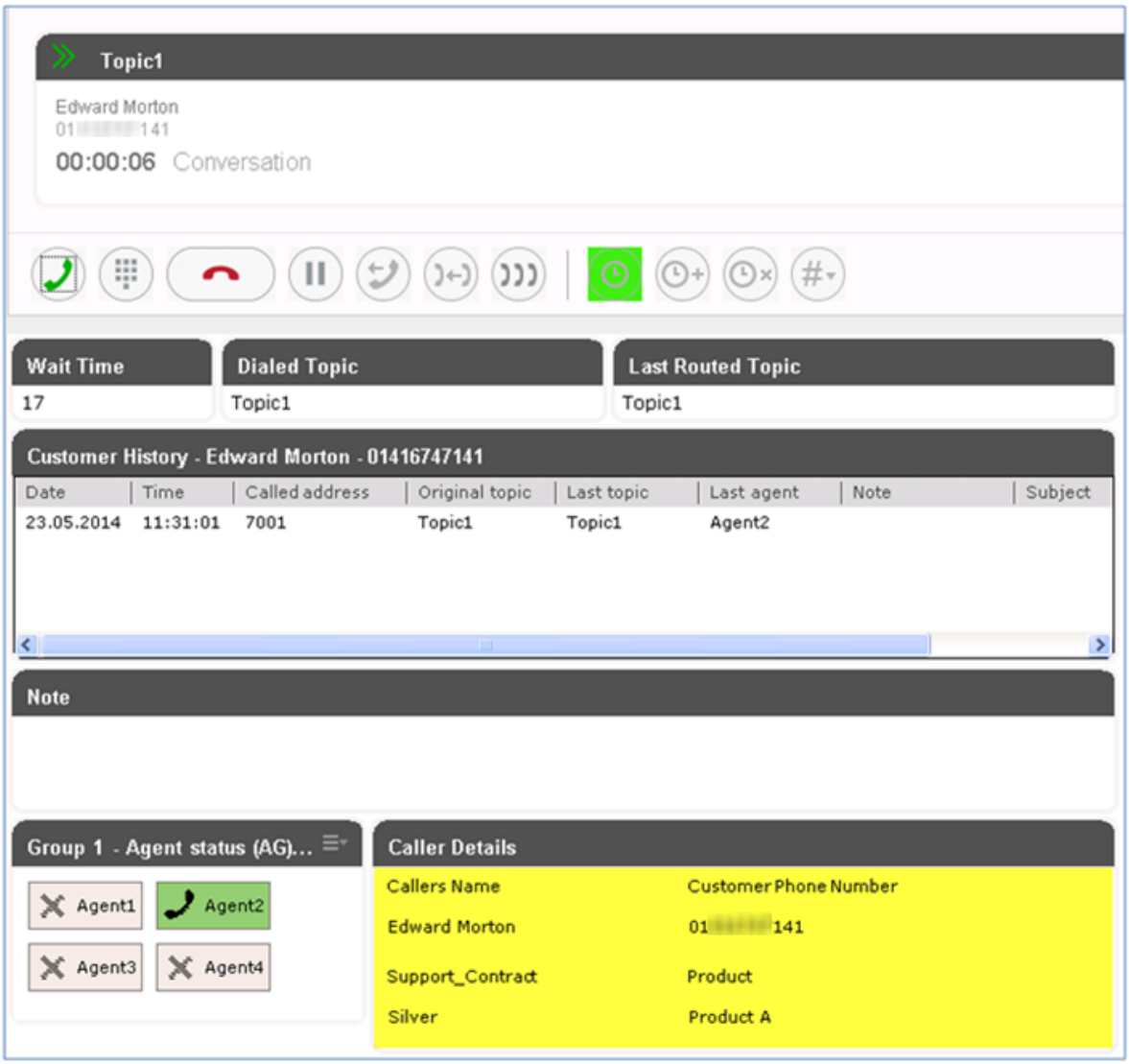
3 Incoming call with NO CLID but a support contract. Therefore the caller is prompted to enter a support contract number (four digits). If this number is matched in the customer's database, this will display the Callers name along with the Support contact level and which product the caller has previously purchased.

4. Incoming call with NO CLID and no support contract. Therefore the caller is prompted to enter a support contract number (four digits). If this number is not matched in the customer's database, the Caller will hear a message "Please be aware that support will only be given to customers with an active support contract" before being sent to the Topic. The Agent's user interface will display NO_SUPPORT_CONTRACT.

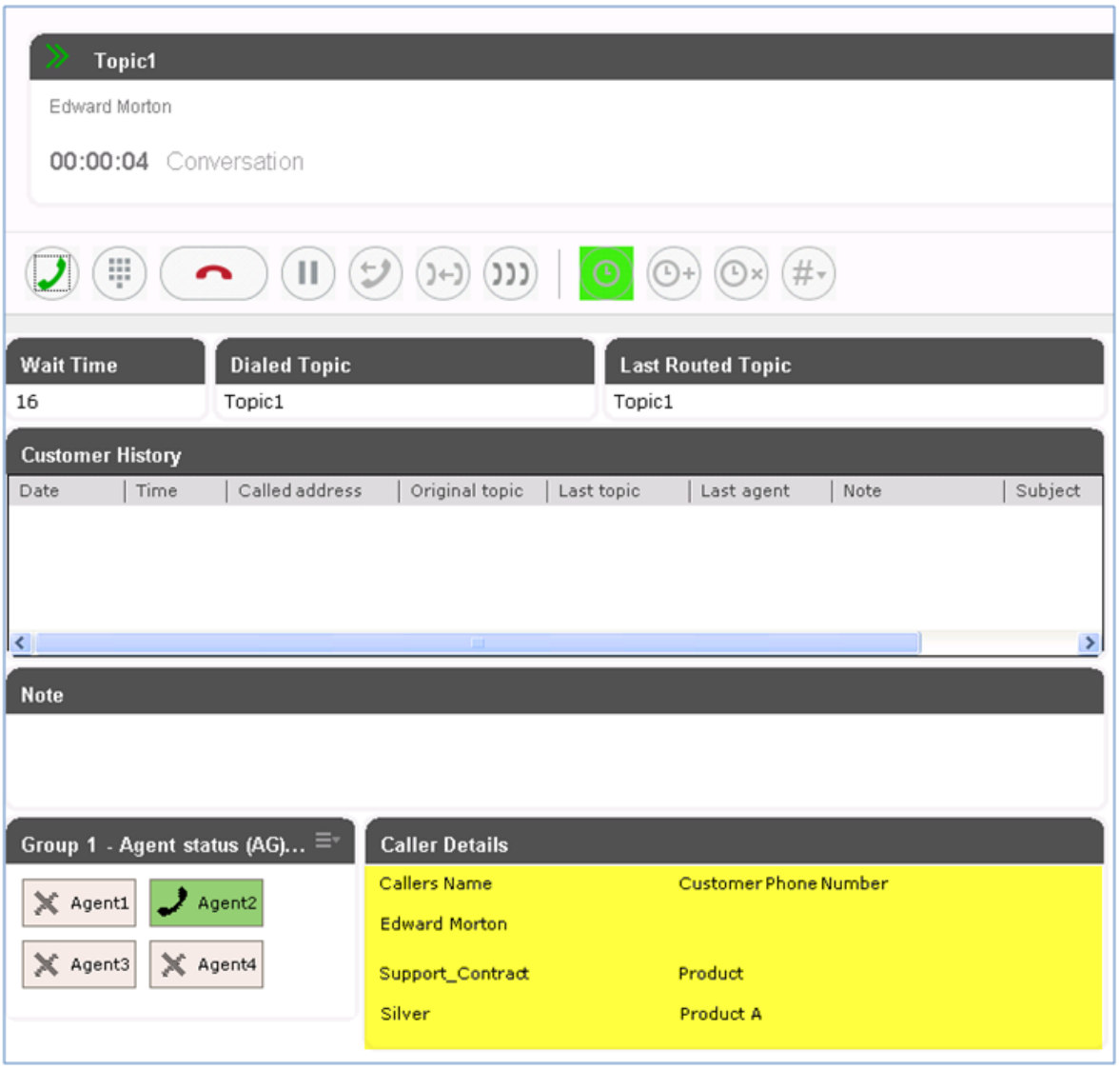
User Interface Scenario 1 - Call presented with CLID and the customer's record is contained within the database



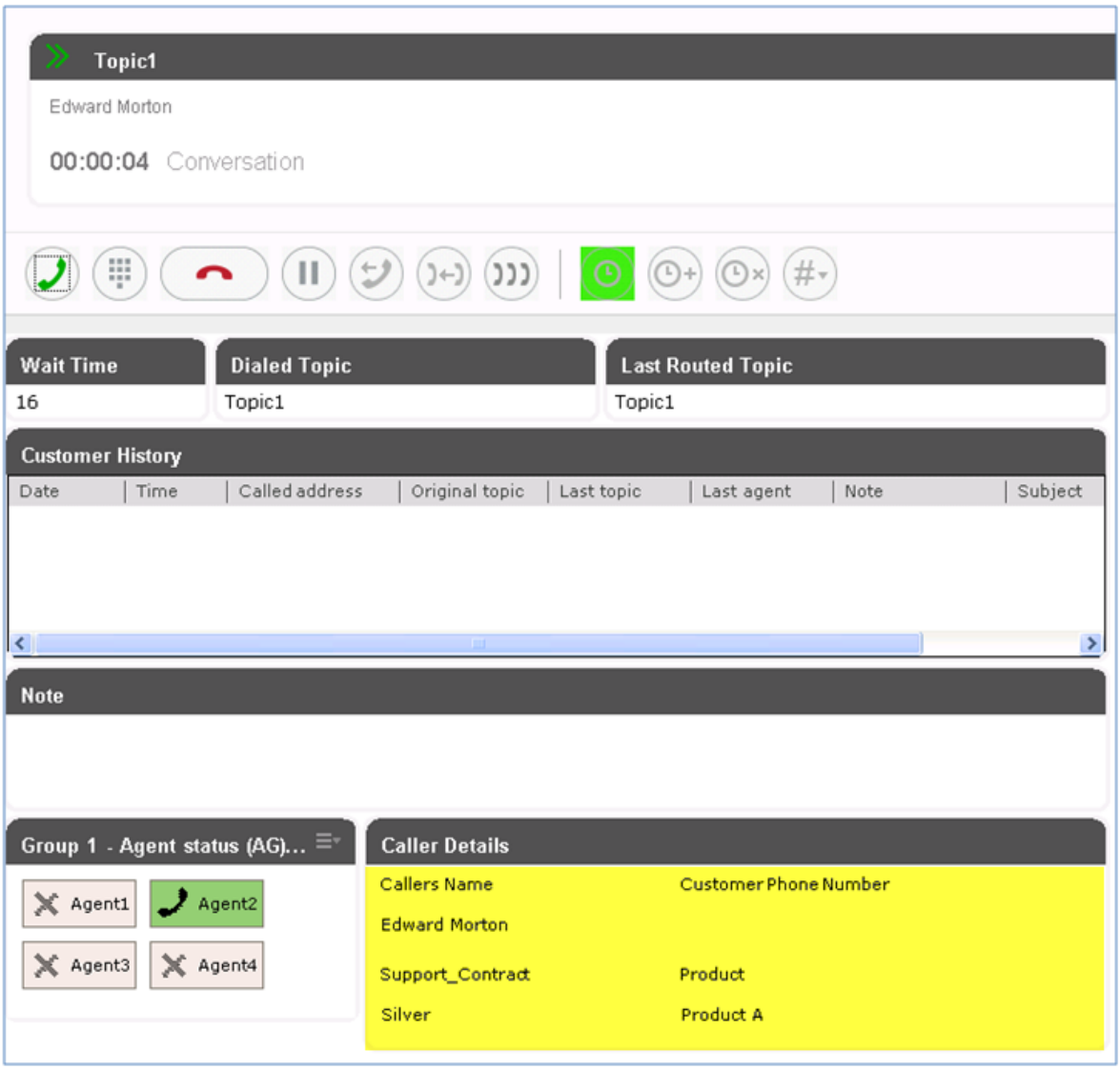
User Interface Scenario 2 - Call presented with CLID, there is no customer record but the customer does have a support contract



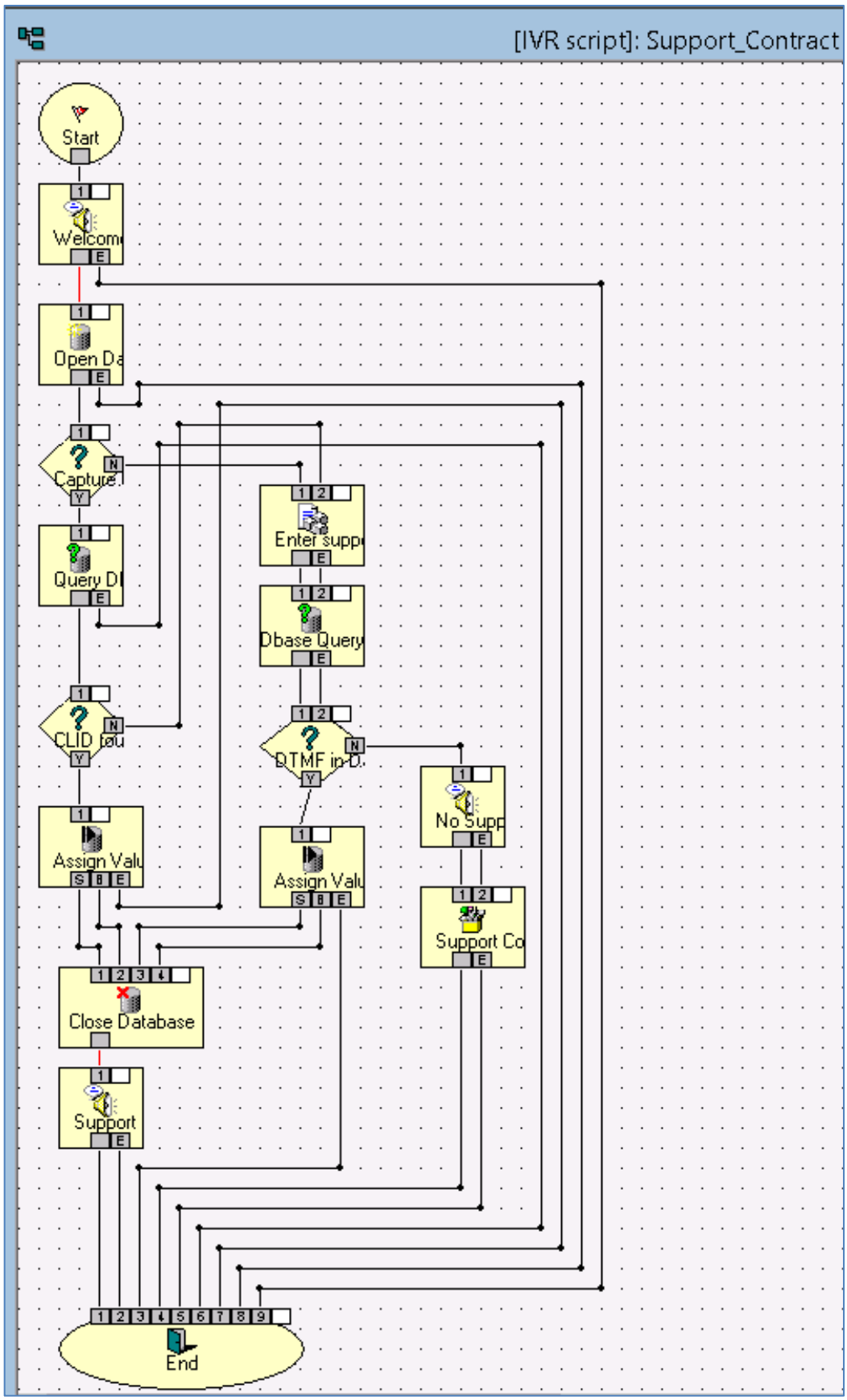
User Interface Scenario 3 - Call presented without CLID but the support contract number is contained within the database



User Interface Scenario 4 - Call presented without CLID and the support contract number is not contained within the database



IVR Design


[IVR script]: Support_Contract
Start
Welcom
Open Da
Capture
Query D
CLID fou
Assign Valu
Enter suppo
Dbase Query
DTMF in D
Assign Valu
No Supp
Support Co
Close Database
Support
End

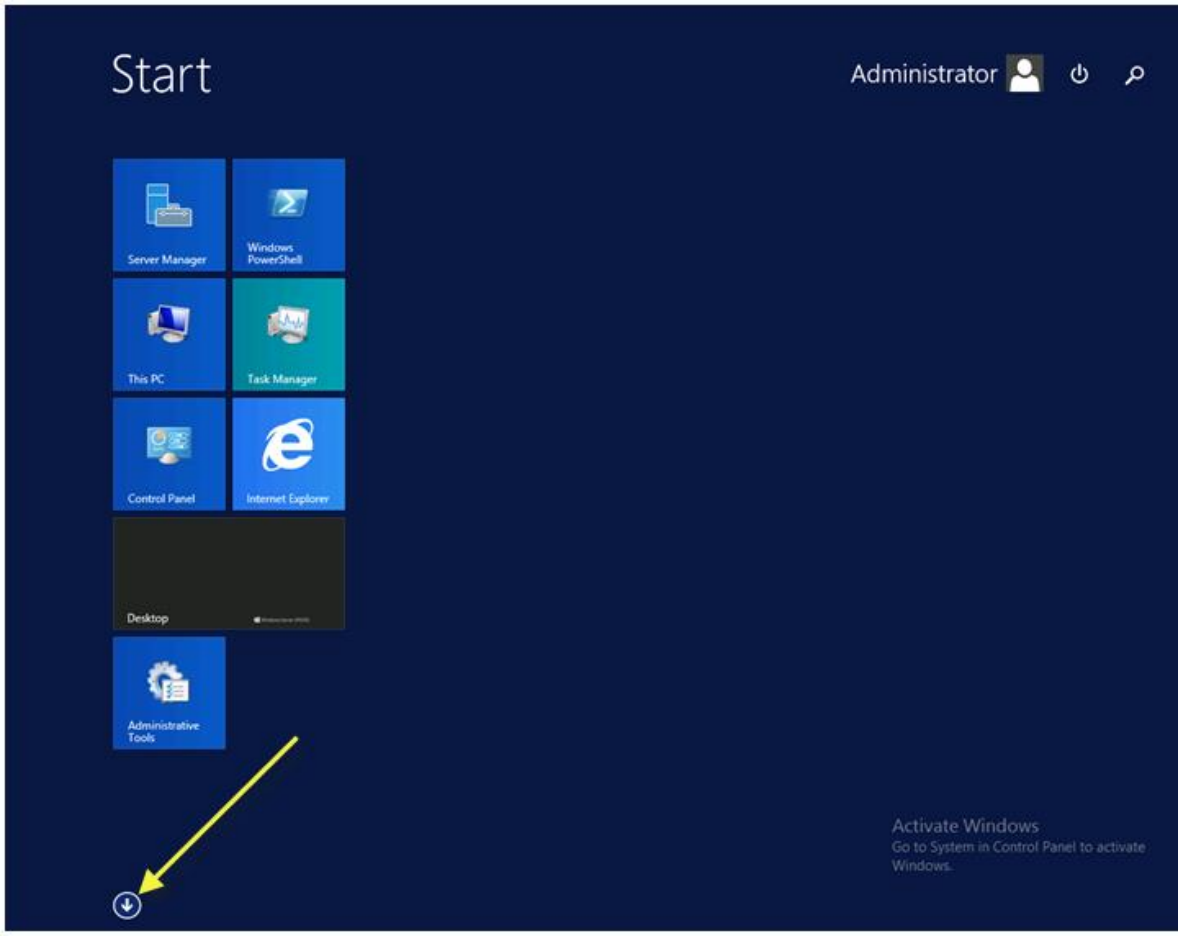
In the following example, it assumed that the database has already been created and contains the required ‘support’ records. A Windows 2012 server has been utilized for illustrative purposes.

The following settings are required for IP Office Contact Centre access to an existing database.

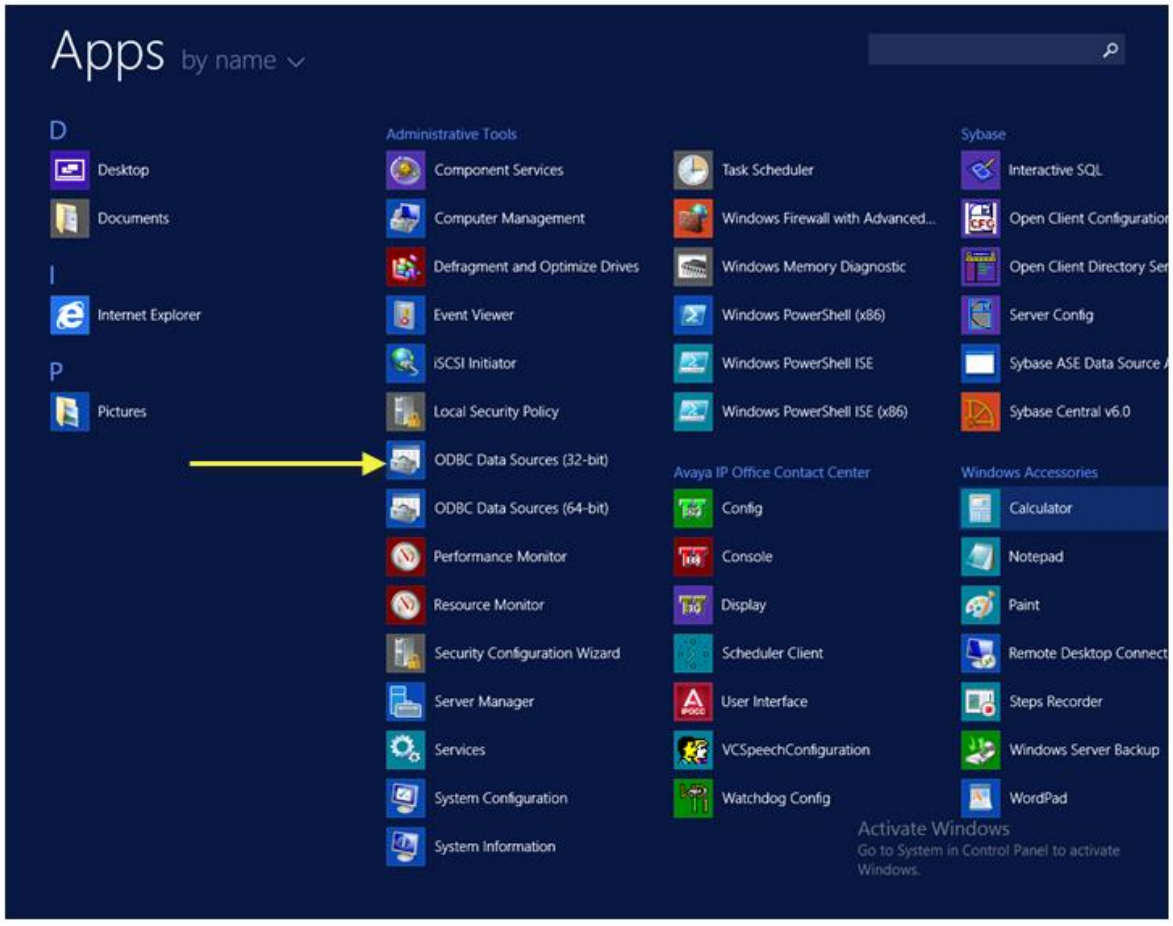
Creating a ODBC Data Source in the IP Office Contact Centre server’s Customer Database

1. Firstly we have to create an ODBC Data Source to the customers Database on the IP Office Contact Centre server. Remotely connect to the IP Office Contact Centre Server.

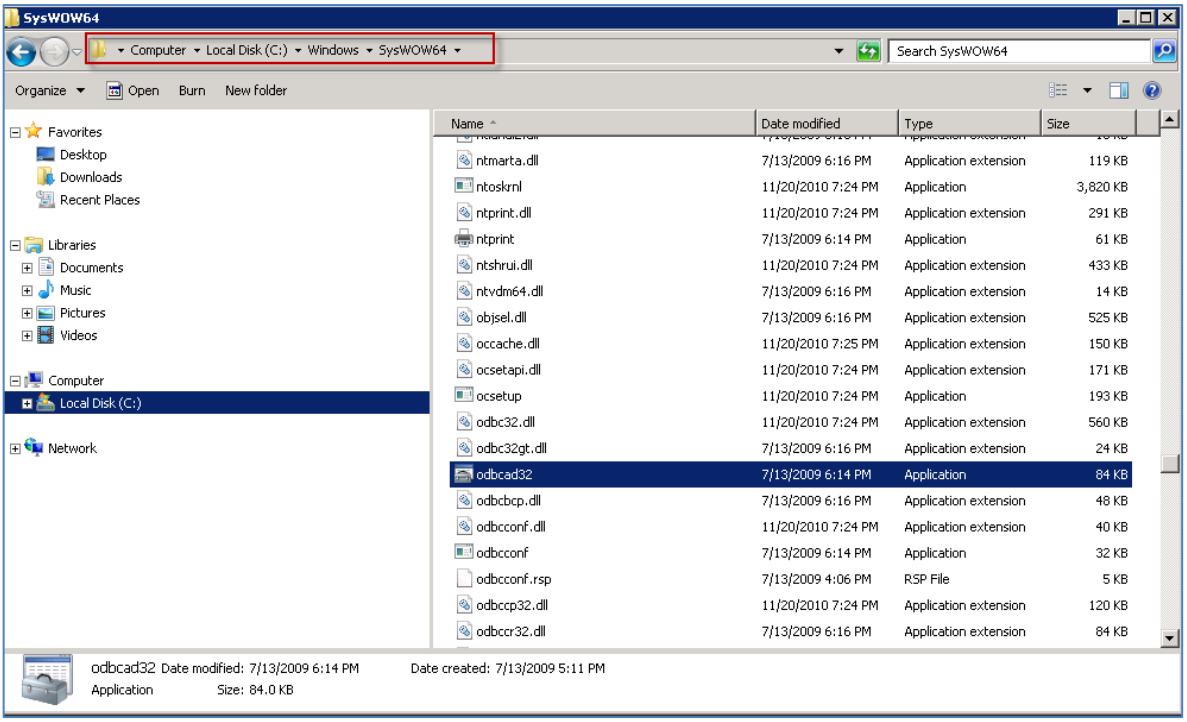
2. Select the down arrow to show the Apps



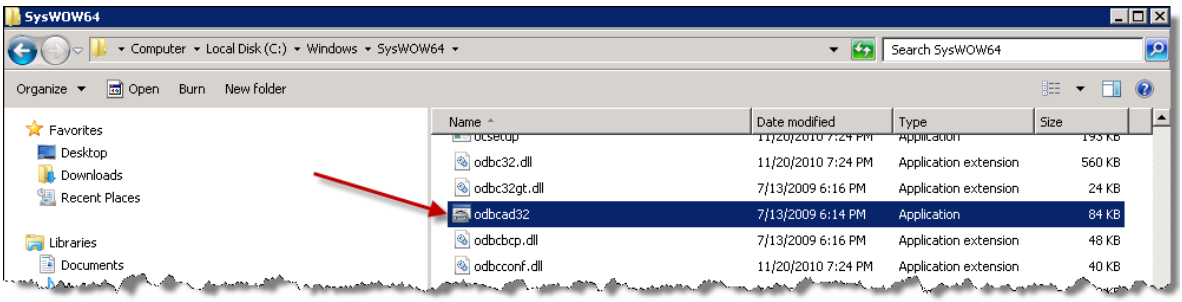
3. Select **ODBC Data Sources (32BIT)** under **Administrative Tools**



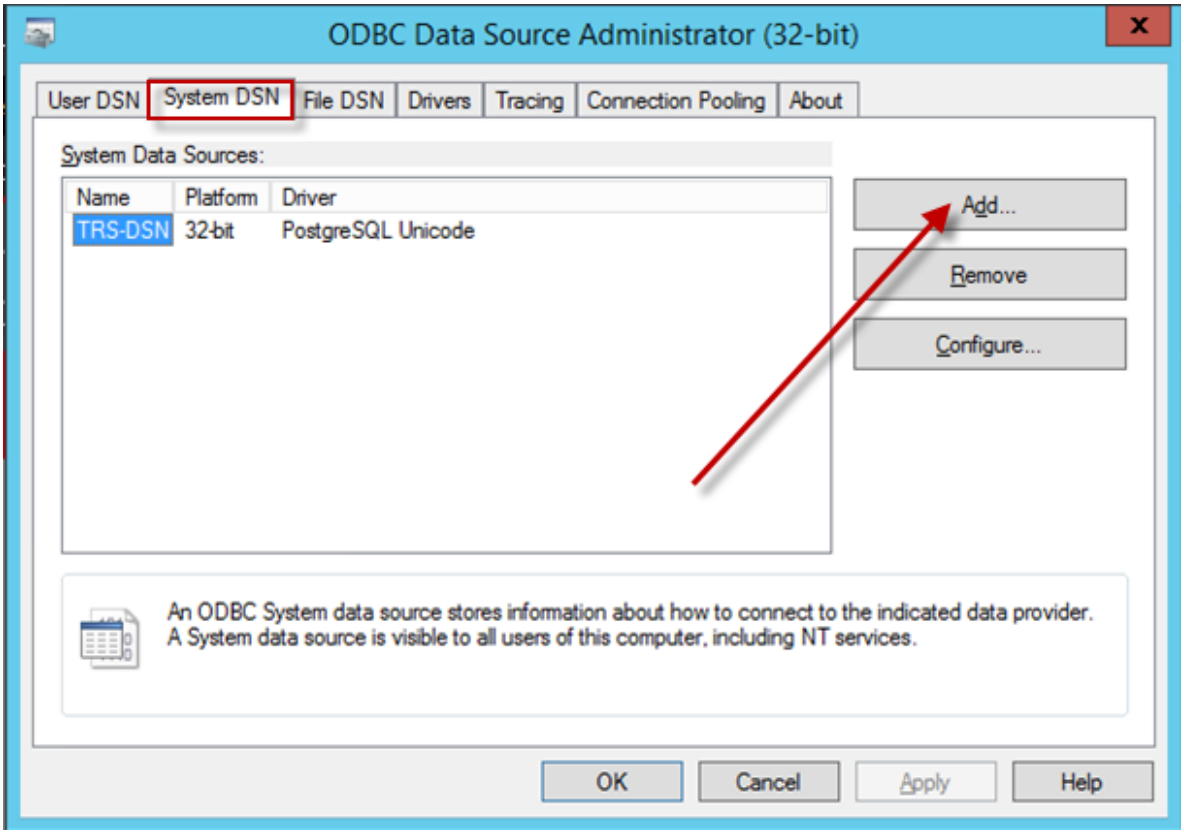
When using a Windows 2008, server navigate to **Computer>Local Disk (c:) >Windows>SysWOW64**



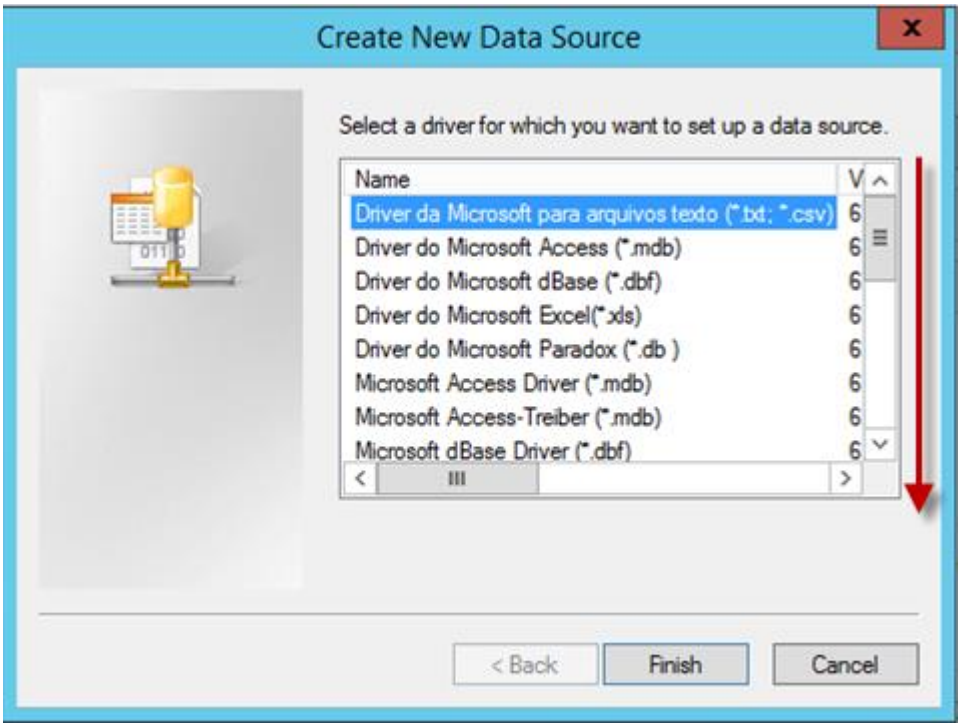
Double left click on **odbcad32**

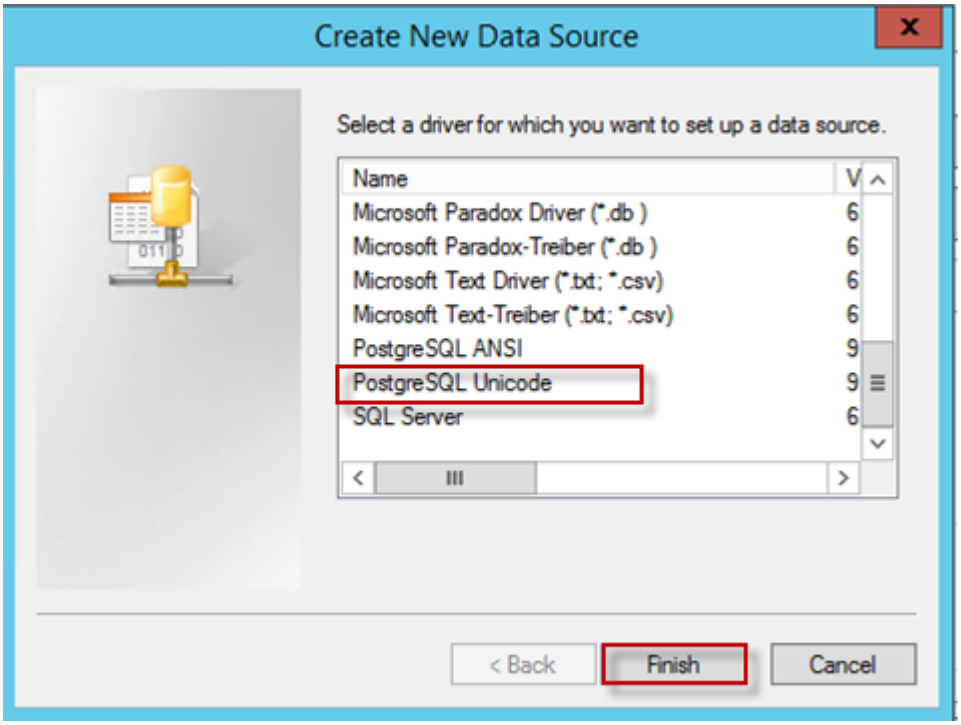


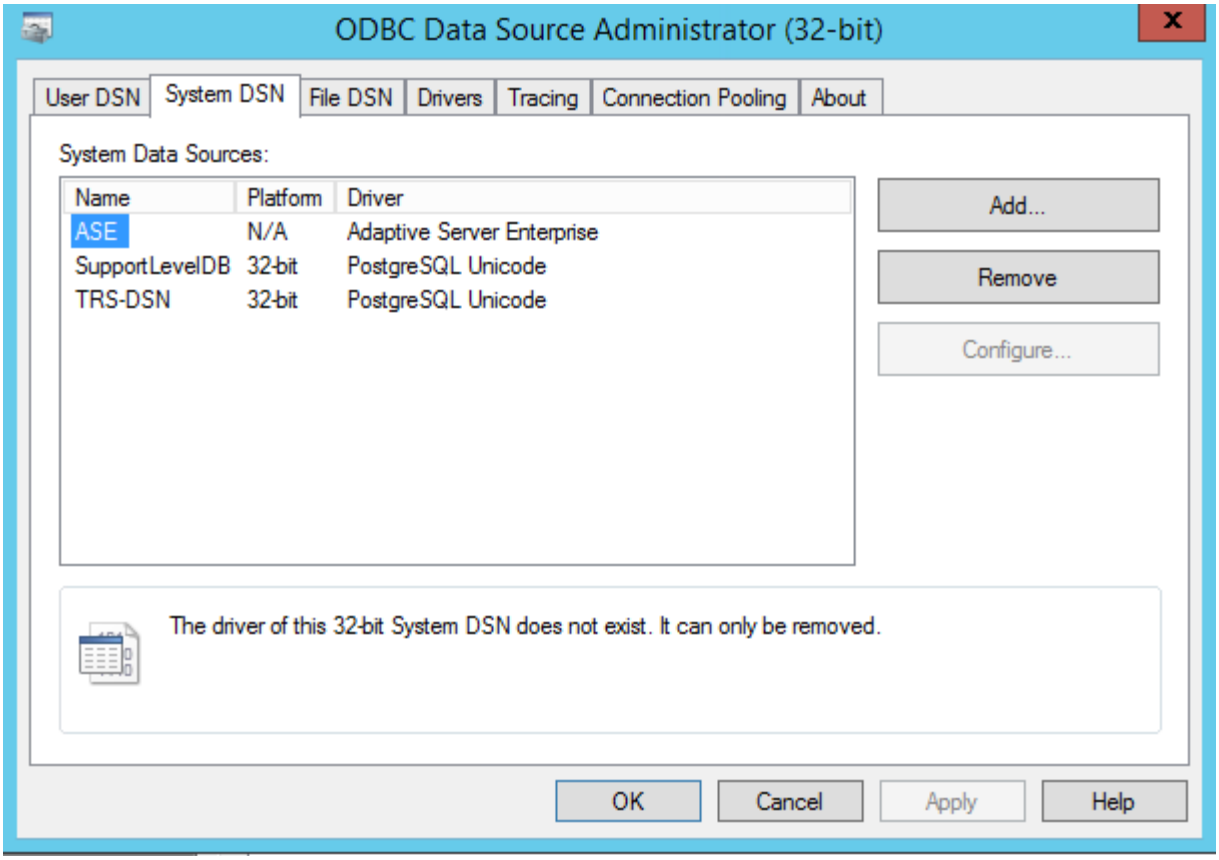
4. When the **ODBC Data Source Administrator** page opens select **System DSN** and then select the **Add..** button



5. Scroll to find your database type, this this case we will select **PostgreSQL Unicode** and the click **Finish**.

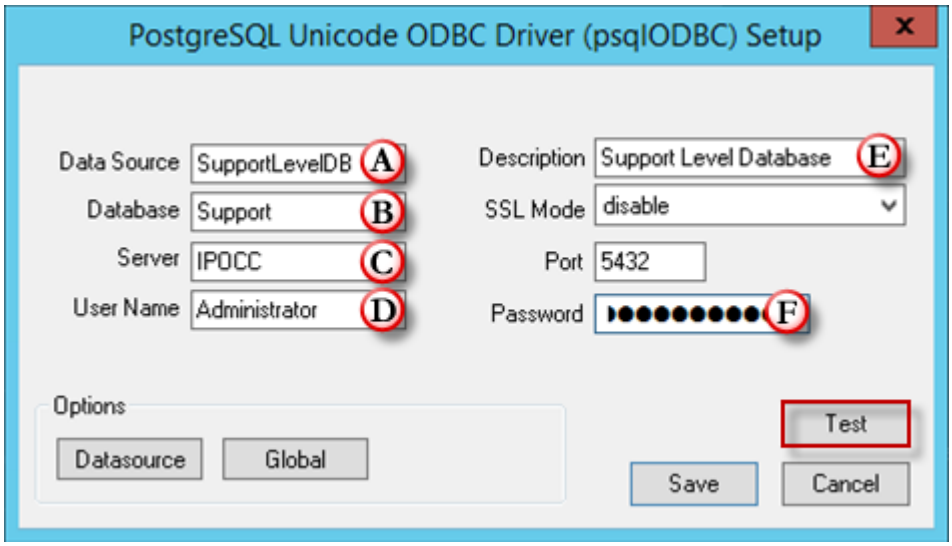




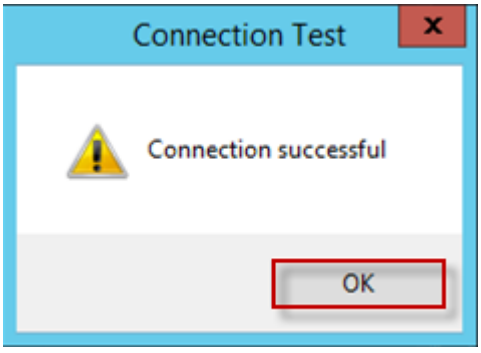


Note: In this example, the PostgreSQL Database on the IPOCC Server is used as the customer database. Other database types installed on other computers can also be used for example, Microsoft SQL Server. In such instances the required ODBC driver must be installed before creating the ODBC DSN.

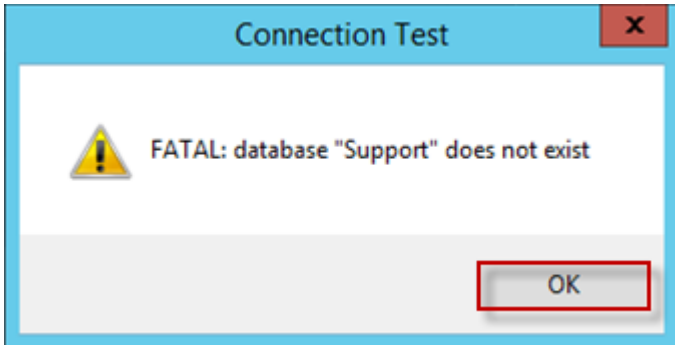
6. Fill out the connection details of the Customers Database, and then click the **Test** tab.
    A. Data Source (Used in IPOCC to link to the database)
    B. Database (Name of the database on the Server)
    C. Server (Host name of the Server with the database)
    D. User Name (A User that has access to the Database)
    E. Description
    F. Password (The User password to access the database)



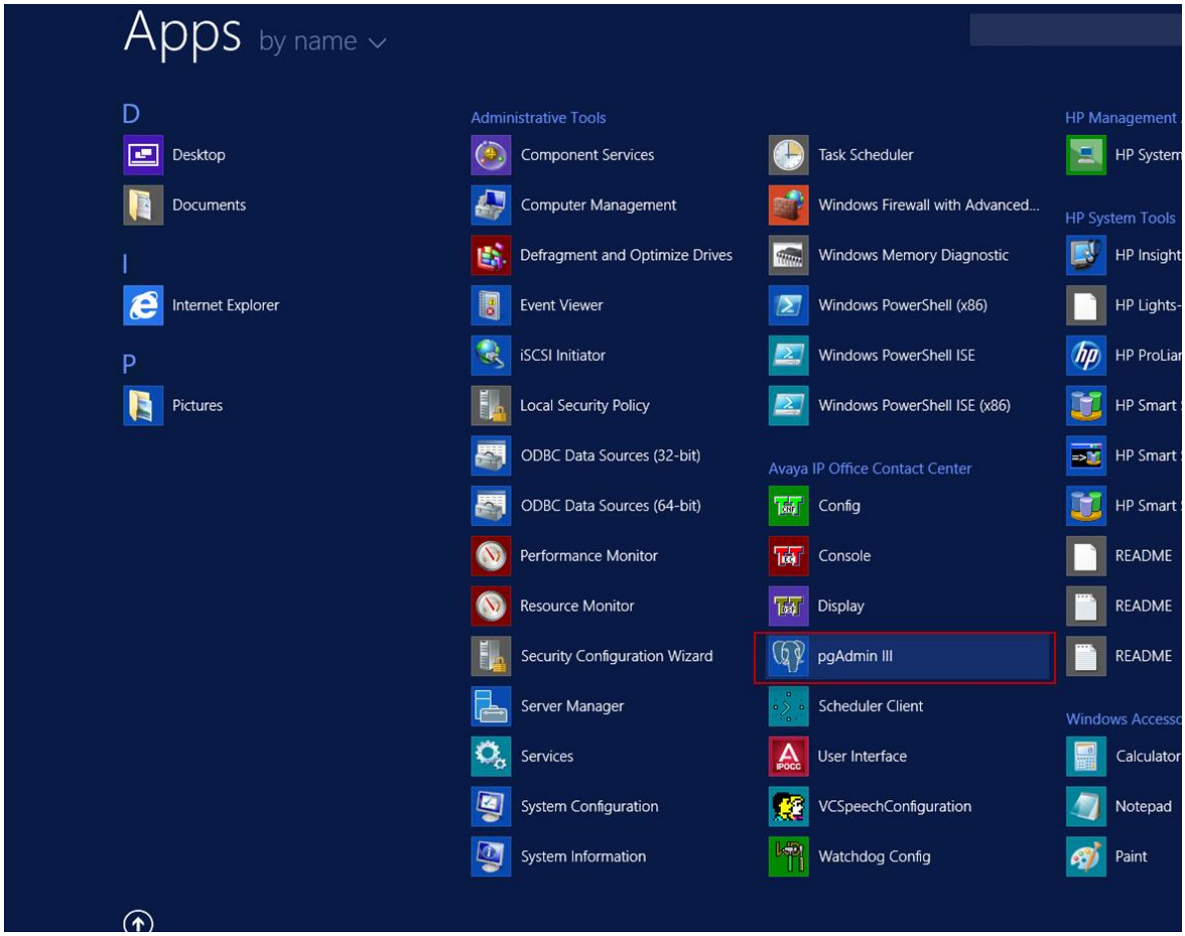
7. When the connection to your database is successful. Choose **OK** to continue. Then go to step **15**.



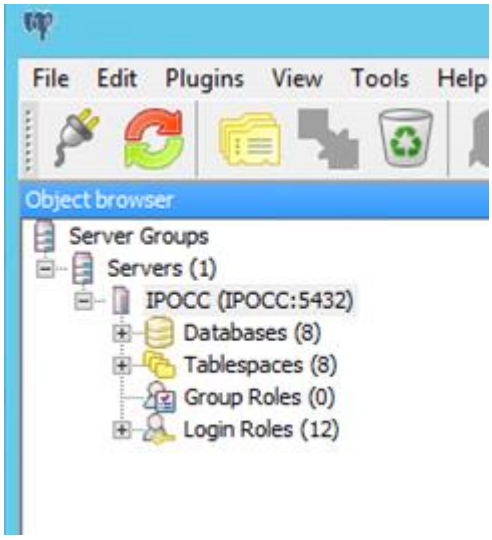
8. If your connection to the database fails. The following steps will help to validate the connection to a postgres database. Choose the **OK** button to clear the warning.



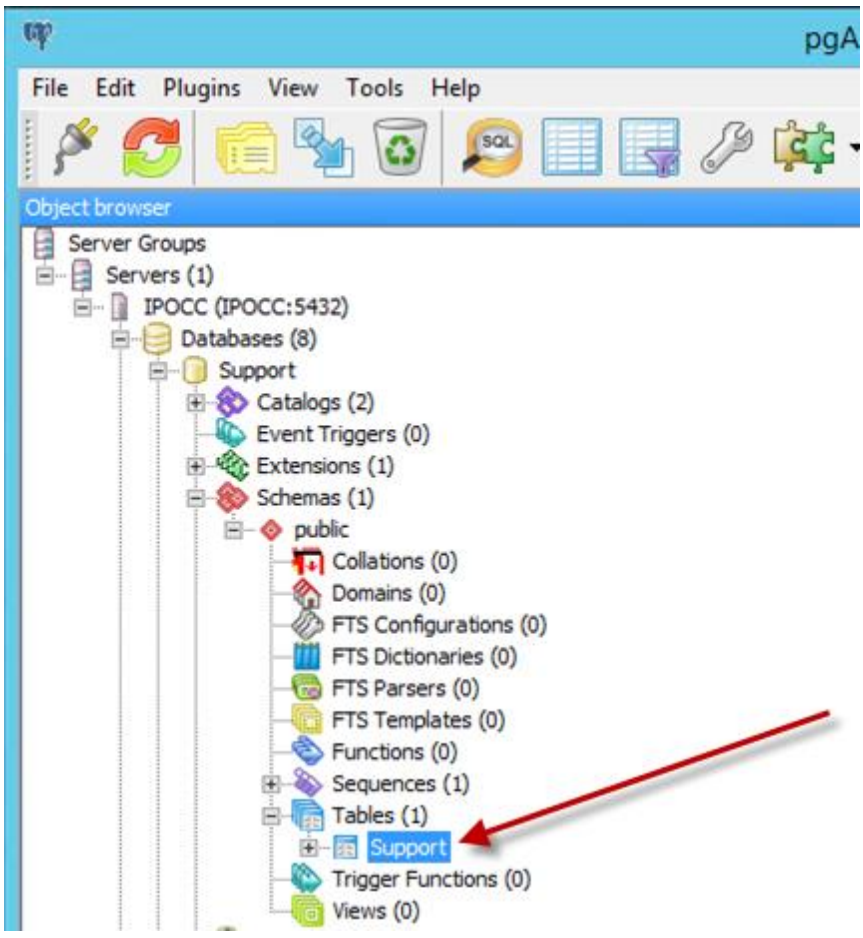
9. .Choose the Windows icon and select the down arrow. Then choose **pgAdminIII**.



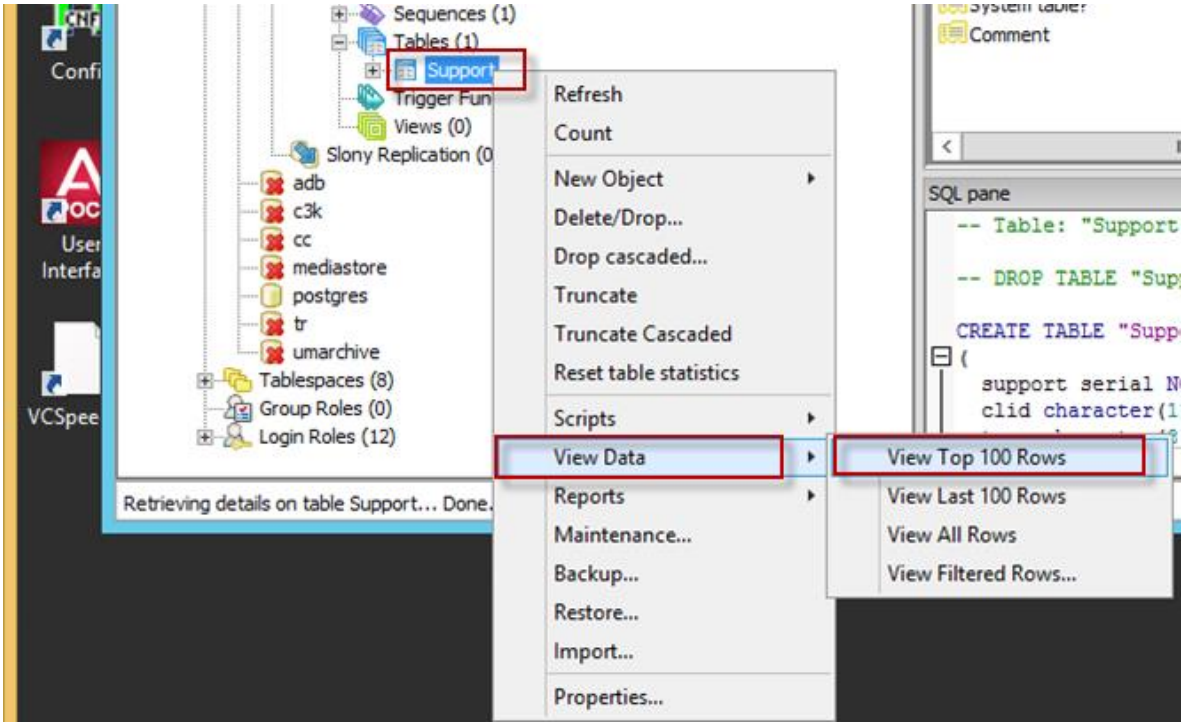
10. In this example where we are using the postgres server on the IPOCC server, we will not need connection details if you are already logged in with an Administrators account.



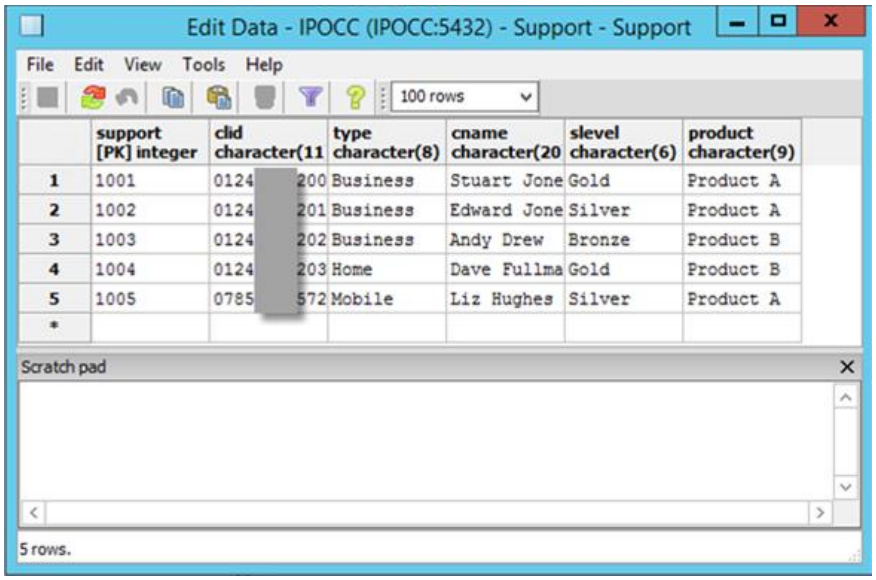
11. Open Databases and check that the database table being used can be seen.



12. Using the RMB on the table choose **View Data** and then select the **View Top 100 Rows**.

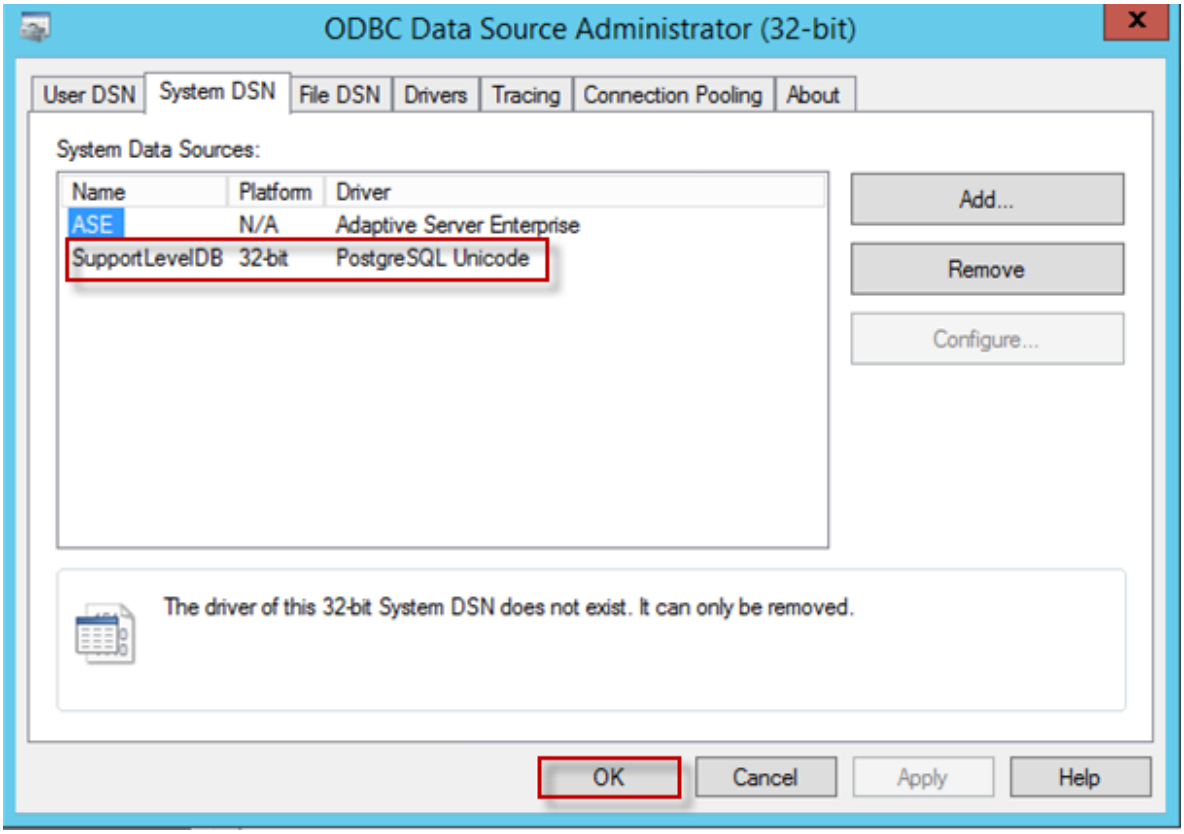


13. The top 100 rows should now be seen.

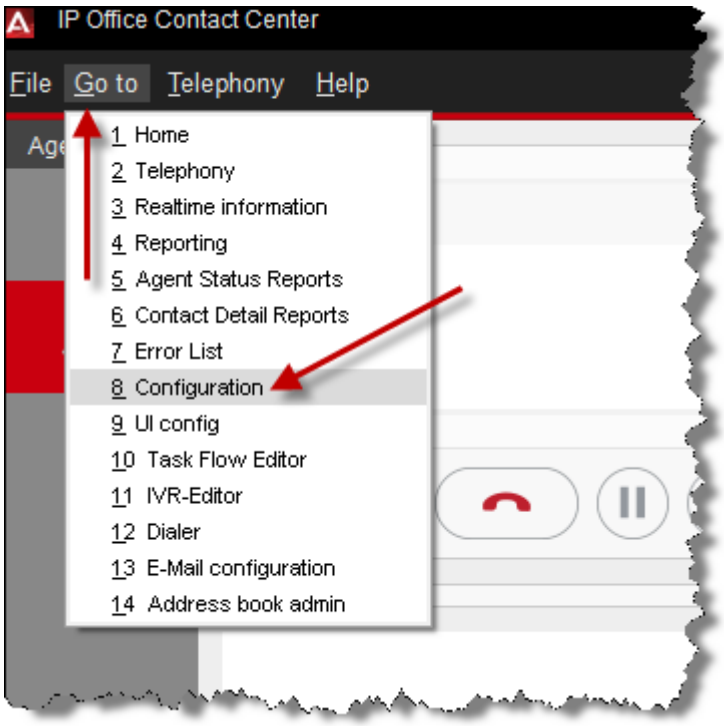


14. .Closed **pgAdminIII** and continue with the connection.

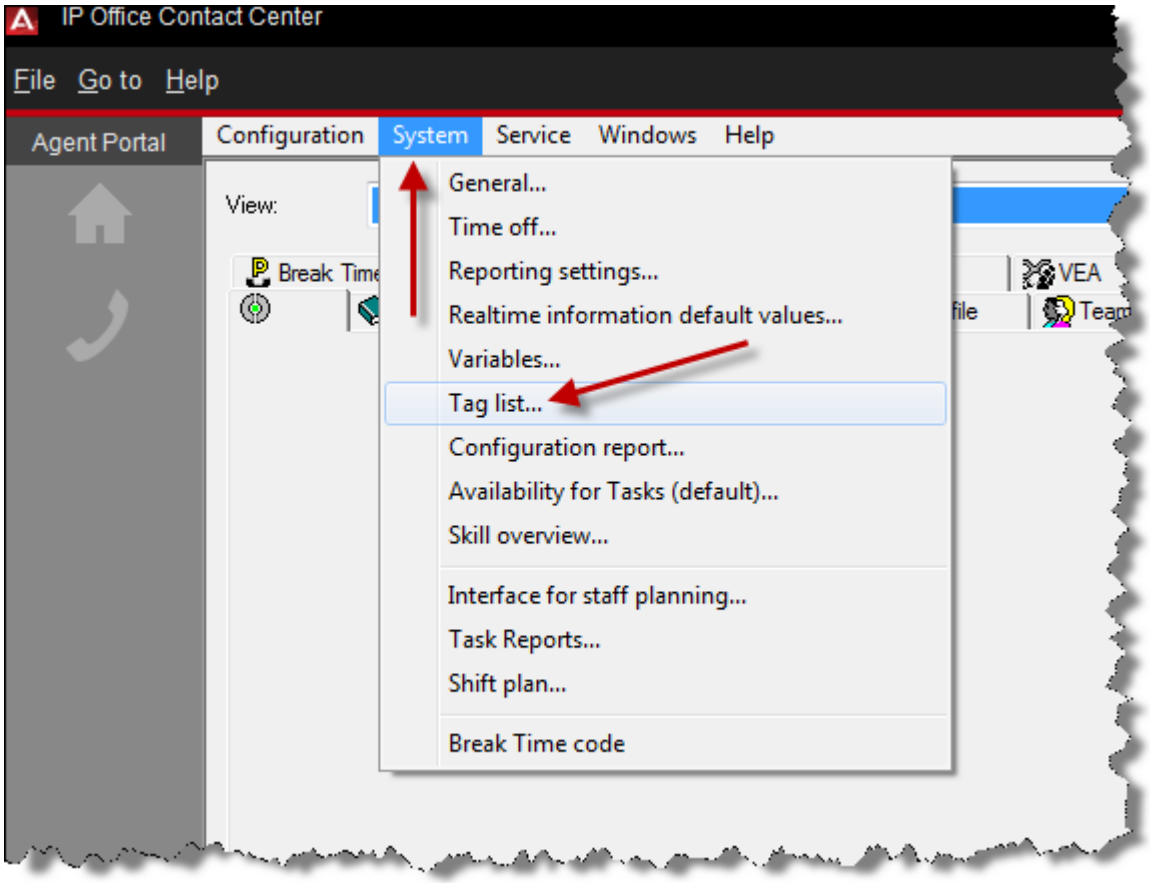
15. Your new ODBC Data Source has now been added. Click the **OK** button to close the ODBC Data Source window.



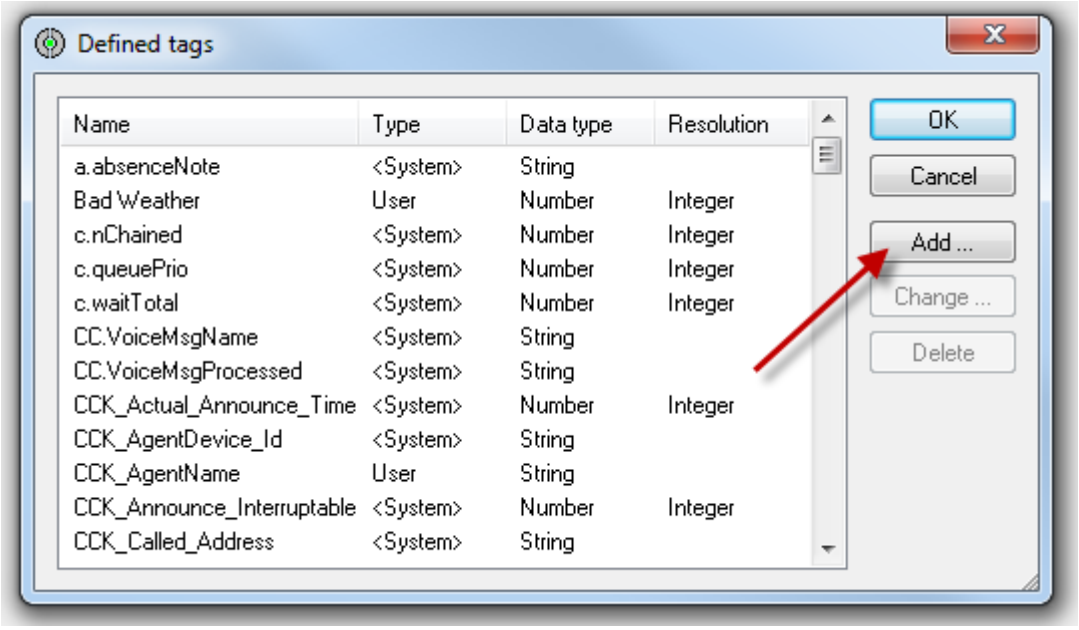
16. We will now create system Tags and Variables that will be referenced whilst configuring the IVR script. Open the IP Office Contact center software and login with Administrator access. Select **Goto** followed by **Configuration**.



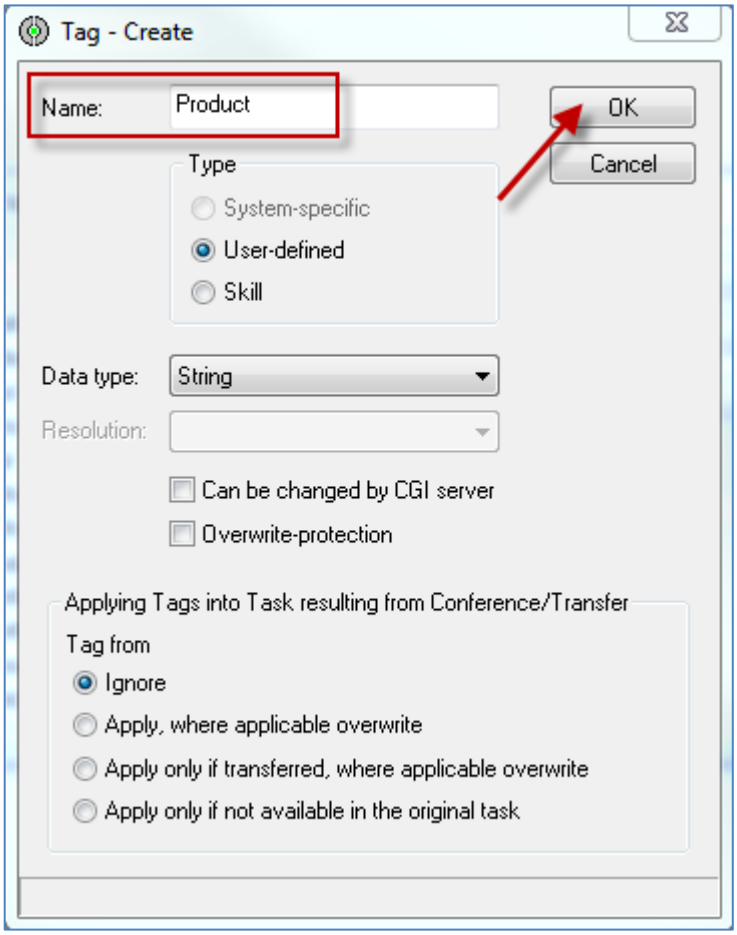
17. Click **System** and click **Tag list**.



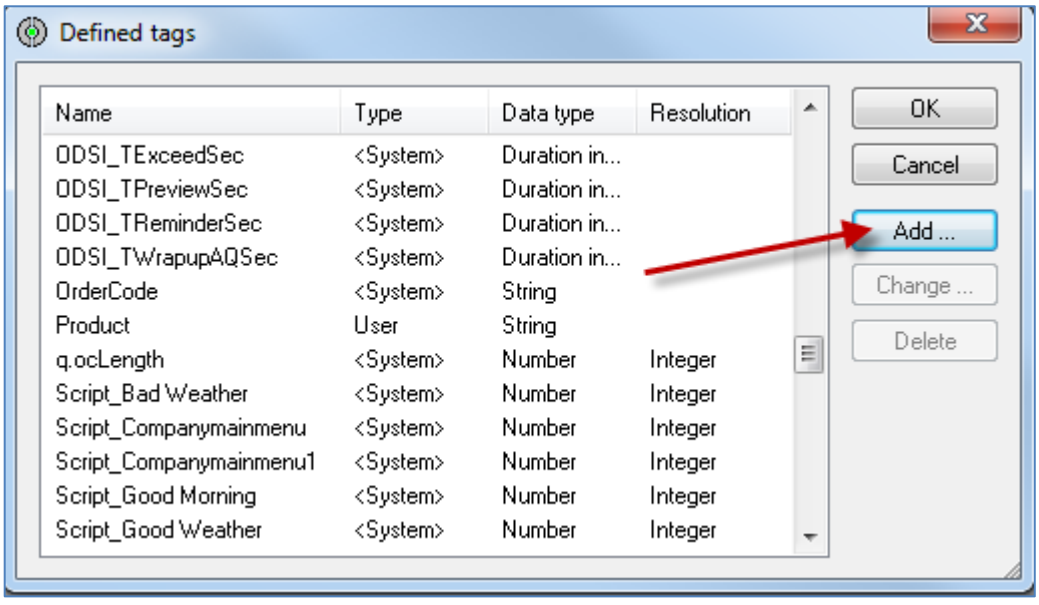
18. Click the **Add …** button.



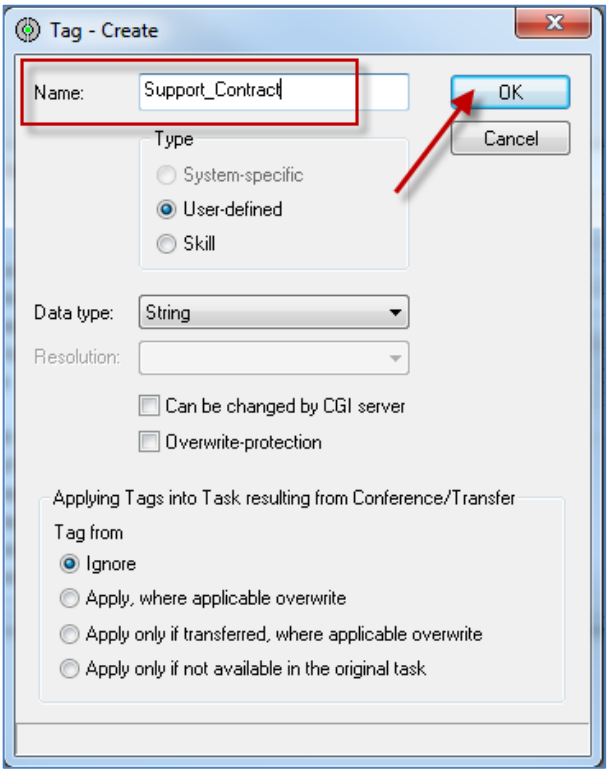
19. Enter a name to identify the tag. In this example, the tag will reference the product previously purchased by the customer, therefore the name “Product” has been entered. Click the **OK** button.



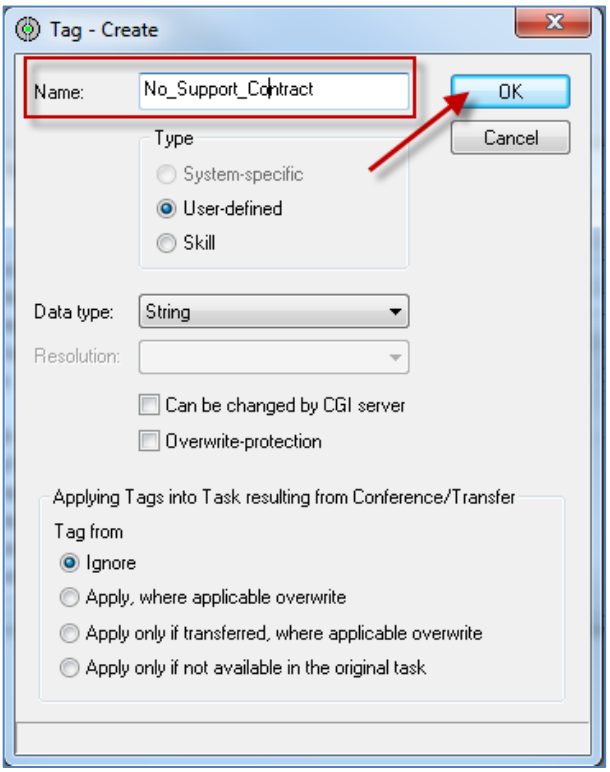
20. Click the **Add …** button.



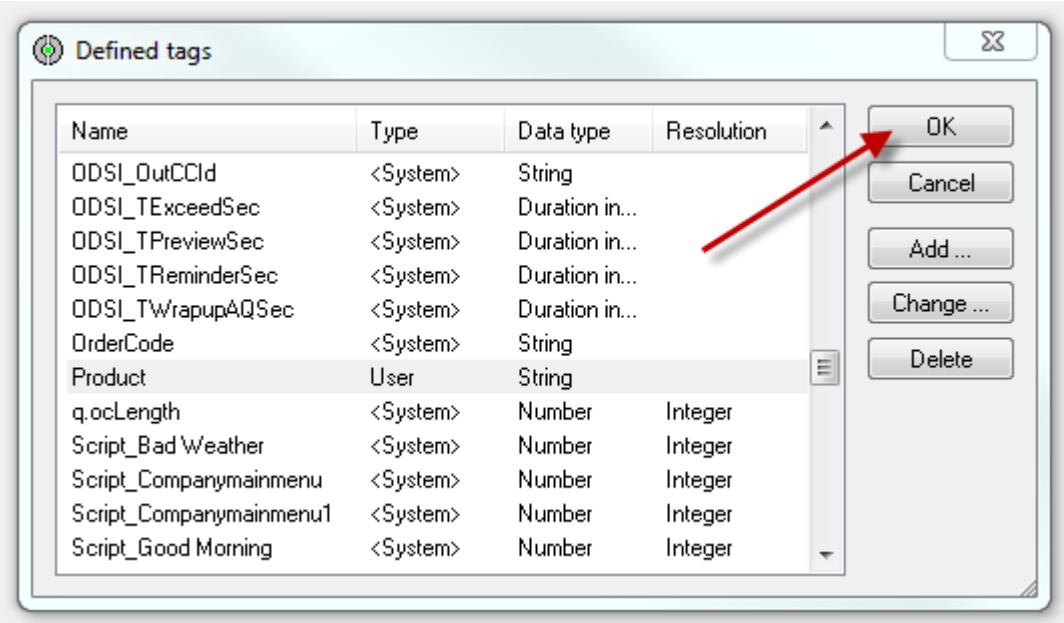
21. Create a tag for **Support_Contract** then click the **OK** button.



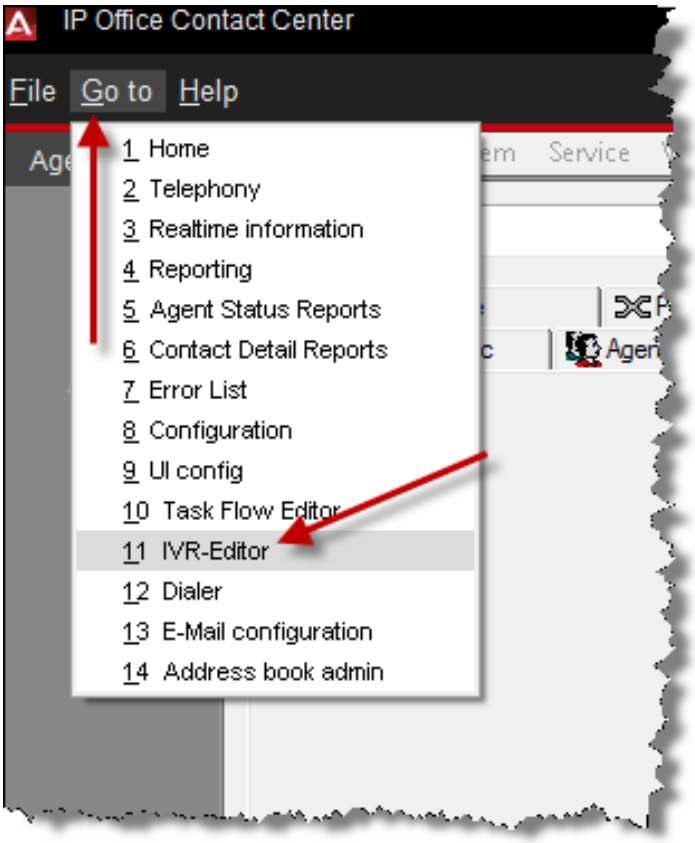
22. Click the **Add …** button again and create a tag for **No_Support_Contract**



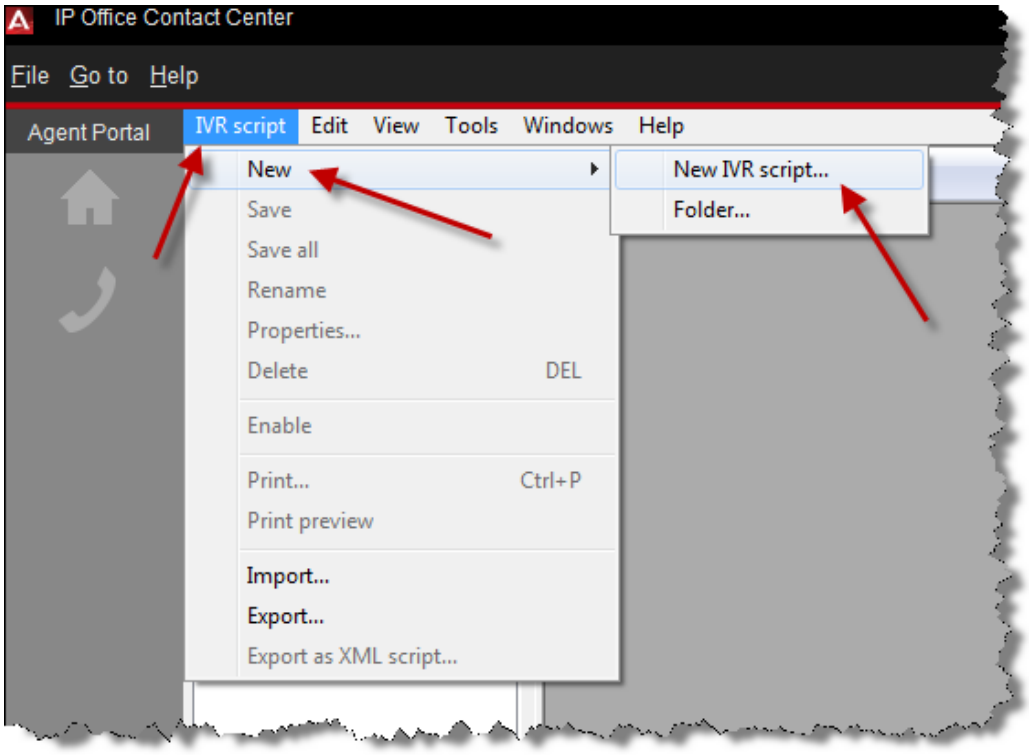
23. With the three tags created, select the **OK** button.



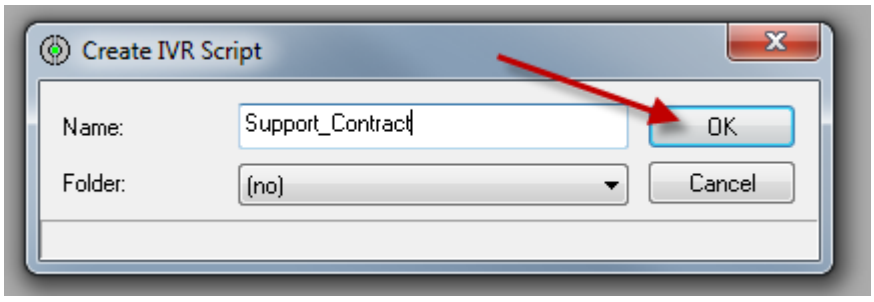
24. We will now create the required IVR script. From the **Goto** menu click **IVR-Editor.**



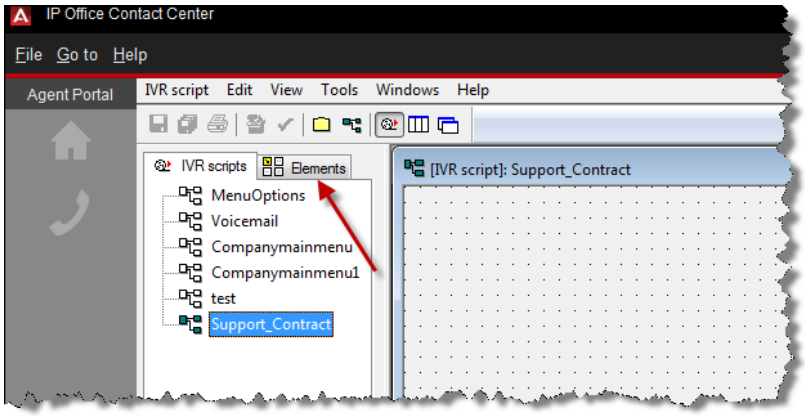
25. Select **IVR script** and then select the **New** option and then select **New IVR script**.



26. Enter the Name **Support_Contract** and click the **OK** button.



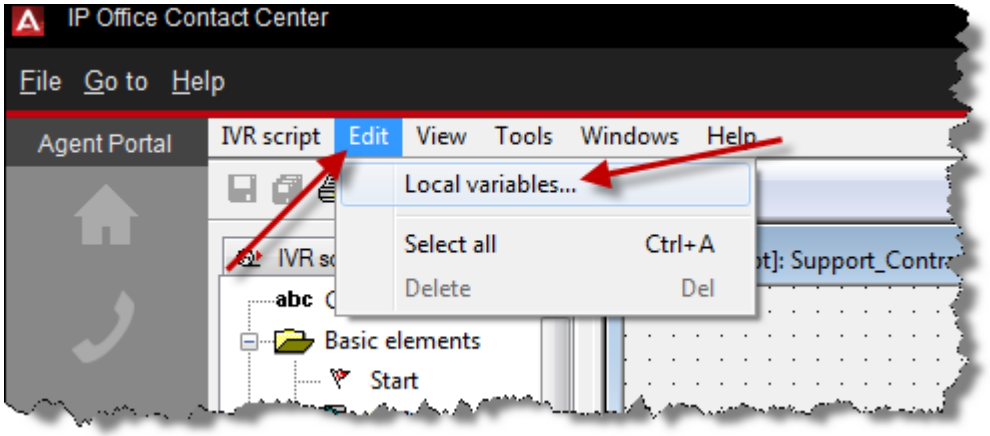
27. Click the **Elements** tab.



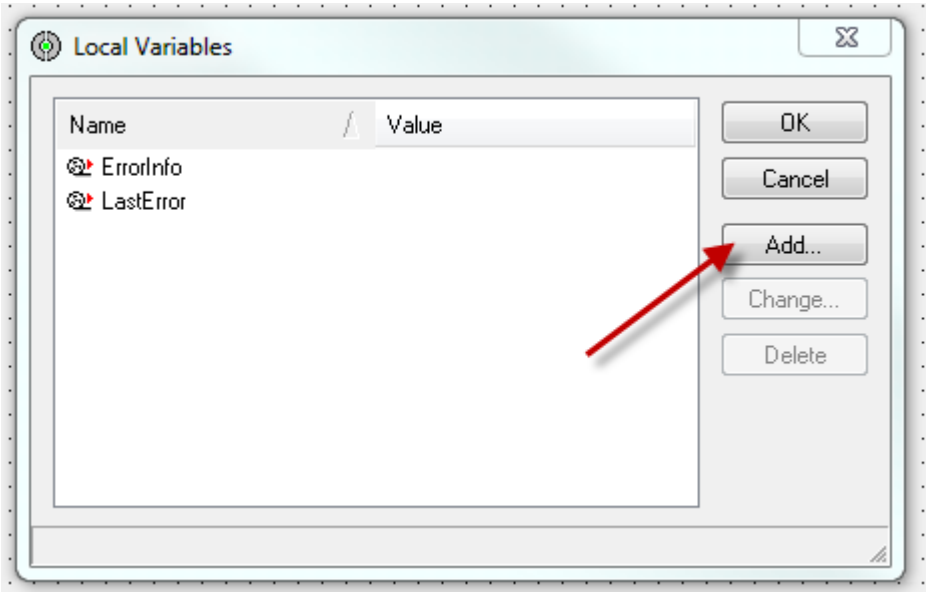
28. Next, add **Local Variables** that the new Call flow will use to record information entered by the customer and that will be used to retrieve information from the database.

Note: Each IVR Script can have its own Local Variables.

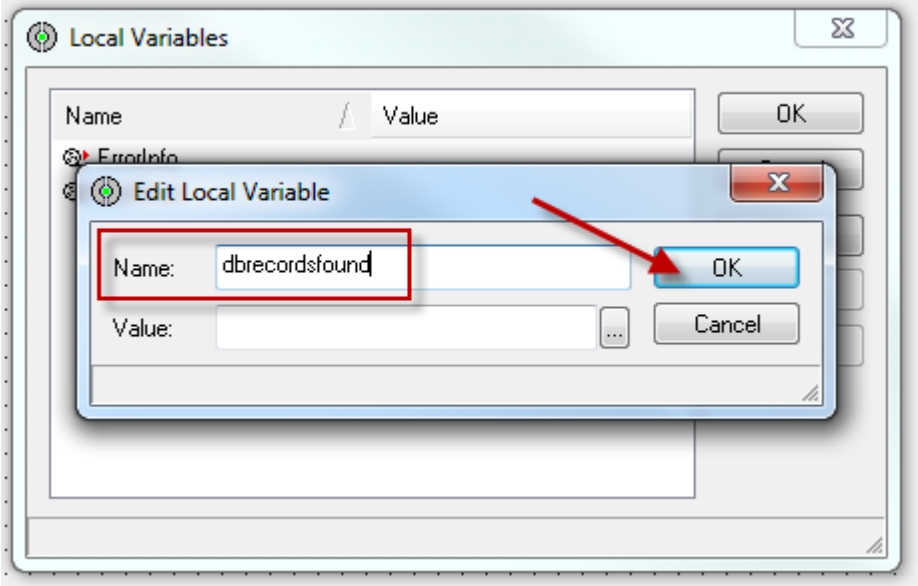
29. Click Edit and select **Local variables**.



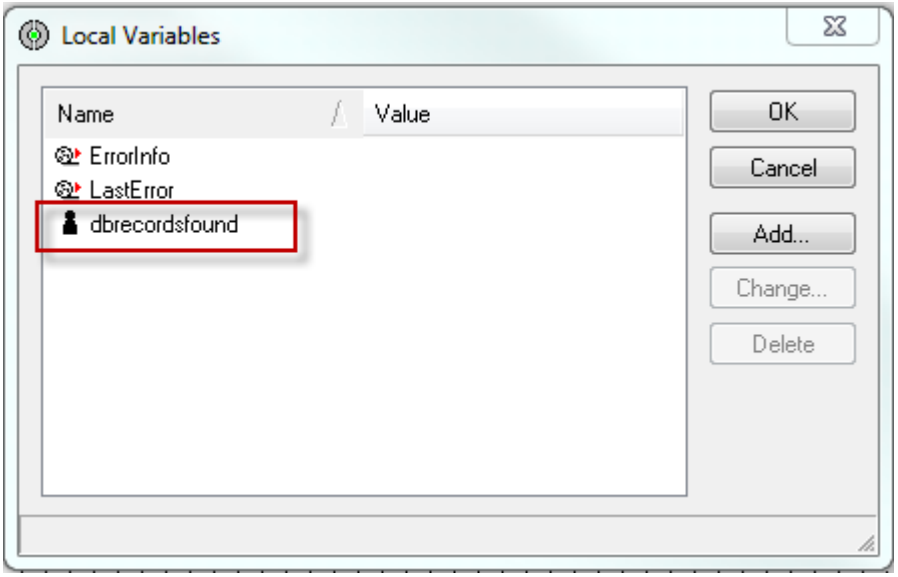
30. The **Local Variables** window is displayed. Click the **Add** button.



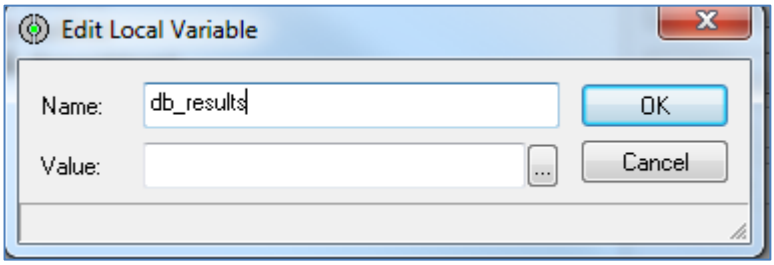
31. Enter the name **dbrecordsfound** and click the **OK** button.

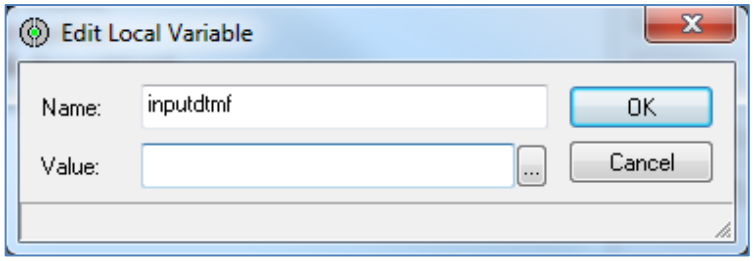


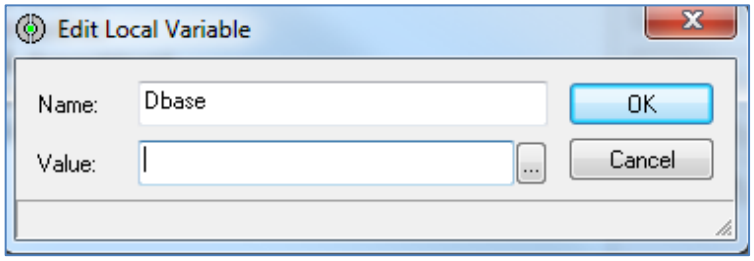
32. The configured Variable is displayed.



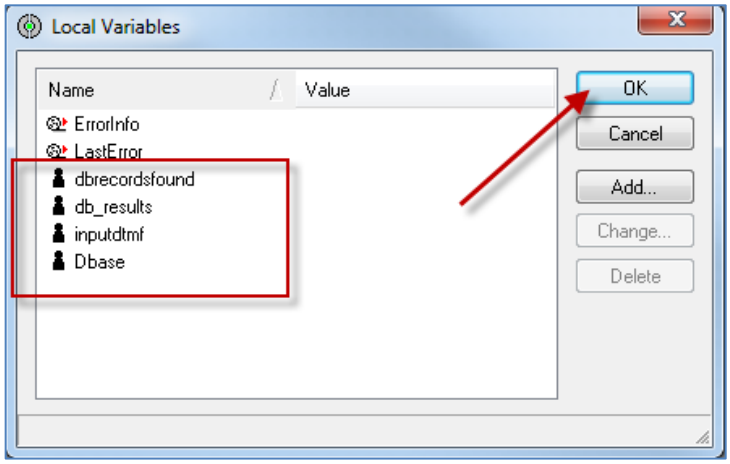
33. Repeat this process to create three more Local Variables for **db_results , inputdtmf** and **dbaseS**



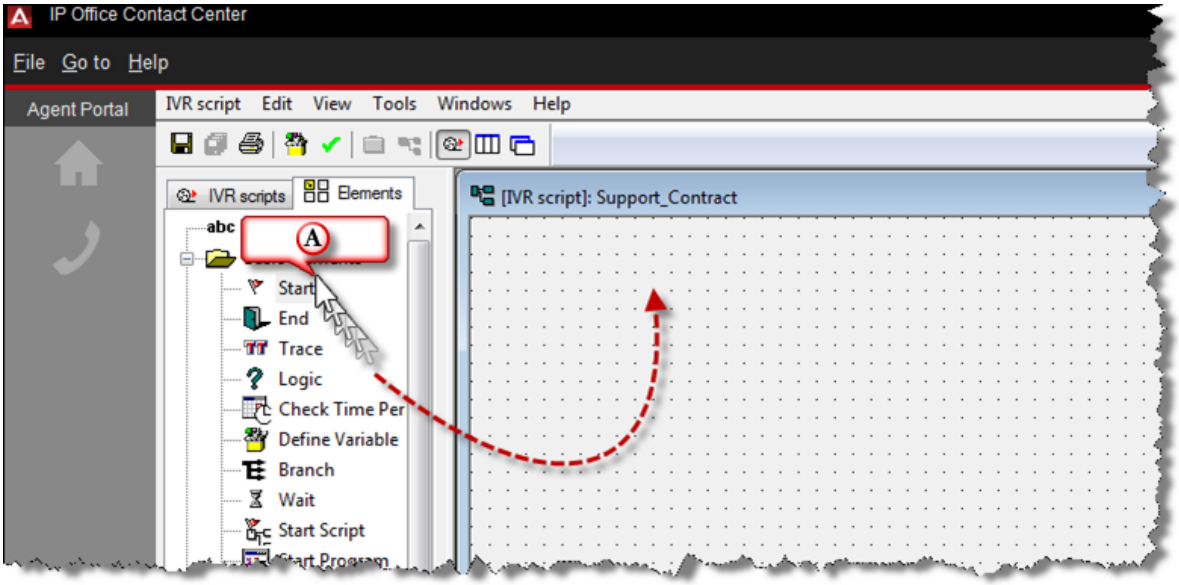




34. Once the three Local Variables have been created, click the **OK** button.

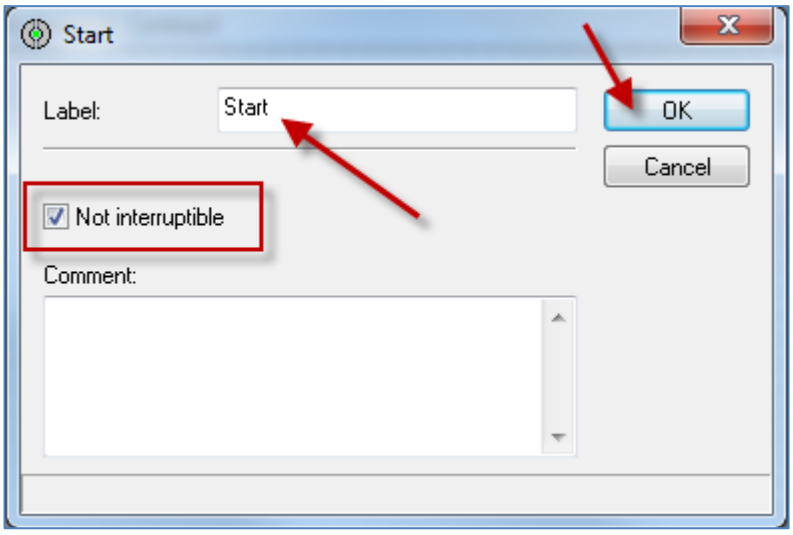


35. The IVR script can now be created. Begin by adding a **Start** element. Drag the **Start** element into the call flow working area.

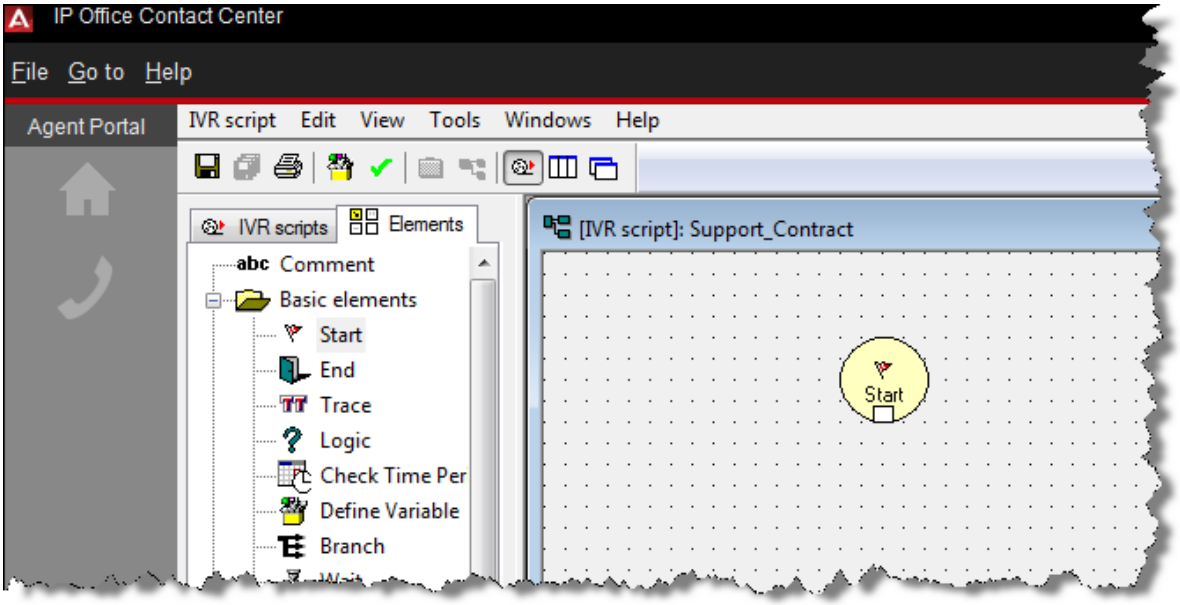


A. Click and drag.

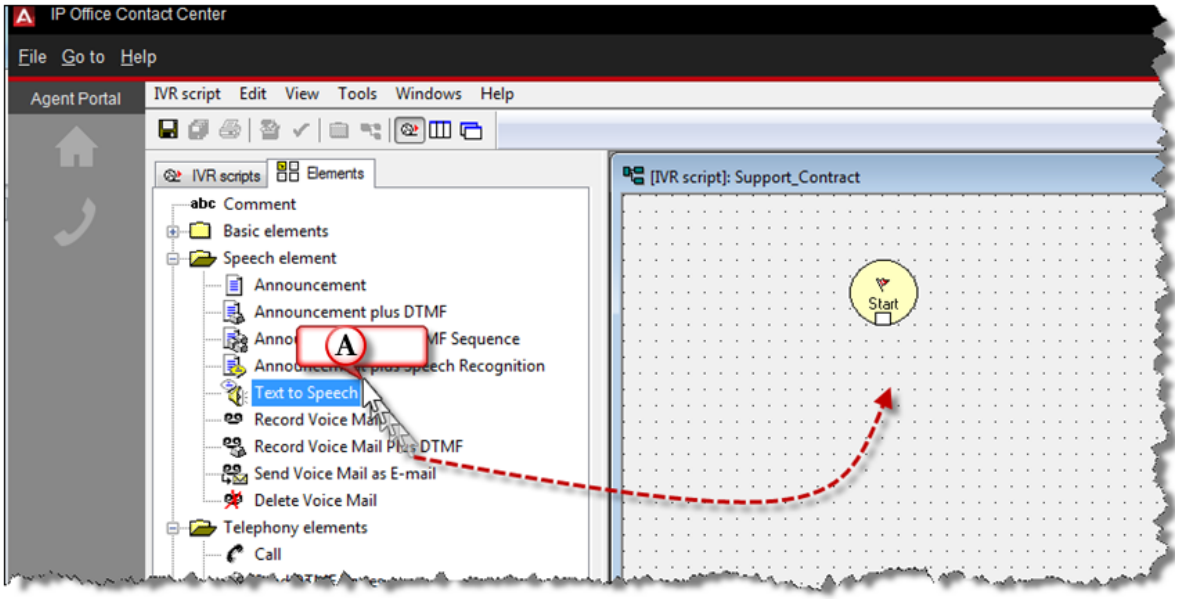
36. Enter the Label **Start** and select **Not interruptible** and then click the **OK** button



37. The configured element is displayed.

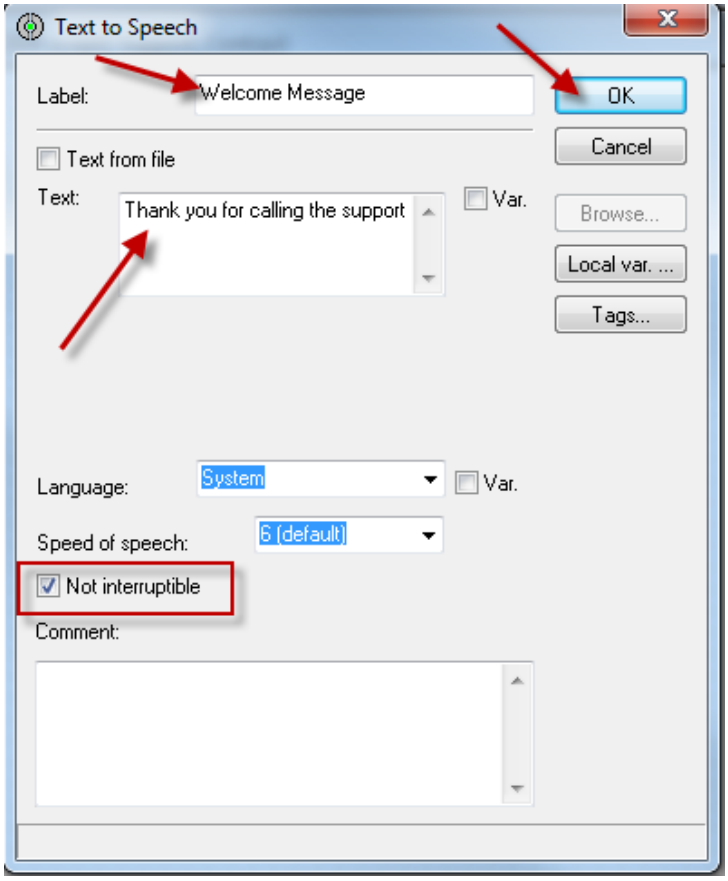


38. In this example, the inbuilt Text To Speech system will be utilized to play messages to the caller. Drag the **Text to Speech** element to the working area.

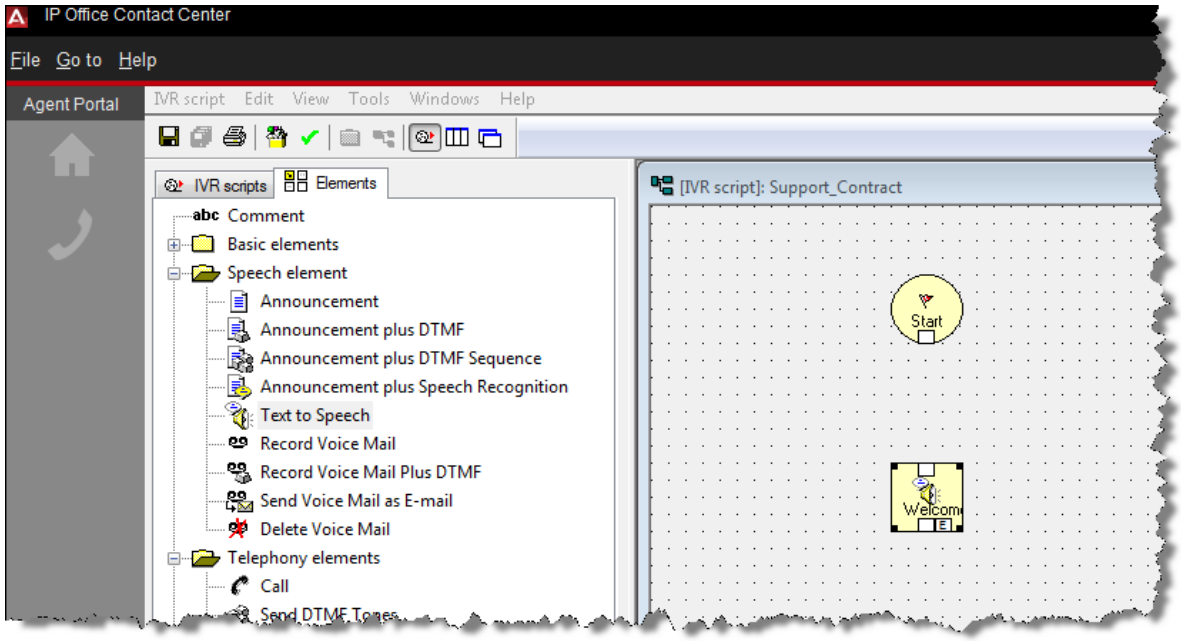


A. Click and drag.

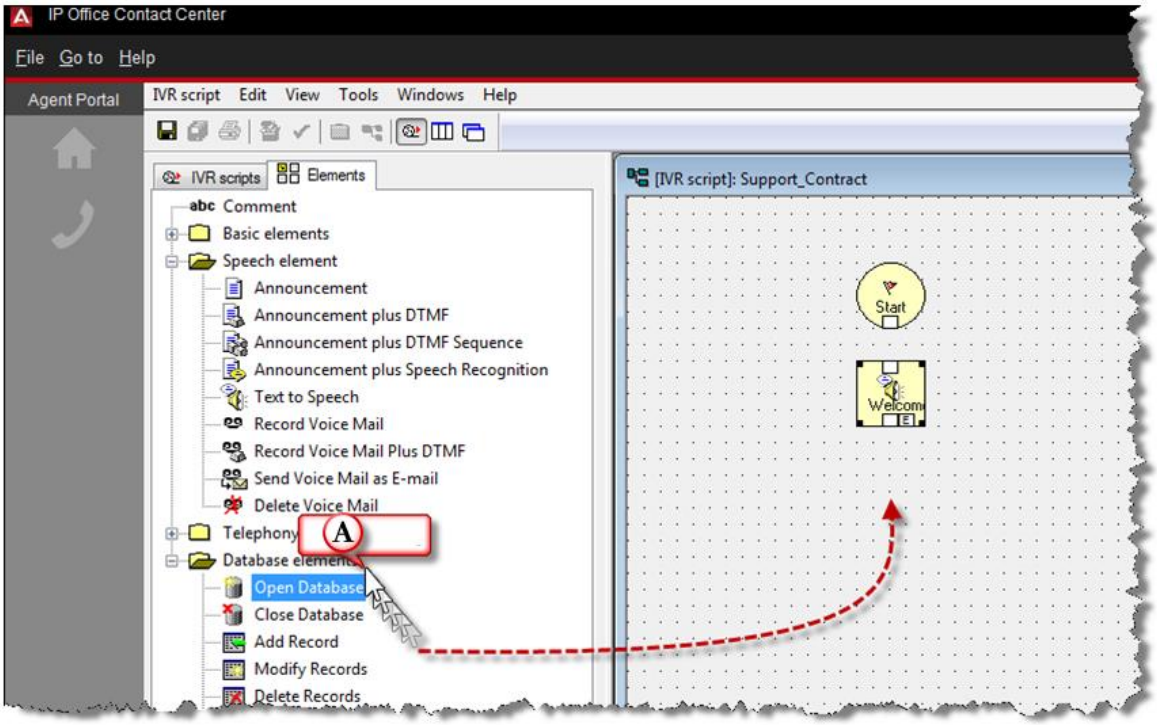
39. Enter the Label **Welcome Message** and in the Text window enter **Thank you for calling the support department**. Click the option for **Not interruptible** and then click the **OK** button.



40. The configured element is displayed.

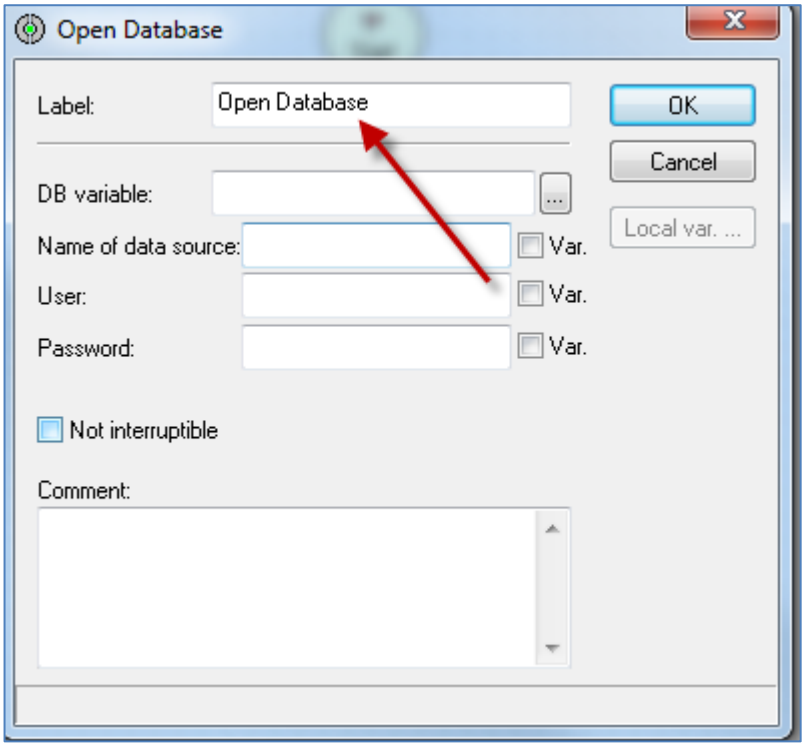


41. We now need to open the Customers Database. Drag the **Open Database** element onto the call flow working area.

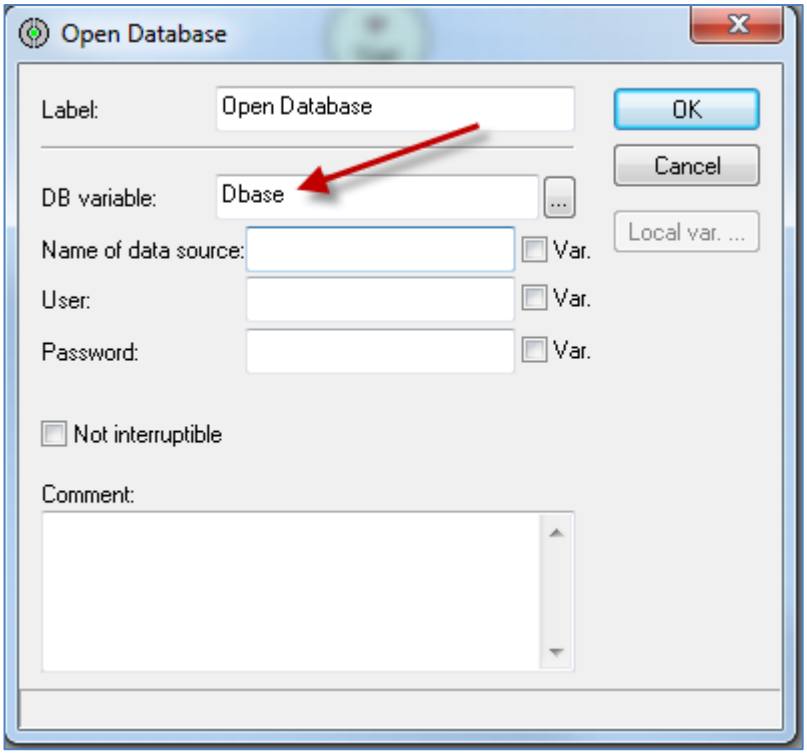


A. Click and drag.

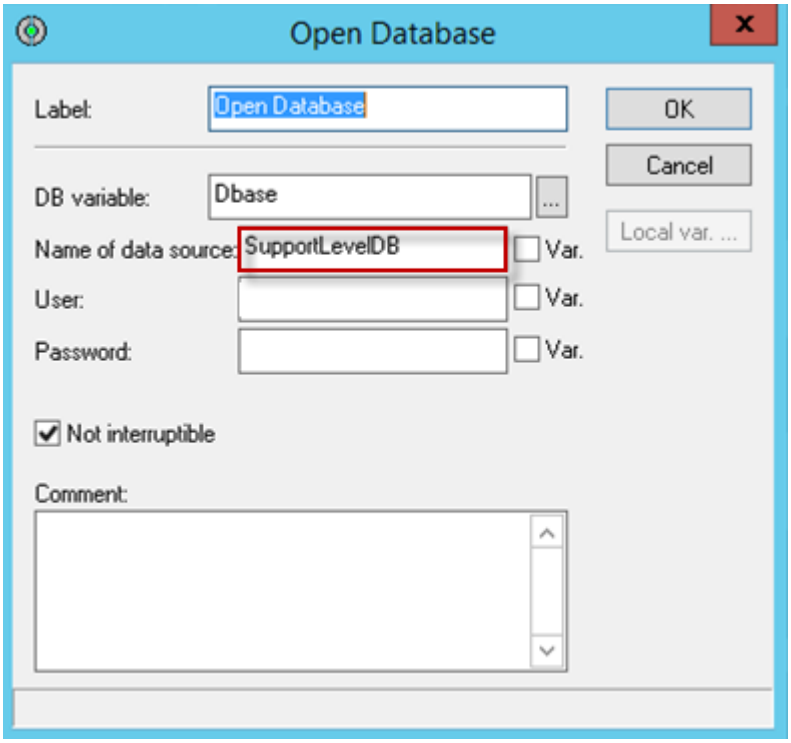
42. Enter the Label **Open Database**.

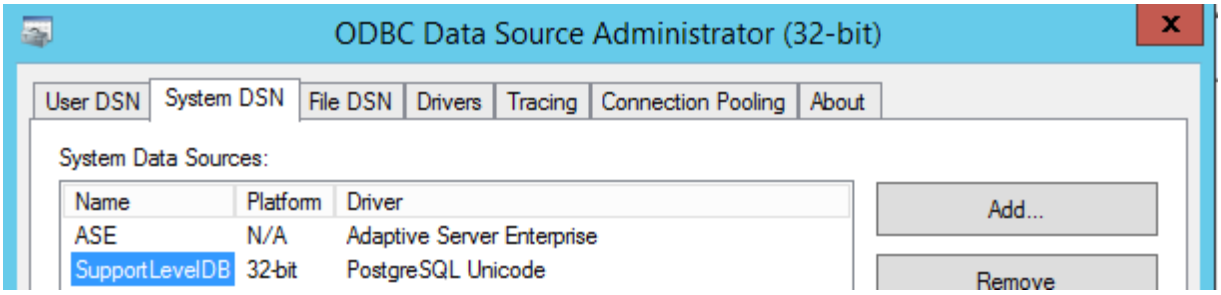


43. Then in the field **DB variable** enter **Dbase**.

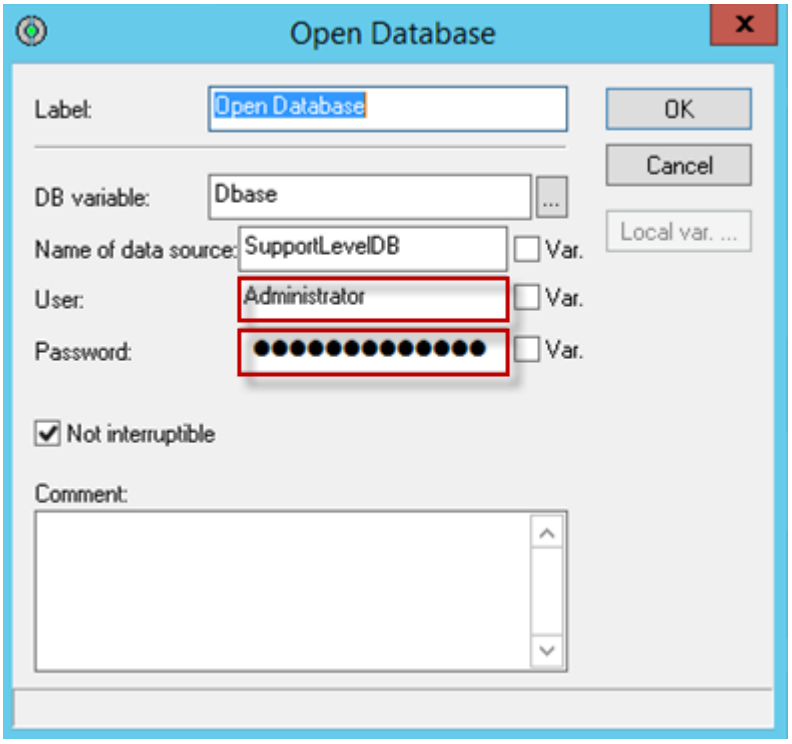


44. In the field **Name of data source** enter **SupportLevelDB**. This is the name used when creating the ODBC Data Source.

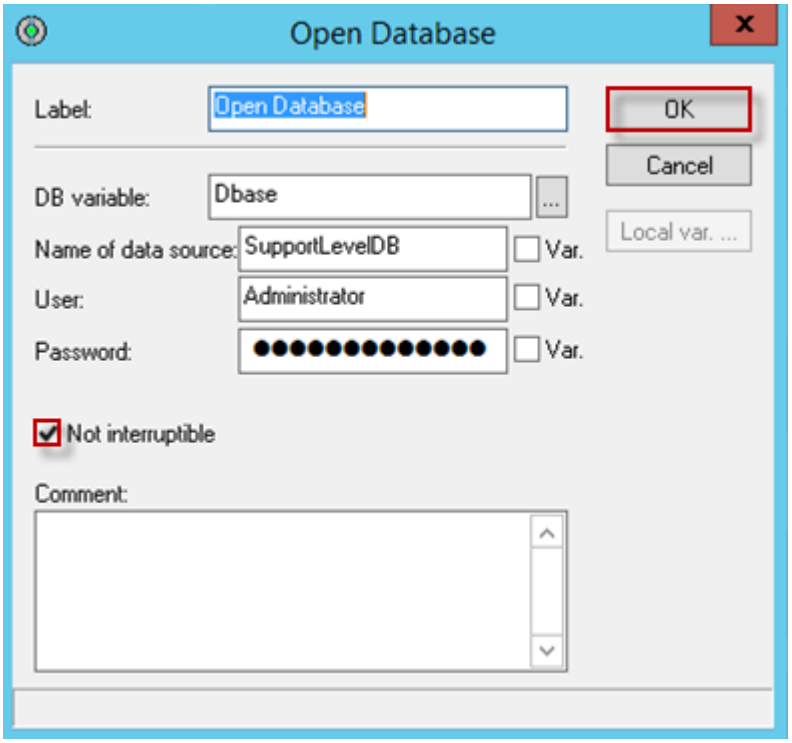




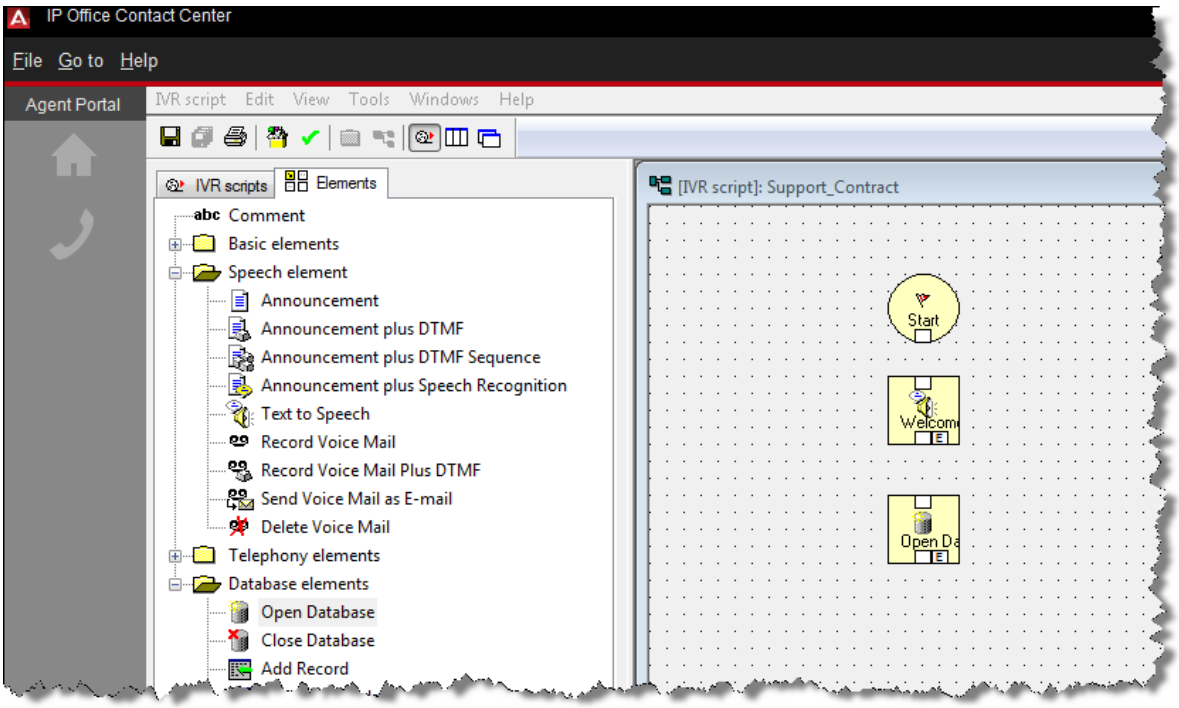
45. In the field **User** enter the name of a database user account e.g. **Administrator**. If required, enter the password for the customer database.



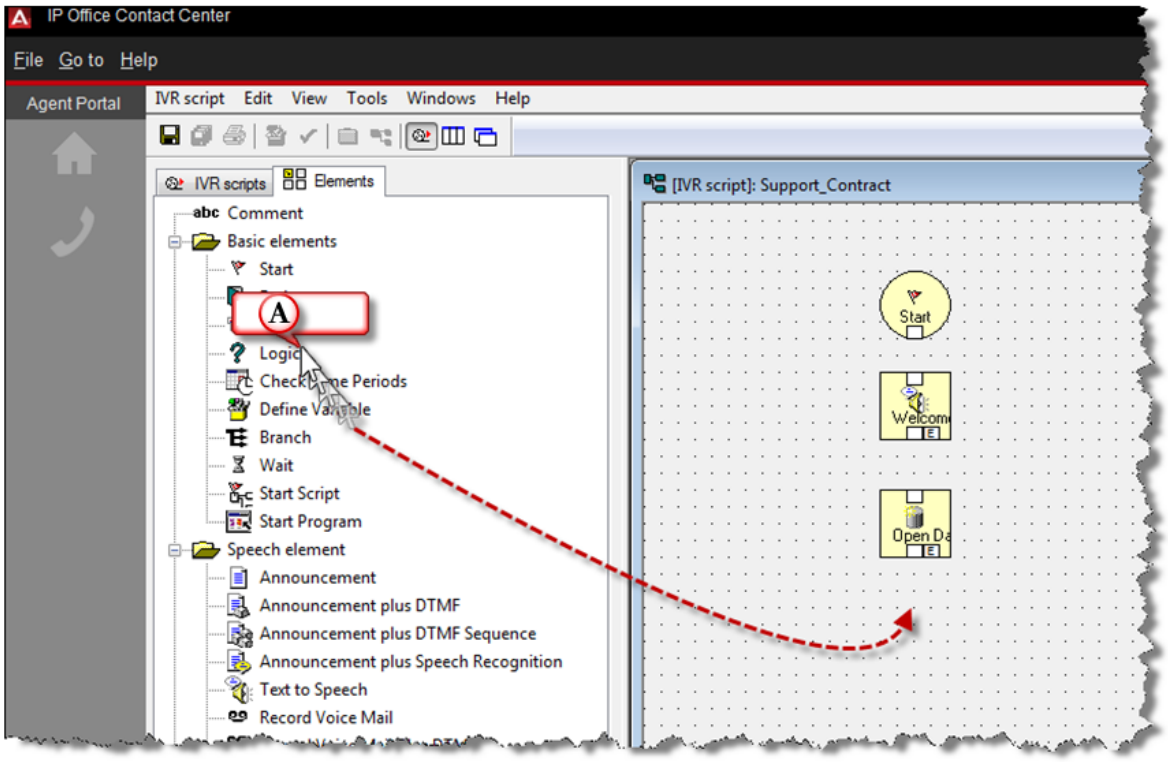
46. Select the **Not interruptible** check box. Then click the **OK** button.



47. The configured element is displayed.

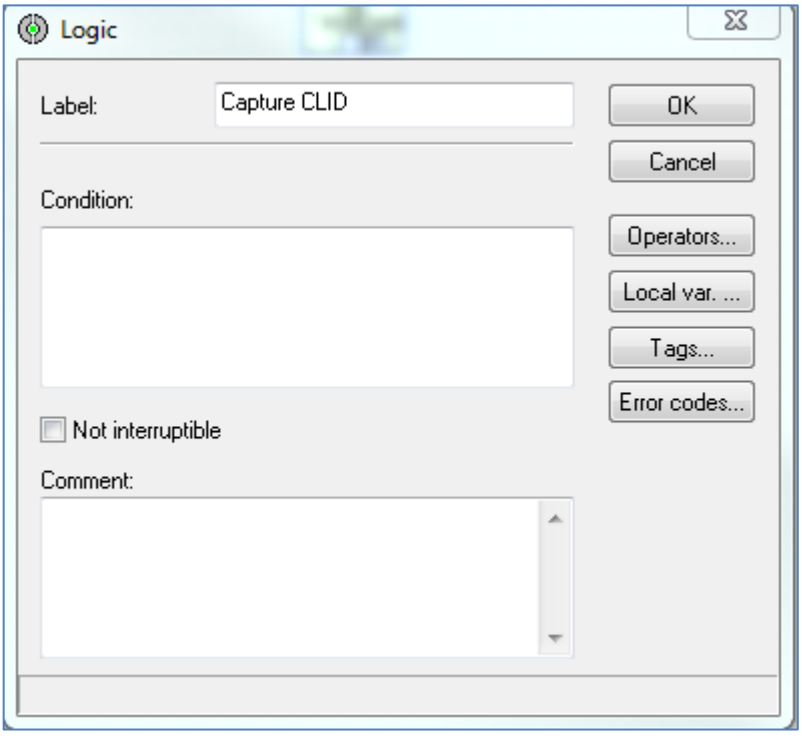


48. We will now use a **Logic** element to capture the callers CLID. Drag a **Logic** element onto the IVR script working area.

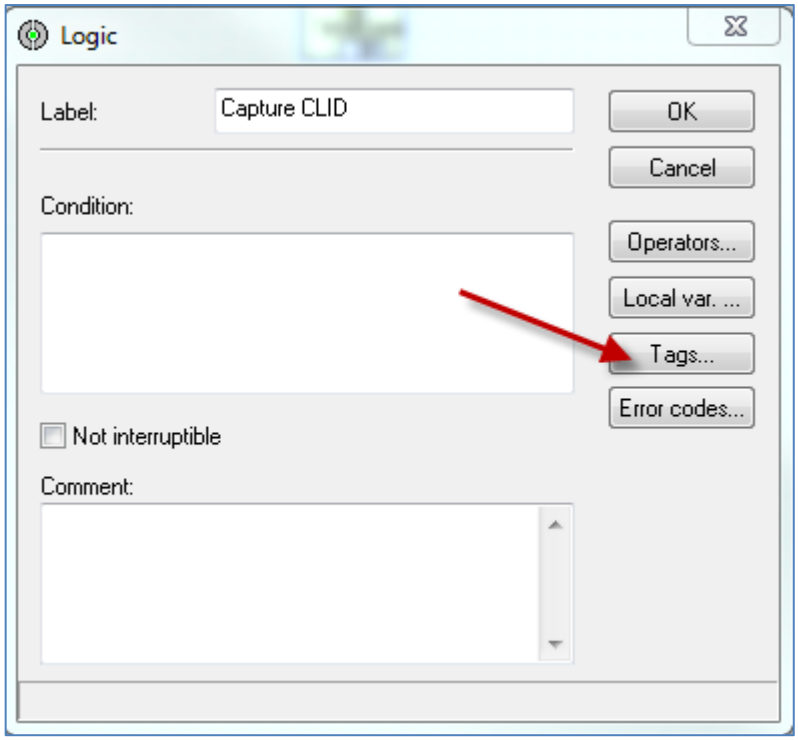


A. Click and drag.

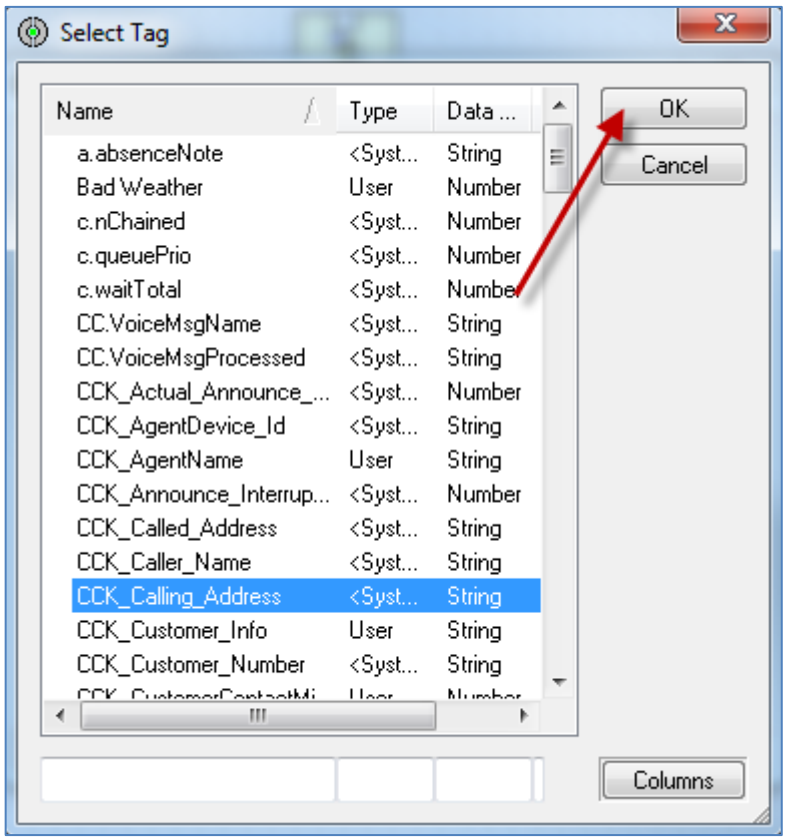
49. Name the **Label Capture CLID**



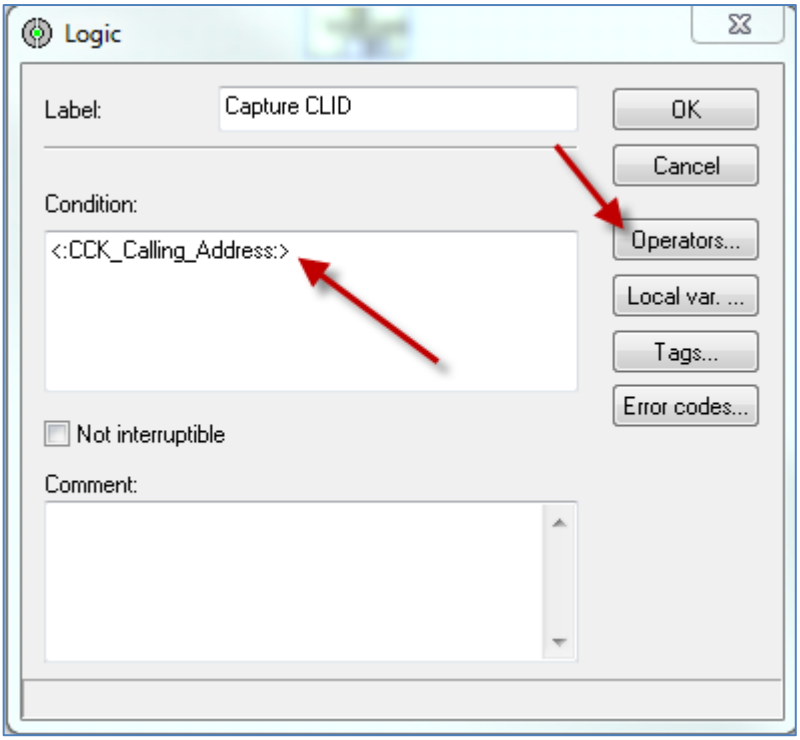
50. Left mouse click in the **Condition** window then click the **Tags** button.



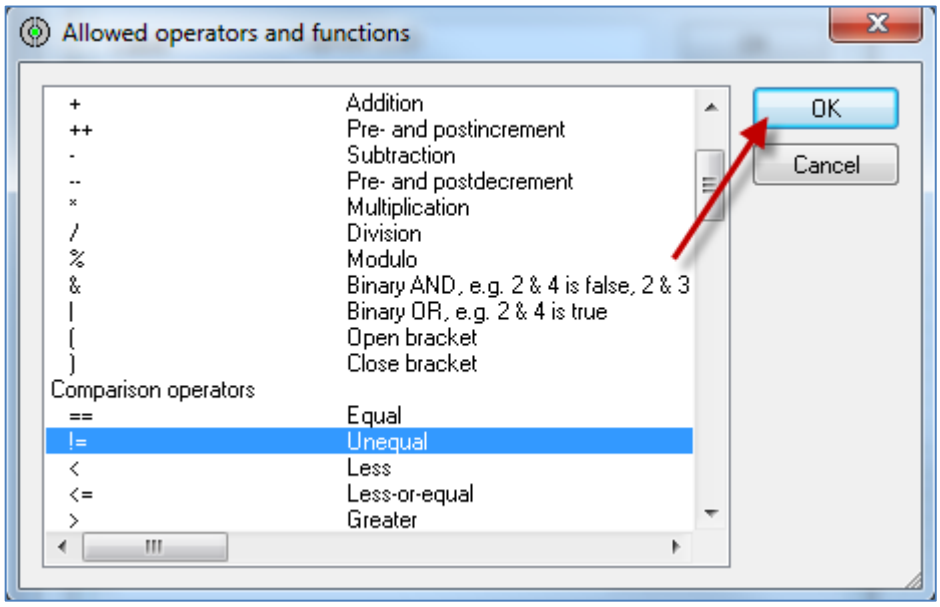
51. Select the **<:CCK_Calling_Address:>** tag



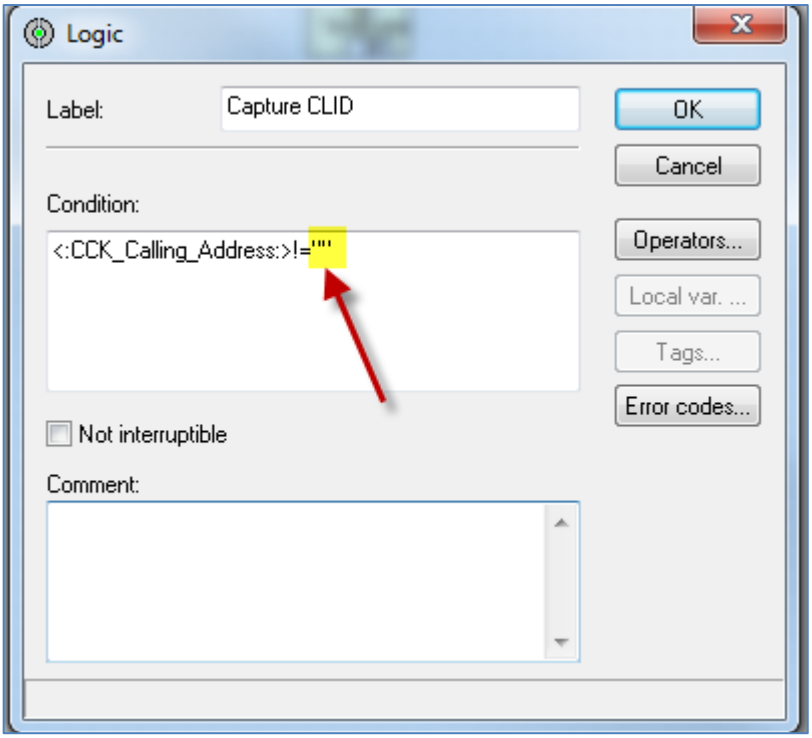
52. Click after the > and select the **Operators** button.



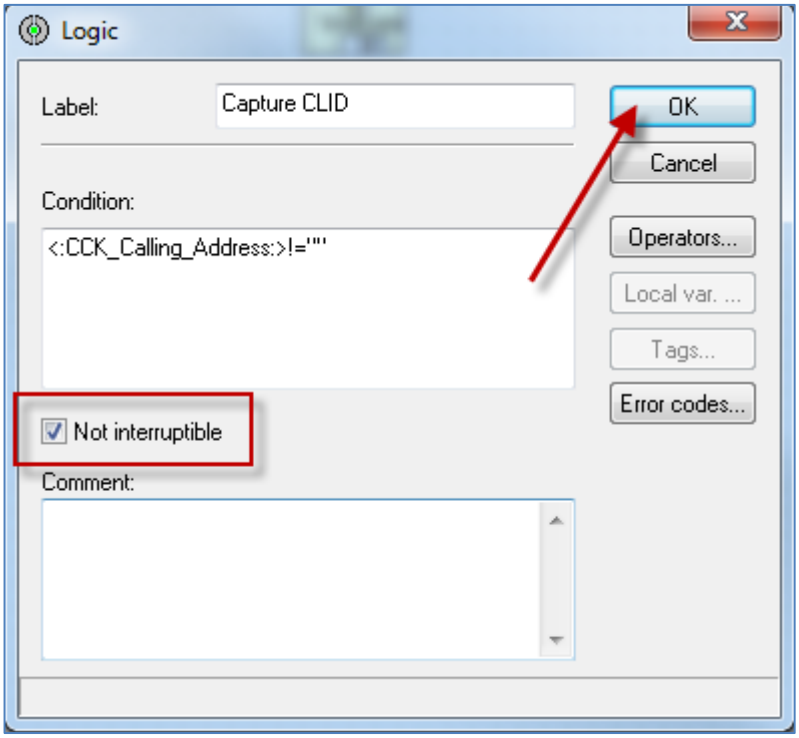
53. Click the **Unequal** operator then click the **OK** button.



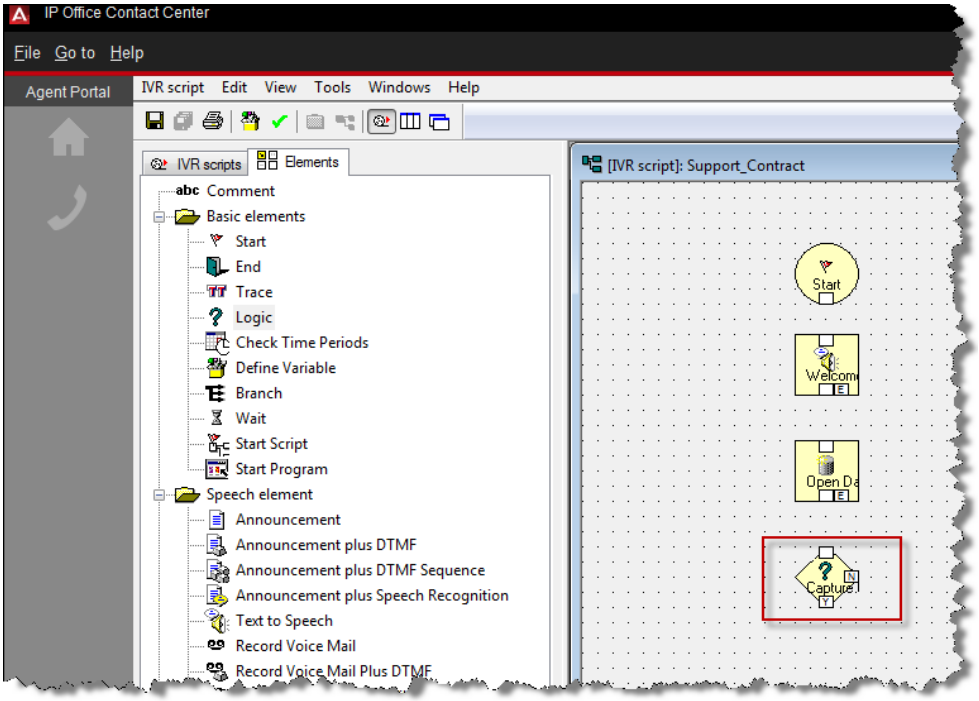
54. Then type **“”** after the operator



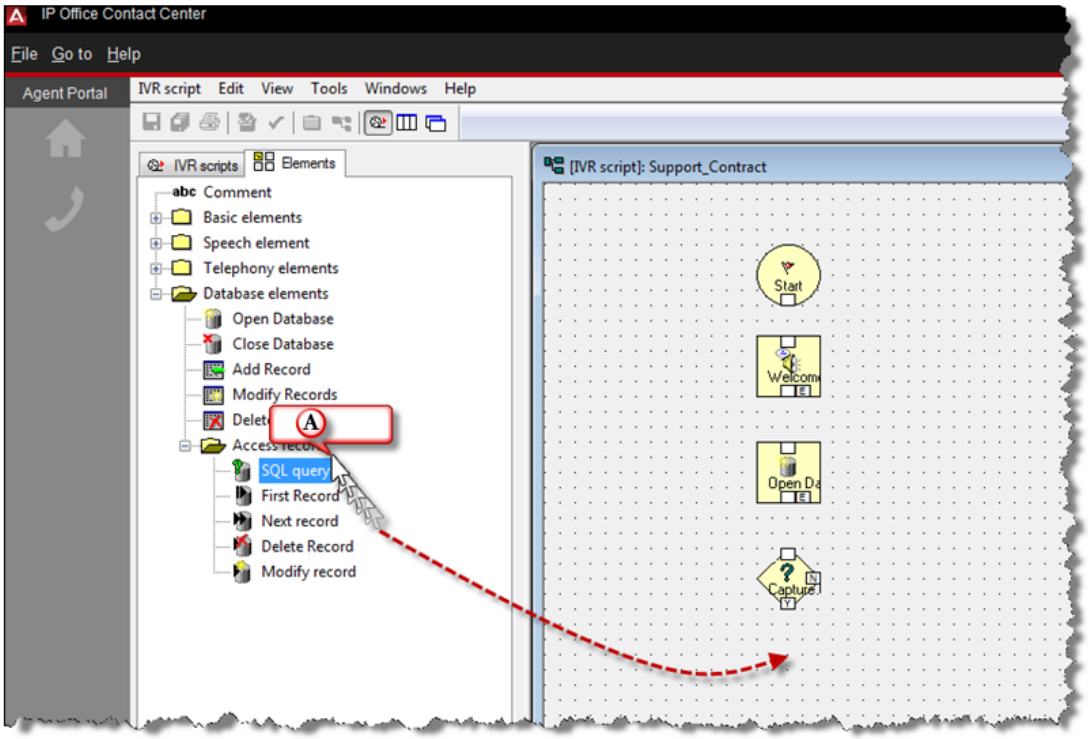
55. Click the **Not interruptible** check box and then click the **OK** button.



56. The configured element is displayed.

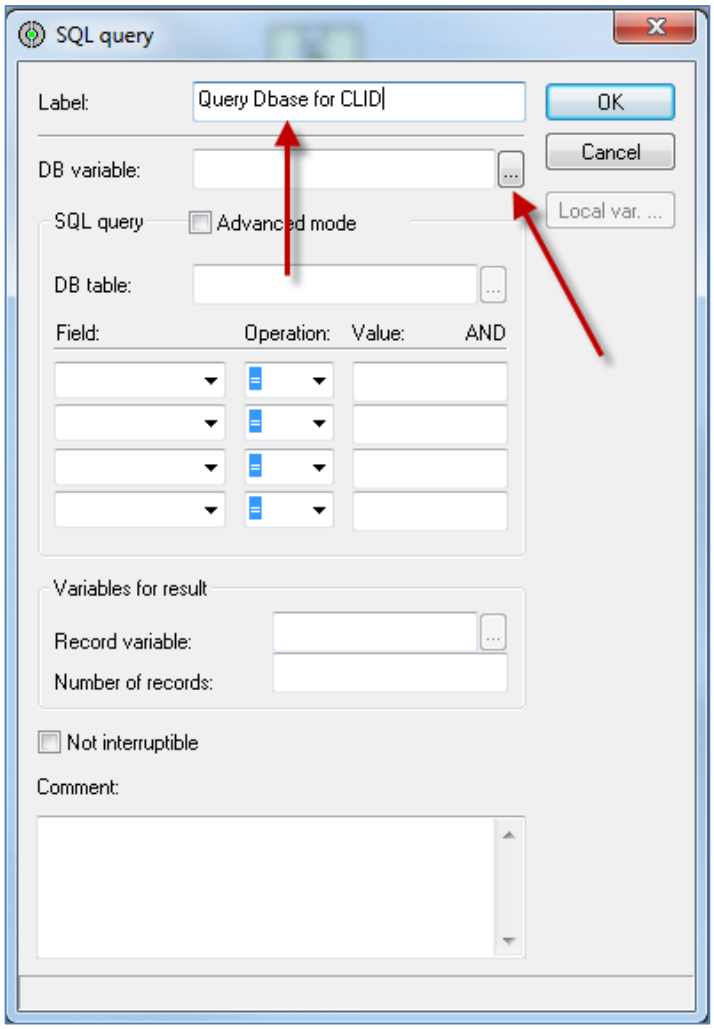


57. We now need to use a Database query based on the customer's CLID, to locate the customer's record within the database. To do this an **SQL query** element will be used. Drag the **SQL query** element into the IVR script working area.

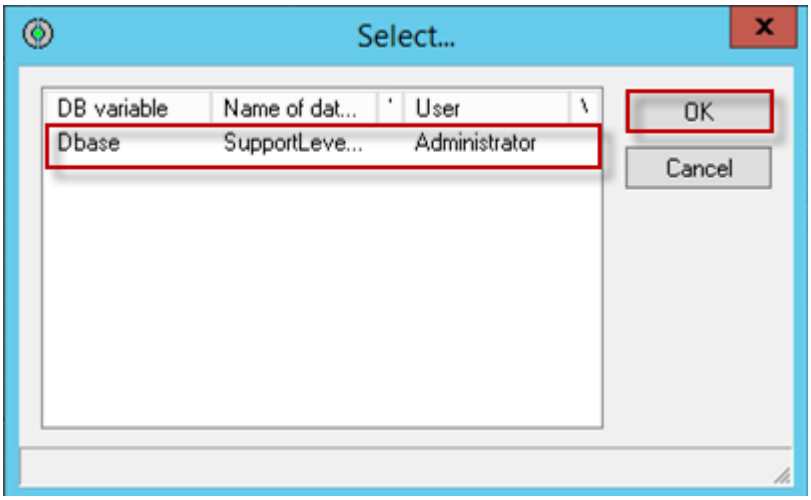


A. Click and drag

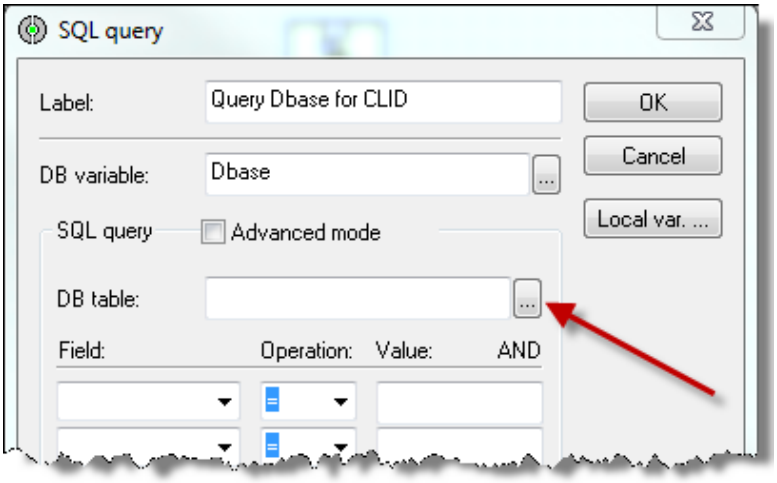
58. In the **Label** field enter **Query Dbase for CLID** and then click the **…** browser button adjacent to the **DB variable** field.



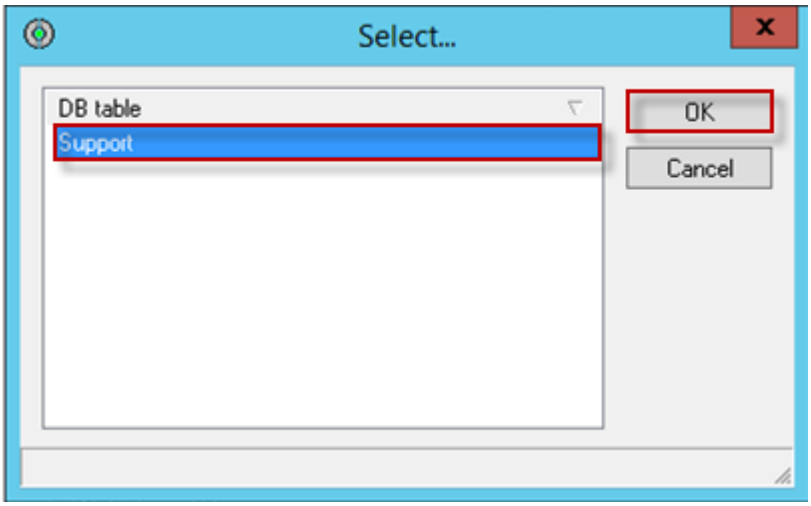
59. Select **Dbase** and click the **OK** button.



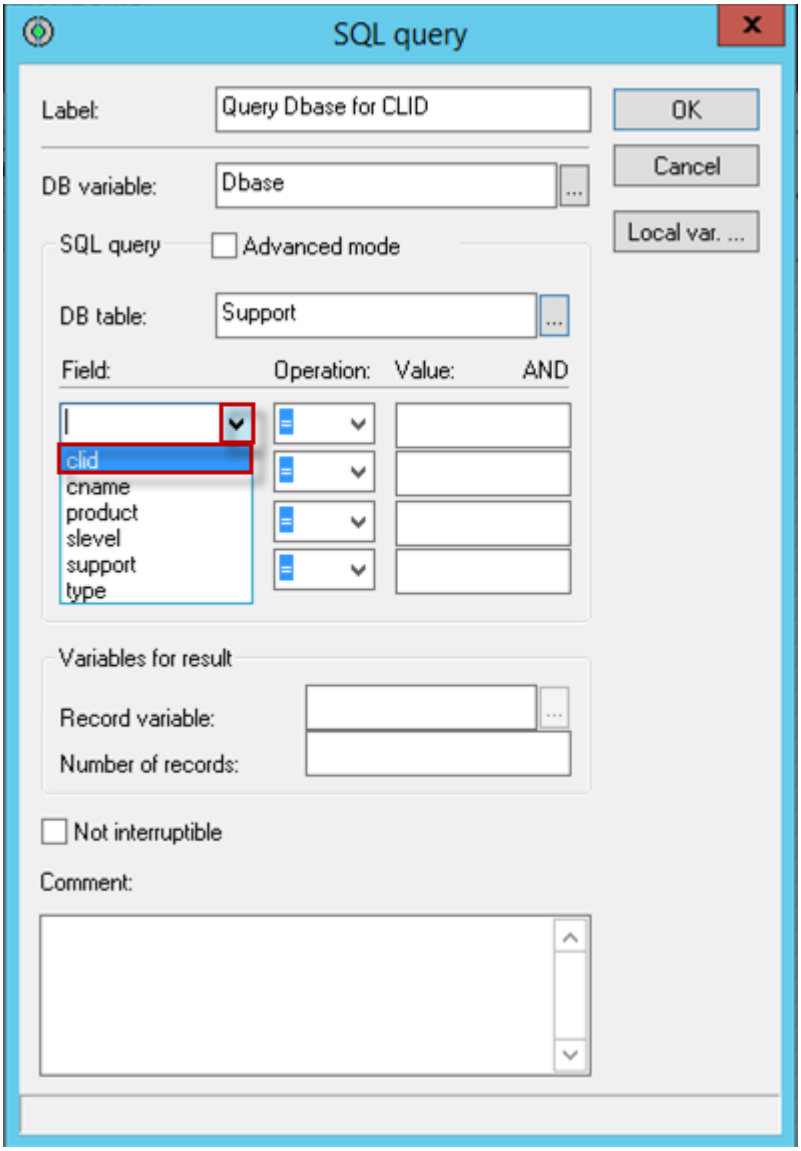
60. Now select the **…** browser button adjacent to the **DB table** field.



61. Select **Support** and then click the **OK** button.

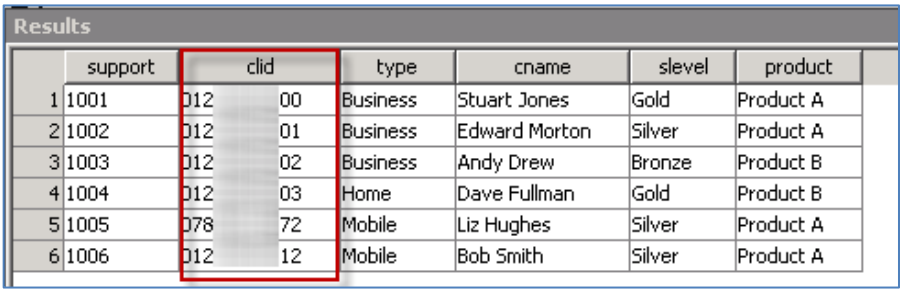


62. Click the drop down arrow next to the first **Field** and select **clid**.



Note: The direct access to the columns within the customers DB table is only possible when the IVR-Script is developed on the IP Office Contact Centre server. If access is required from a client, the ODBC driver for the customer database must be installed on the client PC.

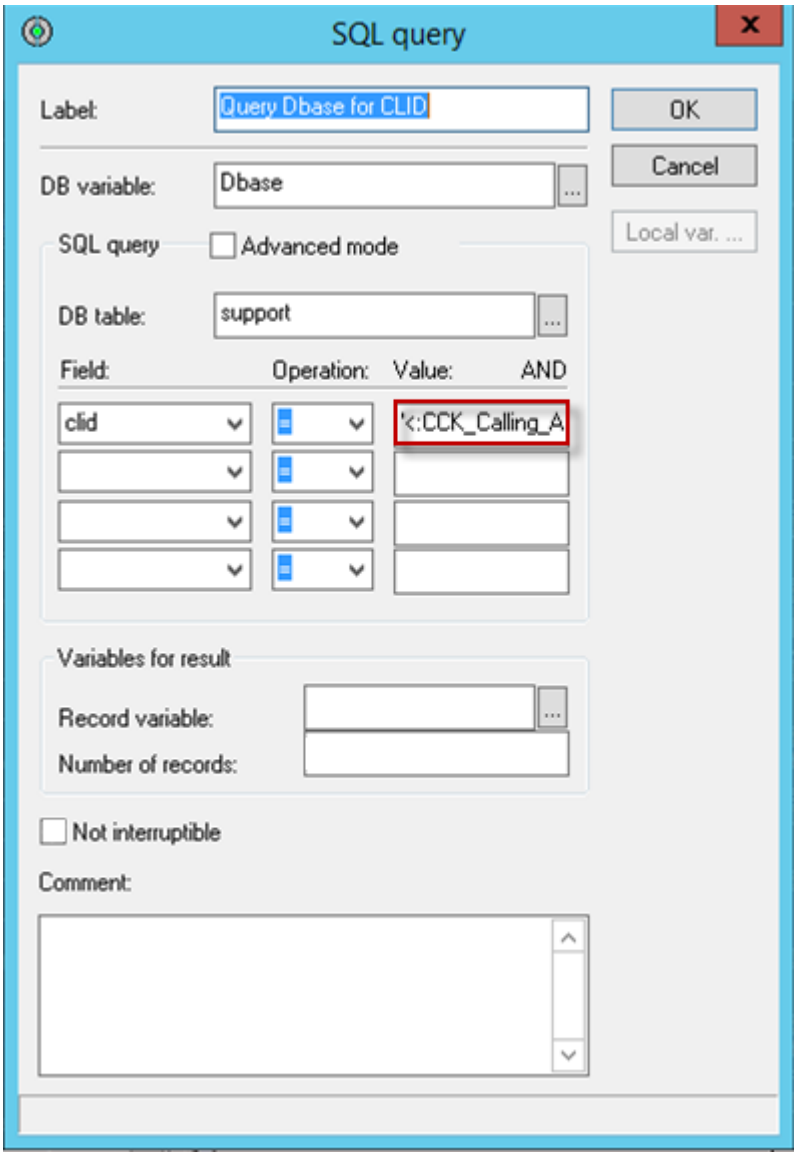
63. This will reference the Clid records contained within the database as illustrated below.



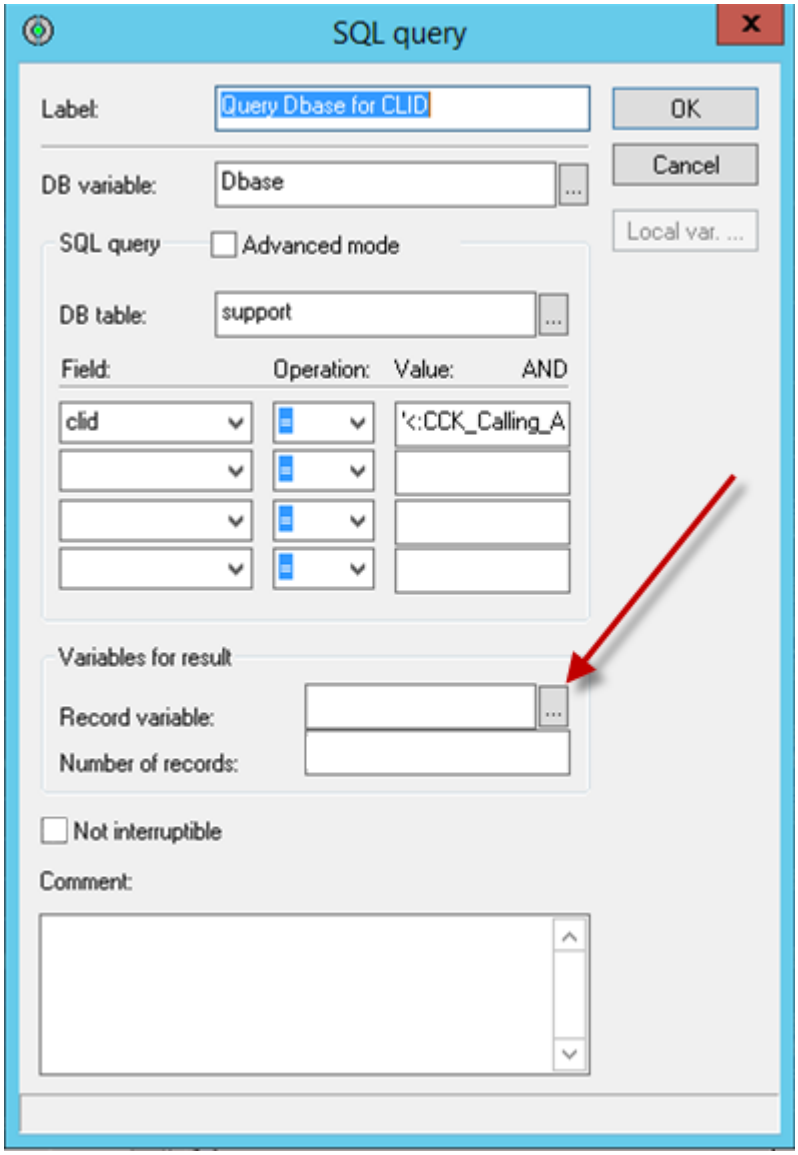
Results

	support	clid	type	cname	slevel	product
1	1001	012 00	Business	Stuart Jones	Gold	Product A
2	1002	012 01	Business	Edward Morton	Silver	Product A
3	1003	012 02	Business	Andy Drew	Bronze	Product B
4	1004	012 03	Home	Dave Fullman	Gold	Product B
5	1005	078 72	Mobile	Liz Hughes	Silver	Product A
6	1006	012 12	Mobile	Bob Smith	Silver	Product A

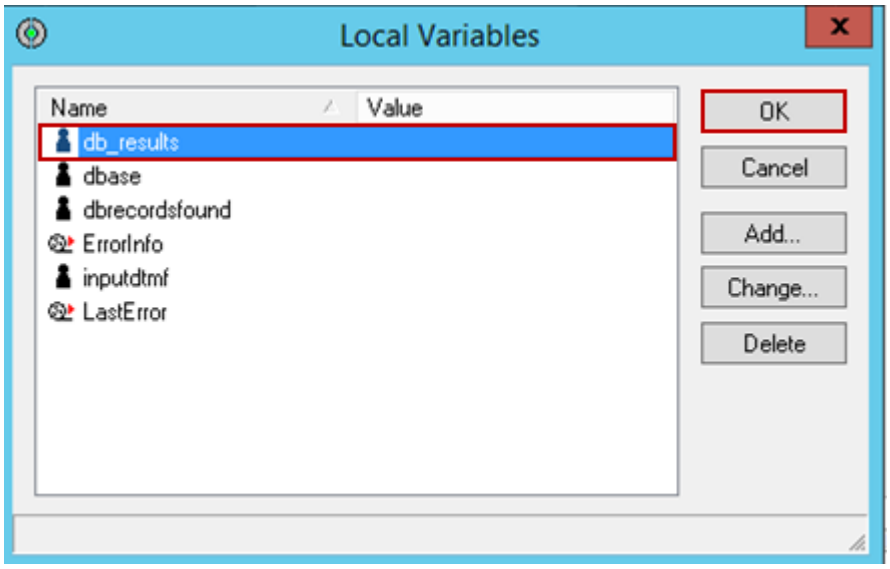
64. In the **Value Field** in the same row as clid enter '**<:CCK_Calling_Address:>'**



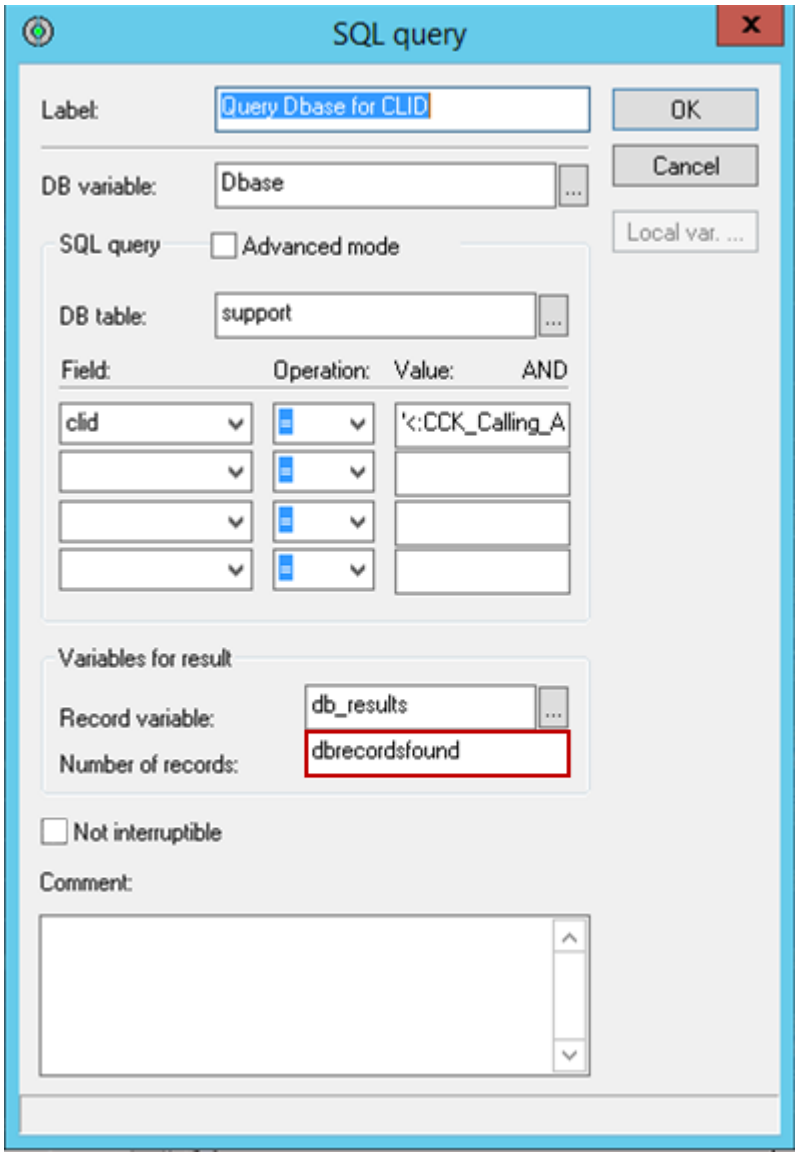
65. Click the Local var… button.



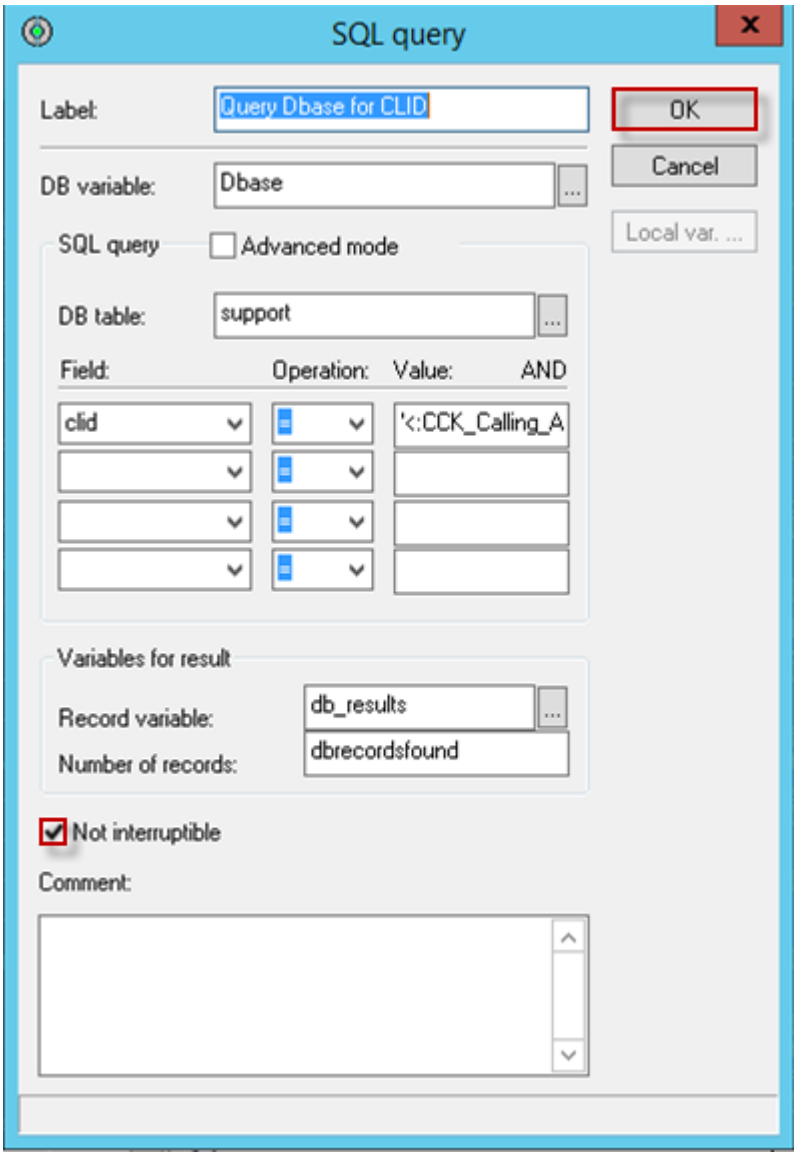
66. Click **db_results** and click the **OK** button.



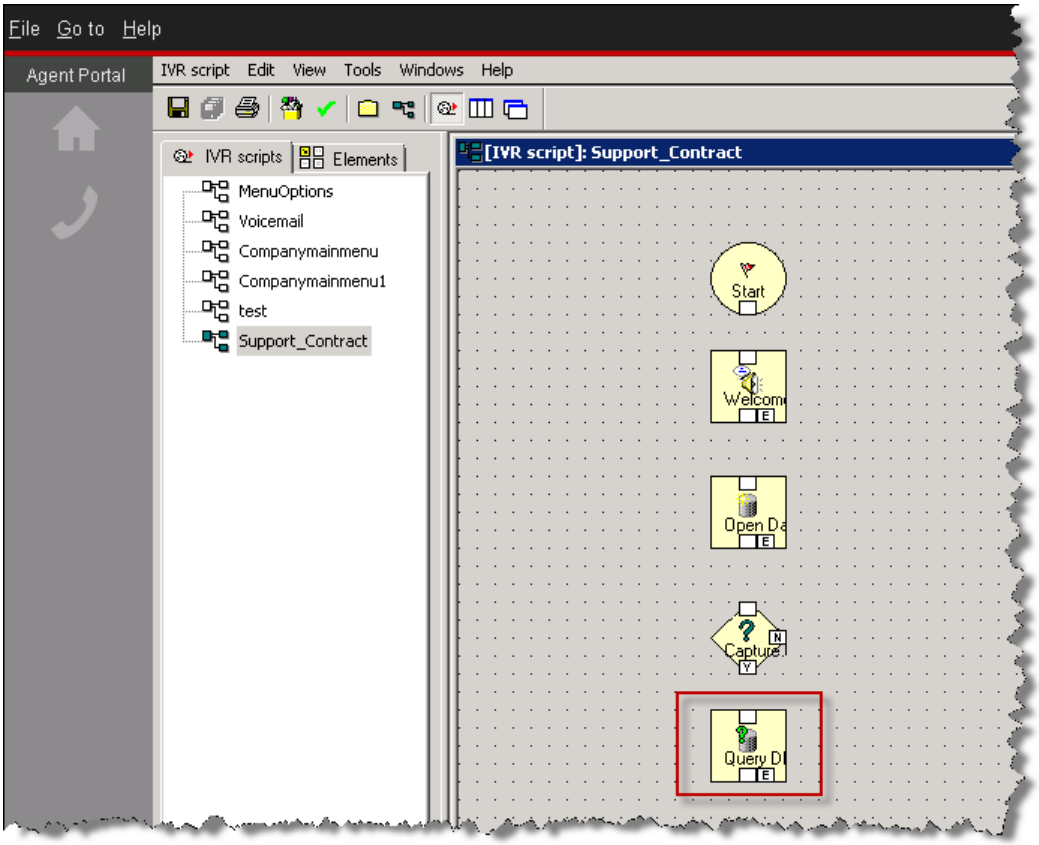
67. In the **Number of records** field enter **dbrecordsfound**.



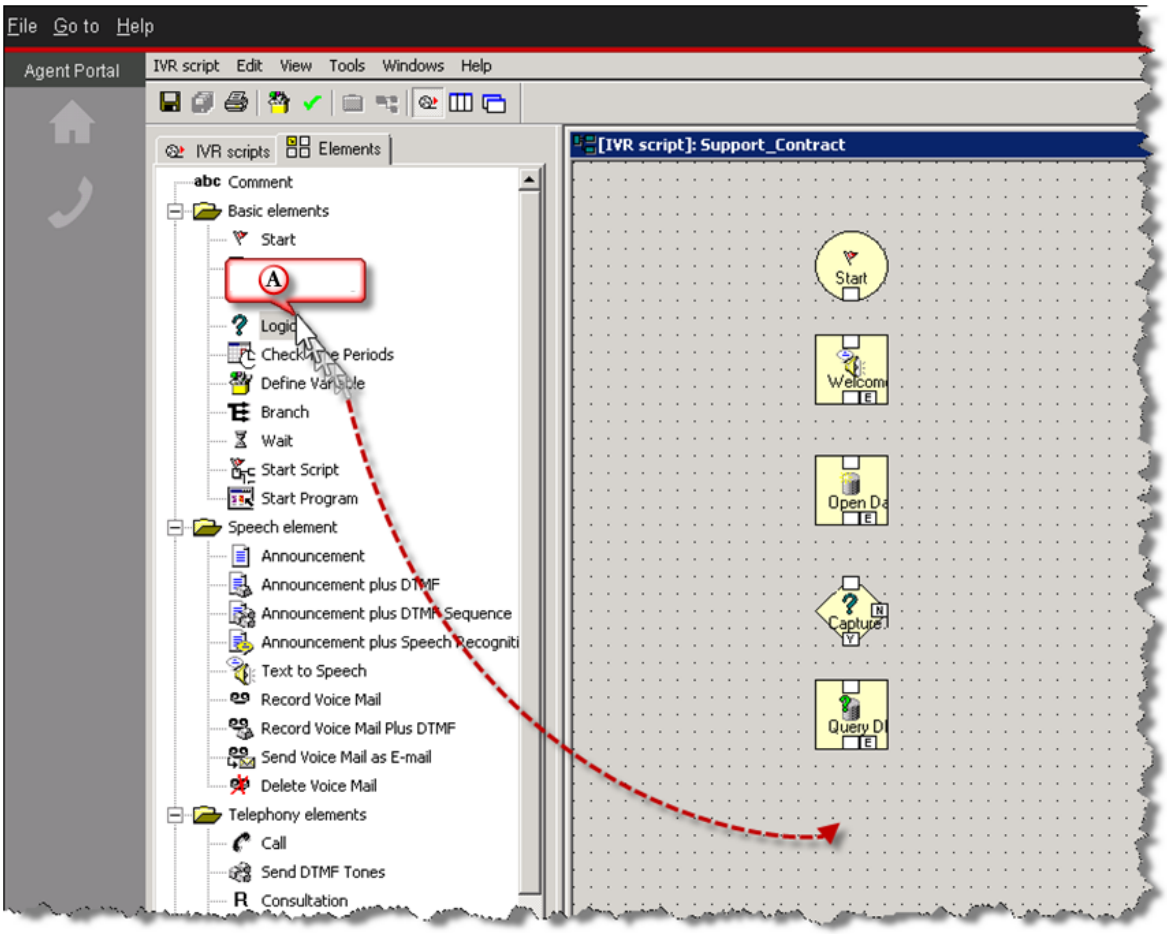
68. Click the option for **Not interruptible** and click the **OK** button.



69. The configured element is displayed.

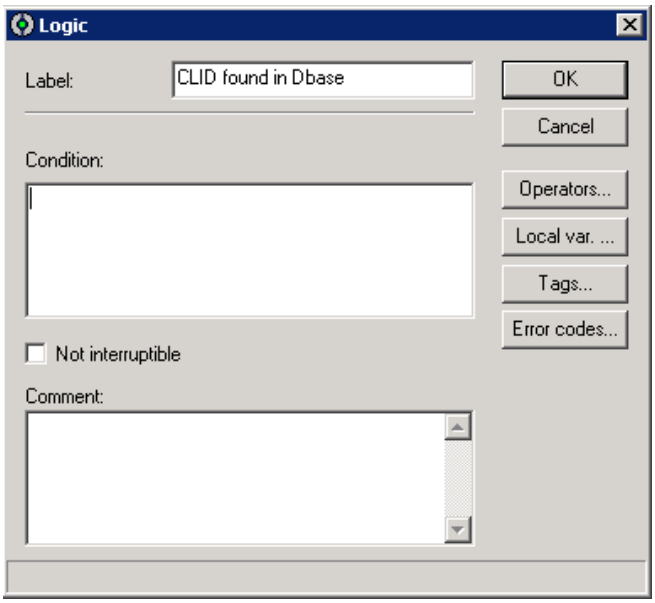


70. We will now use a Logic element to check if the customer CLID was found in the customer's database. Click the **Elements** tab and Drag a **Logic** element into the IVR script working area.

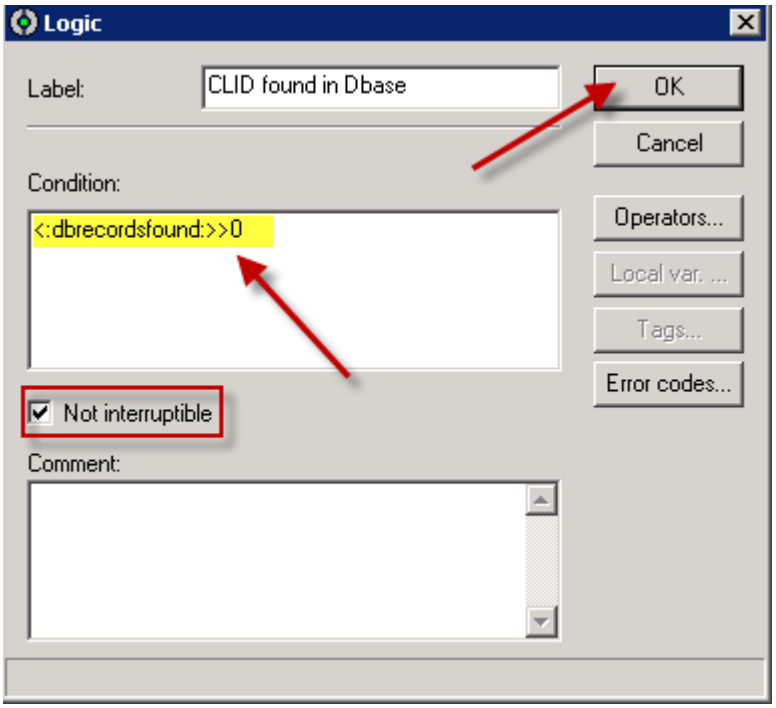


A. Click and drag.

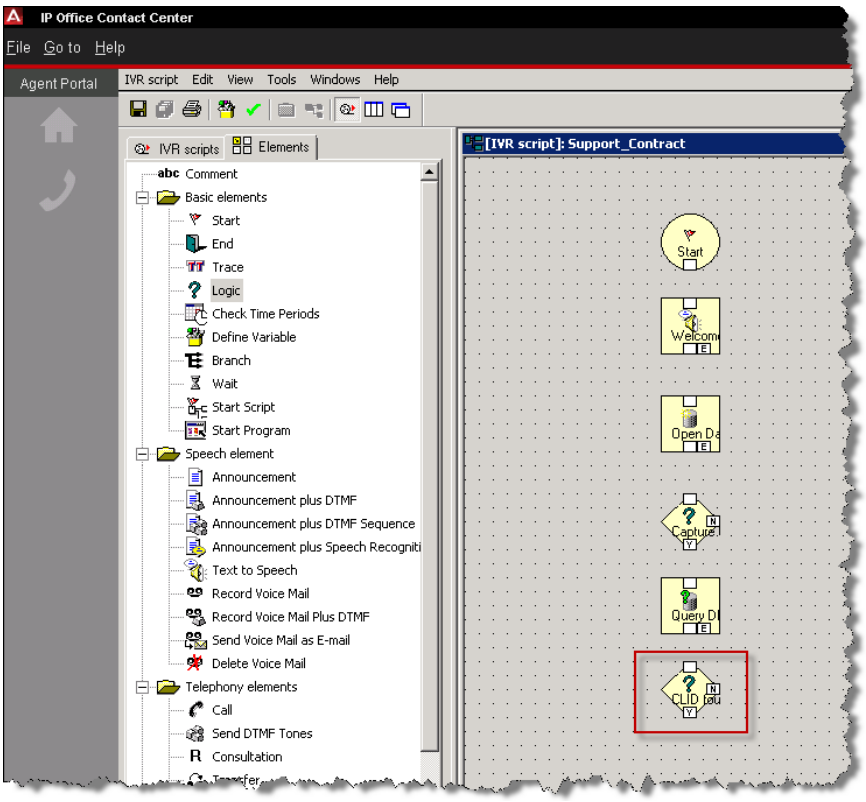
71. In the **Label** field enter **CLID found in Dbase**.



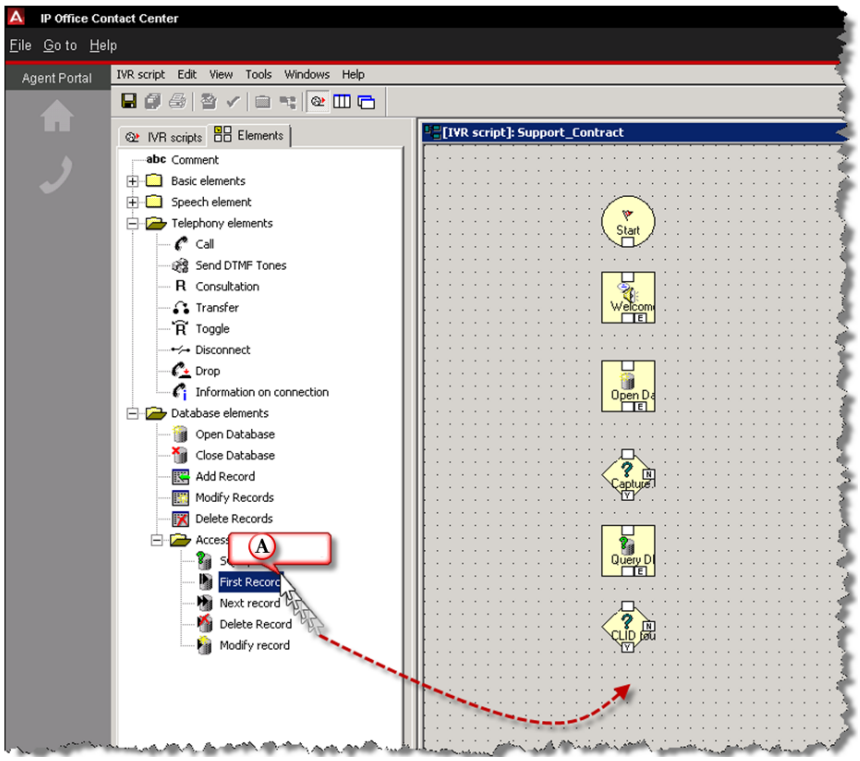
72. In the **Condition** field enter **<:dbrecordsfound:>>0** and click the **Not interruptible** check box. Then click the **OK** button.



73. The configured element is displayed.

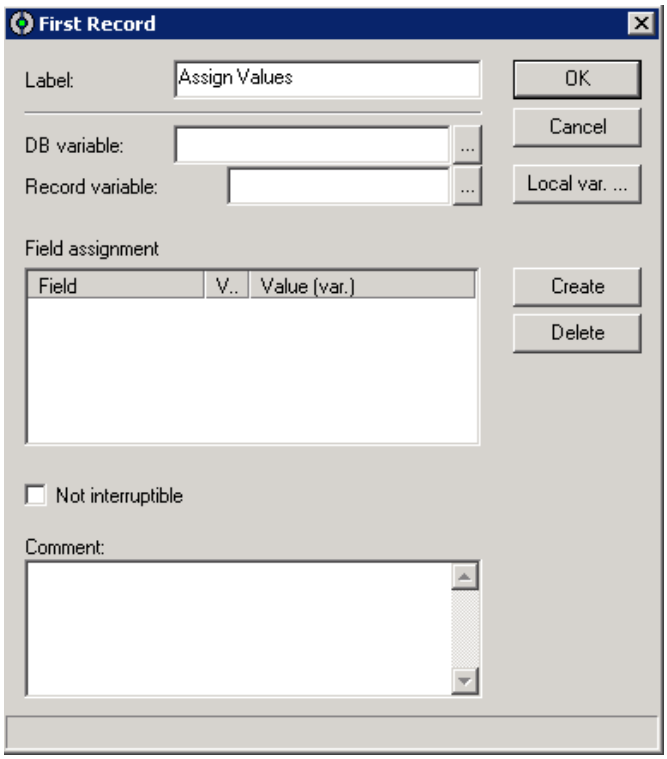


74. After the CLID of the customer has been found, we can query the customer database for additional information. We can do this using the **First Record** element. Drag the element into the IVR script working area.

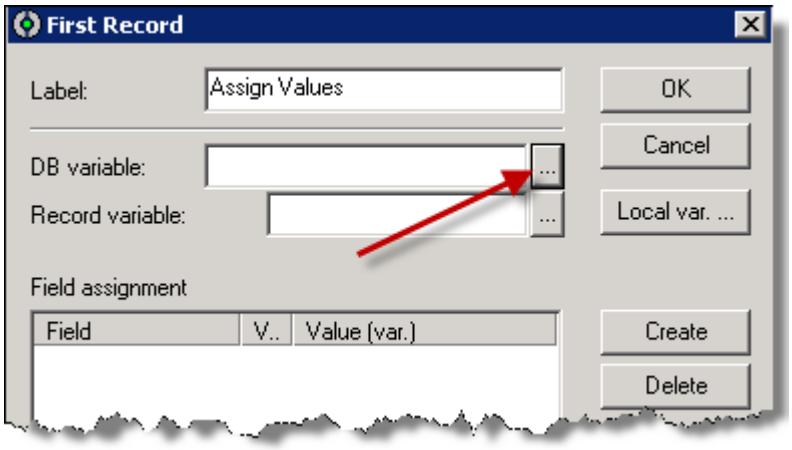


A. Click and drag.

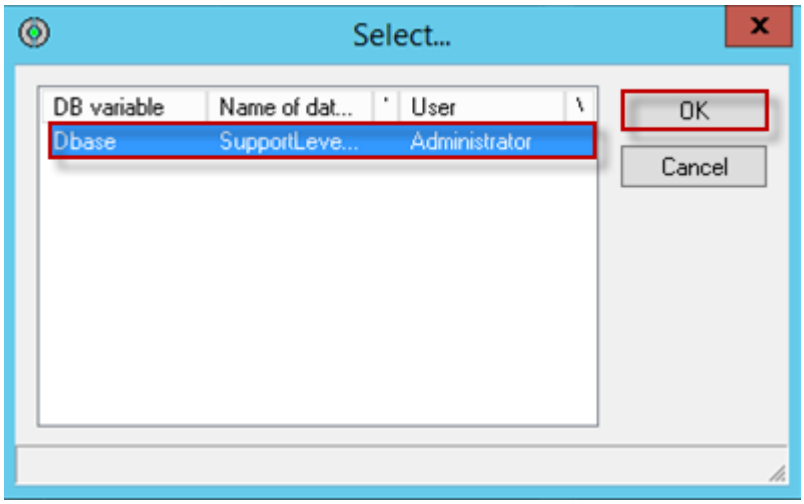
75. In the **Label** field enter **Assign Values.**



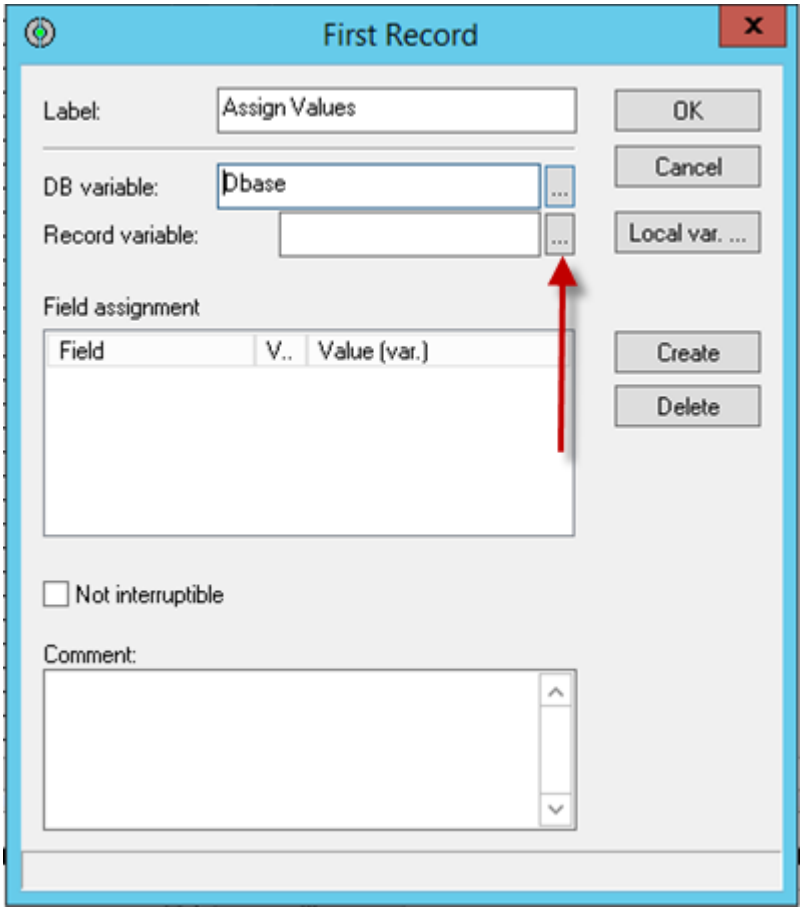
76. Click the **…** browser button adjacent to the **DB variable** field.



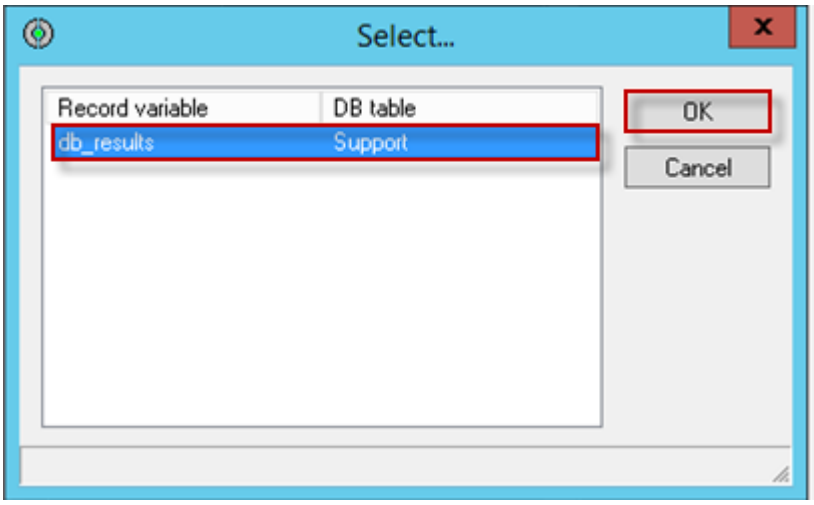
77. Select **Dbase** and click the **OK** button.



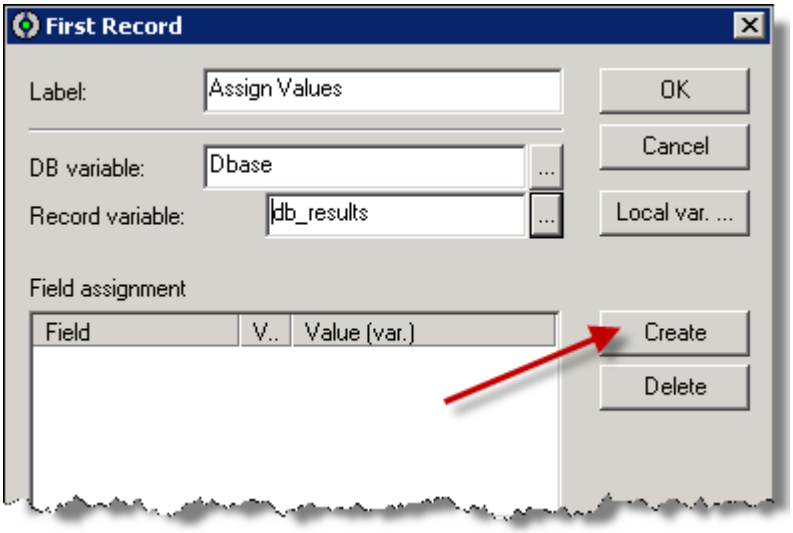
78. Click the **… browser** button adjacent to the **Record variable** field.



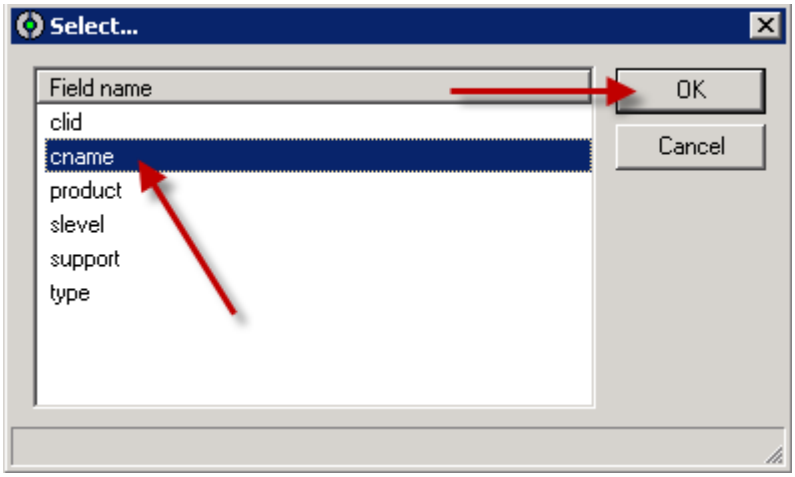
79. Select **db_results** and click the **OK** button.



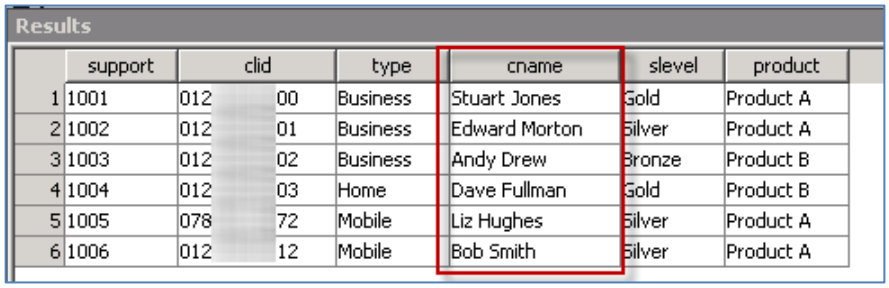
80. Click the **Create** button.



81. Select **cname** and click the **OK** button.

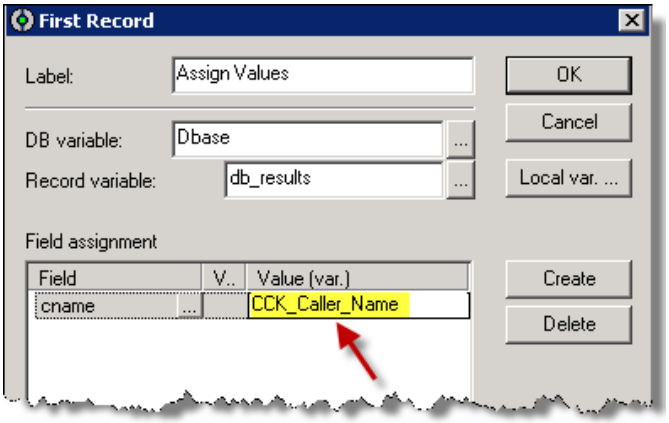


82. This will reference the **cname** records contained within the database as illustrated below.

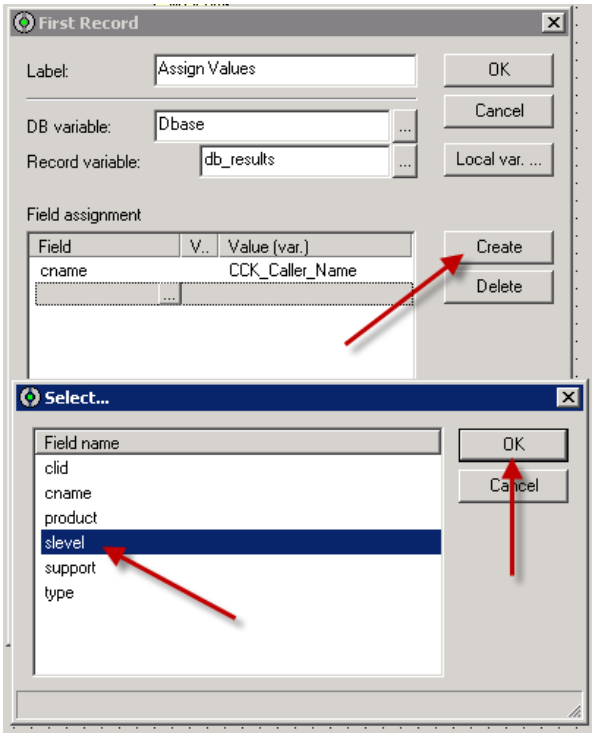


	support	clid	type	cname	slevel	product
1	1001	012 00	Business	Stuart Jones	Gold	Product A
2	1002	012 01	Business	Edward Morton	Silver	Product A
3	1003	012 02	Business	Andy Drew	Bronze	Product B
4	1004	012 03	Home	Dave Fullman	Gold	Product B
5	1005	078 72	Mobile	Liz Hughes	Silver	Product A
6	1006	012 12	Mobile	Bob Smith	Silver	Product A

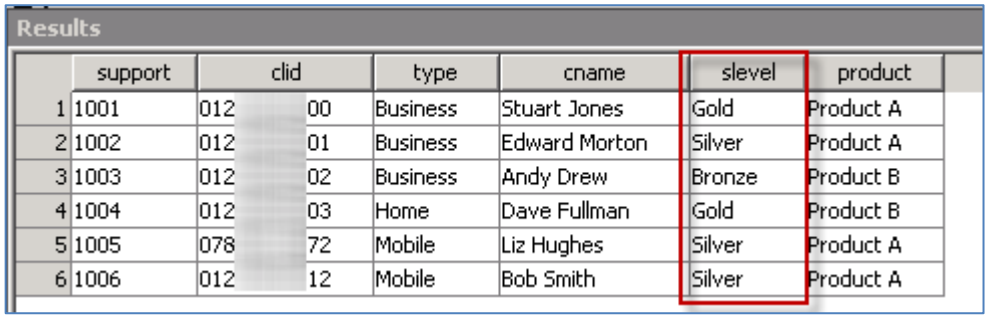
83. Select the field '**cname'** and enter **CCK_Caller_Name** (this will store the CLID of the caller as CCK_Caller_Name which we be displayed on the Agent's User Interface).



84. Click the **Create** button and select **slevel** and click the **OK** button.

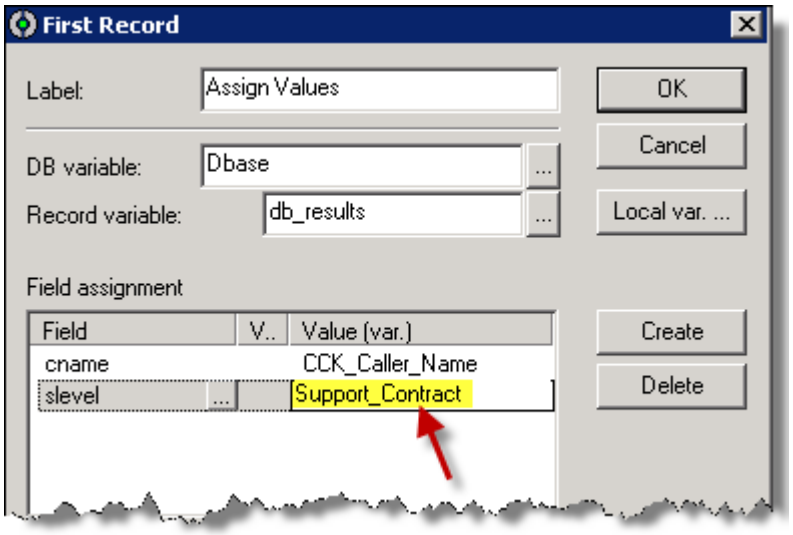


85. This will reference the **slevel** records contained within the database as illustrated below.

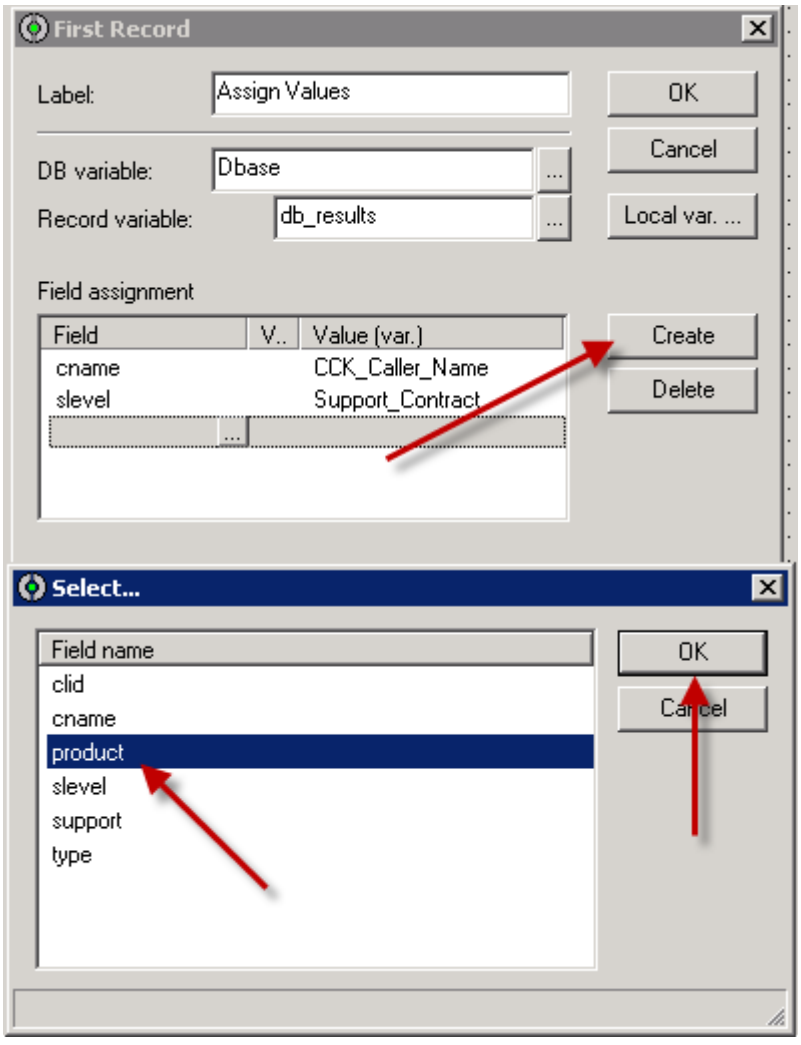


	support	clid	type	cname	slevel	product
1	1001	012 00	Business	Stuart Jones	Gold	Product A
2	1002	012 01	Business	Edward Morton	Silver	Product A
3	1003	012 02	Business	Andy Drew	Bronze	Product B
4	1004	012 03	Home	Dave Fullman	Gold	Product B
5	1005	078 72	Mobile	Liz Hughes	Silver	Product A
6	1006	012 12	Mobile	Bob Smith	Silver	Product A

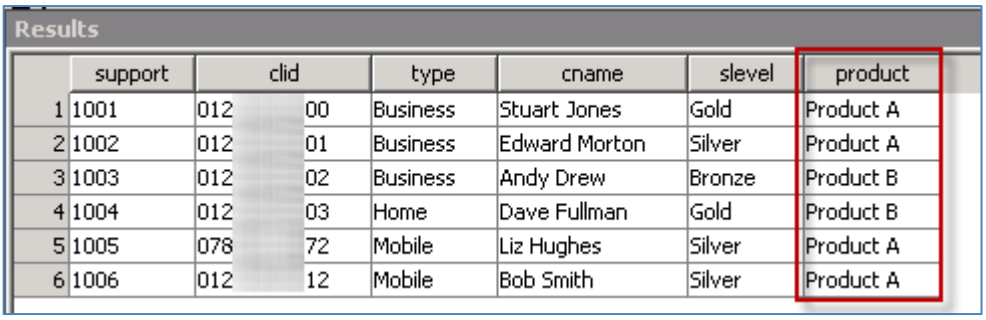
86. In the **Value** field enter **Support_Contract**



87. Click the **Create** button. Click **product** and click the **OK** button.

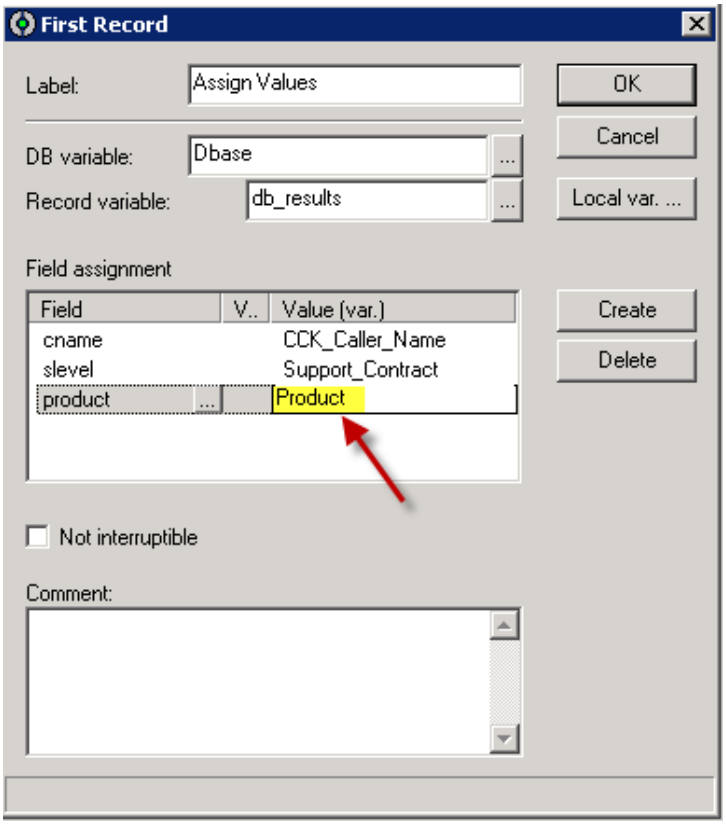


88. This will reference the **product** records contained within the database as illustrated below.

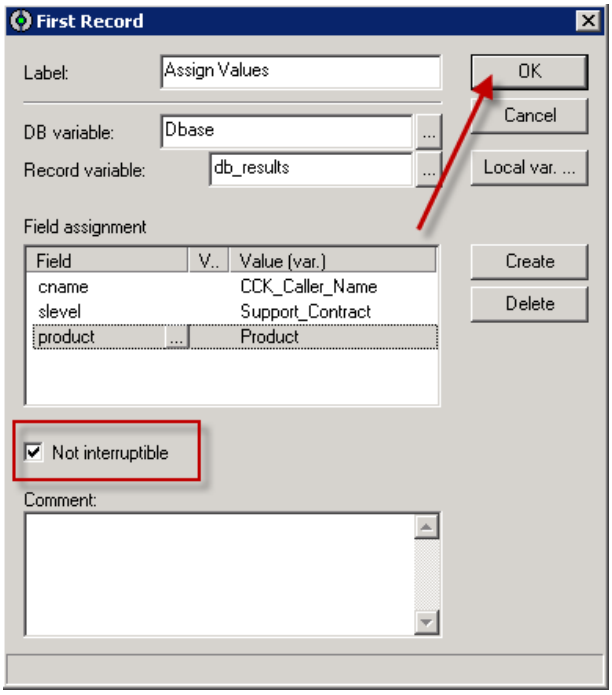


	support	clid	type	cname	slevel	product
1	1001	012 00	Business	Stuart Jones	Gold	Product A
2	1002	012 01	Business	Edward Morton	Silver	Product A
3	1003	012 02	Business	Andy Drew	Bronze	Product B
4	1004	012 03	Home	Dave Fullman	Gold	Product B
5	1005	078 72	Mobile	Liz Hughes	Silver	Product A
6	1006	012 12	Mobile	Bob Smith	Silver	Product A

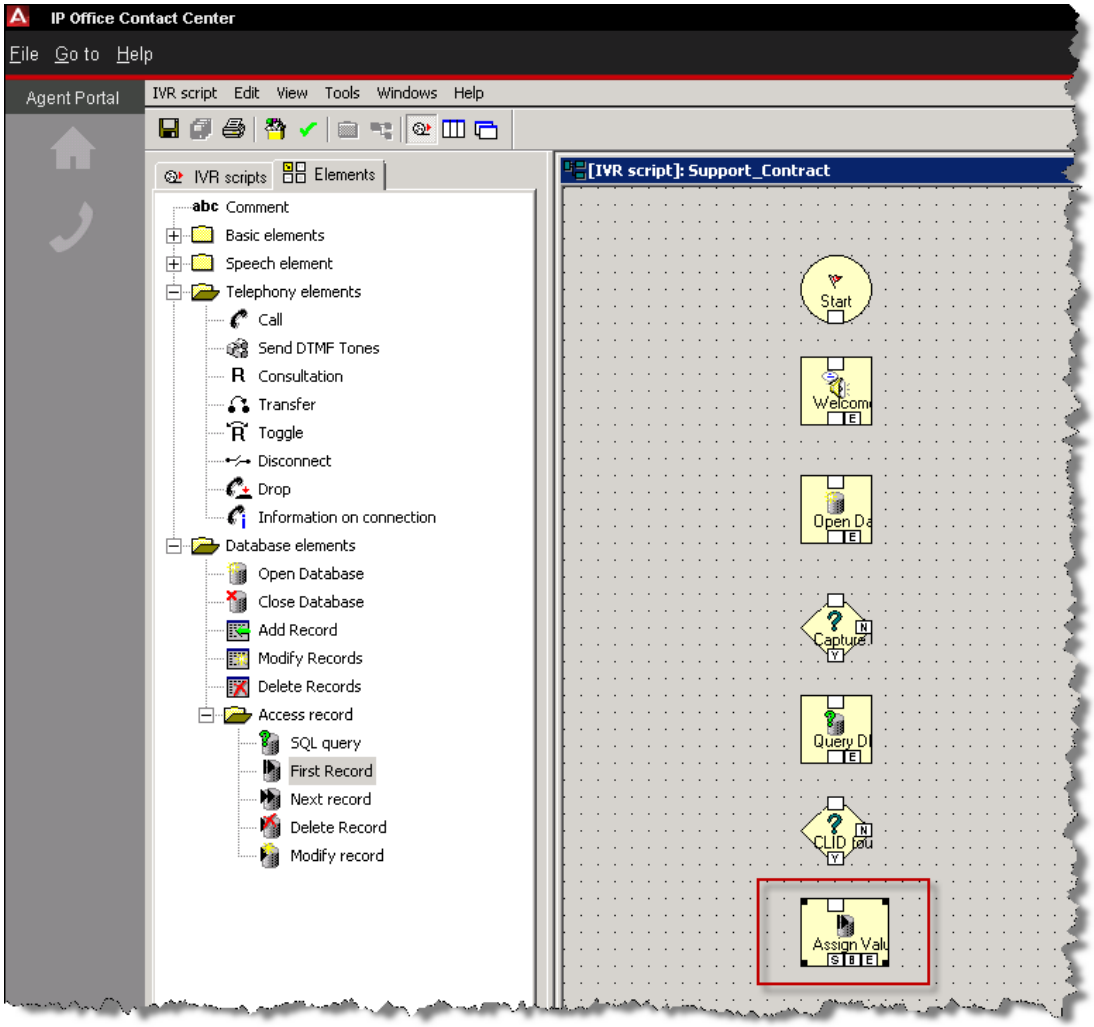
89. In the **Value** field enter **Product**.



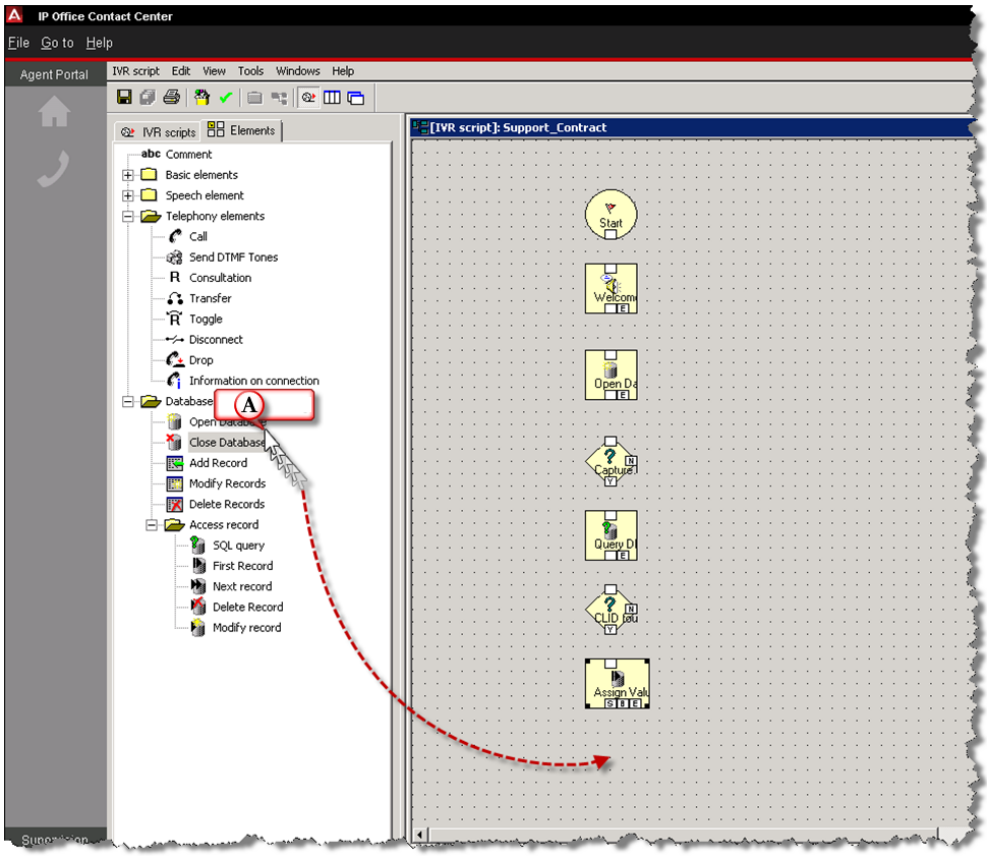
90. Click the **Not interruptible** option and then click the **OK** button.



91. The configured element is displayed.

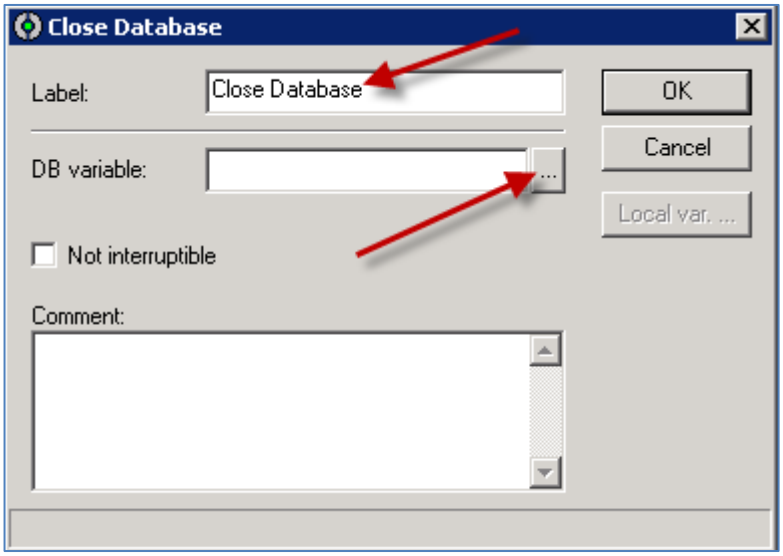


92. Once the information from the customer's database has been retrieved, the link to the database must be closed. This action is completed by using the **Close Database** element. Drag the **Close Database** element into the IVR Script working area.

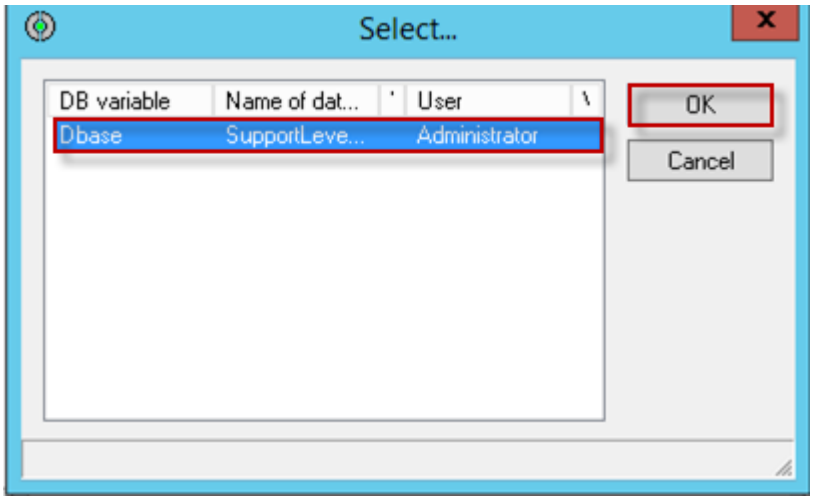


A. Click and drag.

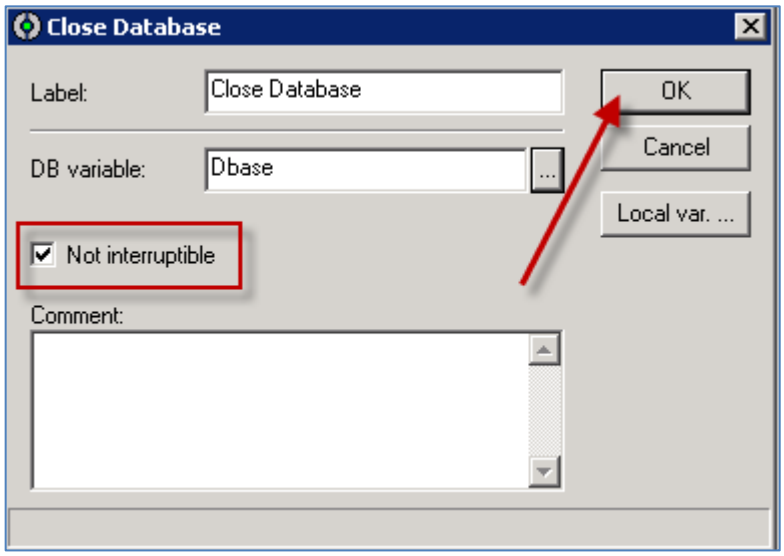
93. In the **Label** field enter **Close Dbase** and then click the **…** browser button adjacent to the DB variable field.



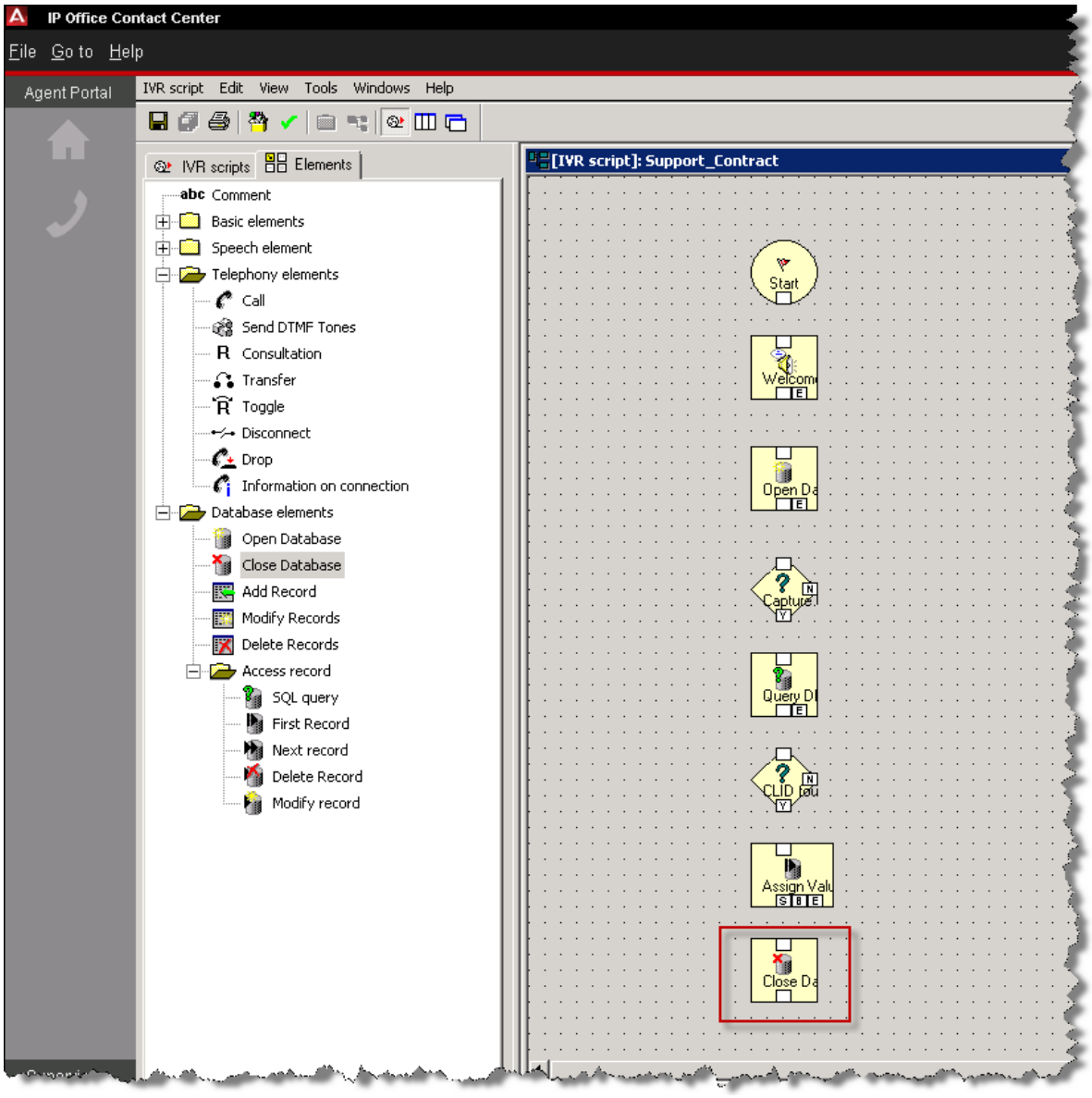
94. Select **Dbase** and click the **OK** button.



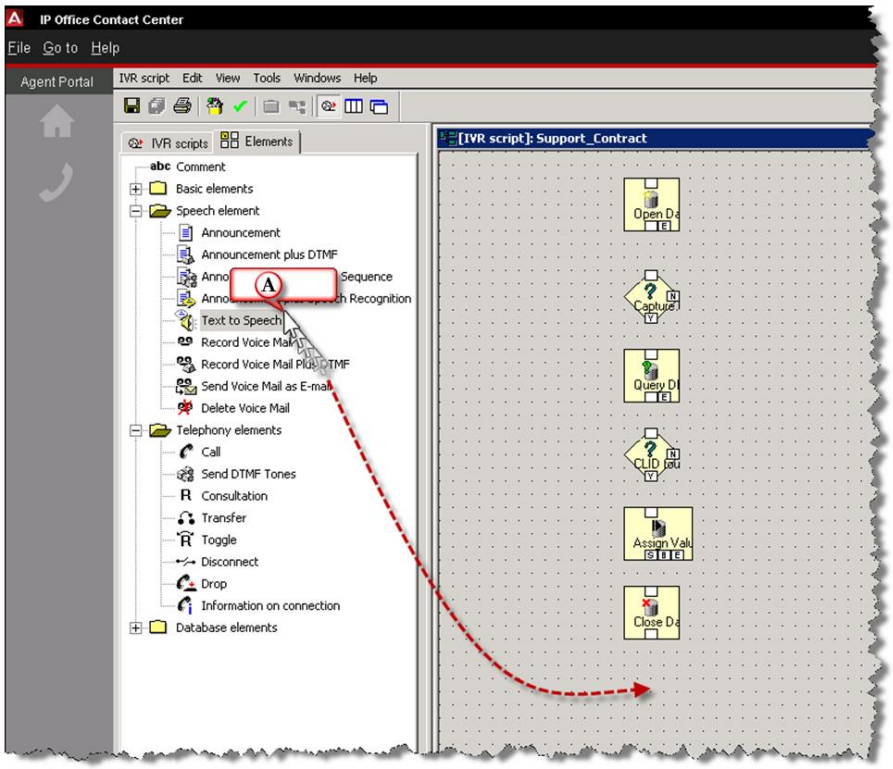
95. Select the **Not interruptible** check box and click the **OK** button.



96. The configured element is displayed.

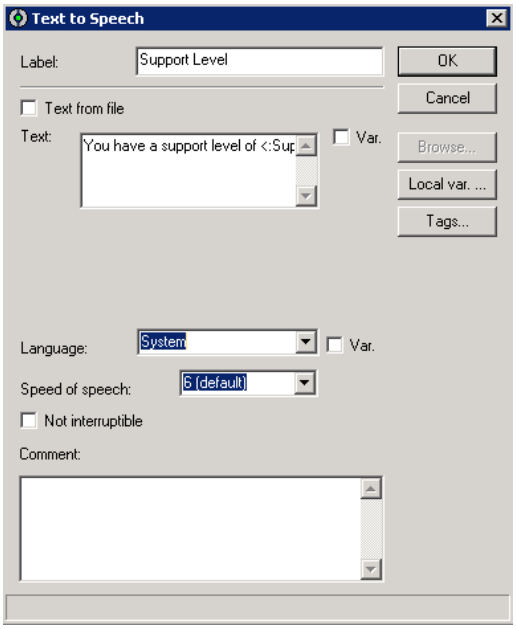


97. The IP Office Contact Centre system will audibly inform the caller their current level of support before their call is directed to an Agent. To do this a **Text to Speech** element can be used. Drag the **Text to Speech** element into the IVR Script working area.

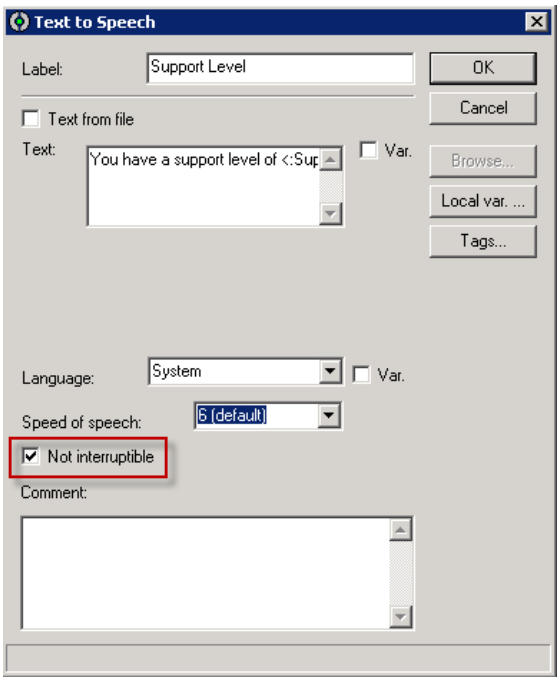


A. Click and drag.

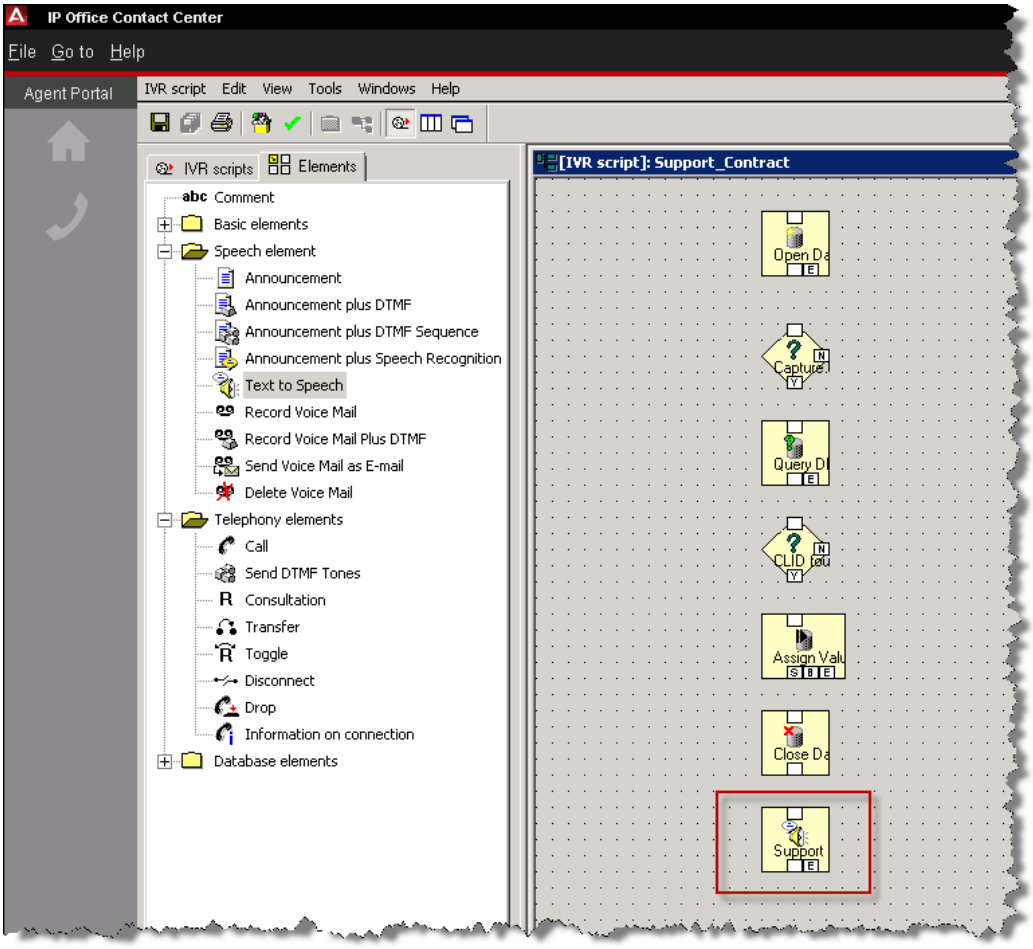
98. In the **Label** field enter **Support Level** and in the **Text** window enter **You have a support level of <:Support_Contract:>**.



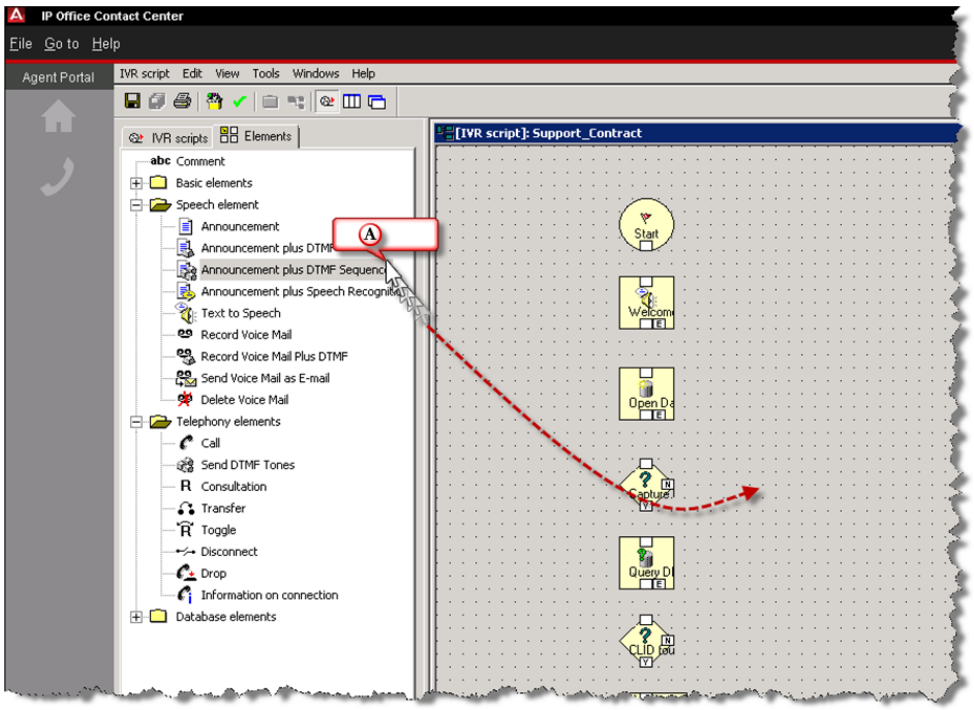
99. Select the option for **Not interruptible** and then click the **OK** button.



100. The configured element is displayed.

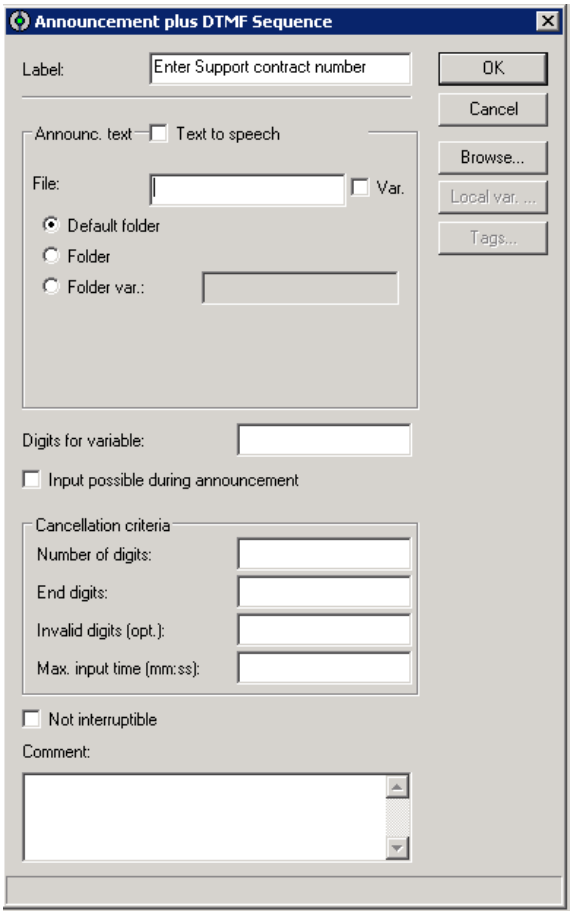


101. We now need to add another section to the IVR Script that can be used if no CLID is detected. This will provide the caller with an opportunity to enter their support contact number. This can be achieved by using an **Announcement plus DTMF Sequence** element. Drag the element into the IVR Script working area.

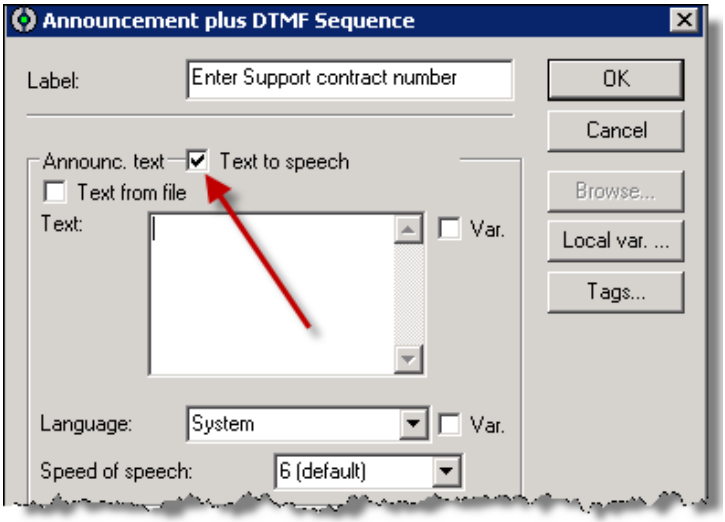


A. Click and drag.

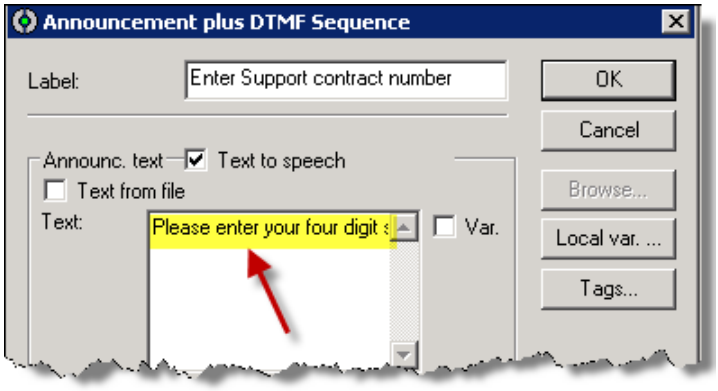
102. In the **Label** field enter **Enter Support contract number**.



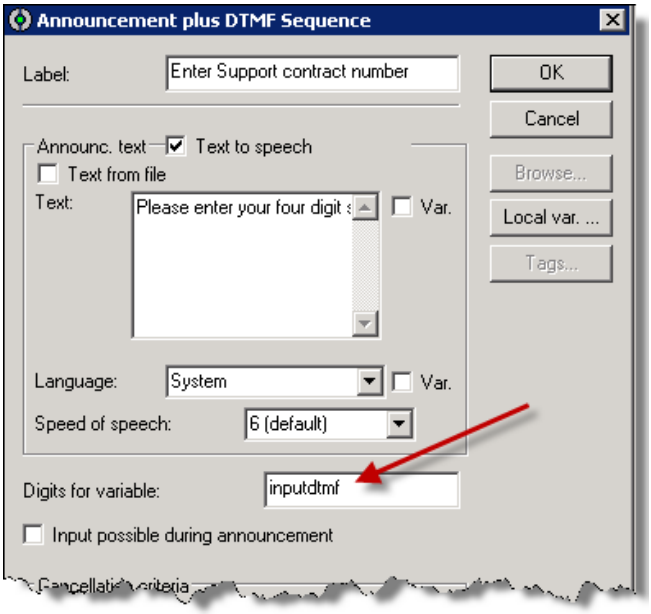
103. Then click the **Text to speech** check box.



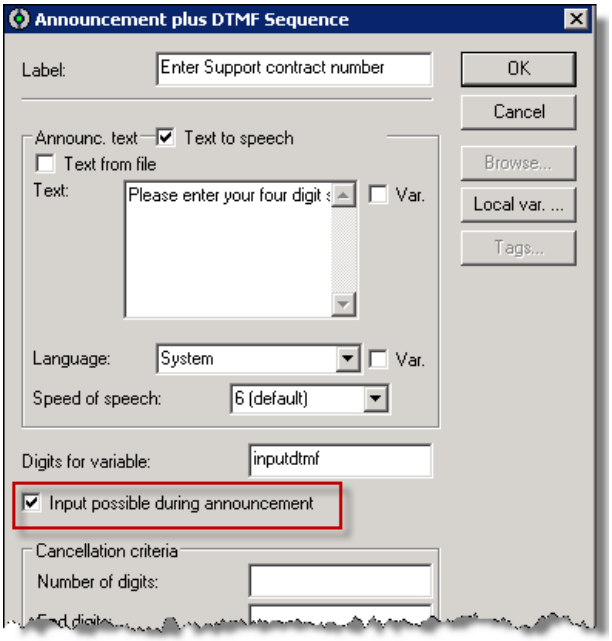
104. In the **Text** field enter **Please enter your four digit support contract number. If you do not have an account number, please hold**.



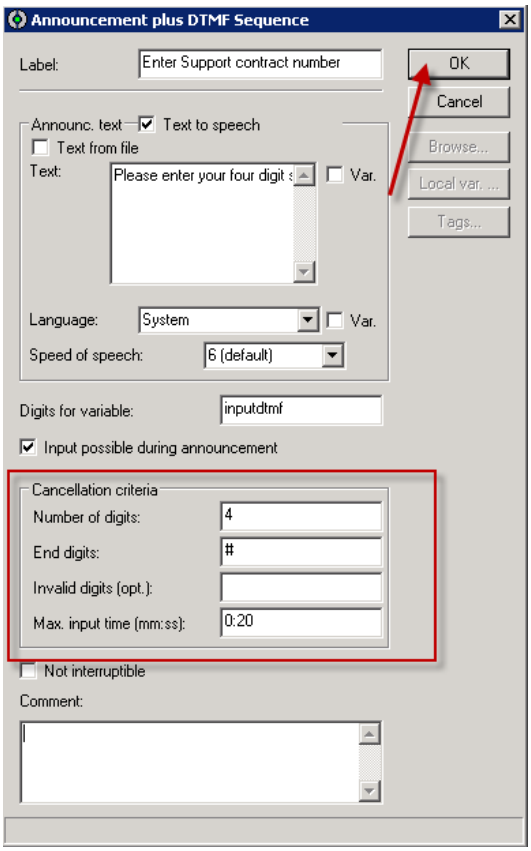
105. Then in the **Digits for variable** field enter **inputdtmf**.



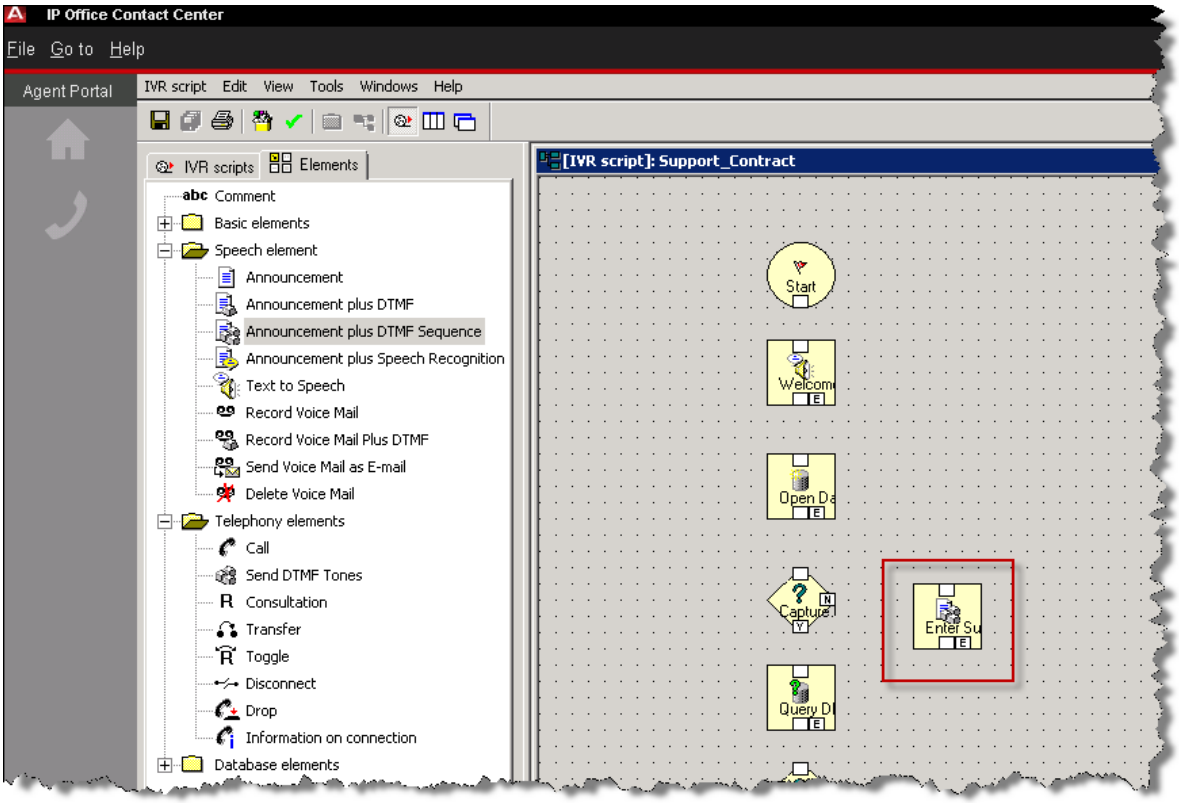
106. Select the **Input possible during announcement** check box.



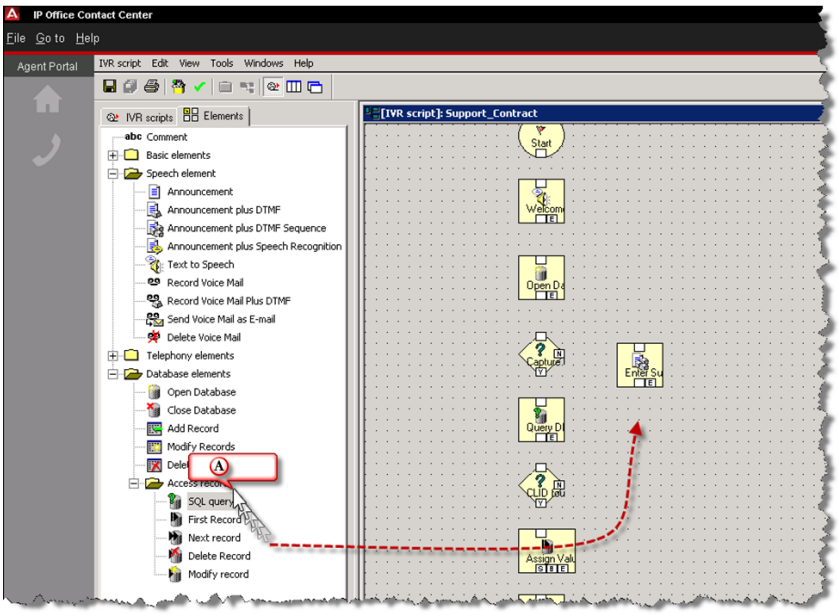
107. The **Cancellation criteria** must now be defined to determine if the customer has entered a valid support contract number. In the **Number of digits** field enter **4**. In the **End digits** field enter #. In the **Max input time (mm:ss)** field enter **00:20** and then click the **OK** button.



108. The configured element is displayed.

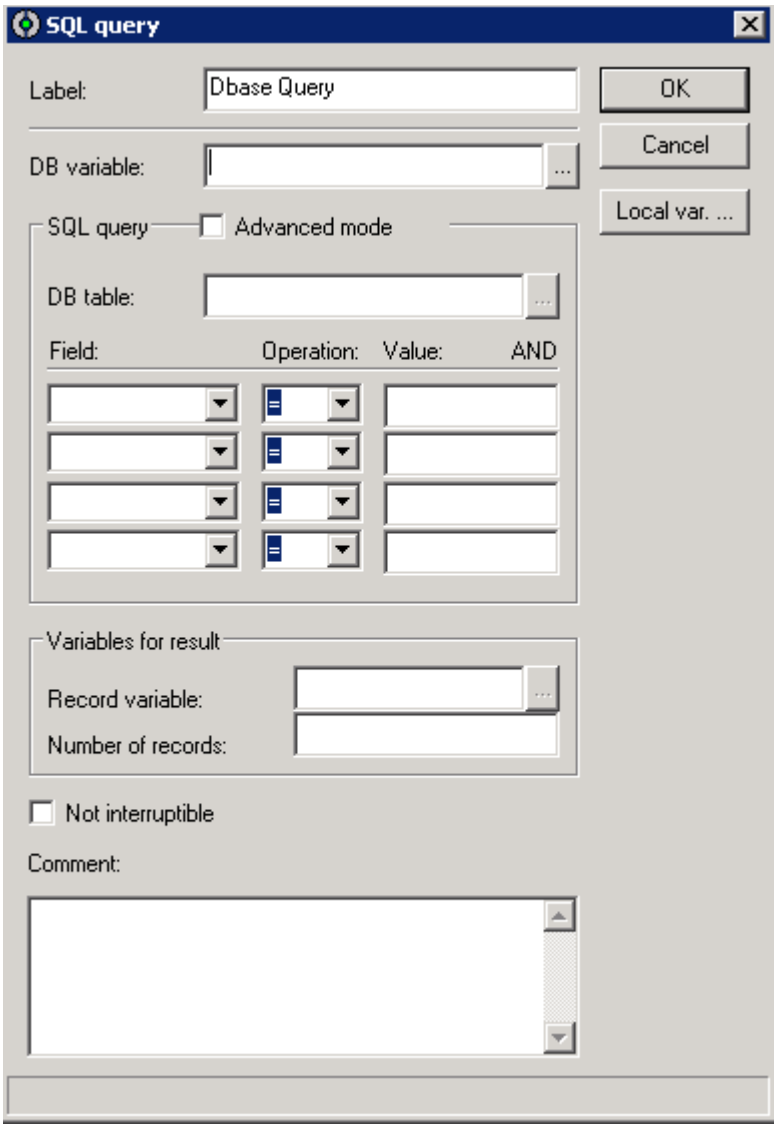


109. By using the DMTF entered by the customer, we can check to see if the digits entered match a record in the customer's database. To do this an **SQL query** element can be used. Drag the element into the IVR Script working area.

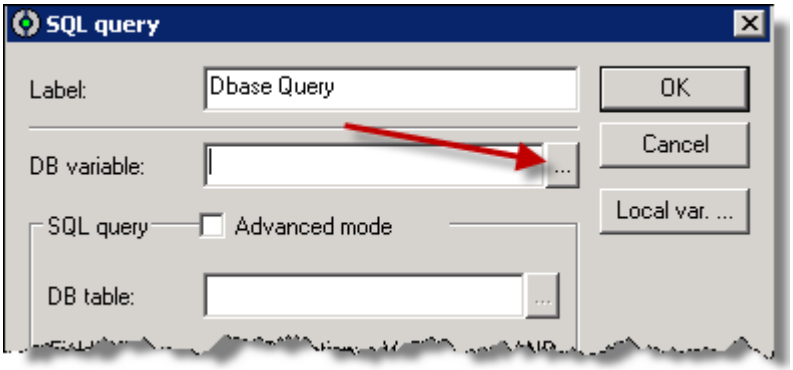


A. Click and drag.

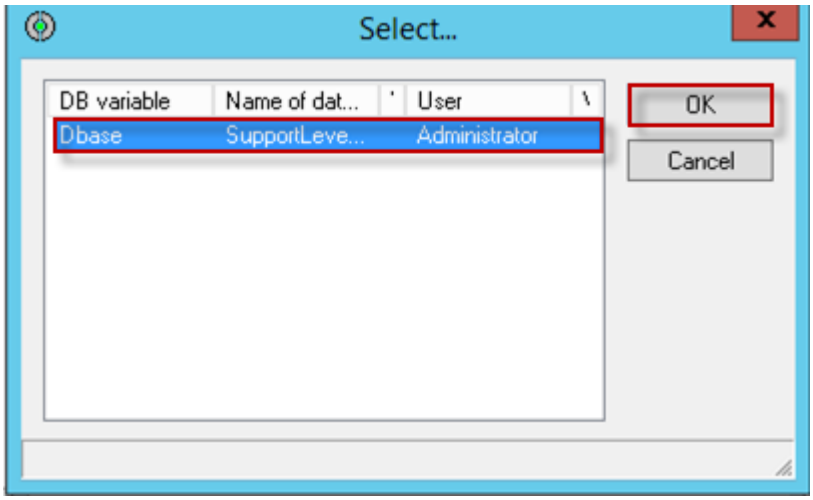
110. In the **Label** field enter **Dbase Query**.



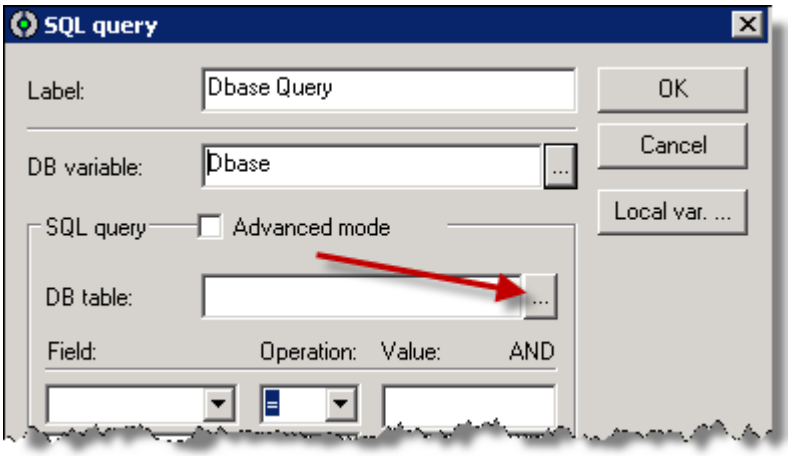
111. Click the **…** browser button next to **DB variable** field.



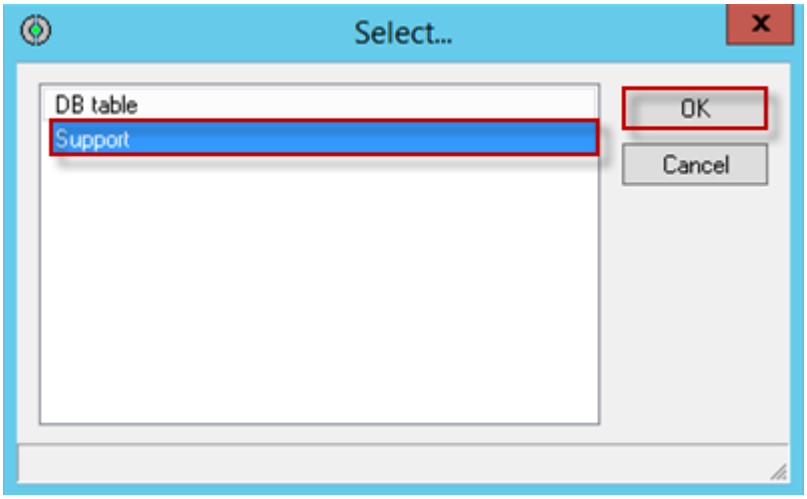
112. Select the **Dbase** variable and then click the **OK** button.



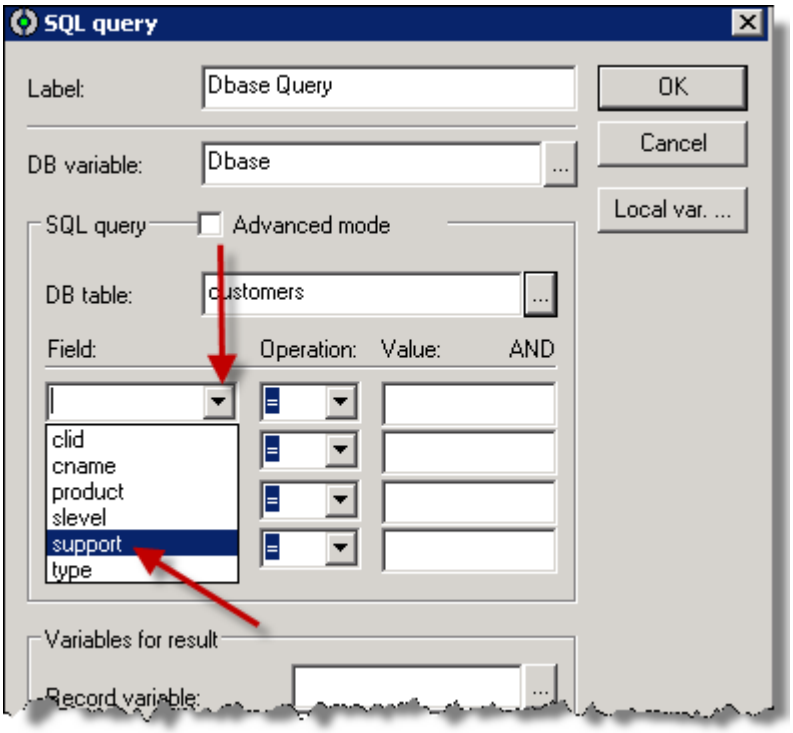
113. Select the **… browser** button next to the **DB table** field.



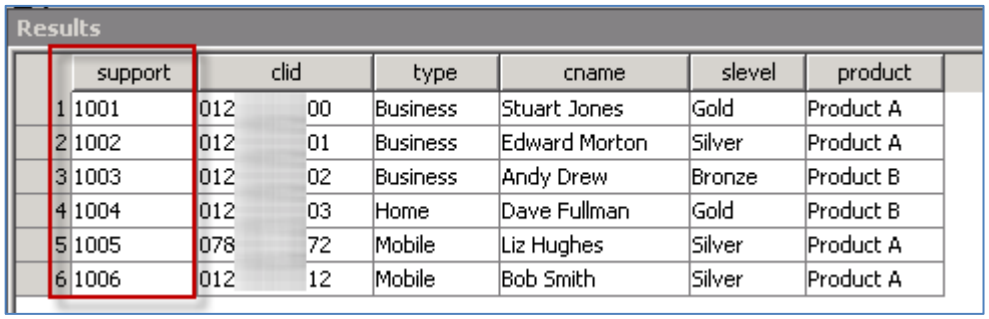
114. Select **customers** and then click the **OK** button.



115. Select the **drop down arrow** in the first **Field** window and select **support**.

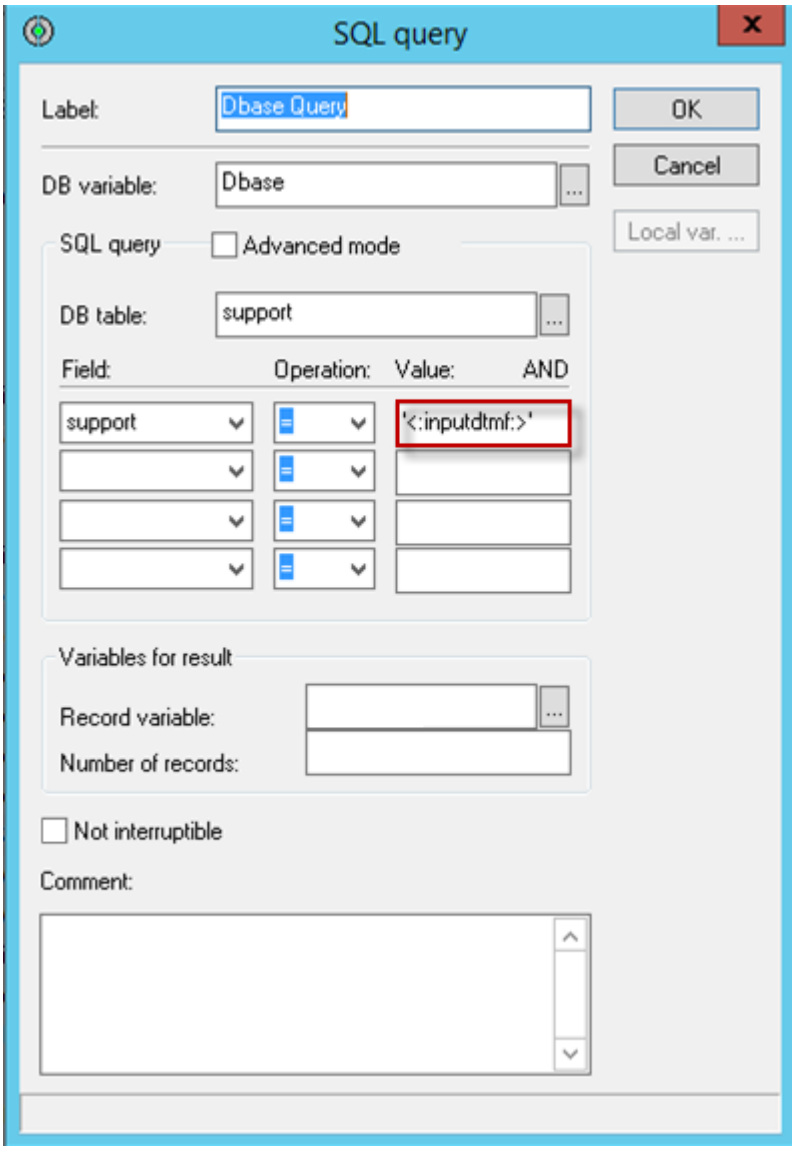


116. This will reference the **support** records contained within the database as illustrated below.

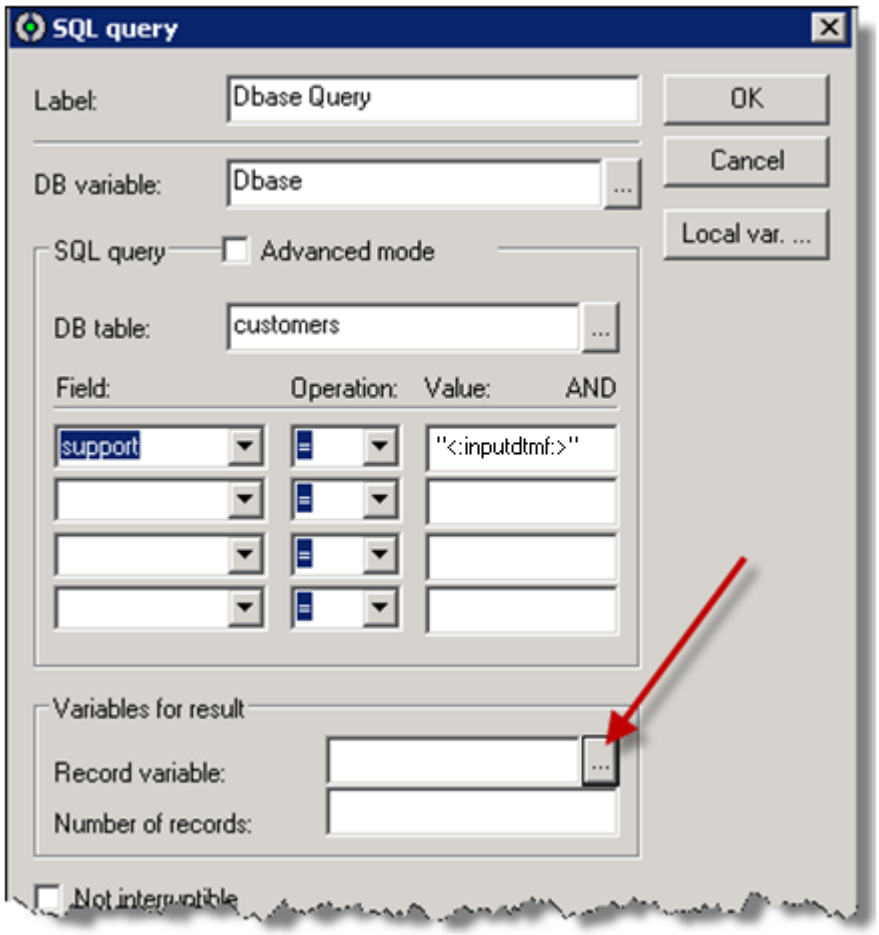


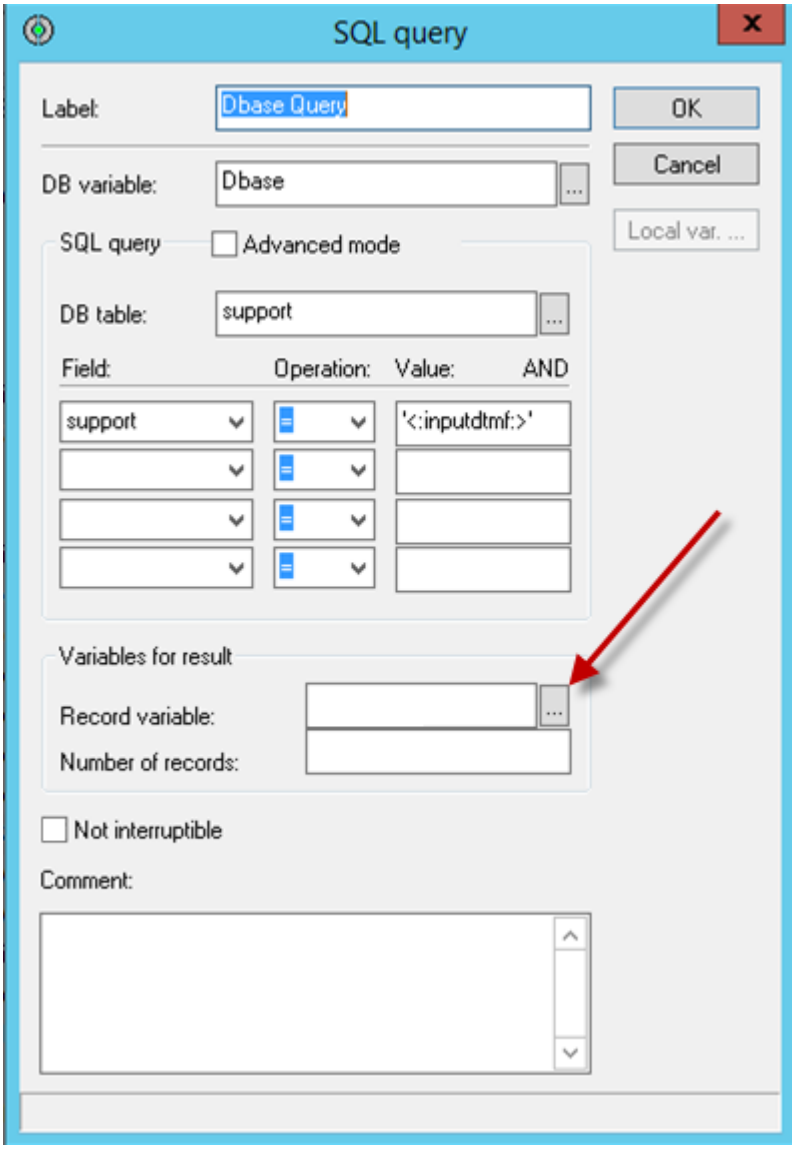
	support	clid	type	cname	slevel	product
1	1001	012 00	Business	Stuart Jones	Gold	Product A
2	1002	012 01	Business	Edward Morton	Silver	Product A
3	1003	012 02	Business	Andy Drew	Bronze	Product B
4	1004	012 03	Home	Dave Fullman	Gold	Product B
5	1005	078 72	Mobile	Liz Hughes	Silver	Product A
6	1006	012 12	Mobile	Bob Smith	Silver	Product A

117. In the **Value** field enter **‘<:inputdtmf:>’**

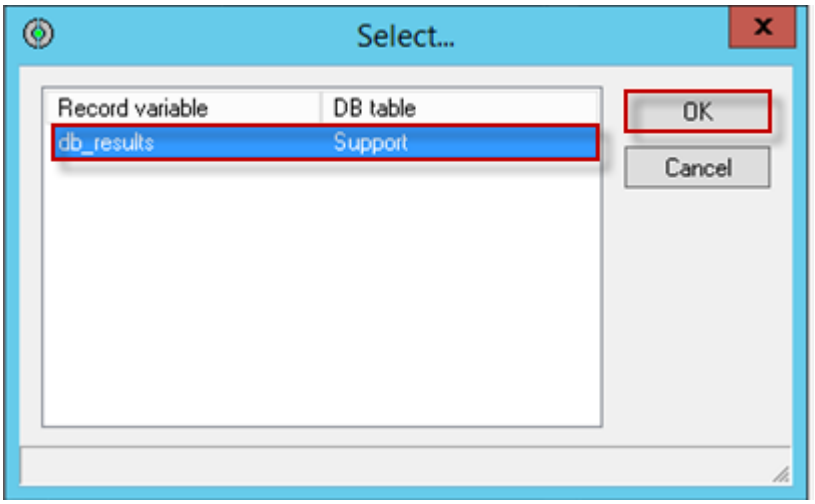


118. Select the **… browser** button adjacent to the **Record variable** field.

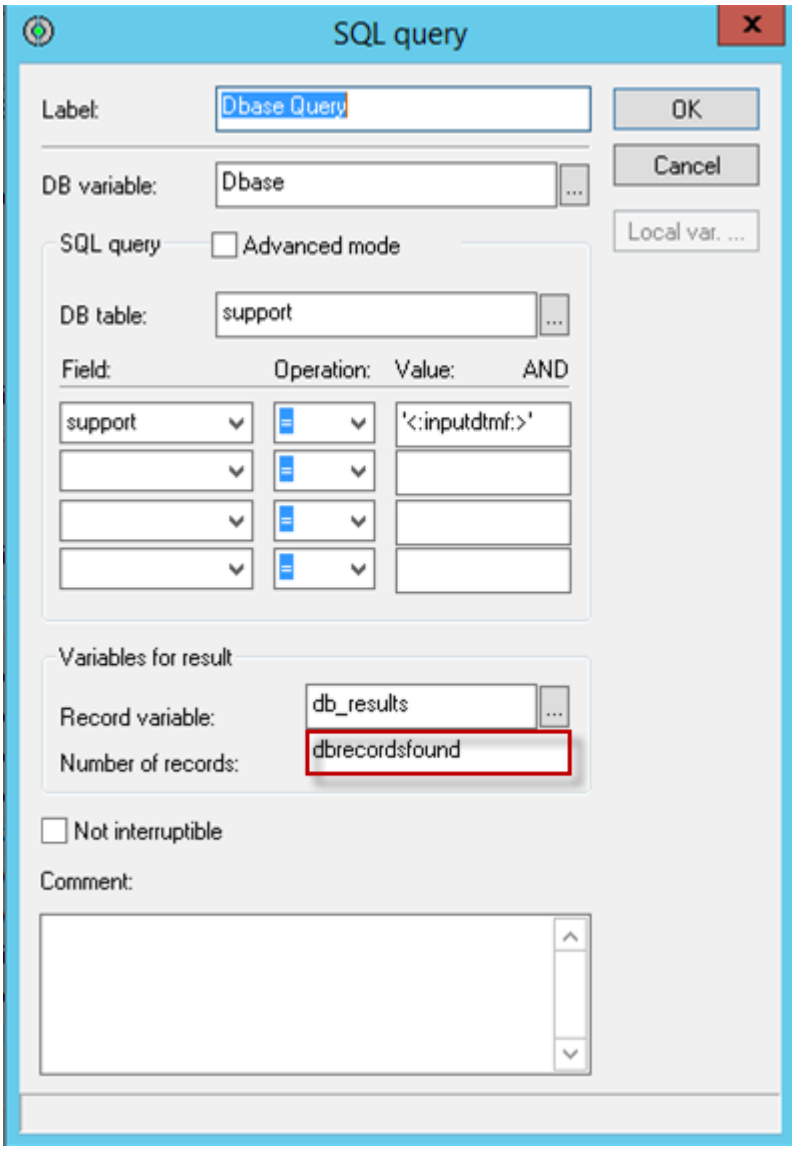

SQL query
Label:
Dbase Query
OK
Cancel
DB variable:
Dbase
Local var. ...
SQL query
Advanced mode
DB table:
customers
Field:
Operation:
Value:
AND
support
=
"<:inputdtmf:>"
Variables for result
Record variable:
Number of records:
Not interruptible



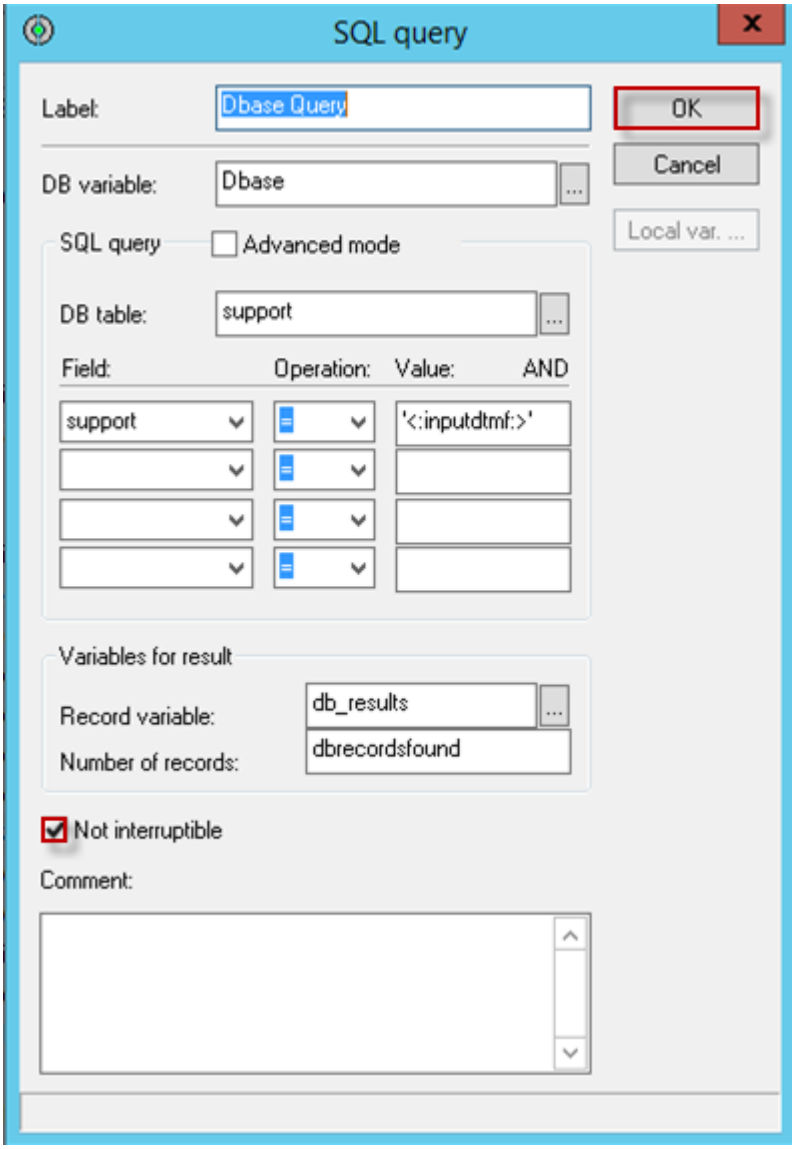
119. Click the **db_results** variable and select the **OK** button.



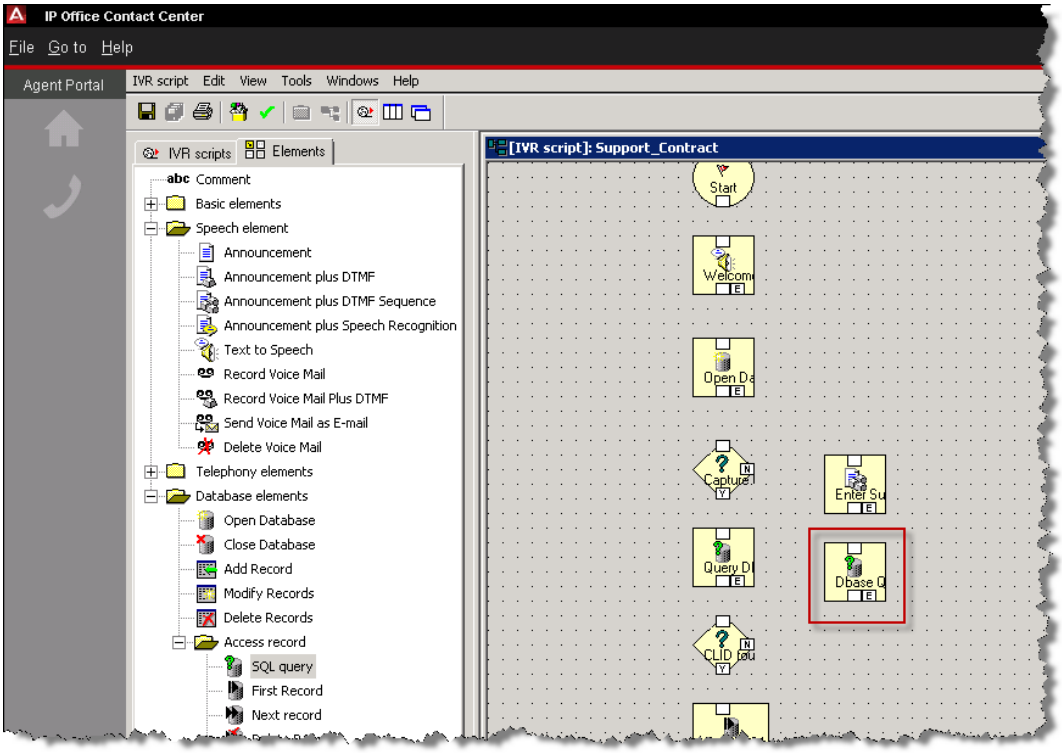
120. In the **Number of records** field enter **dbrecordsfound**.



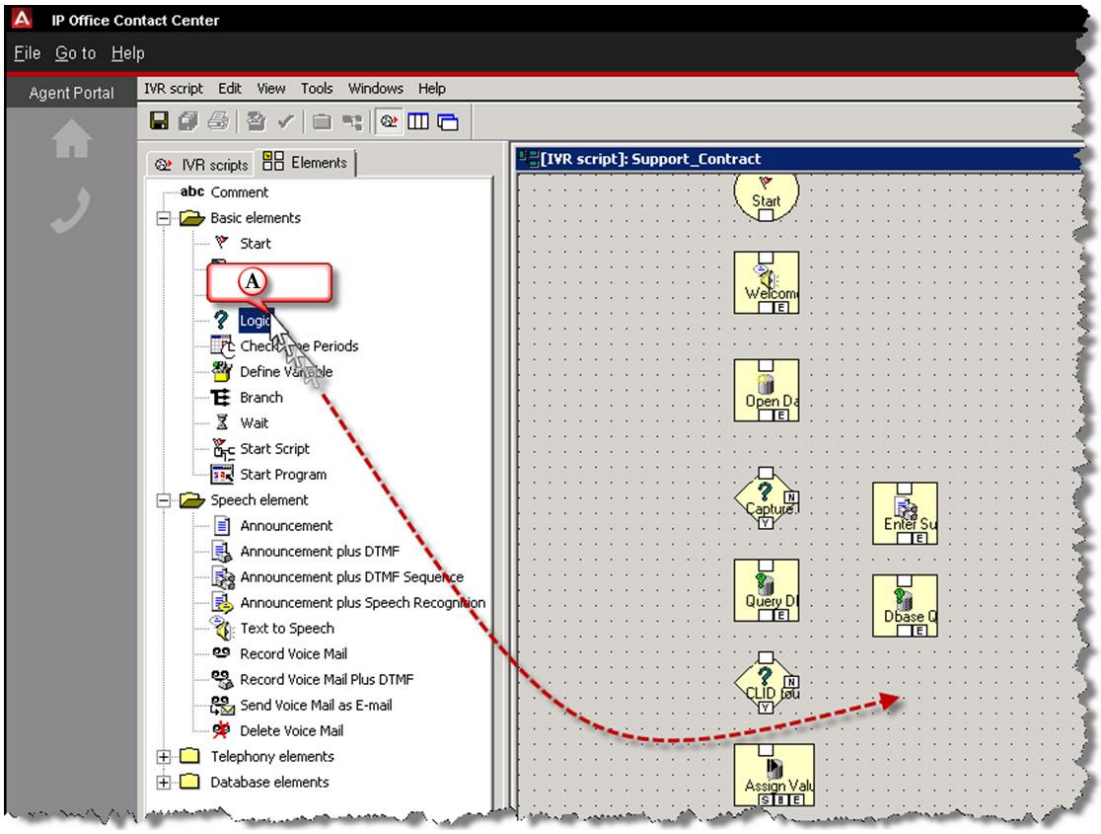
121. Click the **Not interruptible** check box. Click the **OK** button.



122. The configured element is displayed.

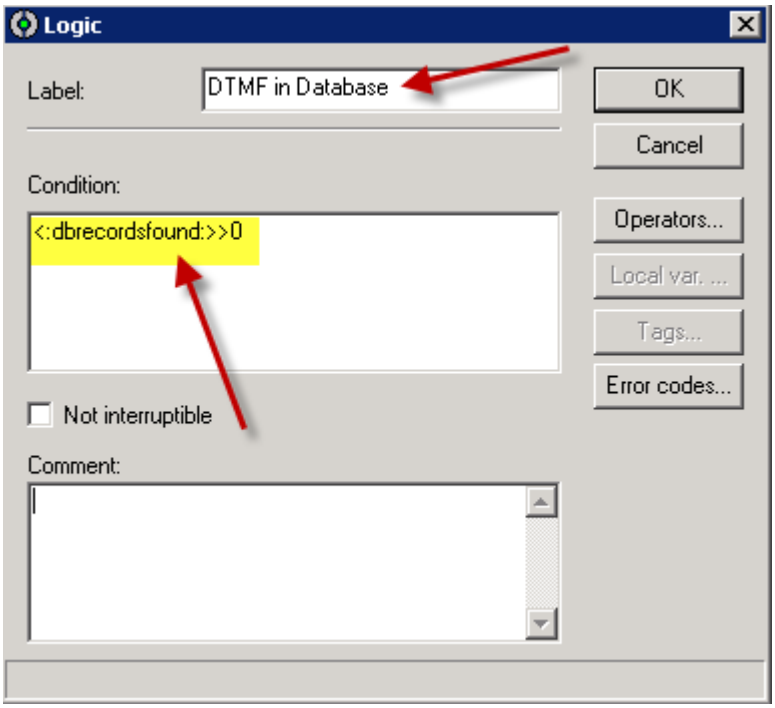


123. We will now use a Logic element to check if a Support contract was found in the customer's database. Drag a **Logic** element into the IVR Script working area.

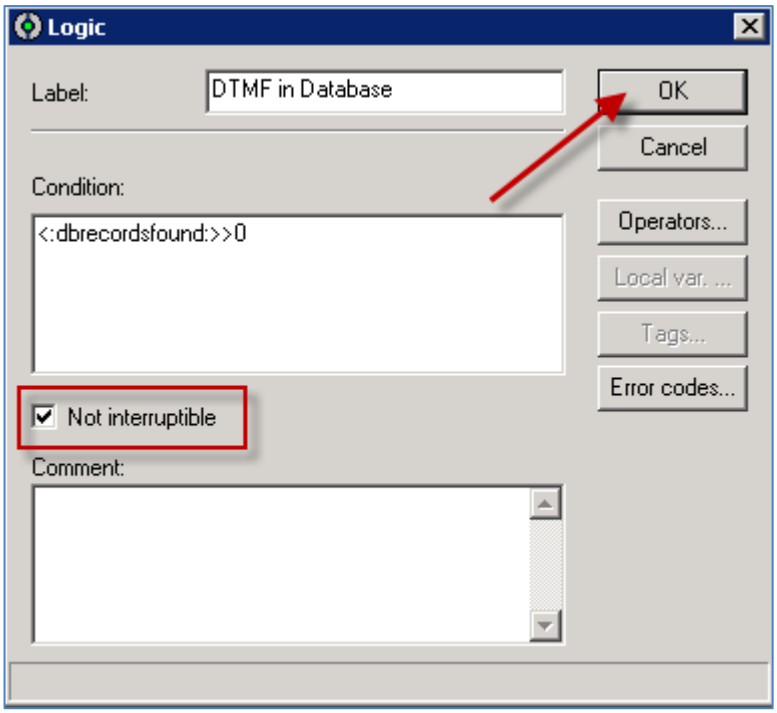


A. Click and drag.

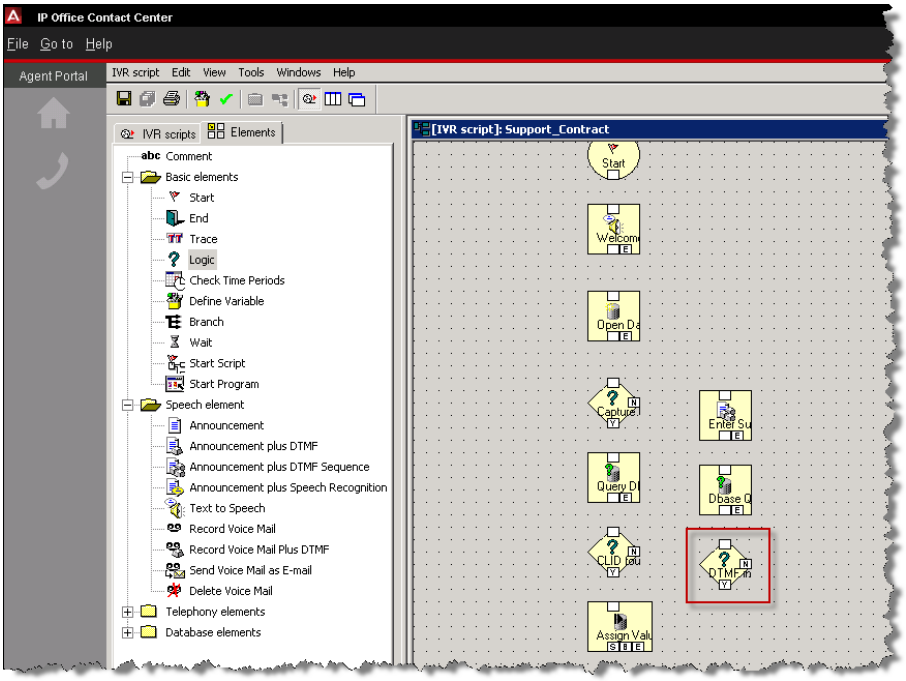
124. In the **Label** field enter **DTMF in Database** and in the **Condition** field enter **<:dbrecordsfound:>>0**



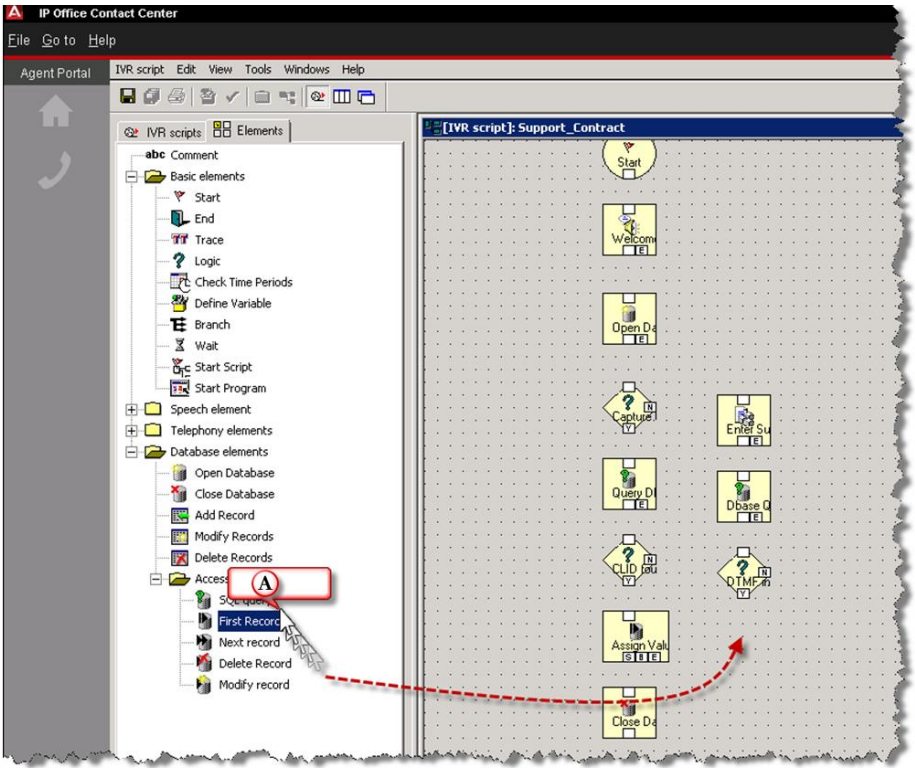
125. Select **Not interruptible** check box and click the **OK** button.



126. The configured element is displayed.

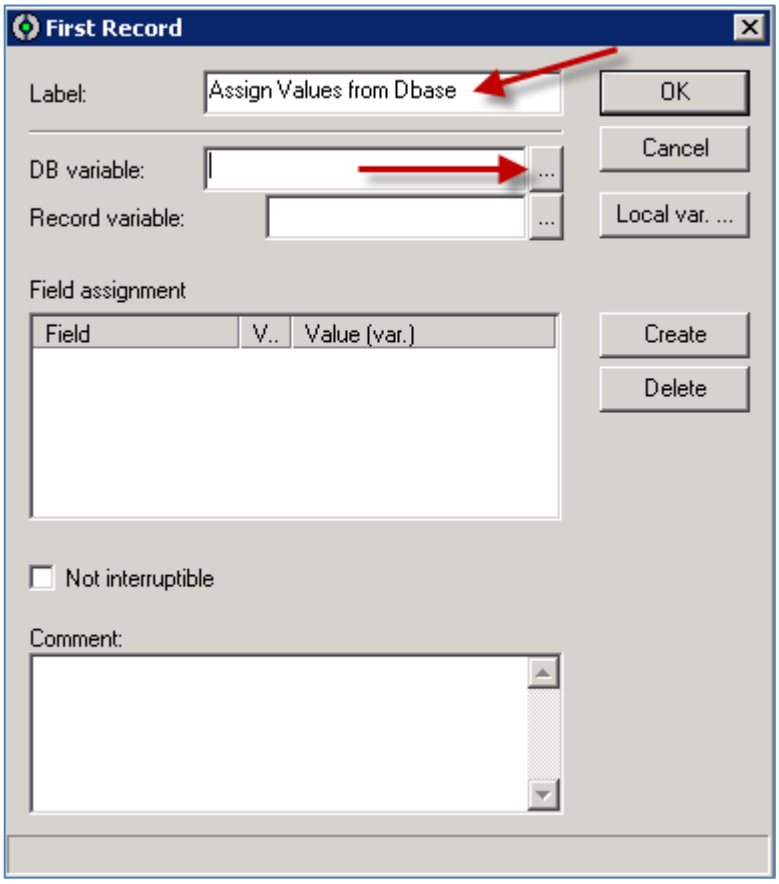


127. If the Support contract number is located within the database, it will be retrieved and stored in a variable that will be referenced later. This process can be performed using the **First Record** element. Drag the element into the IVR Script working area.

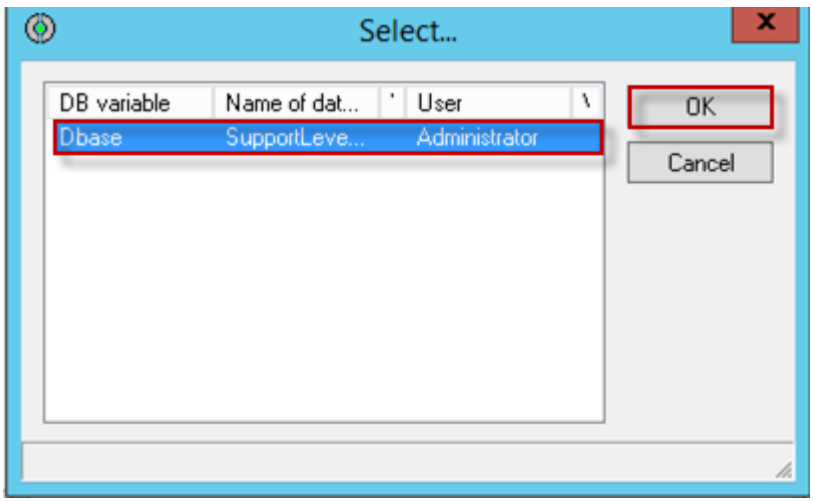


A. Click and drag.

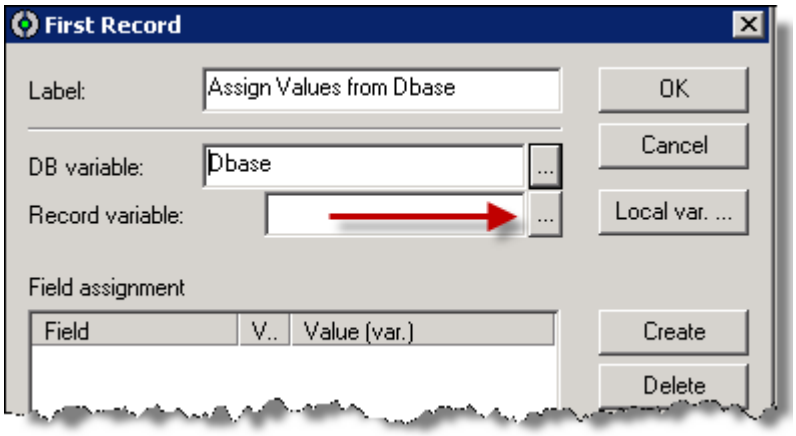
128. In the **Label** field enter **Assign Values from Dbase** and then select the **…** browser button adjacent to the **DB variable** field.



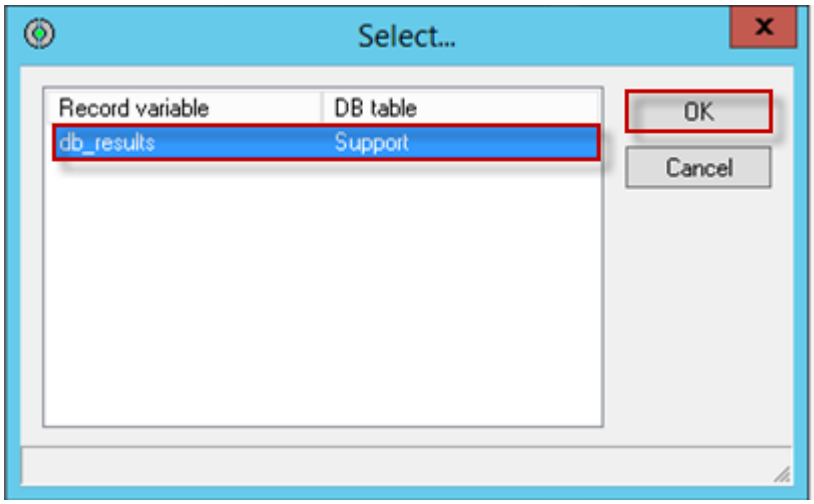
129. Click the **Dbase** variable and then click the **OK** button.



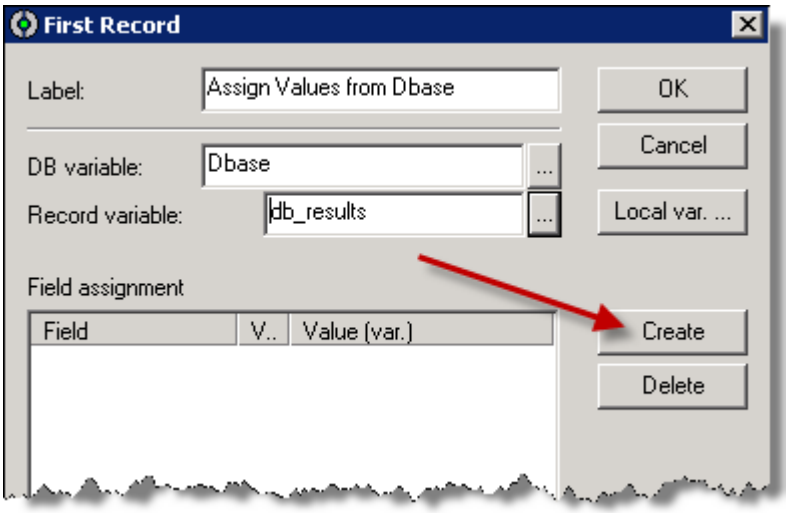
130. Click the **…** browser button adjacent to the **Record variable** field.



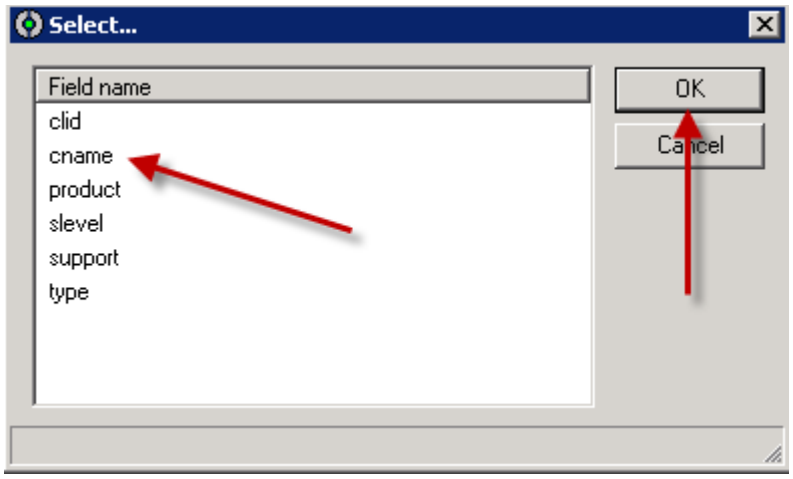
131. Select the **db_results** variable and click the **OK** button.



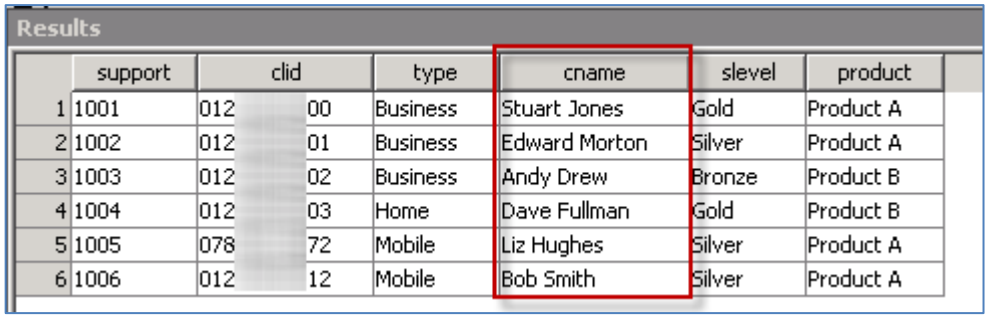
132. Click the **Create** button.



133. Click **cname** and select the **OK** button

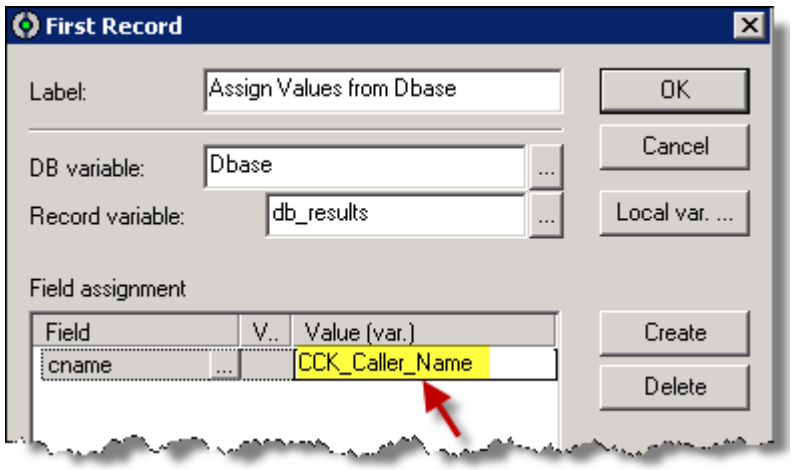


134. This will reference the **cname** records contained within the database as illustrated below.

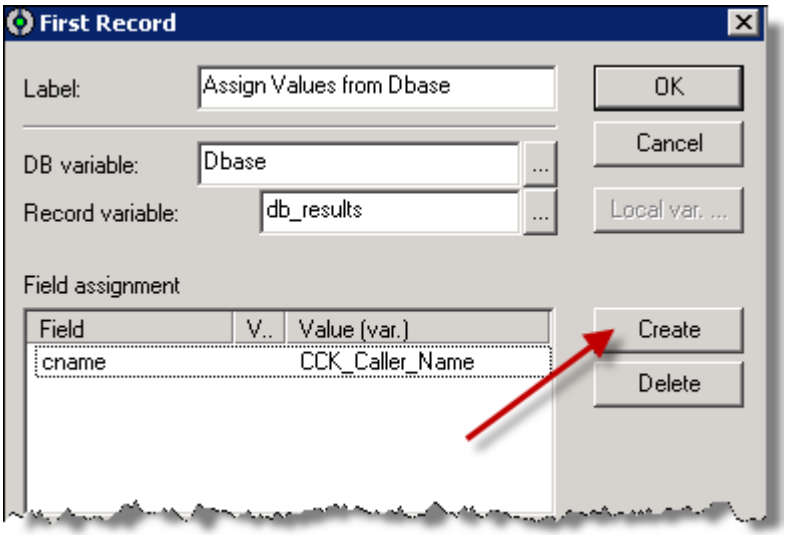


	support	clid	type	cname	slevel	product
1	1001	012 00	Business	Stuart Jones	Gold	Product A
2	1002	012 01	Business	Edward Morton	Silver	Product A
3	1003	012 02	Business	Andy Drew	Bronze	Product B
4	1004	012 03	Home	Dave Fullman	Gold	Product B
5	1005	078 72	Mobile	Liz Hughes	Silver	Product A
6	1006	012 12	Mobile	Bob Smith	Silver	Product A

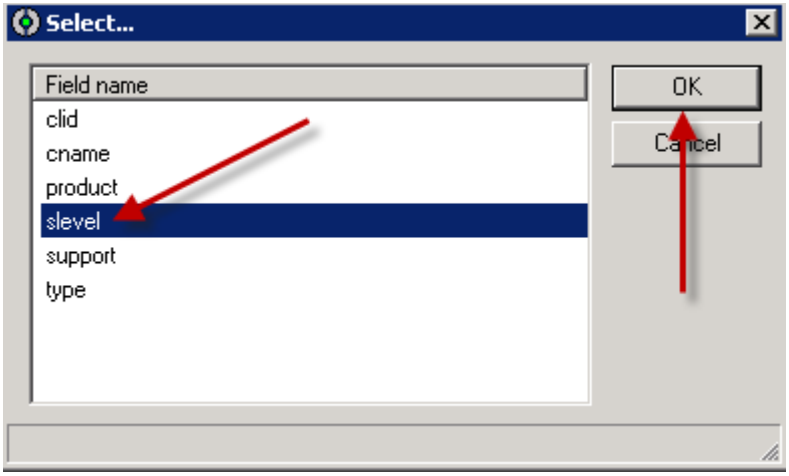
135. In the **Value(Var)** field enter **CCK_Caller_Name**



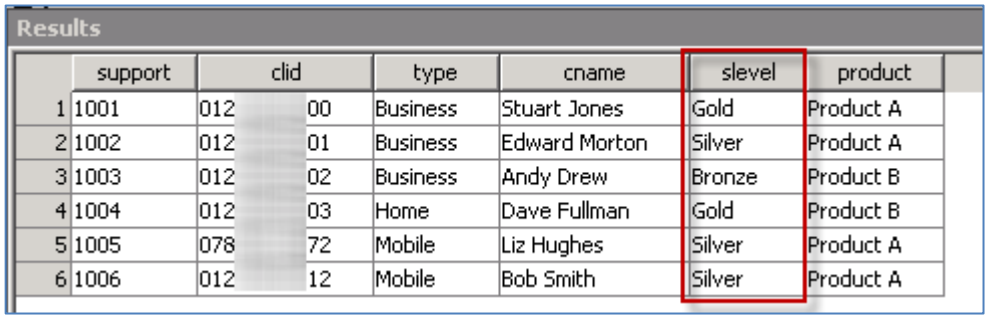
136. Click the **Create** button.



137. Click **slevel** and select the **OK** button.

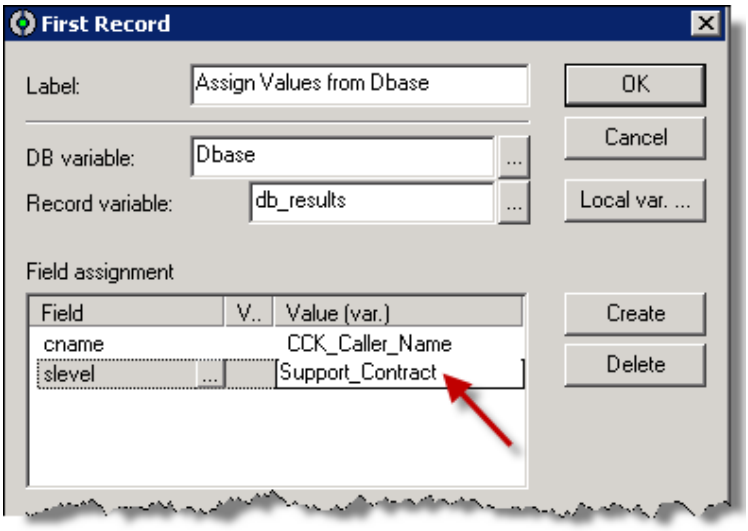


138. This will reference the **slevel** records contained within the database as illustrated below.

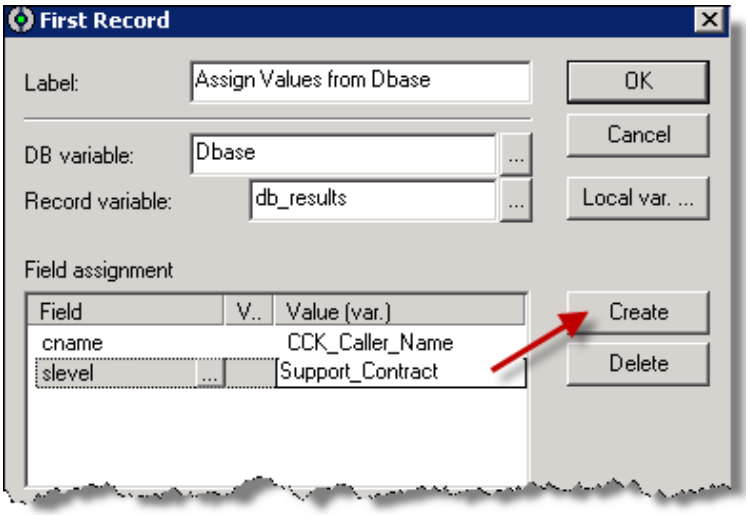


	support	clid	type	cname	slevel	product
1	1001	012 00	Business	Stuart Jones	Gold	Product A
2	1002	012 01	Business	Edward Morton	Silver	Product A
3	1003	012 02	Business	Andy Drew	Bronze	Product B
4	1004	012 03	Home	Dave Fullman	Gold	Product B
5	1005	078 72	Mobile	Liz Hughes	Silver	Product A
6	1006	012 12	Mobile	Bob Smith	Silver	Product A

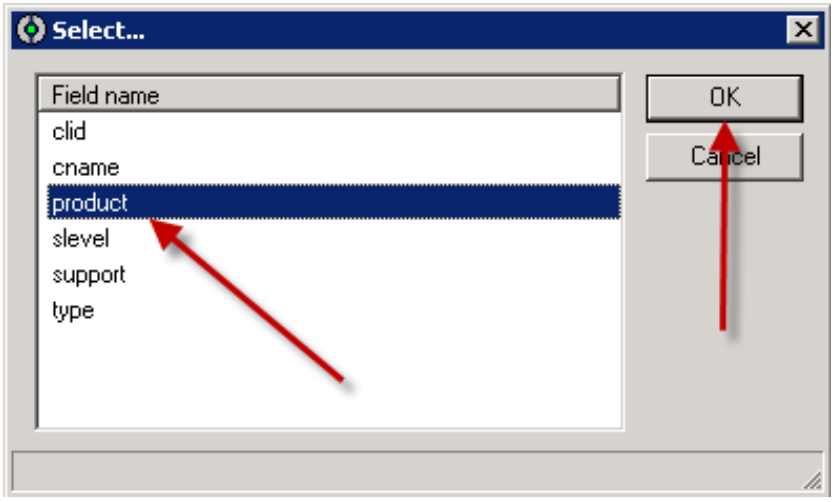
139. In the **Value** field enter **Support_Contract**



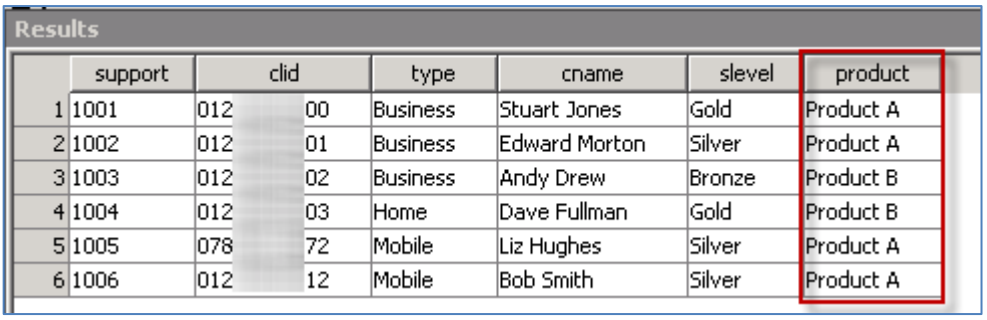
140. Click the **Create** button.



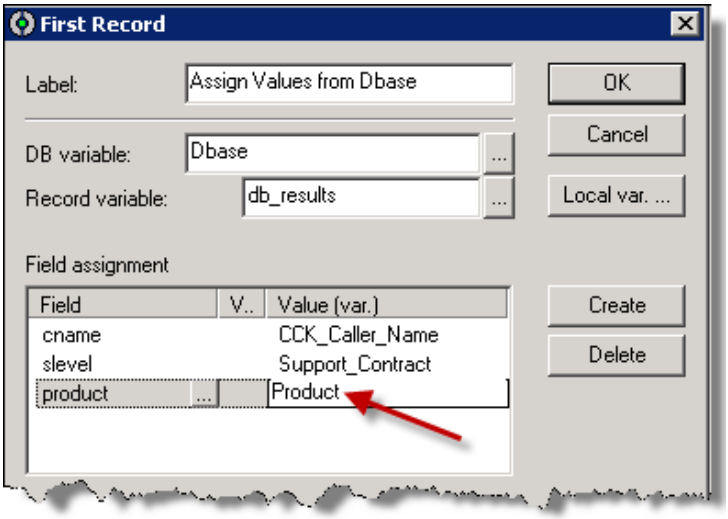
141. Click **product** and click the **OK** button.



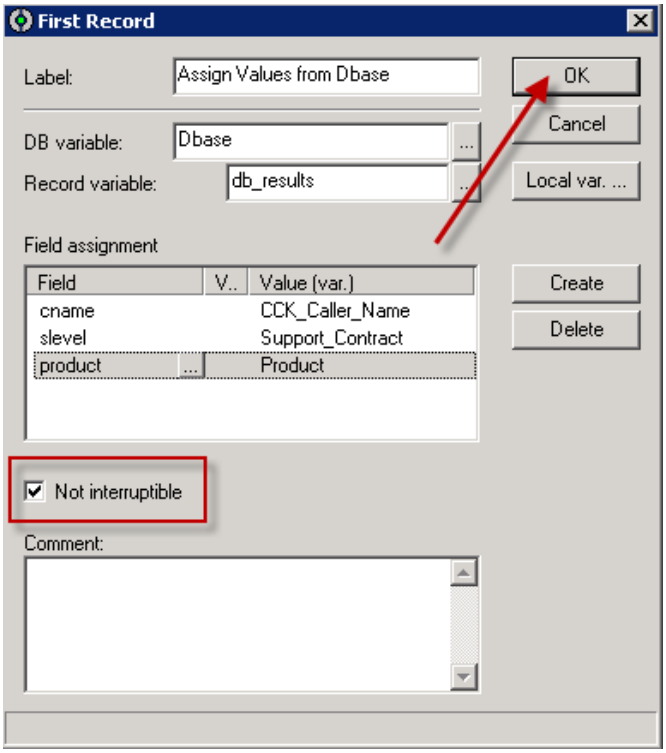
142. This will reference the **product** records contained within the database as illustrated below.



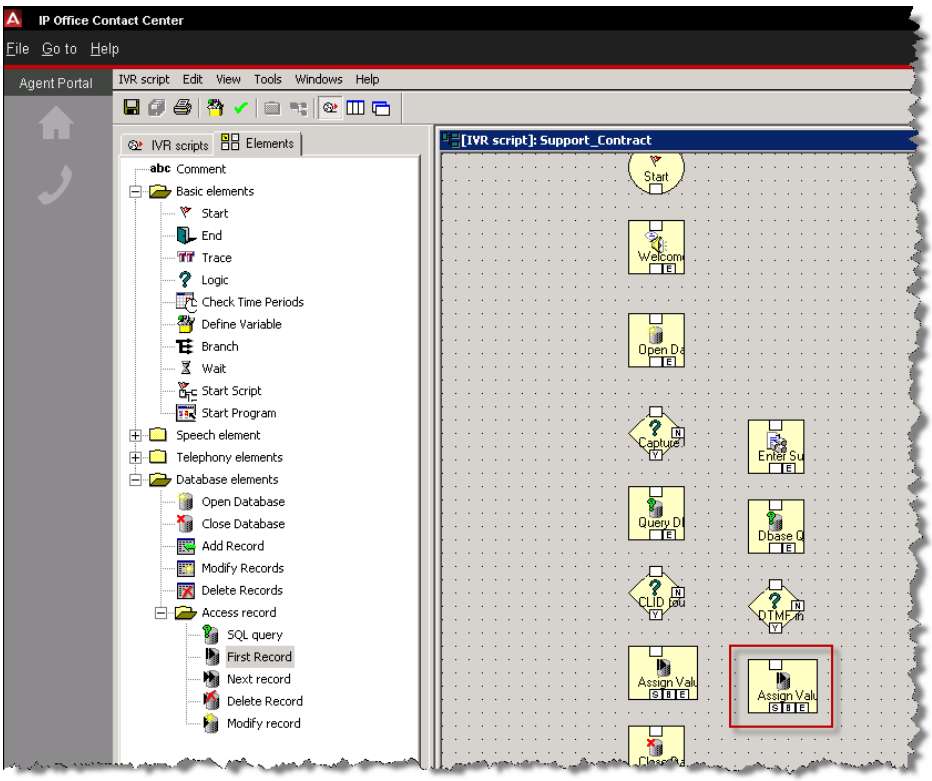
143. In the **Value** field enter **Product**.



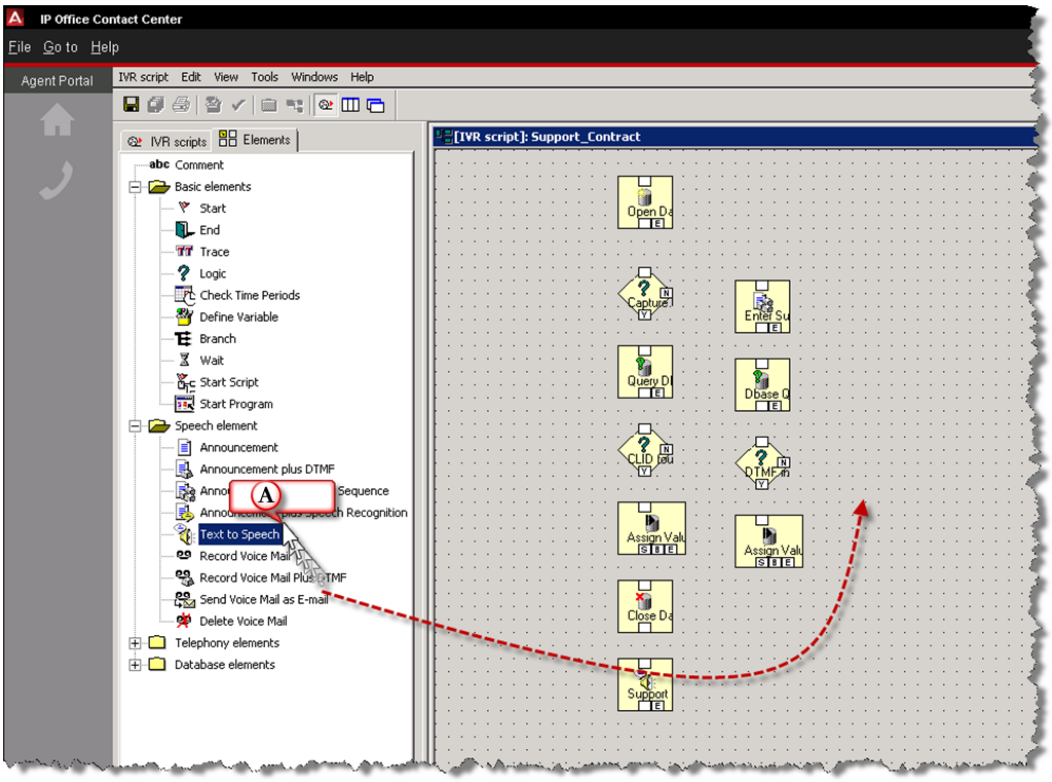
144. Click the **Not interruptible** check box and then click the **OK** button



145. The configured element is displayed.

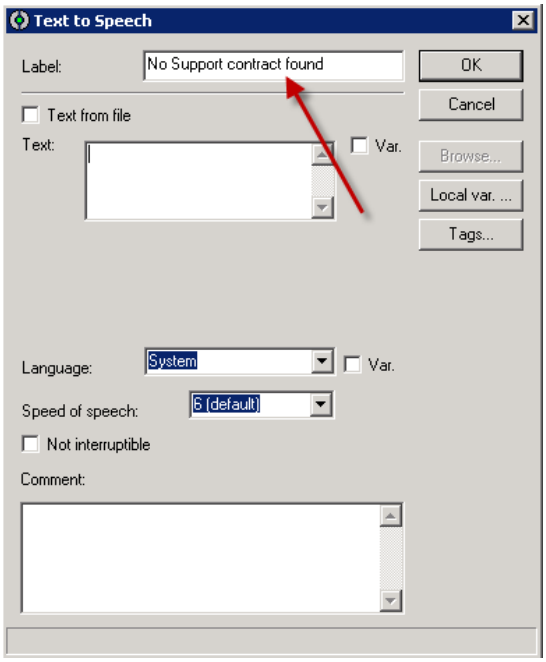


146. If a ‘support’ record cannot be found in the customer’s database, the caller will hear an announcement informing them that they do not have a support contract. This can be achieved by using a **Text to Speech** element. Drag the **Text to Speech** element into the IVR Script working area.

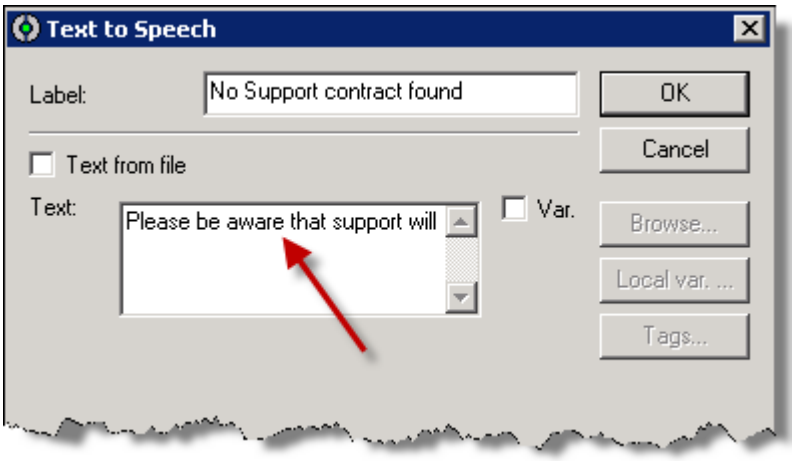


A. Click and drag.

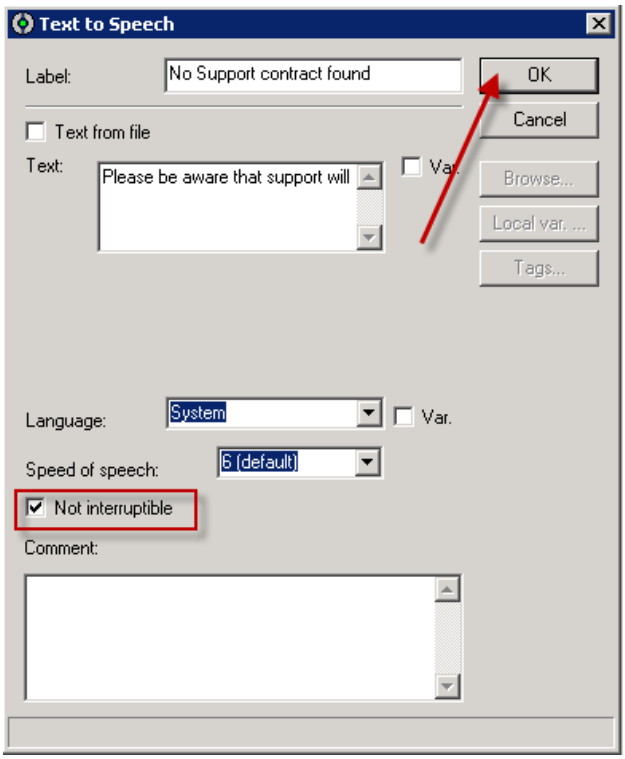
147. In the **Label** field enter **No Support contract found**.



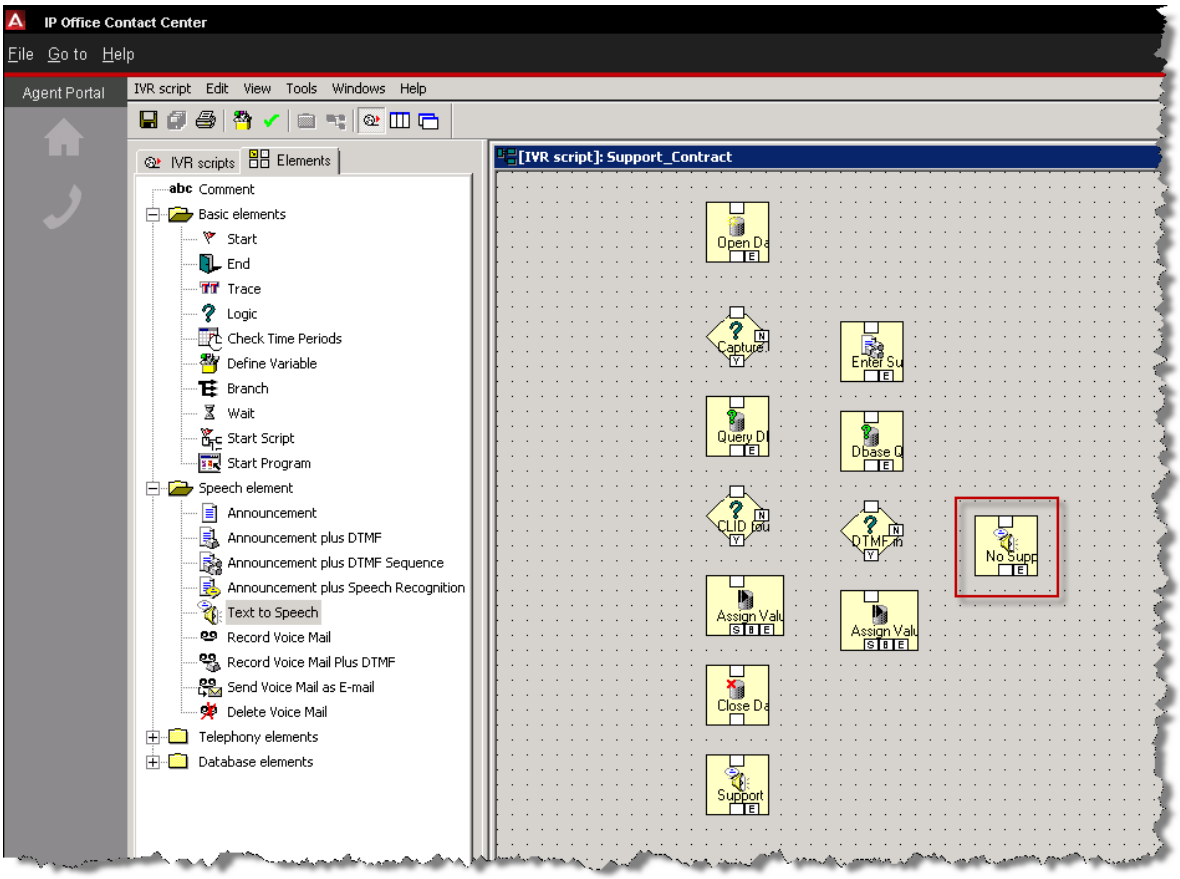
148. In the **Text** field enter **Please be aware that support will only be given to customers with an active support contract**.



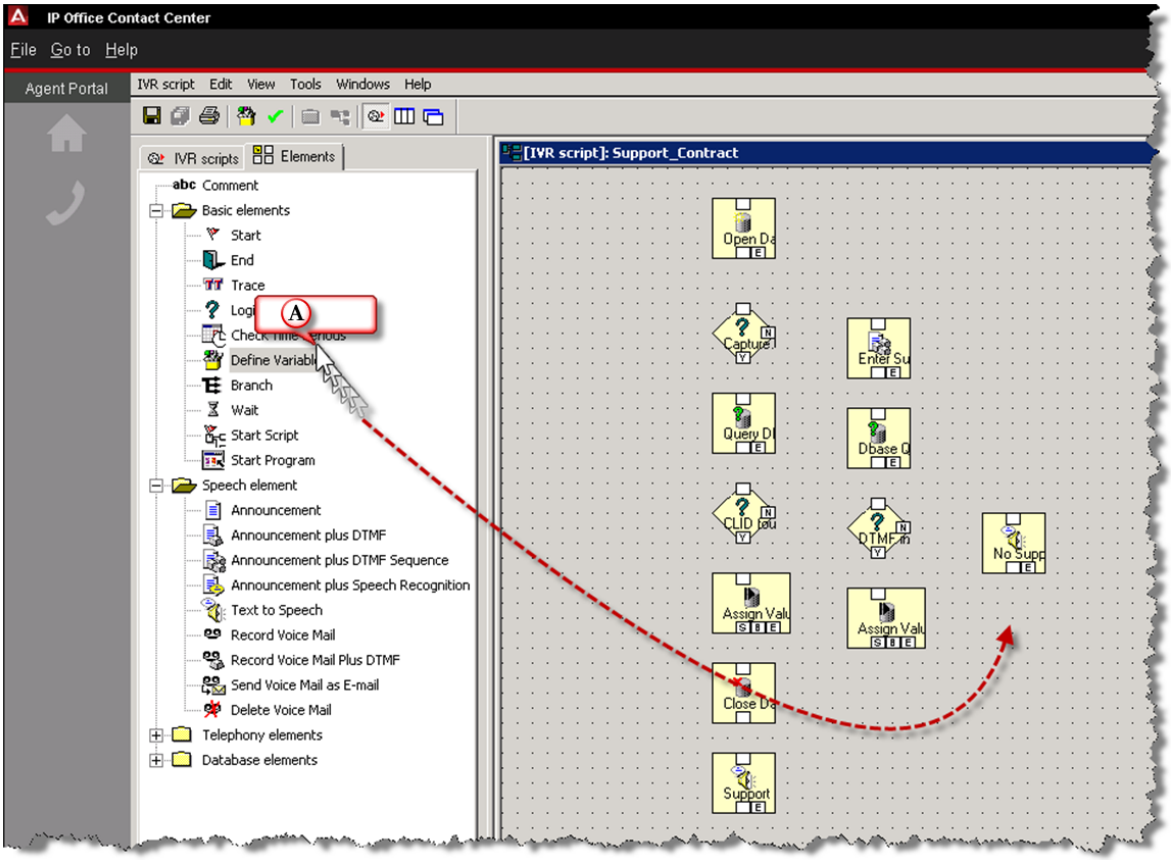
149. Click the **Not interruptible** check box and then click the **OK** button.



150. The configured element is displayed.

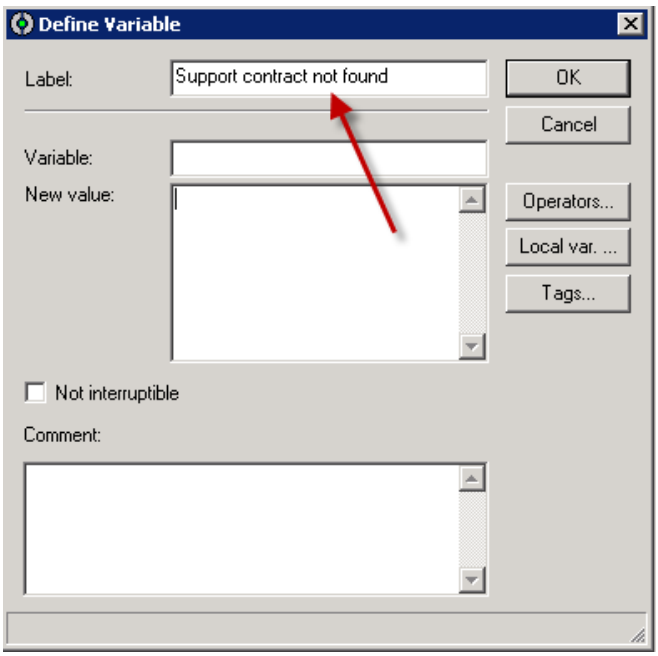


151. We will now amend a Variable to alert the Agent taking the call, that the caller's details have not matched any records in the customer's database. This can be achieved by using a **Define Variable** element. Drag the element into the IVR Script working area.

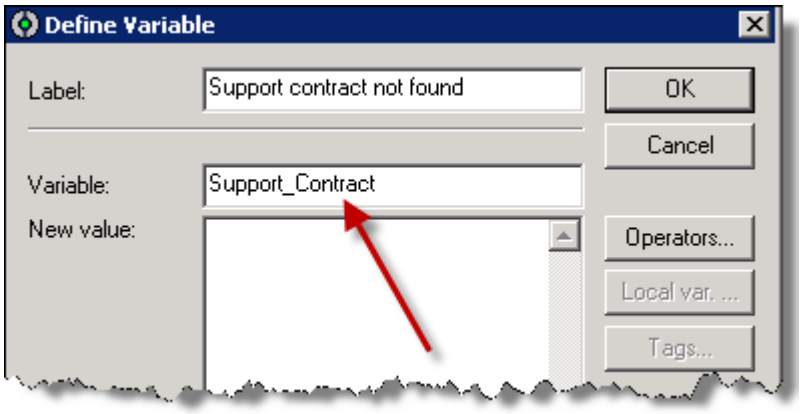


A. Click and drag.

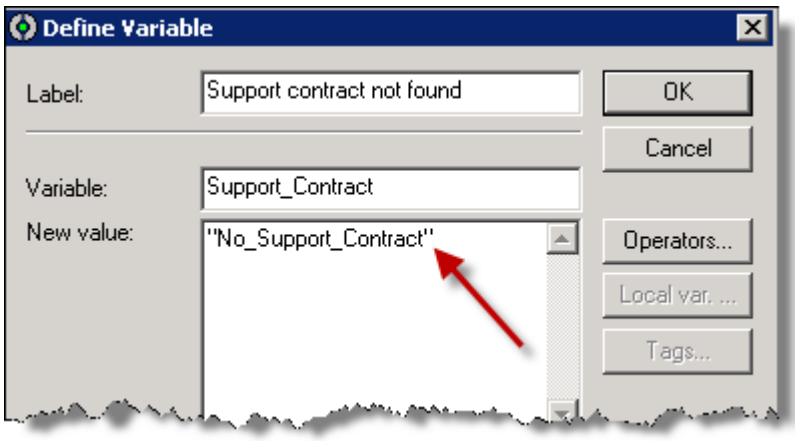
152. In the **Label** field enter **Support contract not found**



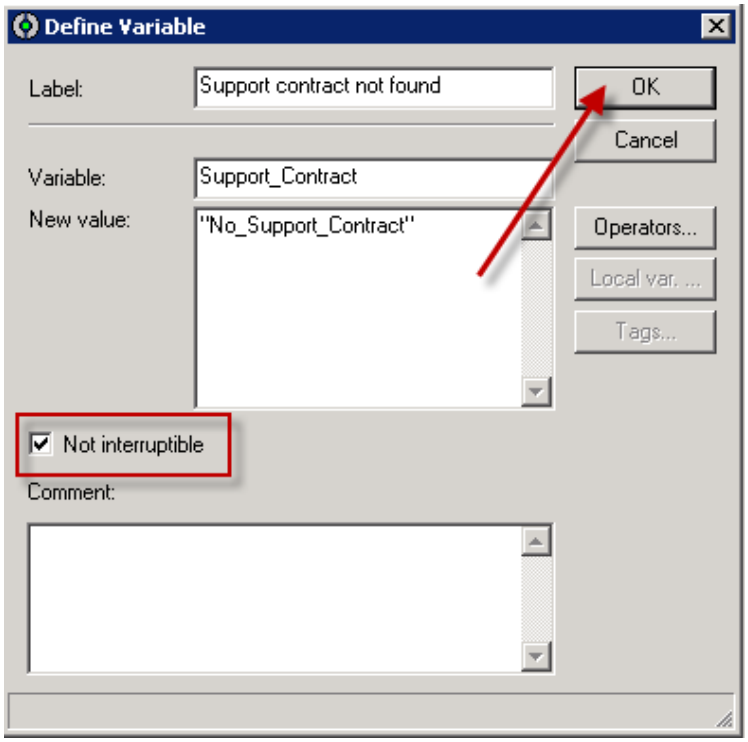
153. In the **Variable** field enter **Support_Contract**



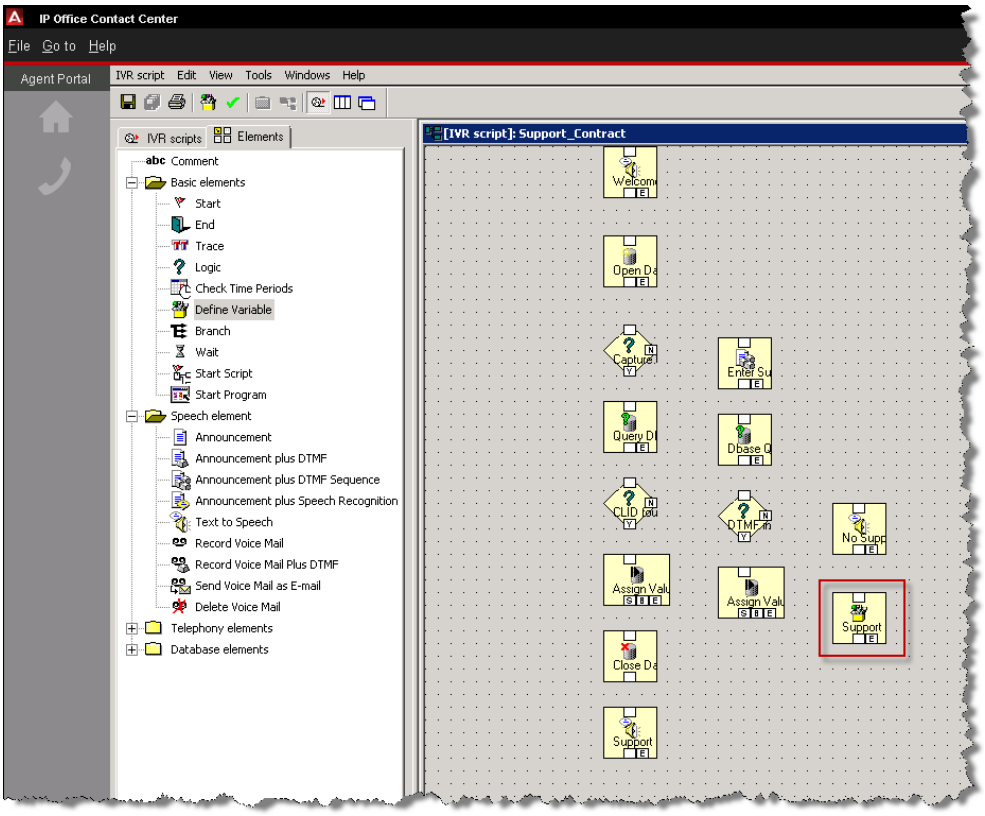
154. In the **New Value** field enter **“No_Support_Contract”**



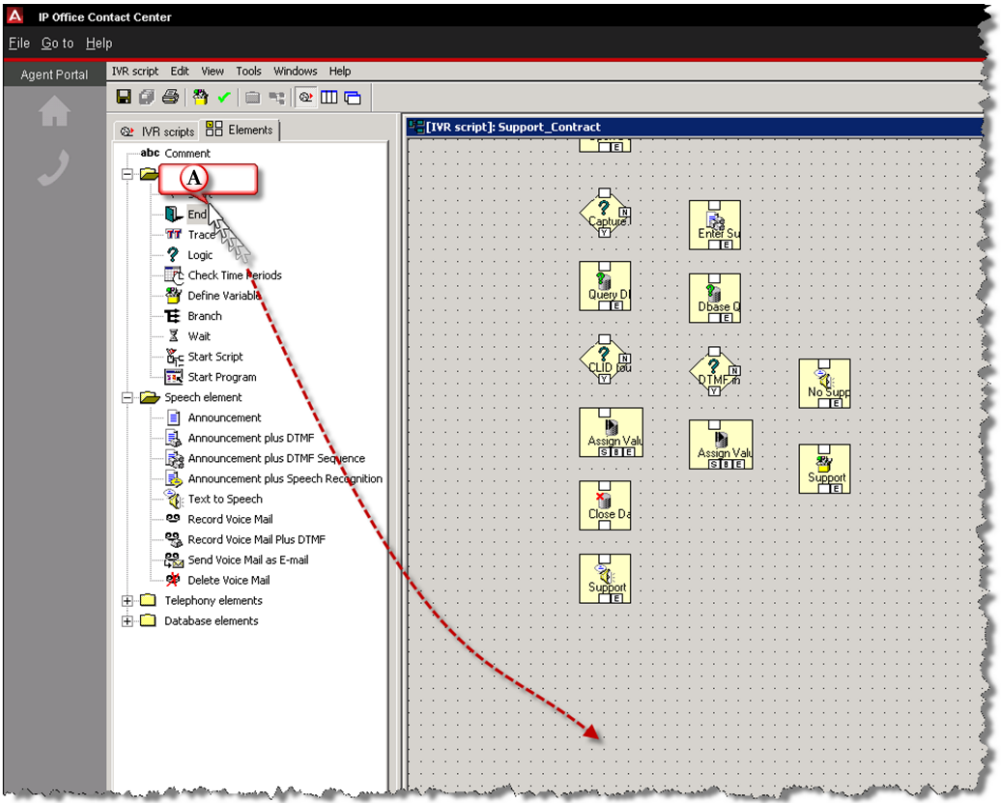
155. Click the **Not interruptible** check box and then click the **OK** button.



156. The configured element is displayed.

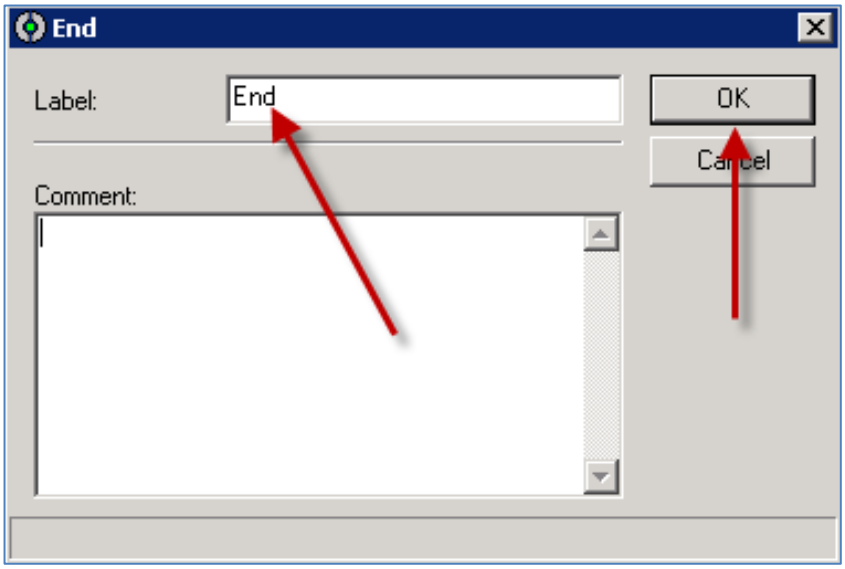


157. The IVR Script can be completed with an **End** element. Drag the element into the IVR Script working area.

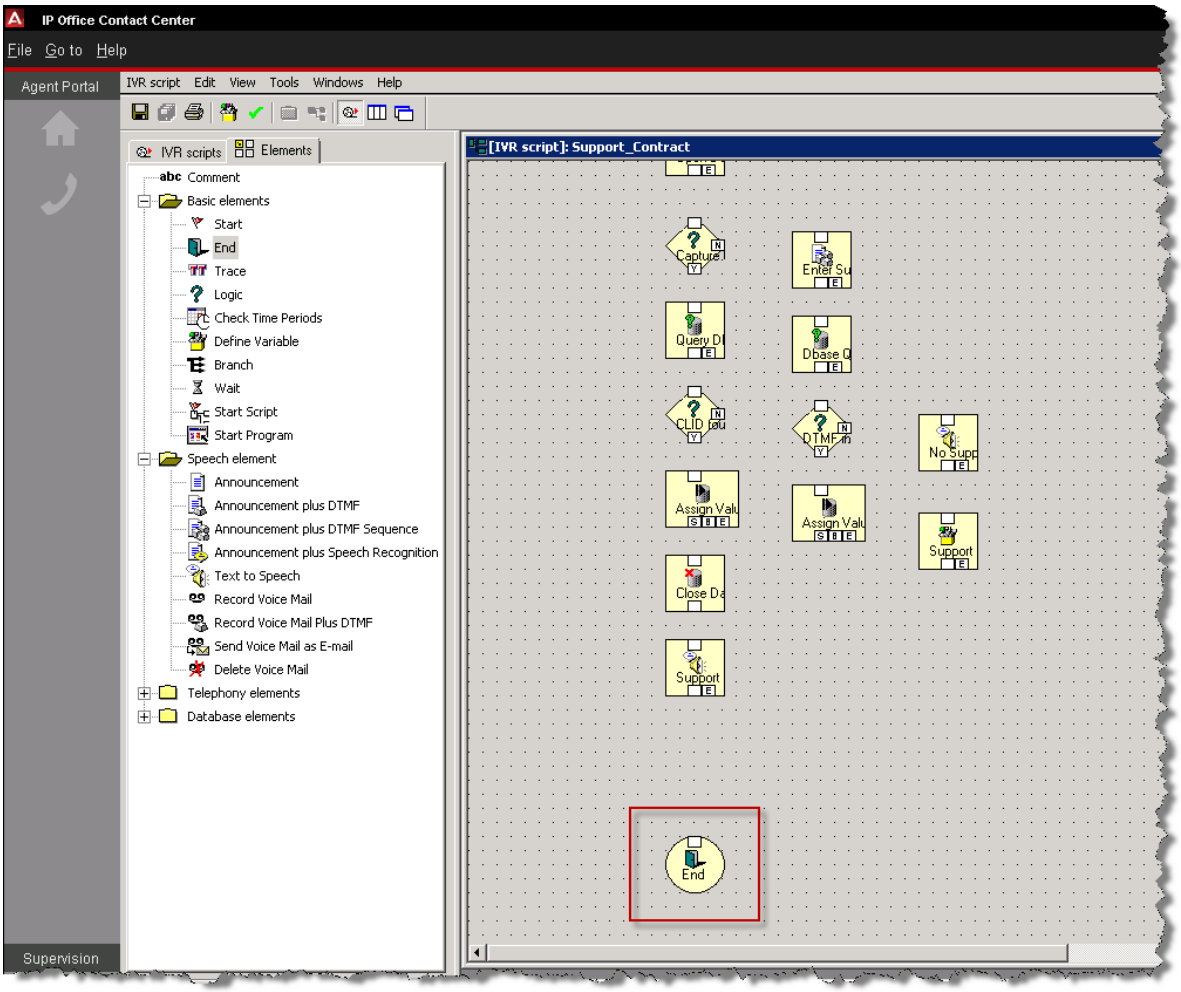


A. Click and drag.

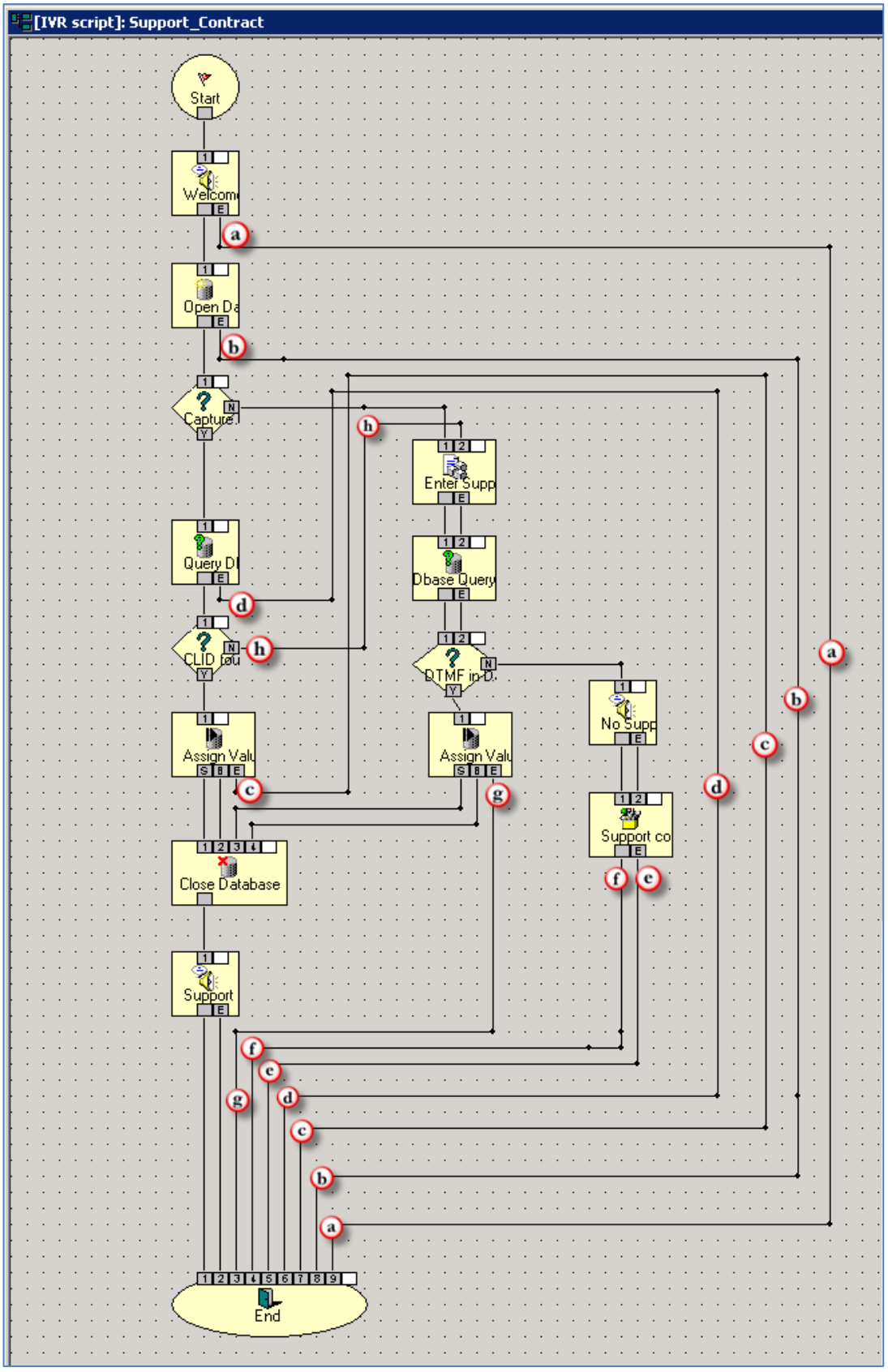
158. In the **Label** field enter **End** and click the **OK** button.



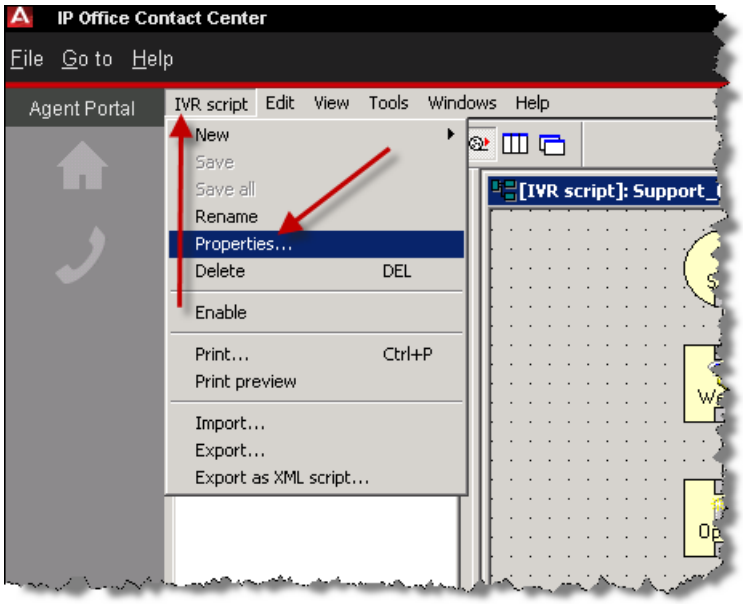
159. The configured element is displayed.



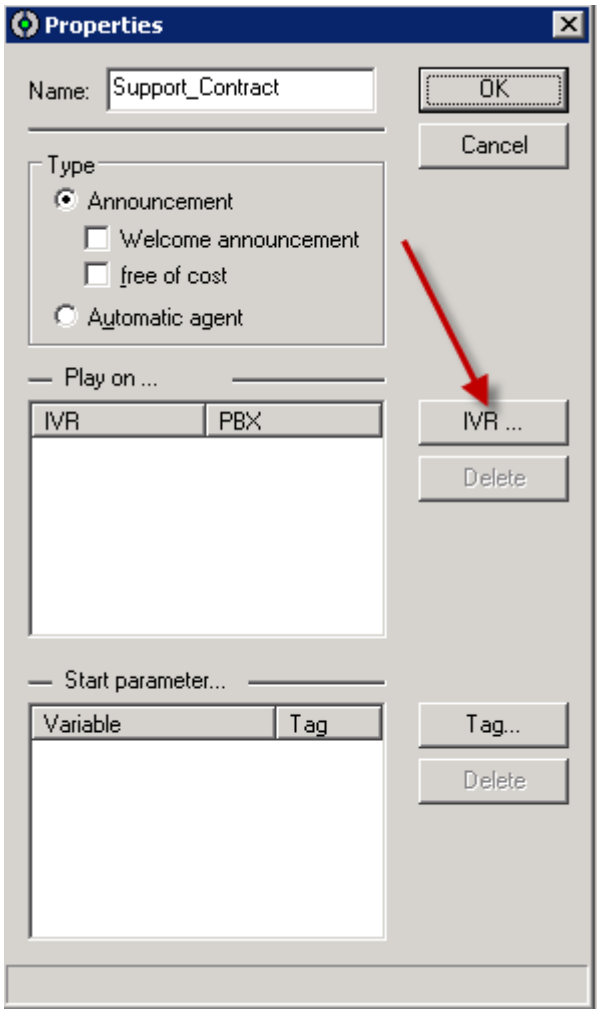
160. We now need to link all of the elements together, as illustrated below.



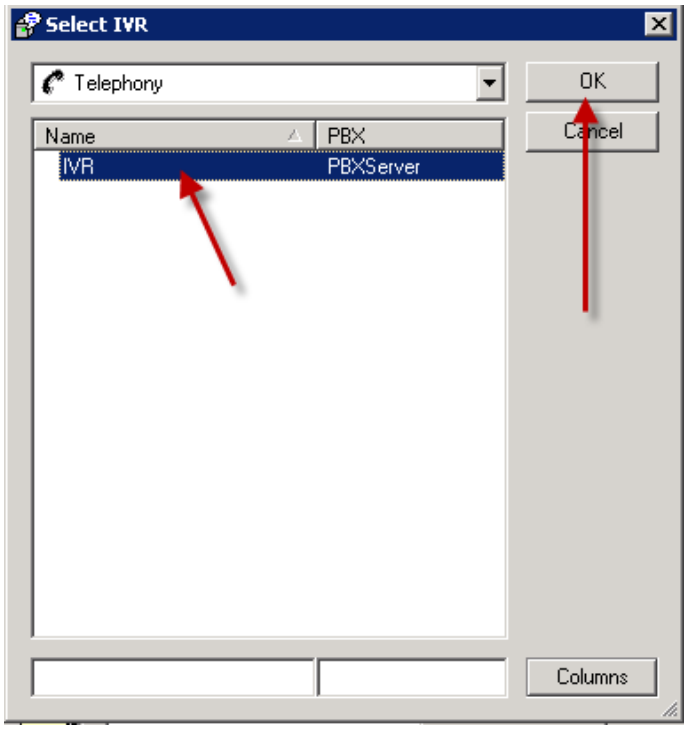
161. Now that all the connections have been created, the IVR script must be enabled. Select **IVR Script** and click **Properties.**



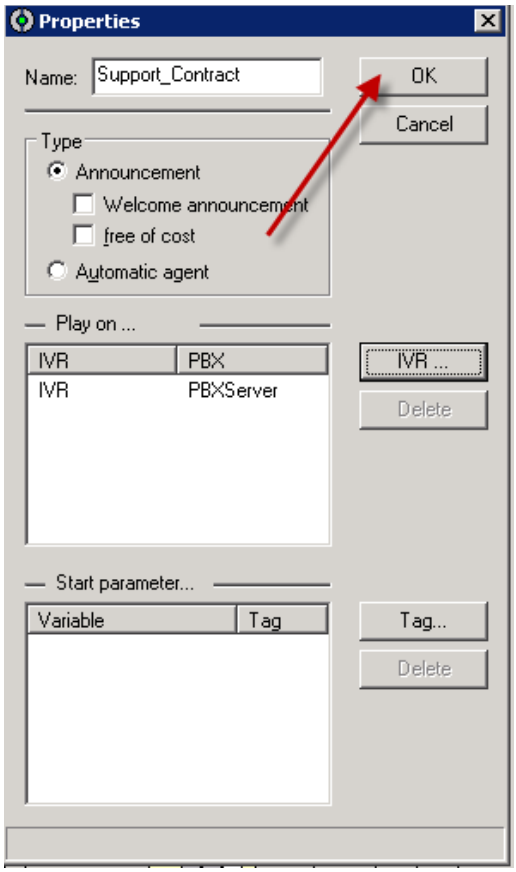
162. Select the **IVR…** button.



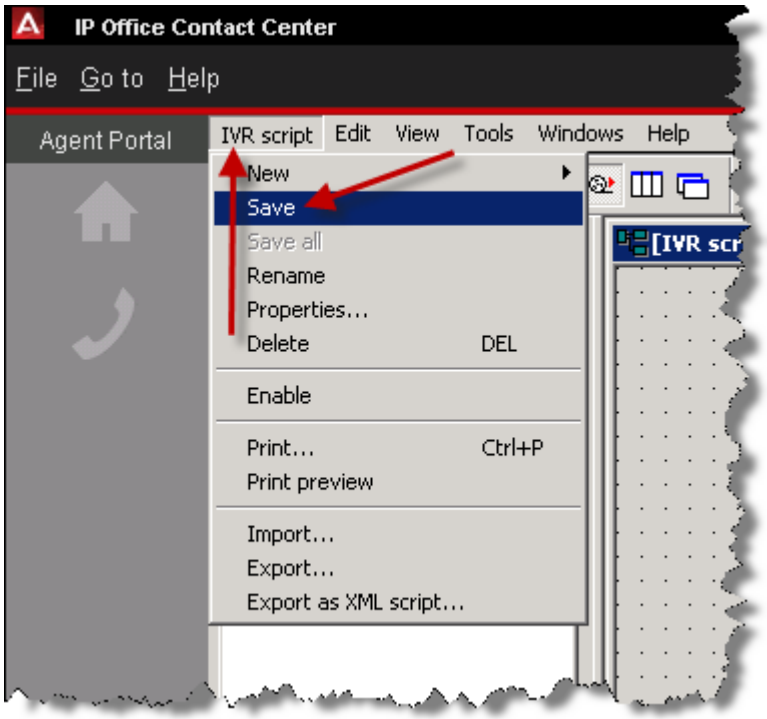
163. Select **IVR** and then click the **OK** button.



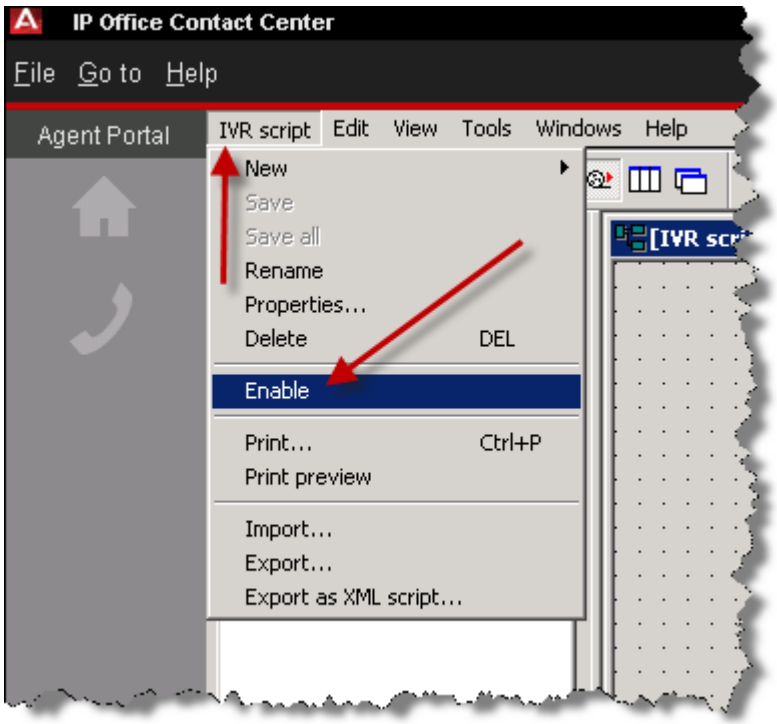
164. Click the **OK** button.



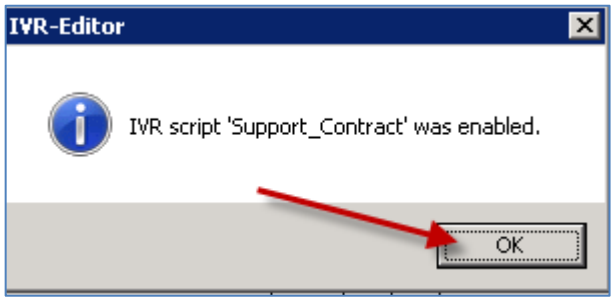
165. Select **IVR script** and click **Save**.



166. Click **IVR script** and select **Enable**.

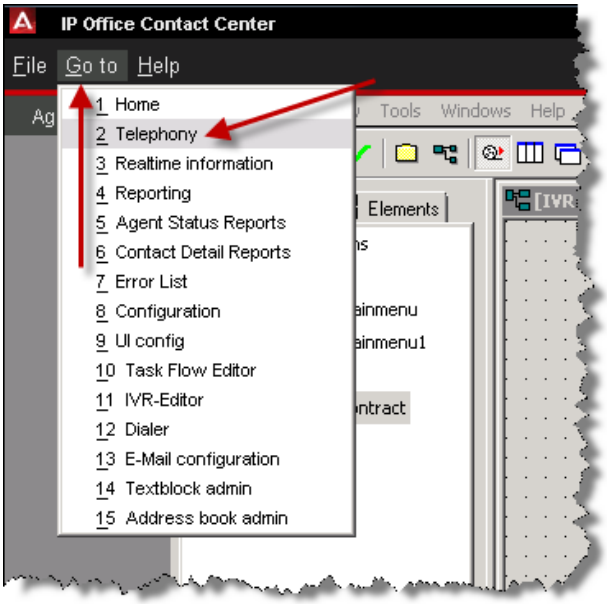


167. A confirmation windows is displayed, click the **OK** button.

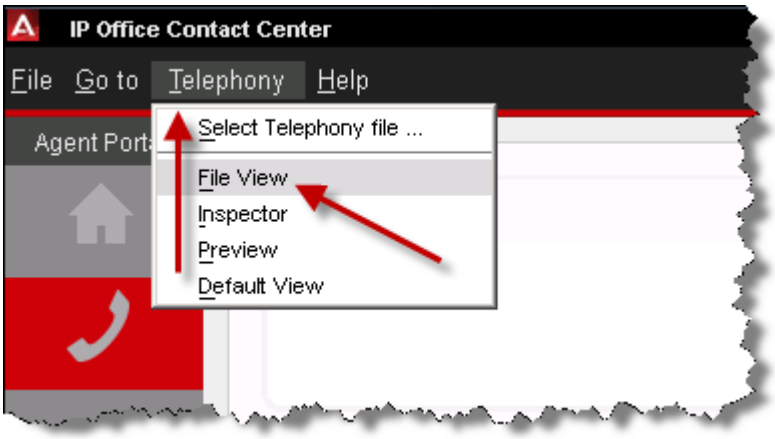


Configuring the Agents Interface for use with the IVR Script

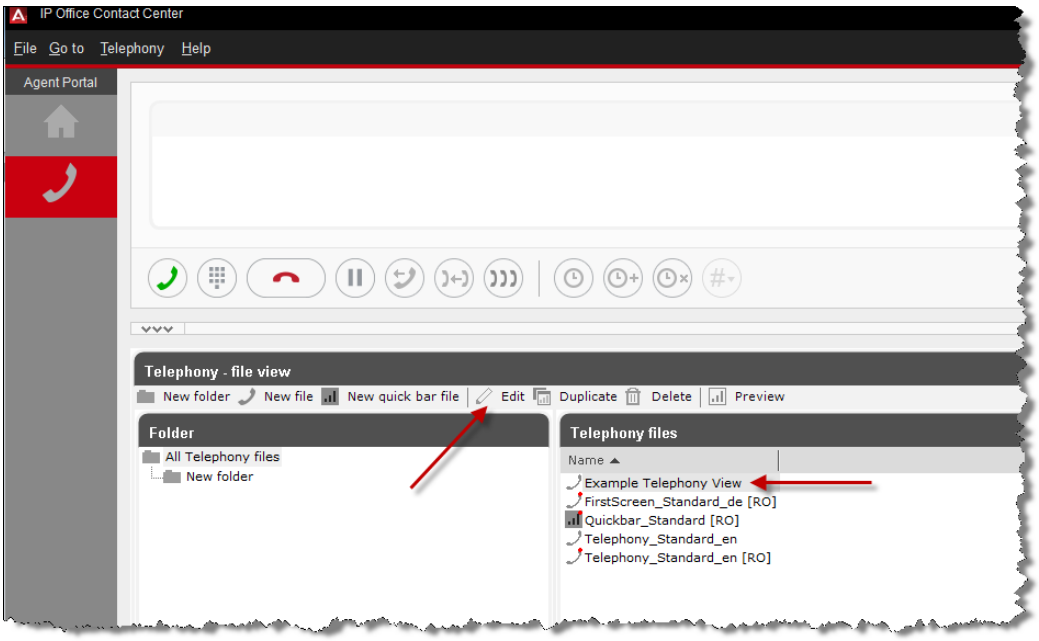
1. The Agents User Interface can now be configured, so that it can receive the information from the record found in the customer database and display the information to the agent. From the **Go to** menu select **Telephony**.



2. Select the **Telephony** link and click **File View.**

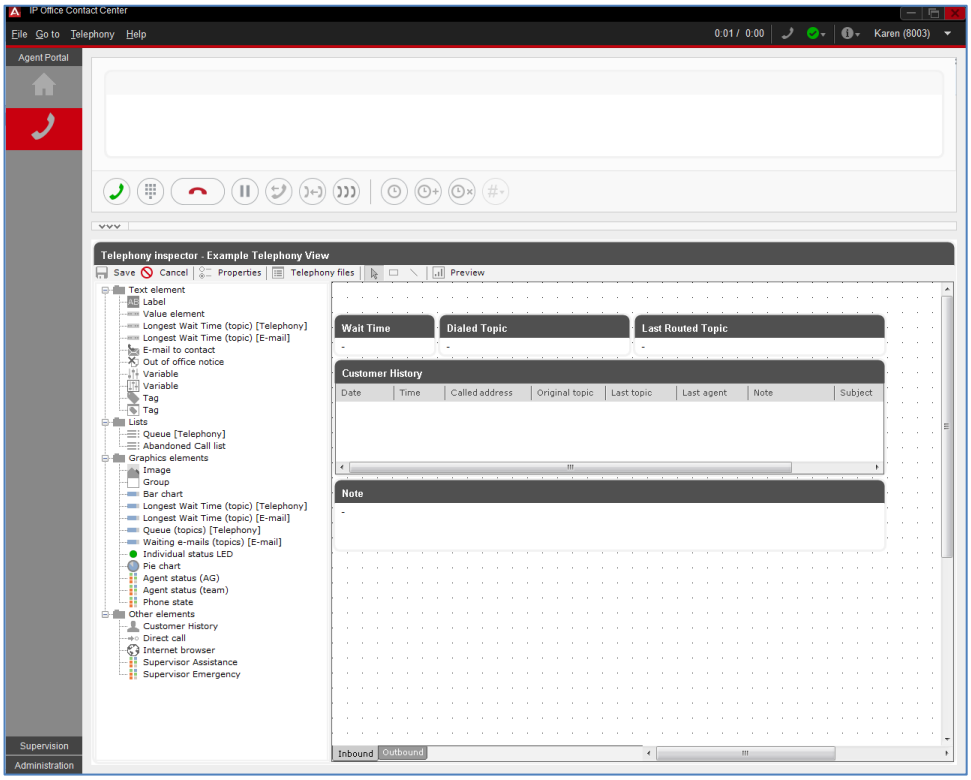


3. Click the required file to be used with the Agents user Interface, then click the **Edit** button.



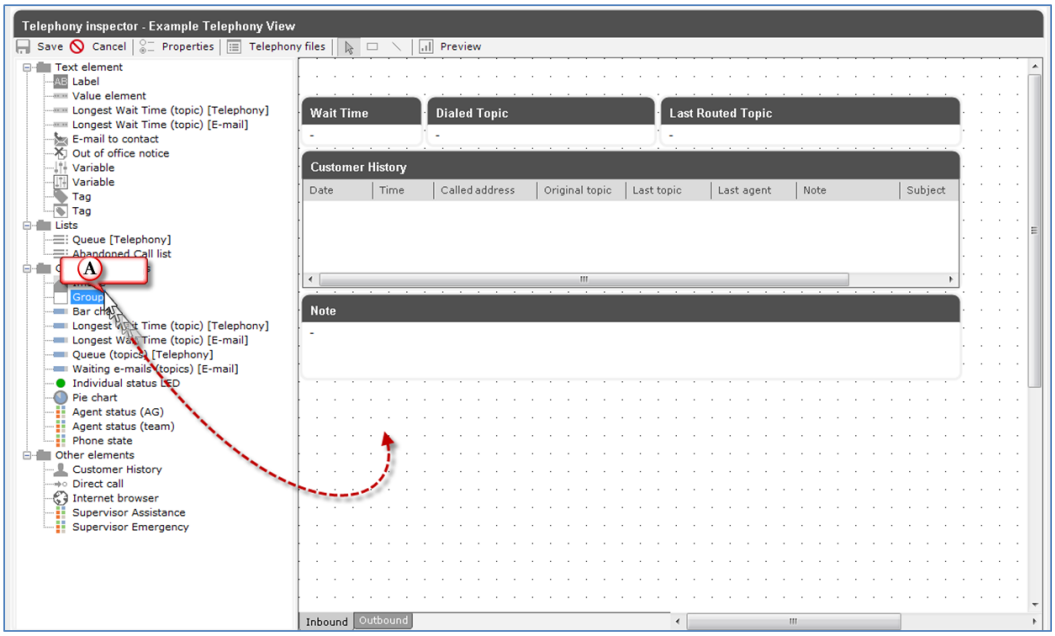
Please refer to the *IP Office Contact Centre Telephony User Interface Configuration Task Based Guide* for further details relating the configuration of the User Interface.

4. The User Interface working area is displayed and can now be configured



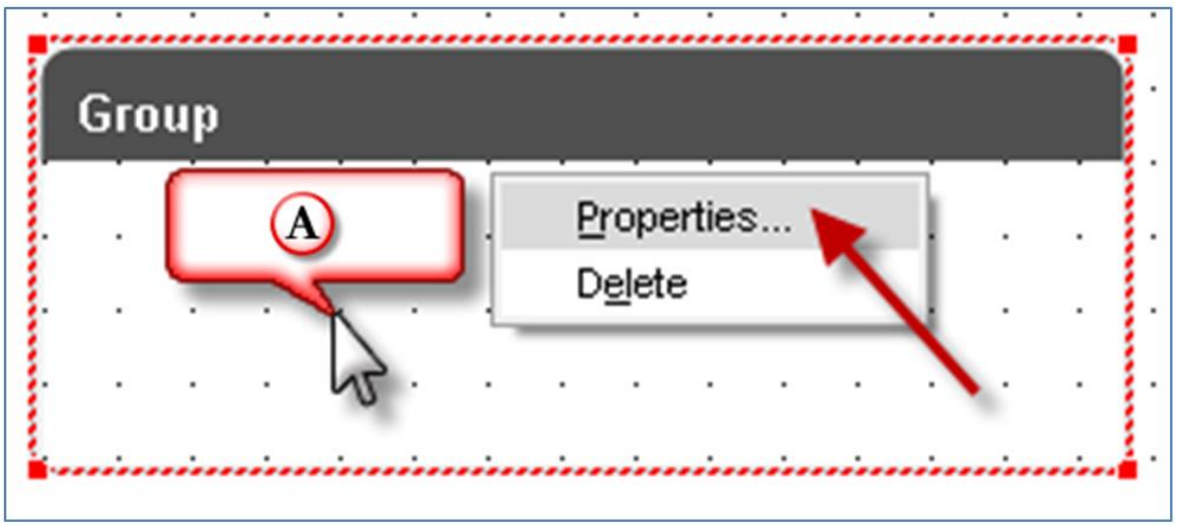
In the following example, a **Group** element will be configured to contain a number of **Tag** elements that will display caller details to the agent from the customer database.

5. Drag a **Group** element into the working area.



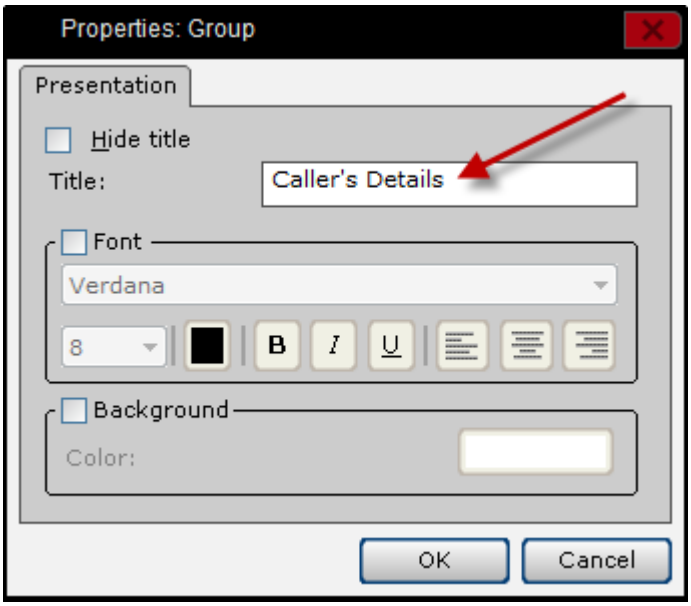
A. Click and drag.

6. Using the right mouse button, click within the **Group** element and select **Properties**.

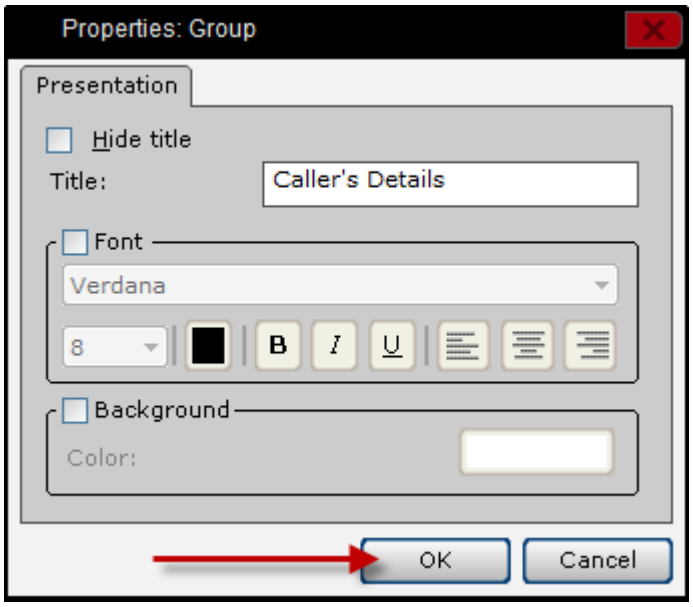


A. Right click.

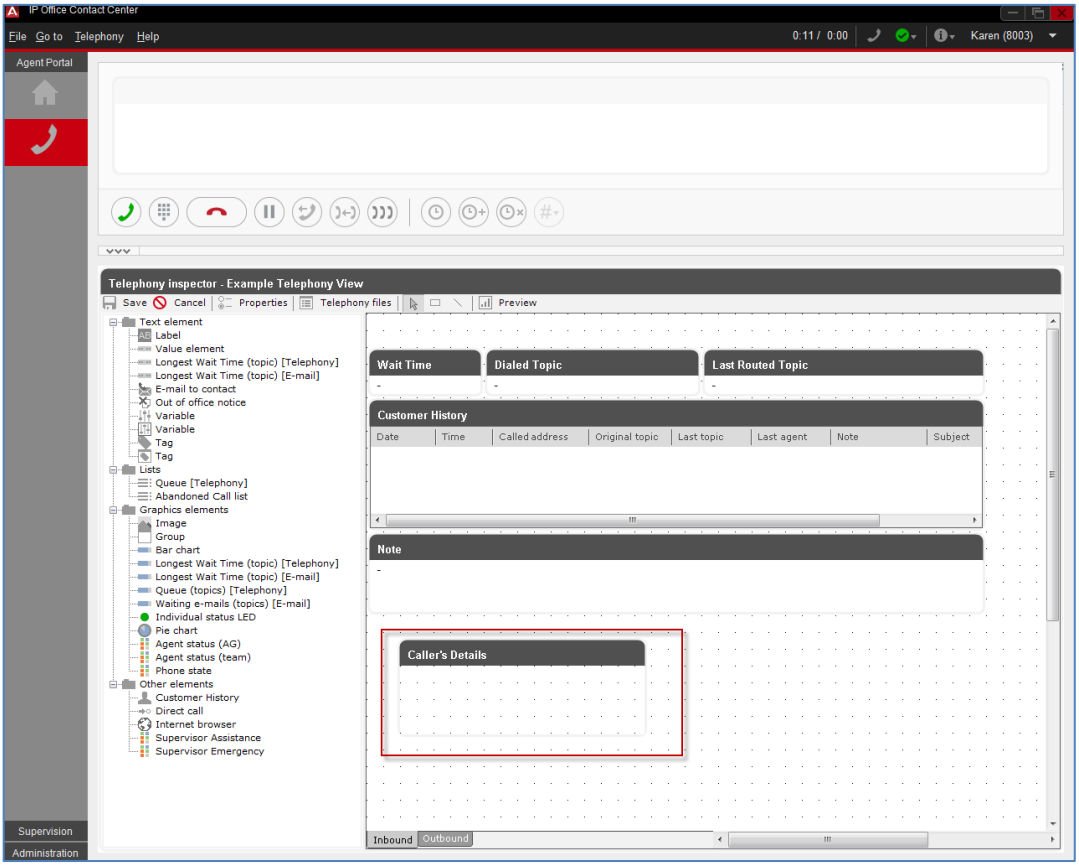
7. Name the group **Caller's Details**.



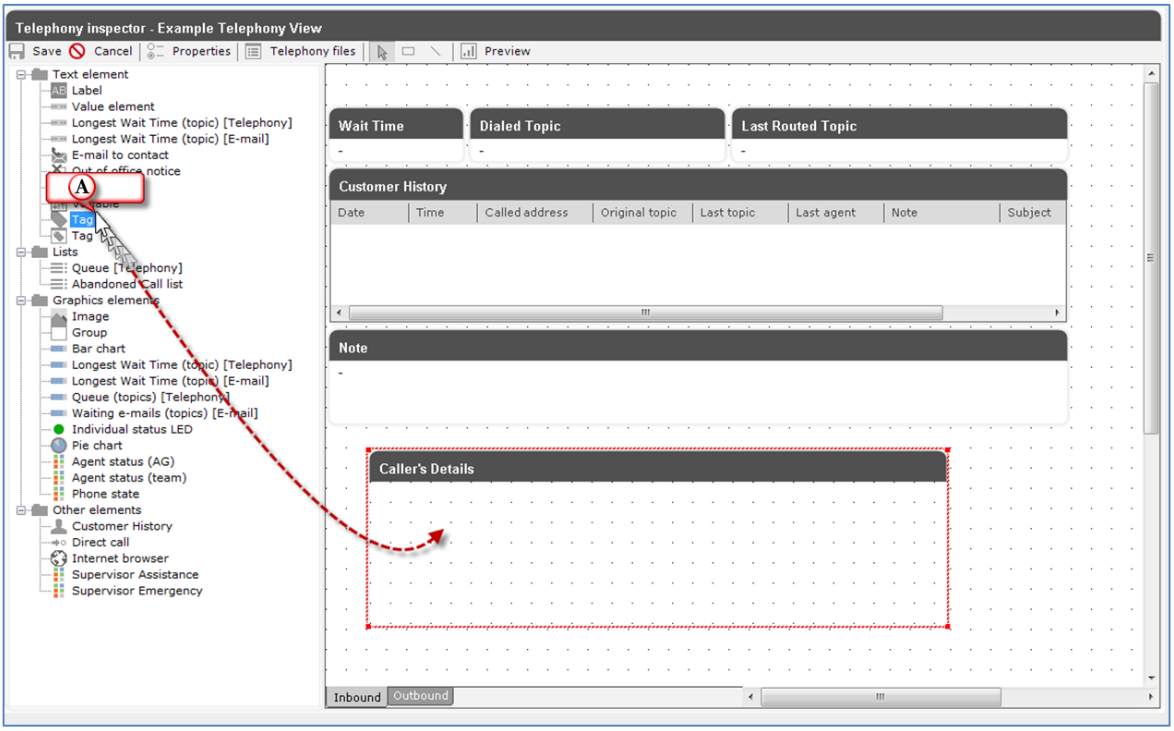
8. Click the **OK** button.



9. The Group element is displayed with its new title.

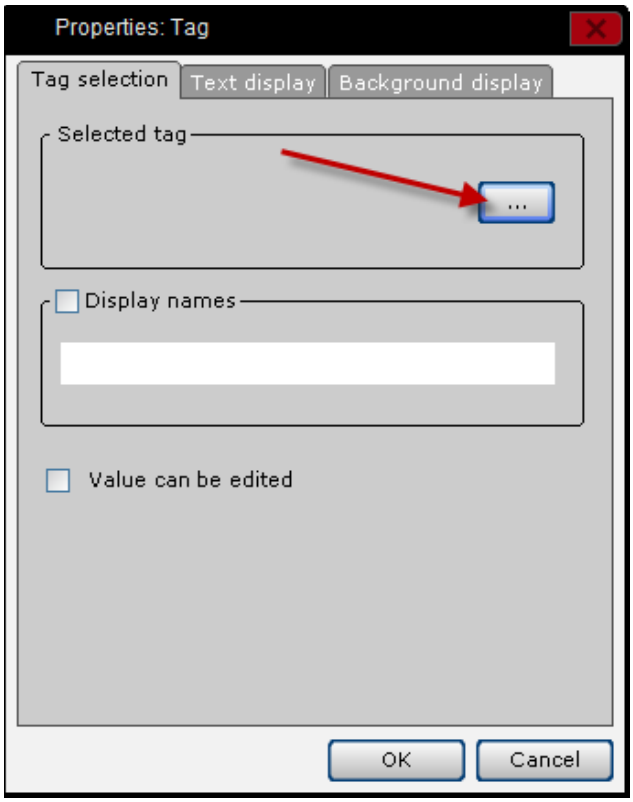


10. Drag a **Tag** element into the Callers Details Group window.

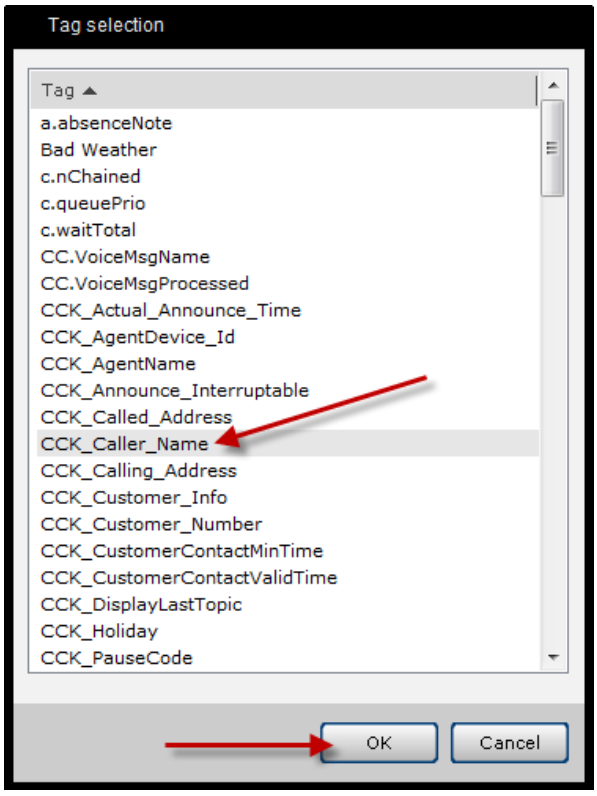


A. Click and drag.

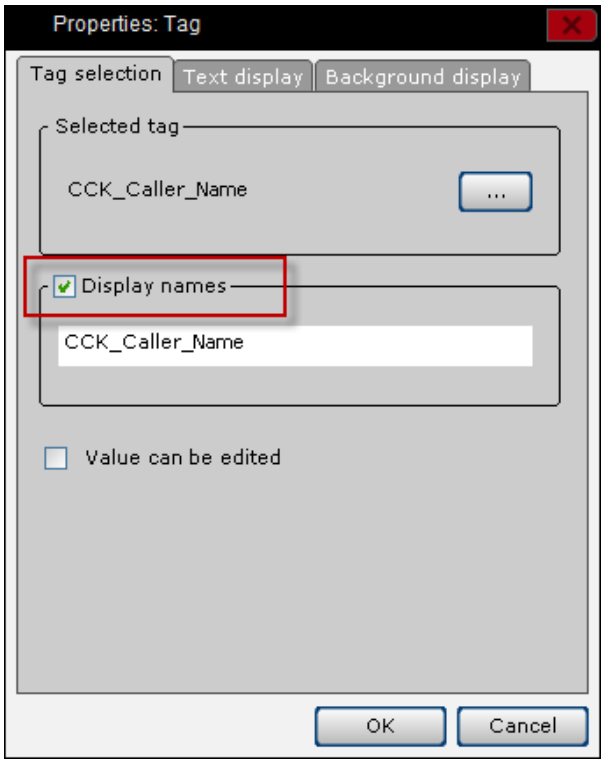
11. Click the **… browser** button.



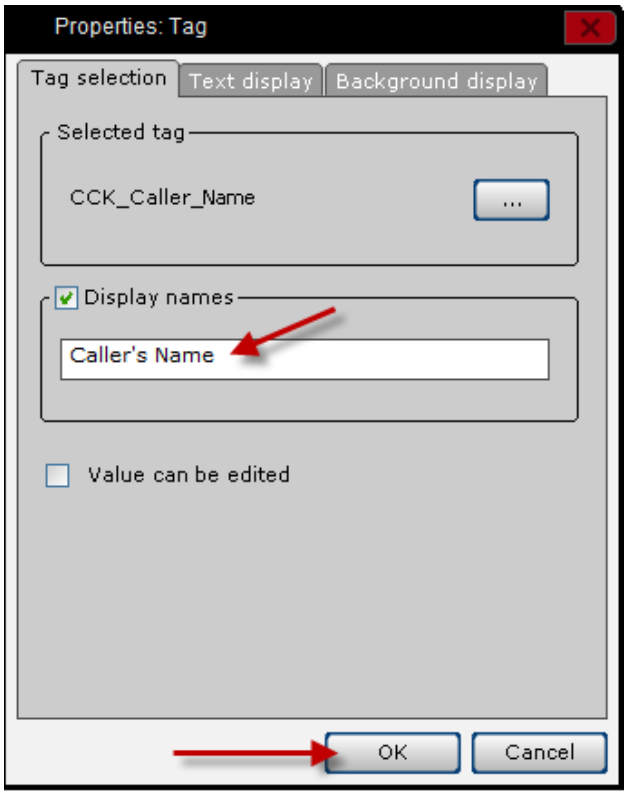
12. In the **Tag** selection field click **CCK_Caller_Name** and select the **OK** button.



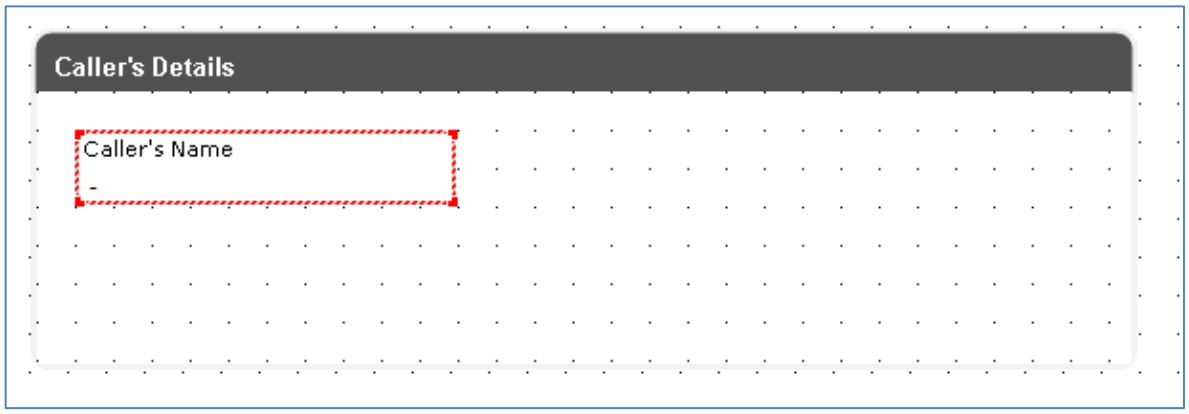
13. Click the **Display names** check box.



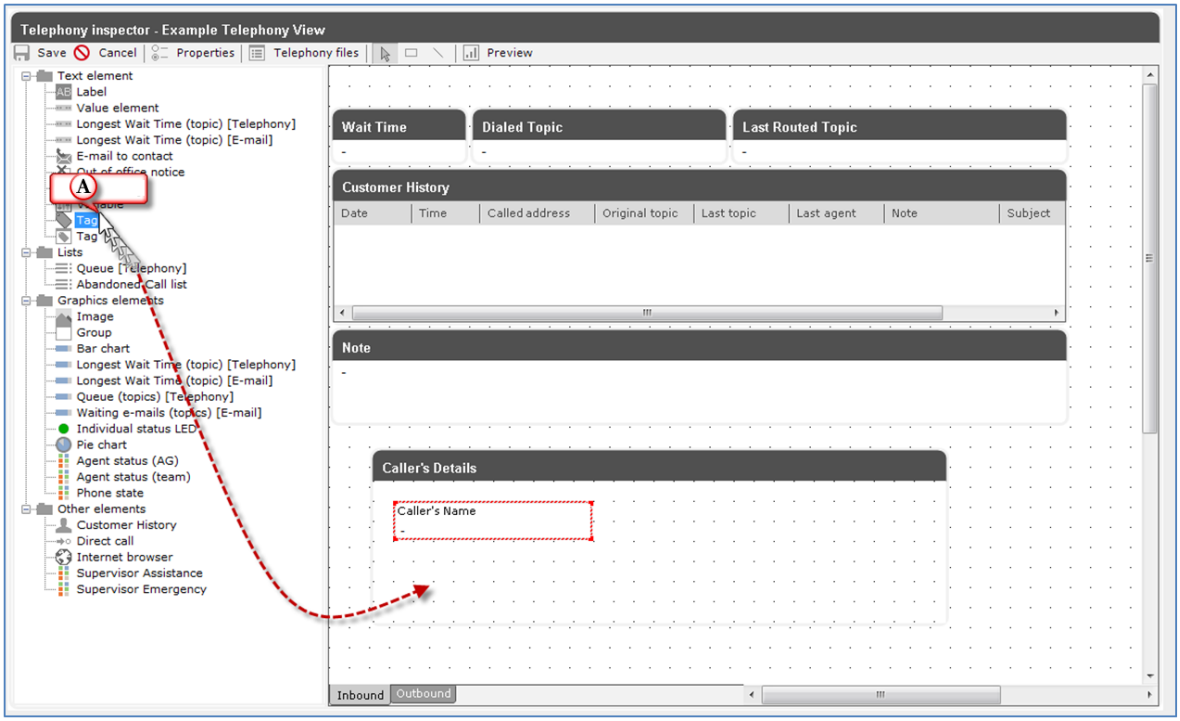
14. Change **CCK_Caller_Name** to **Caller's Name** and click the **OK** button.



15. The configured element is displayed.

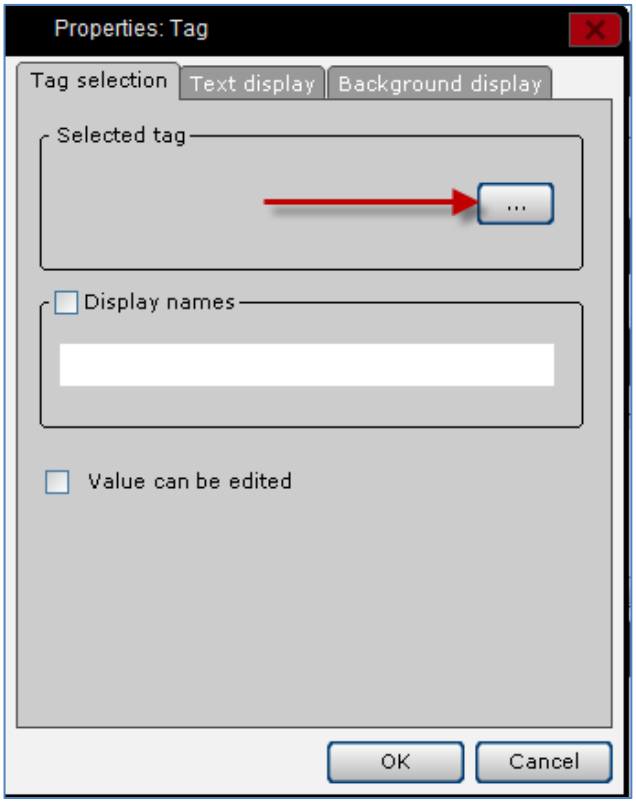


16. Drag another **Tag** element into the **Callers Details** group.

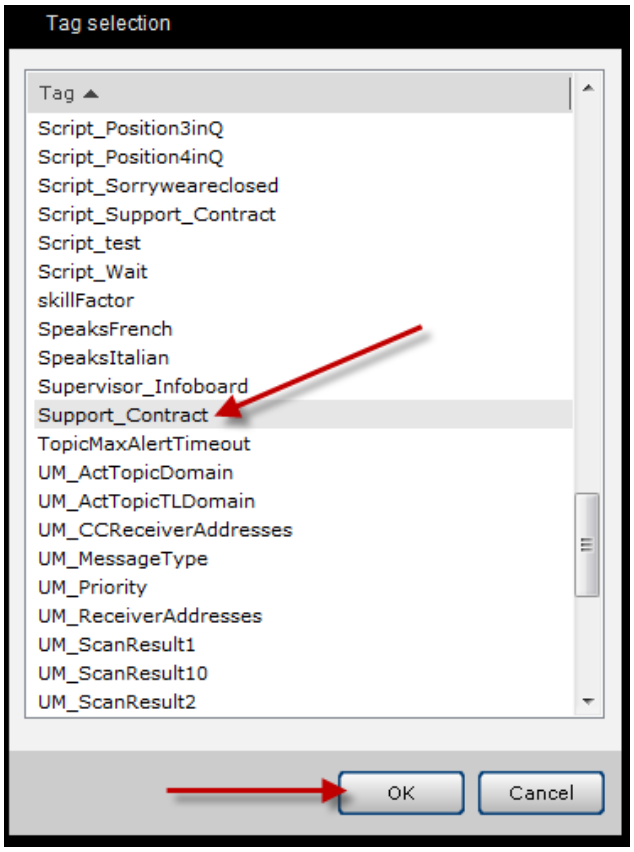


A. Click and drag.

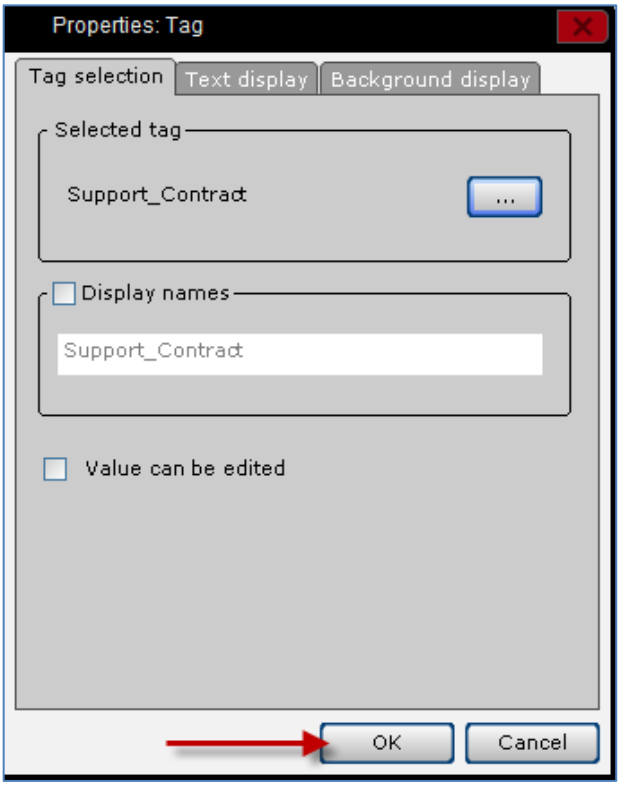
17. Click the **… browser** button in the **Selected Tag** field.



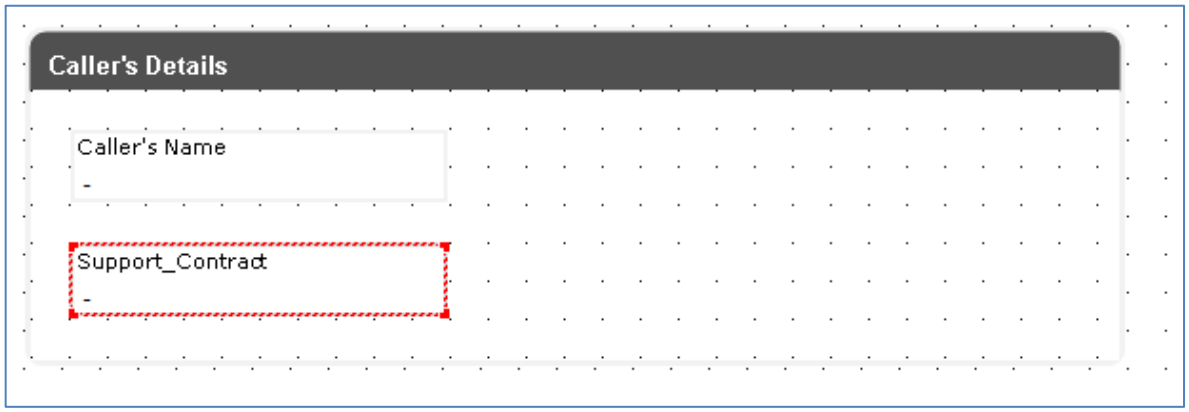
18. Select **Support_Contract** and click the **OK** button.



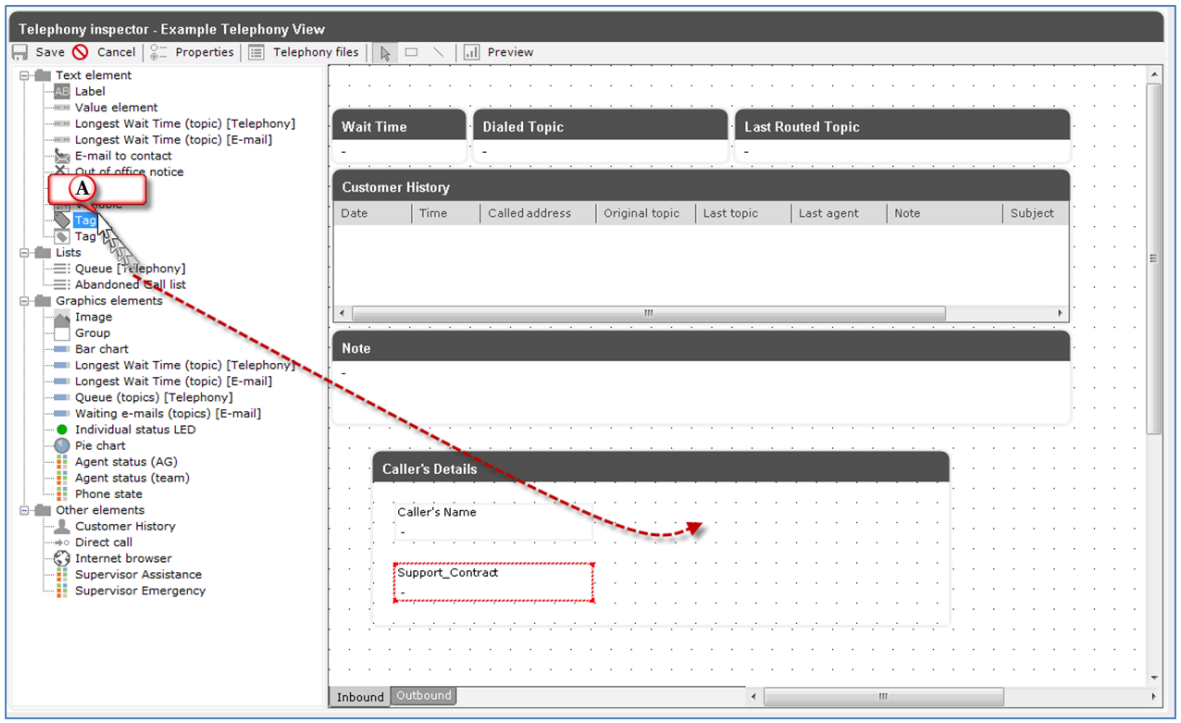
19. Click the **OK** button.



20. The configured element is displayed.

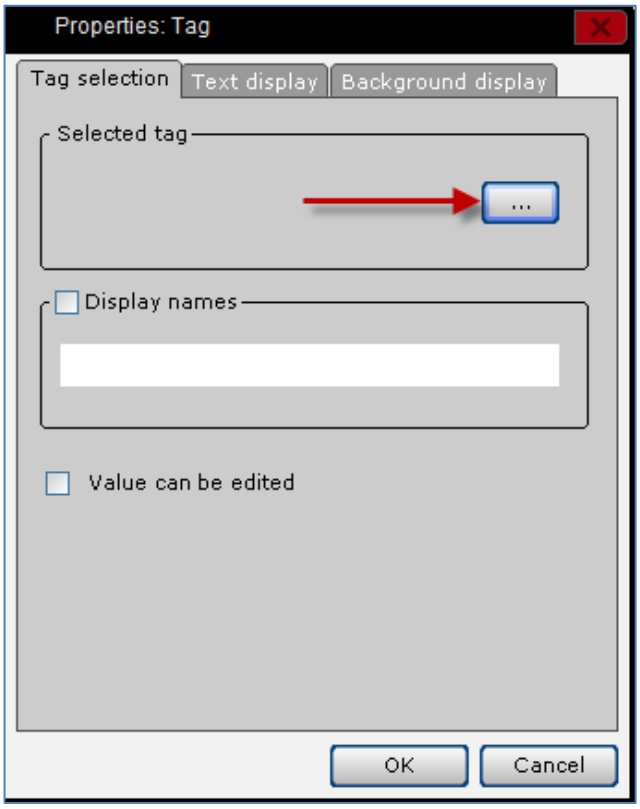


21. Drag another **Tag** element into the **Callers Details** group.

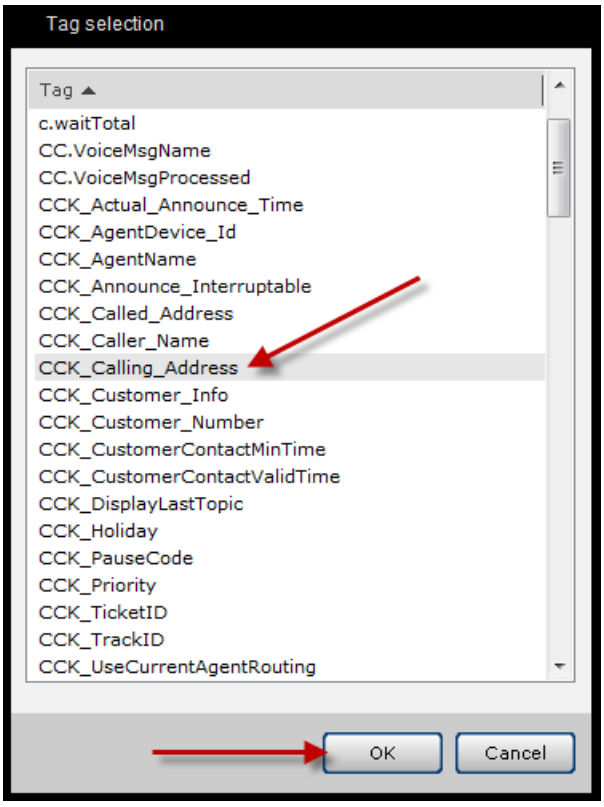


A. Click and drag.

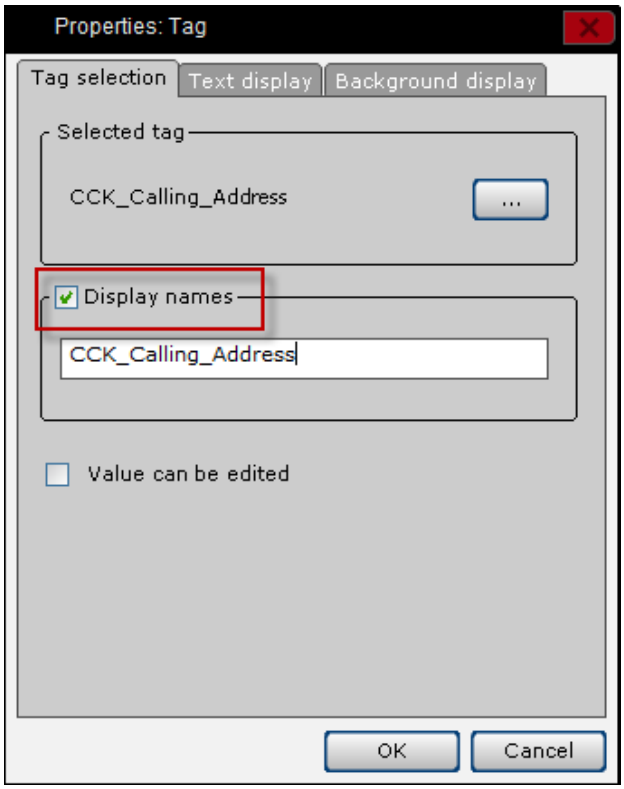
22. Click the **… browser** button in the **Selected Tag** field.



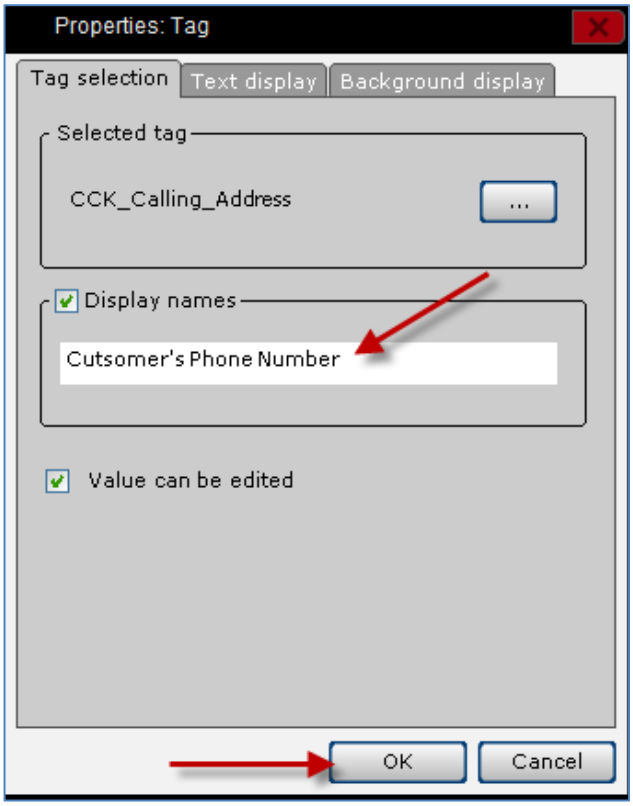
23. Select **CCK_Calling_Address** and click the **OK** button.



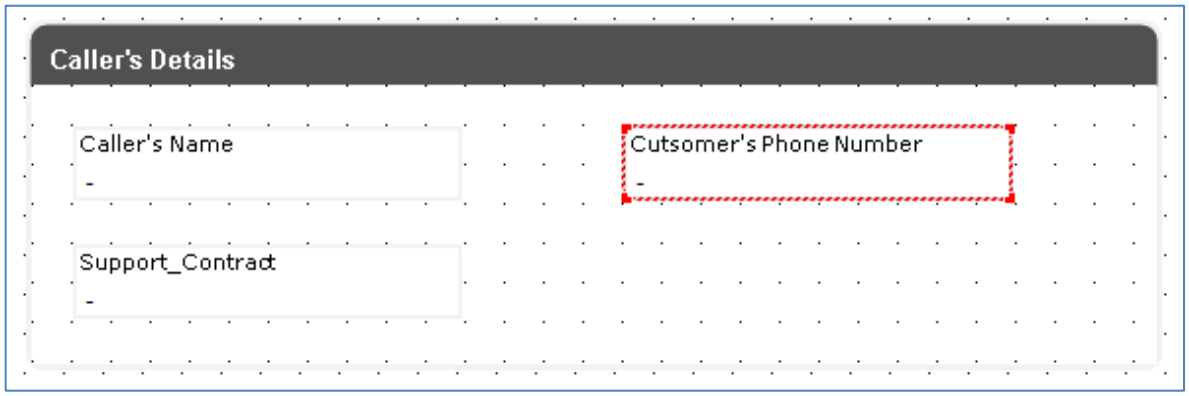
24. Click the **Display Names** option.



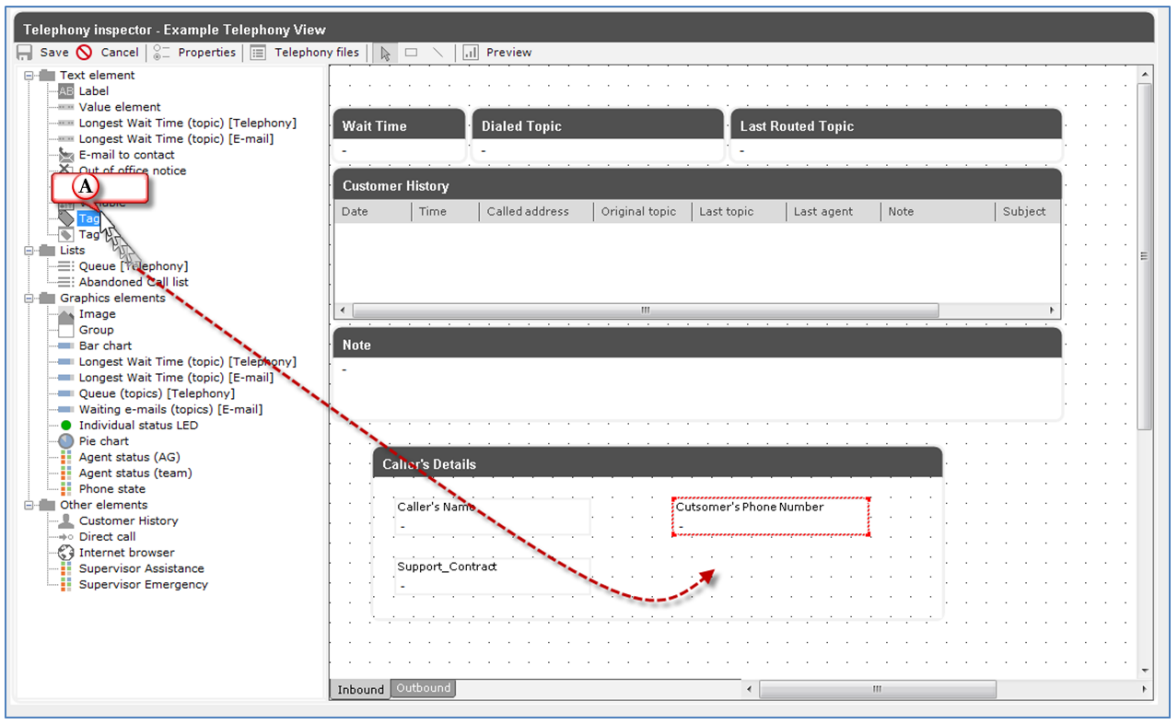
25. Change **CCK_Calling_Address** to **Customer's Phone Number** and select the **OK** button.



26. The configured element is displayed.

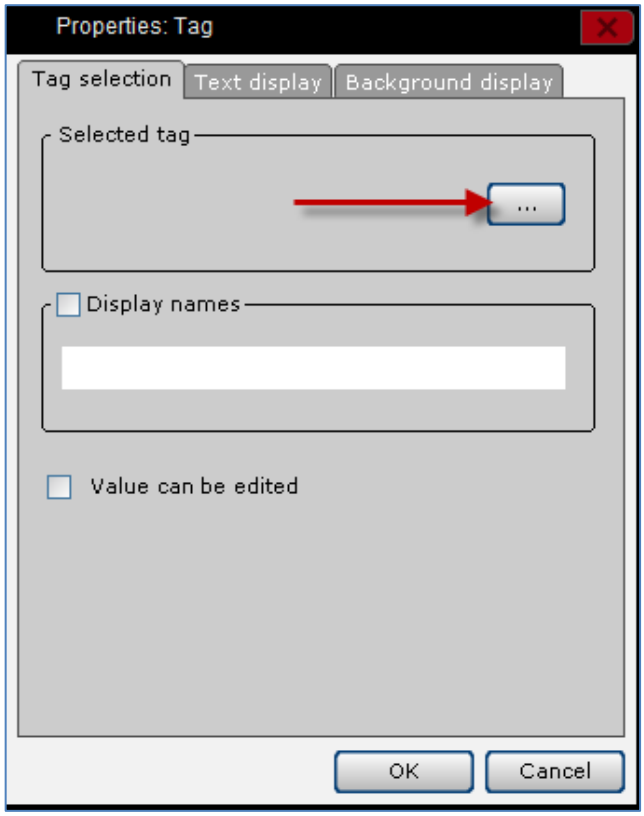


27. Drag another **Tag** element into the **Callers Details group**.

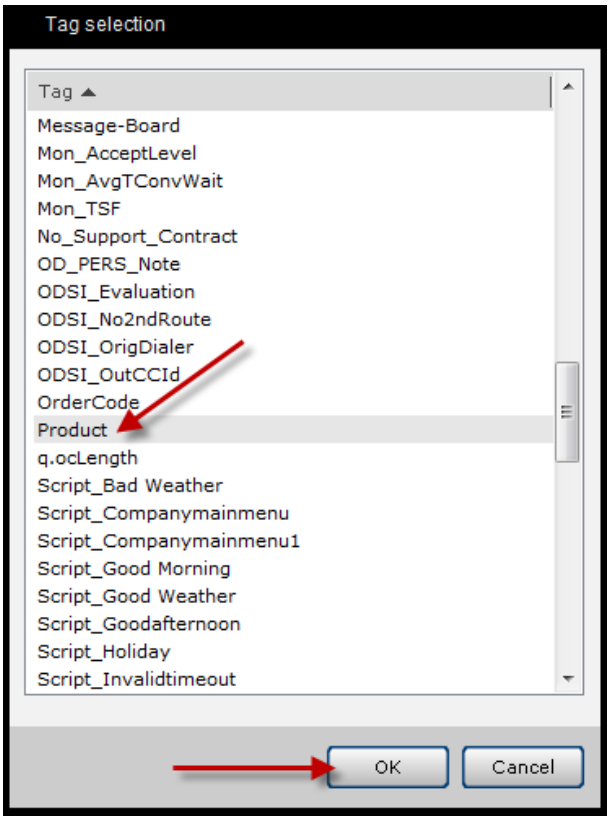


A. Click and drag.

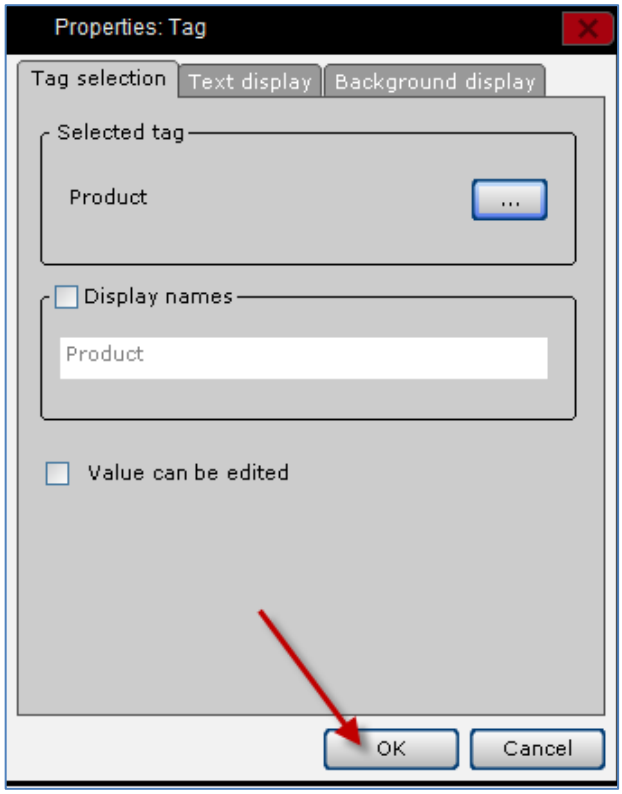
28. Click the **… browser** button in the **Selected Tag** field



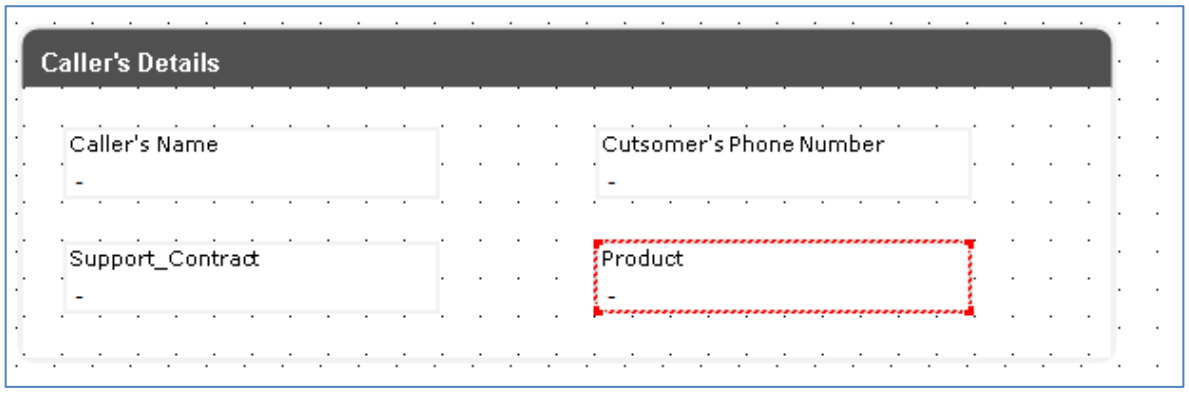
29. Click **Product** and select the **OK** button.



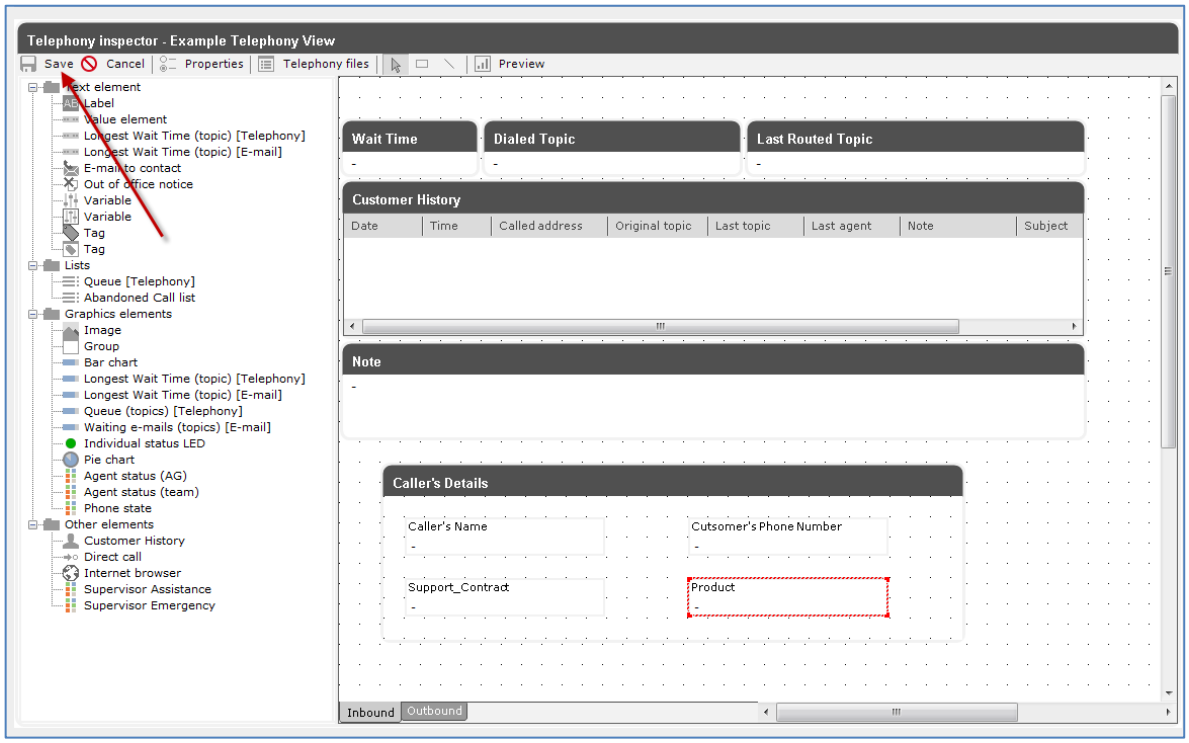
30. Click the **OK** button.



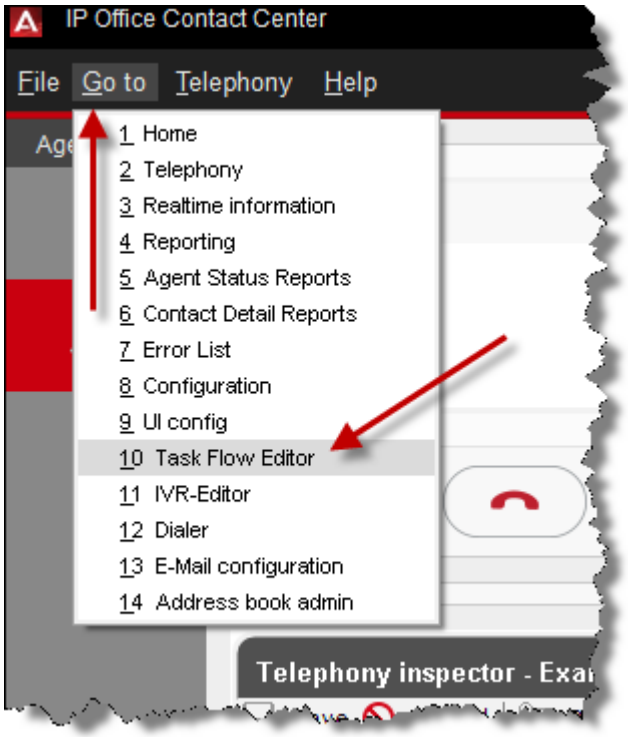
31. Adjust the sizes of the Group element and the tags within the element.



32. Click the **Save** button.

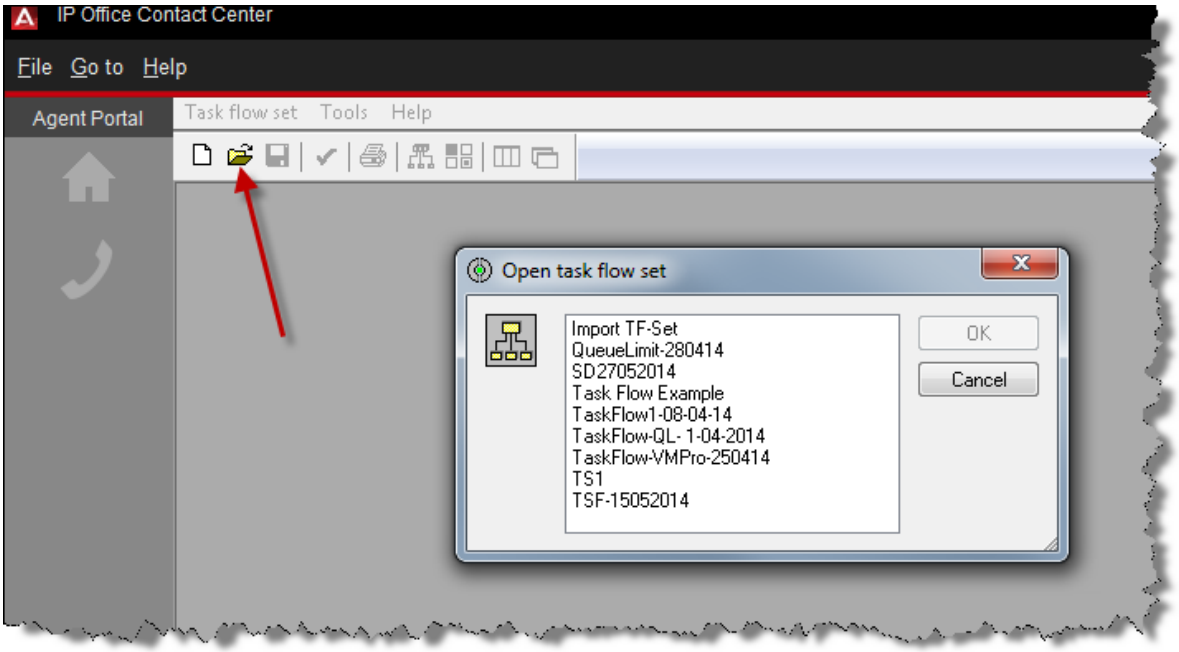


33. The New IVR script can now be added into the required Call flow. From the **Go to** menu select **Task Flow Editor**.

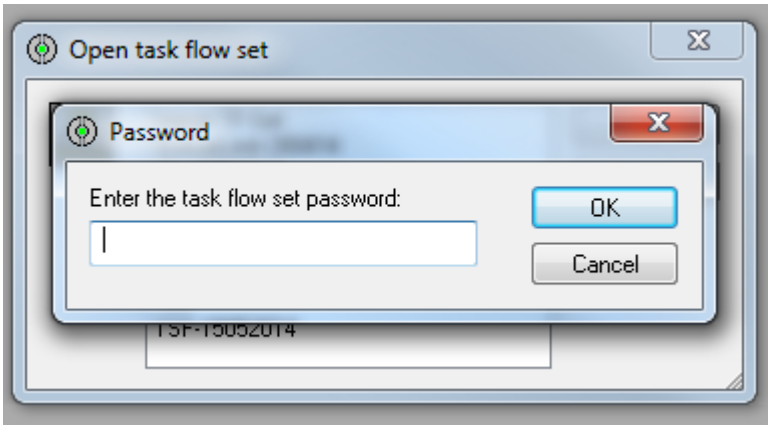


34. We will use the Company Main Menu call flow previously configured within this guide.

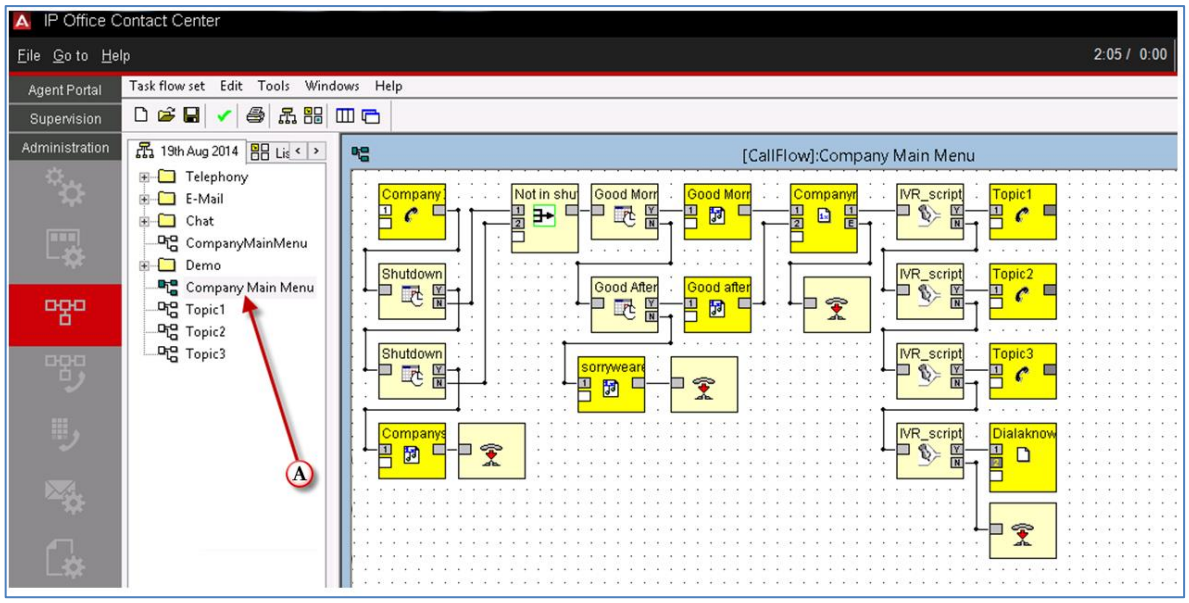
35. Click the **Open** icon and select the required Task Flow Set and click **OK**.



36. If a password has previously been configured for the Task Flow, enter the password and click **OK**. Otherwise click the **OK** button.

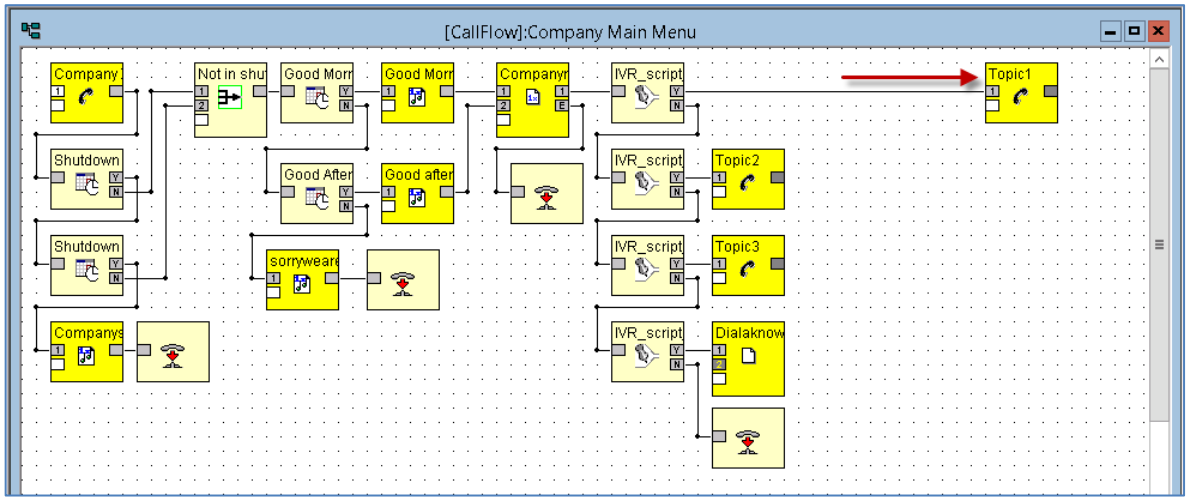


37. Double left mouse click on the required call flow, in this example the Company Menu call flow will be utilized.

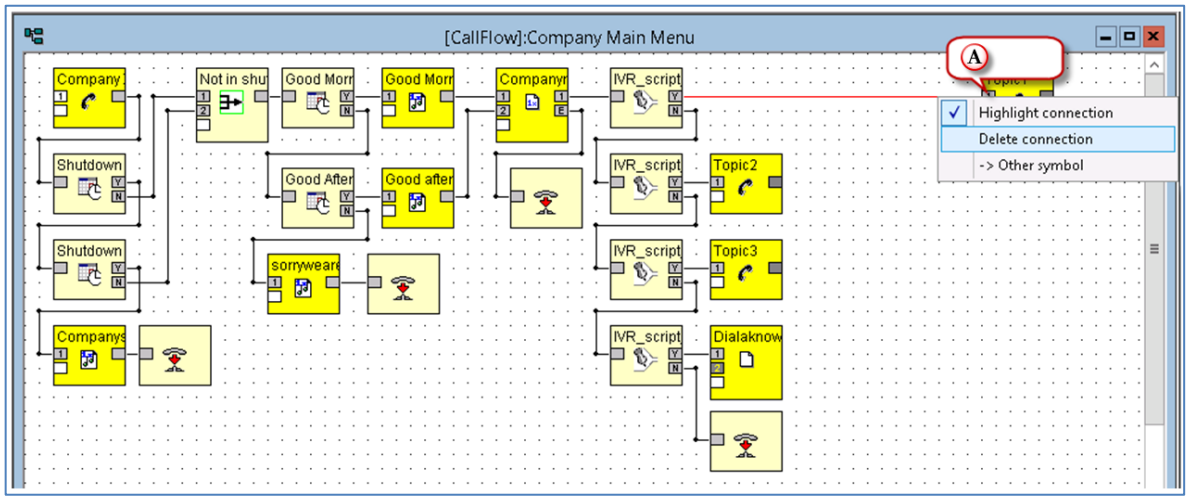


A. Double left click.

38. We will place the new IVR Script before Topic 1. Move Topic 1 over to leave a space for the new IVR element

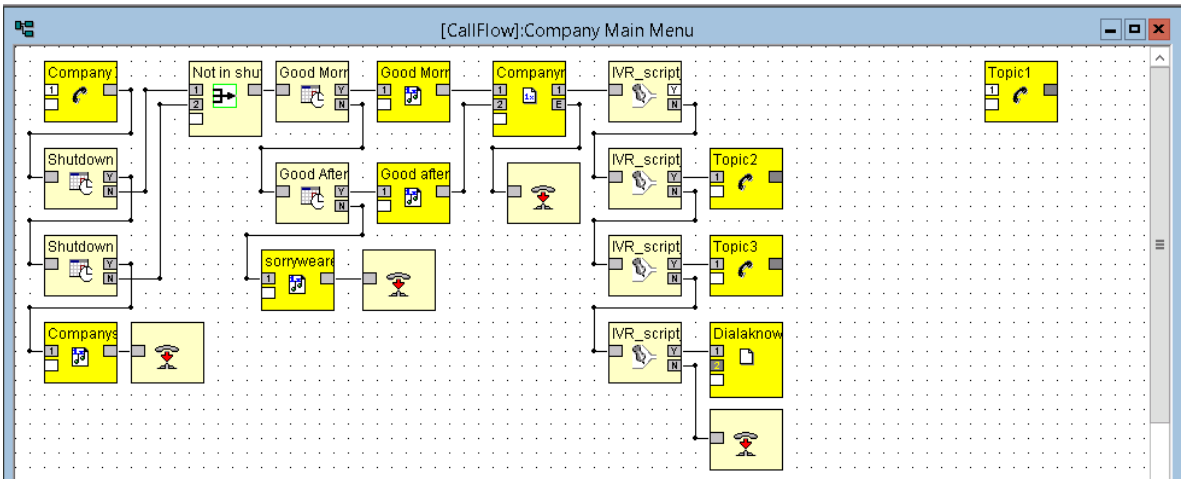


39. Now Delete the connection between the Logic element Option 1 and Topic 1

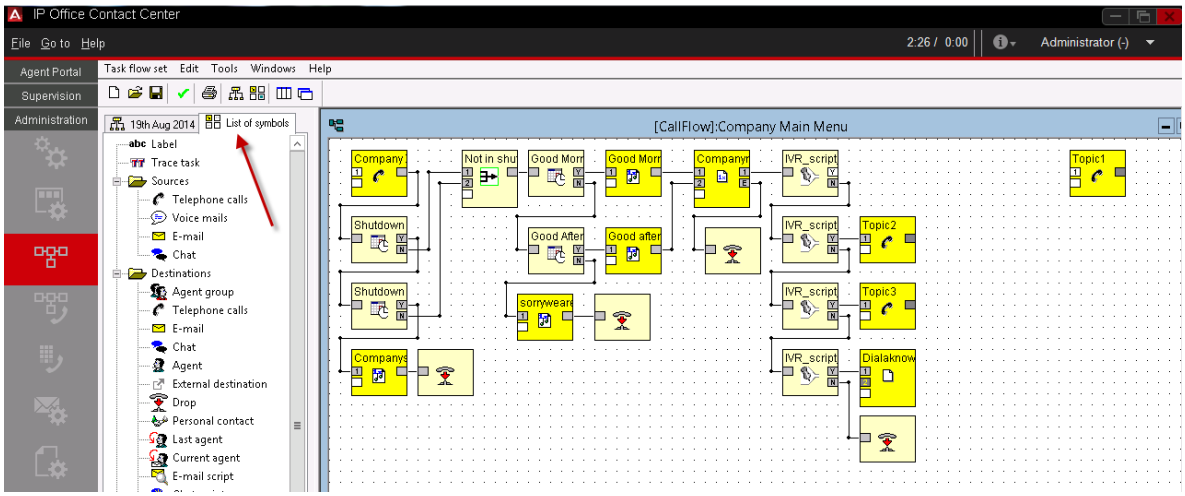


A. Right click

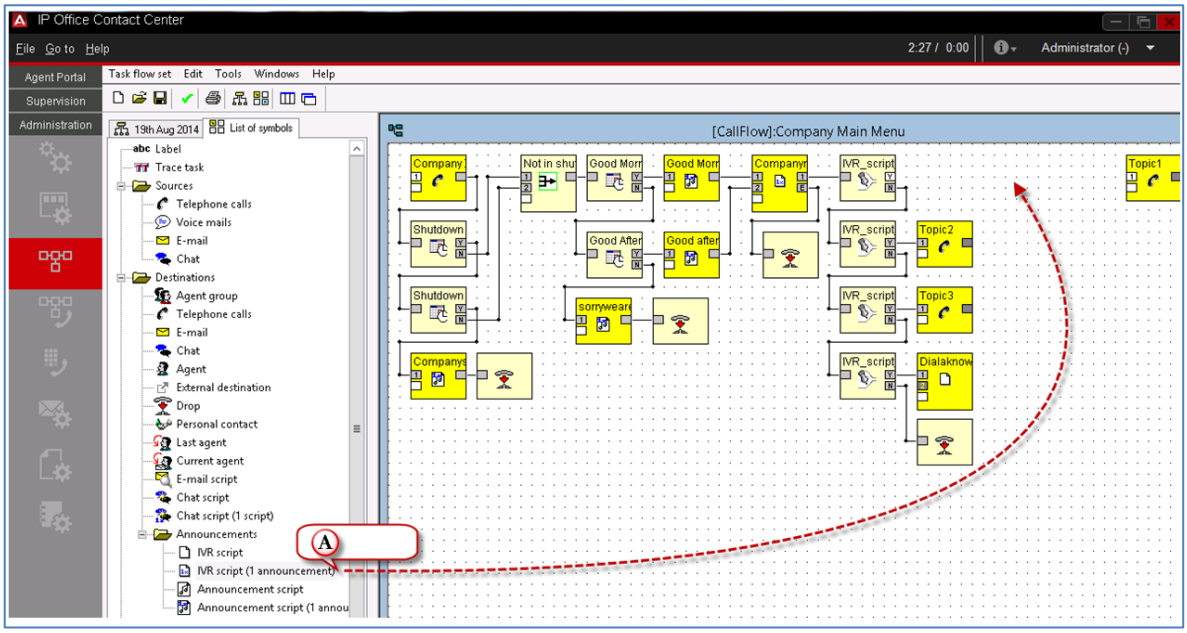
40. The connection is deleted.



41. Click the **List of symbols** tab.

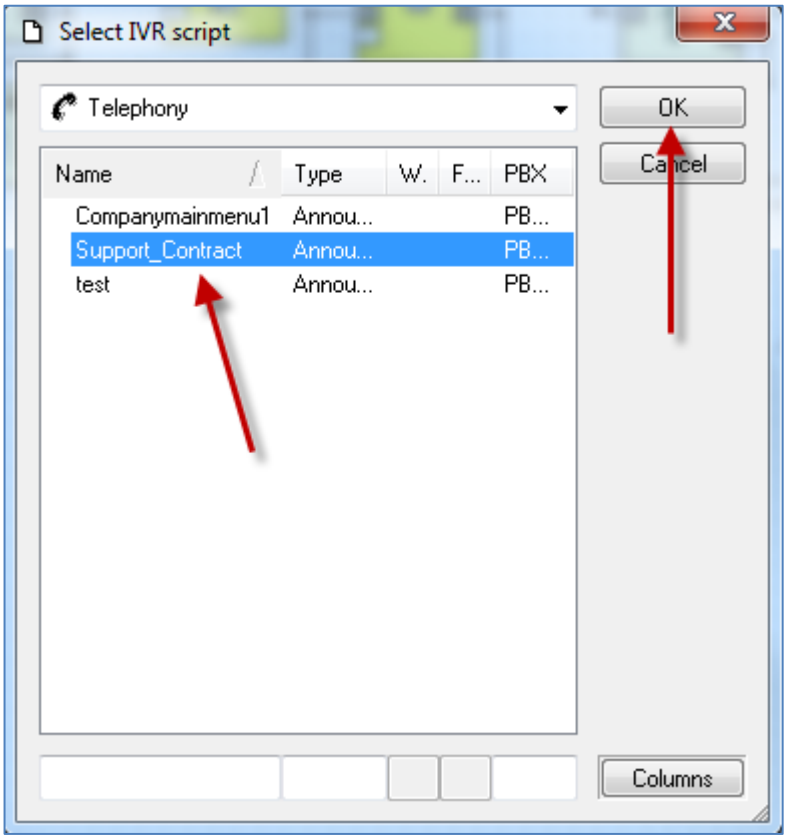


42. We will use the **IVR-Script (1announcement)** element to place the new IVR script into the Call flow. Drag the element into the call flow.

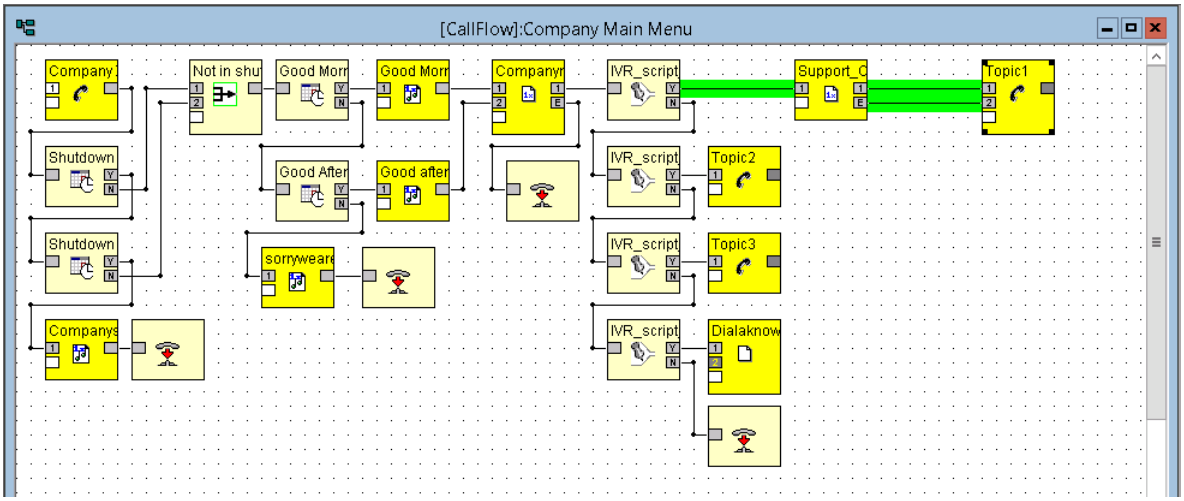


A. Click and drag.

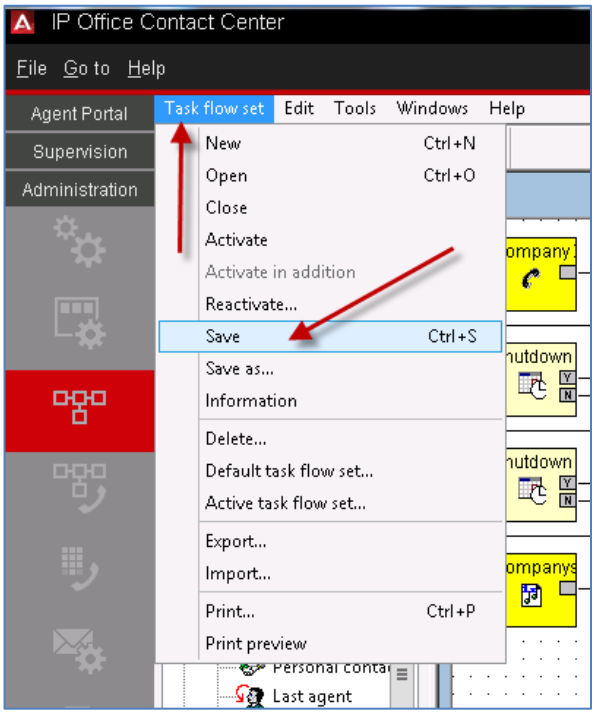
43. Select the **Support_Contract** IVR Script and click the **OK** button.



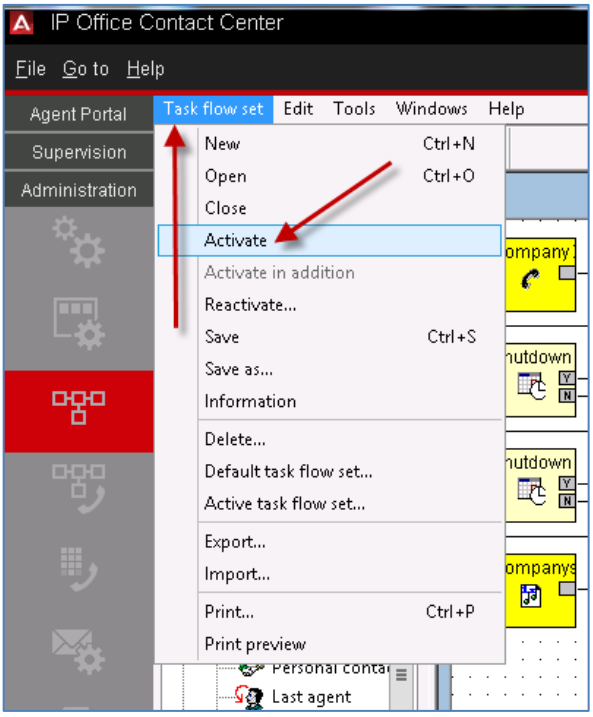
44. Now connect the New IVR script element within the Call flow as highlighted below.



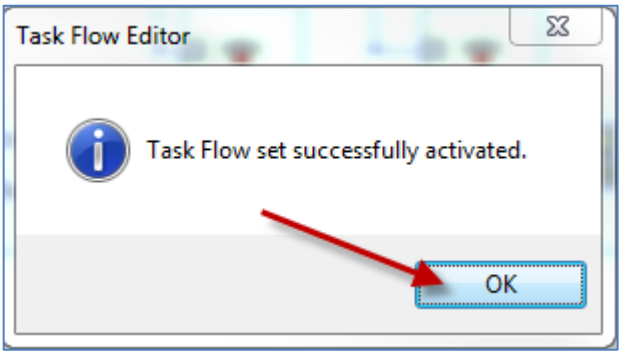
45. Click **Task Flow set** and select **Save**.



46. Click **Task flow set** and select **Activate**.

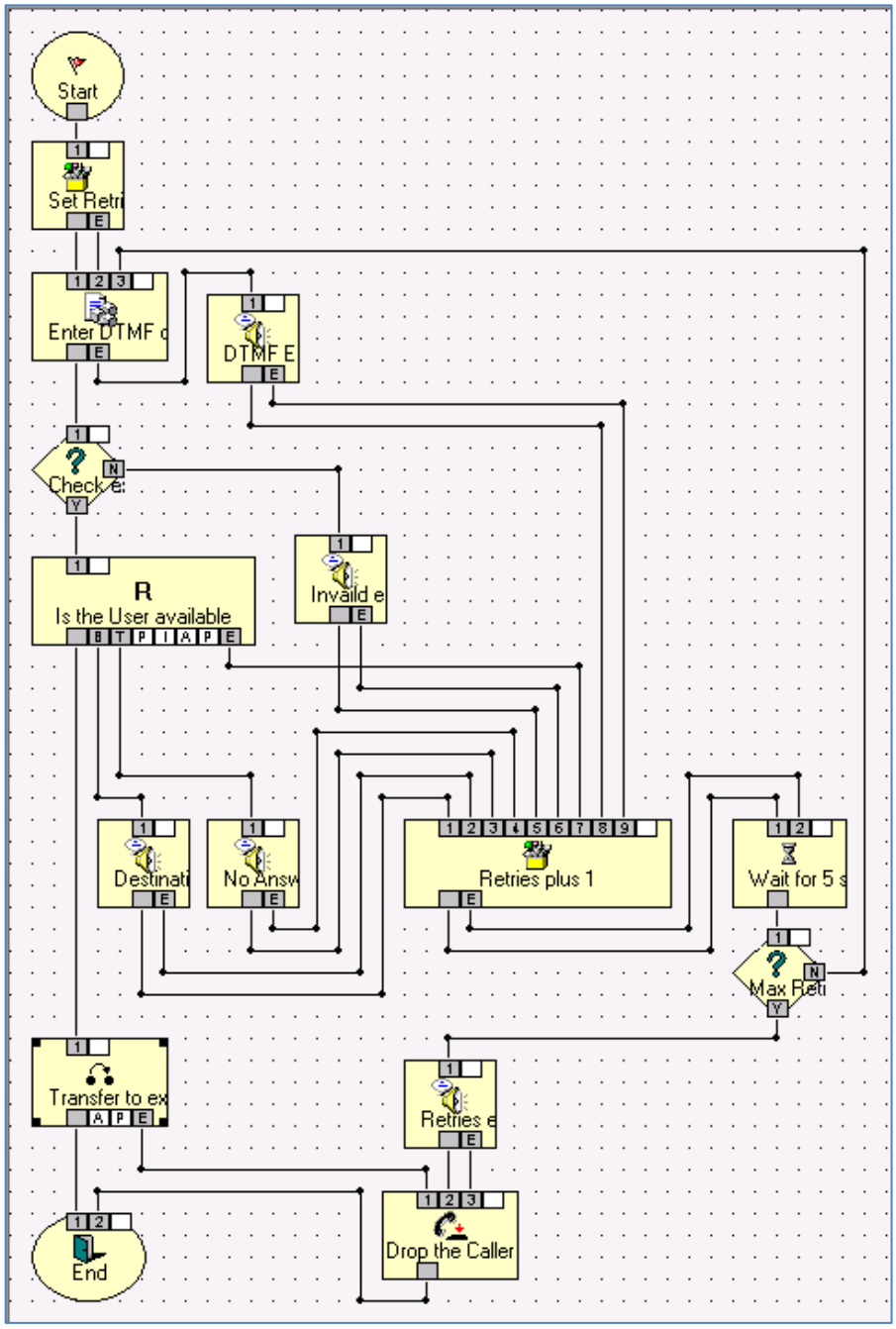


47. Click the **OK** button when prompted.

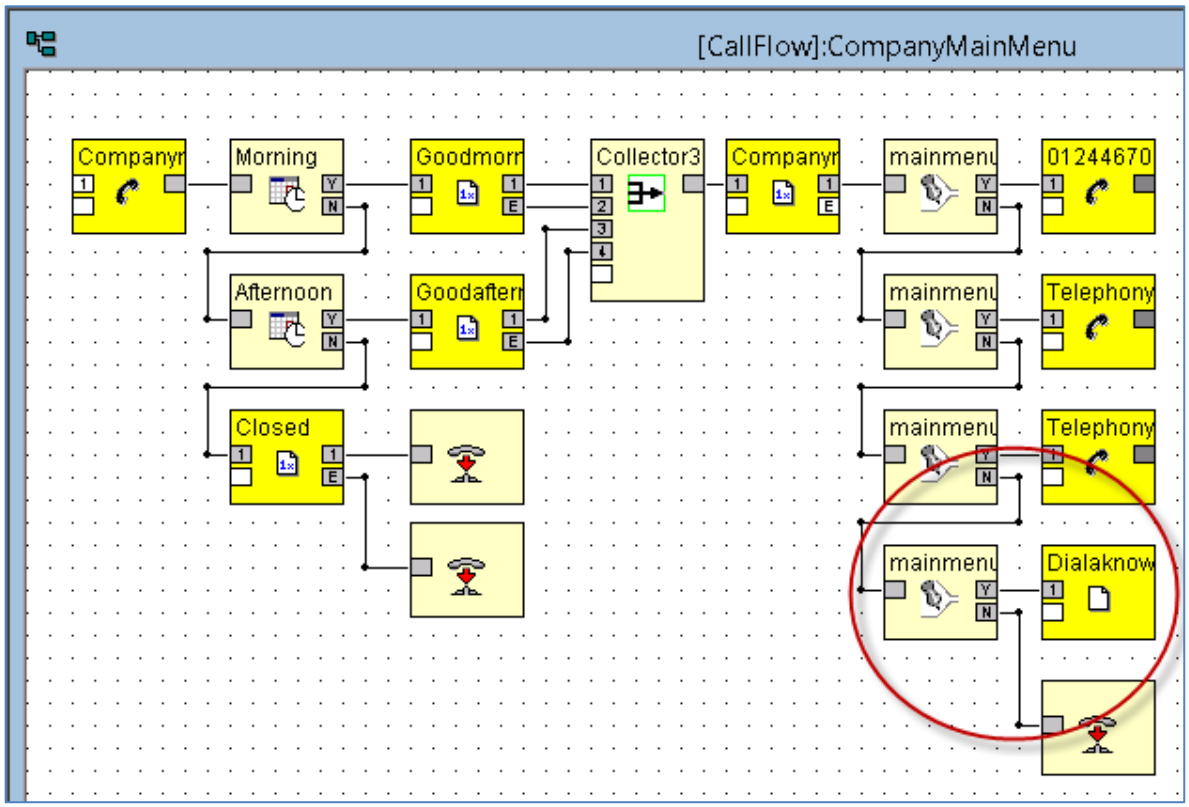


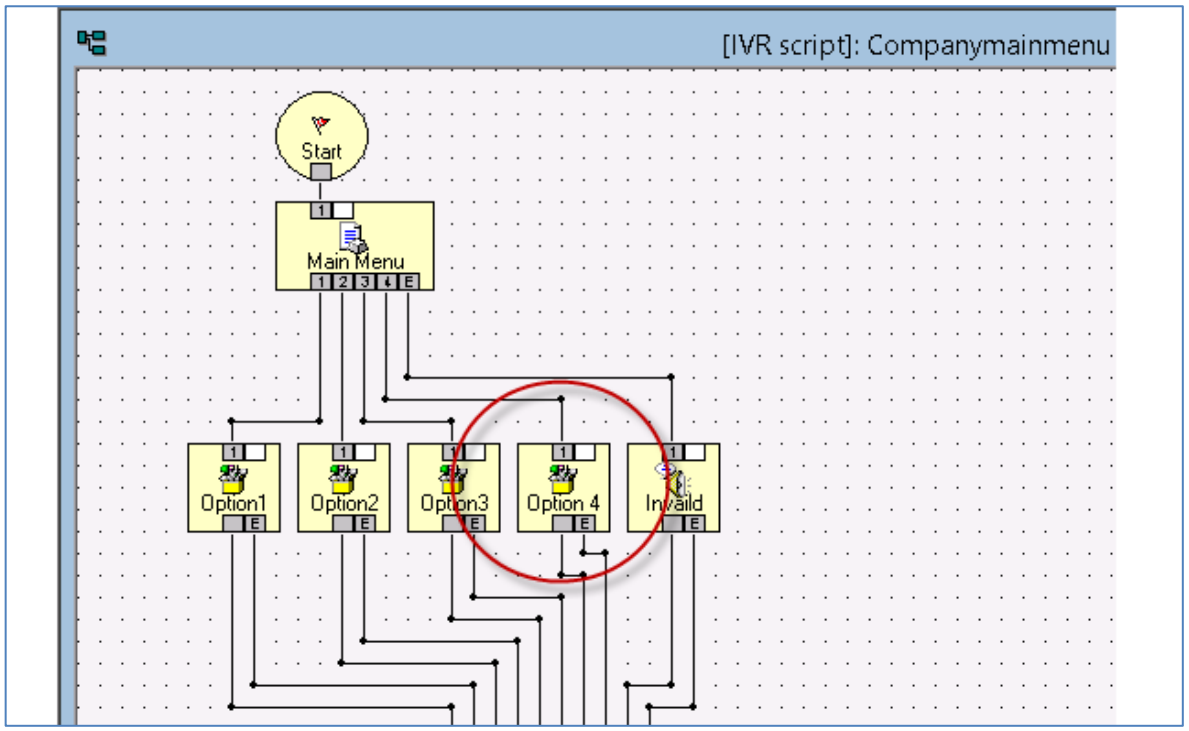
IVR Script: To allow a Caller to Dial a Known Extension Number

The IVR Script detailed in the following example, will allow a caller to enter a known extension number on the IP Office/ IP Office Contact Centre and consequently their call will be directed to that extension. If the destination extension is not available or busy, the caller will hear a message and be prompted to enter the extension number again. The caller will be informed if they enter an invalid extension number and will be prompted to try again. After three attempts they will be notified and their call disconnected.



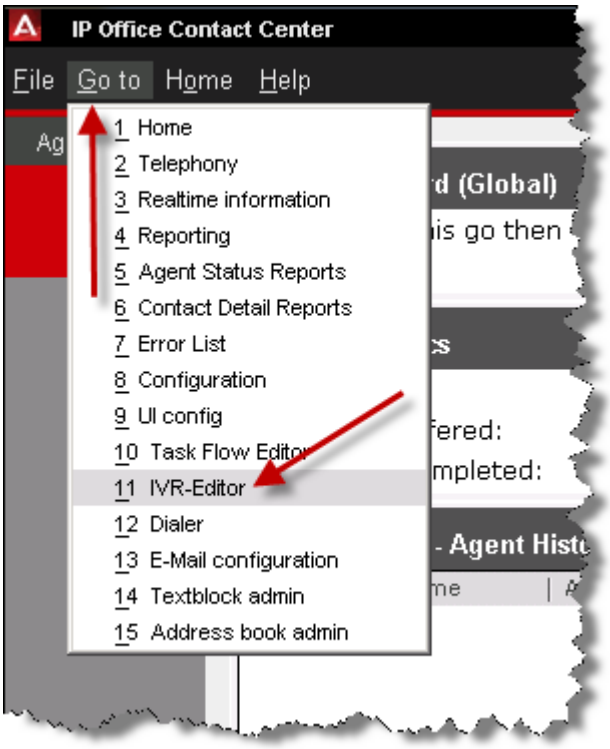
The illustration below shows the new IVR script being added to the Company Main menu IVR script, the configuration of which was previously discussed in this guide.



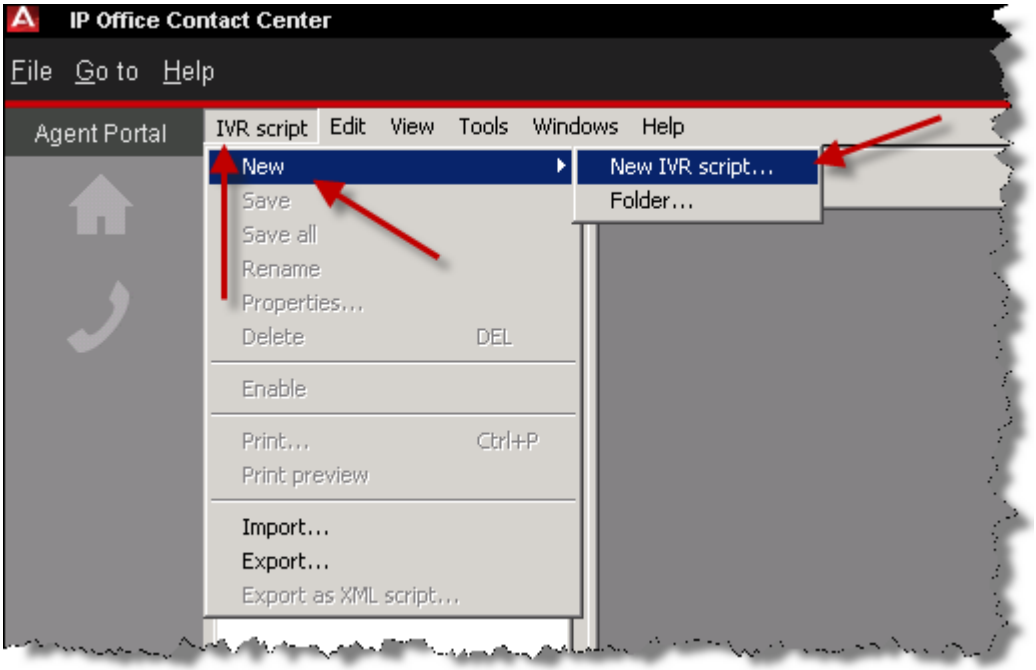


To create an IVR Script to allow a Caller to Dial a Known Extension Number:

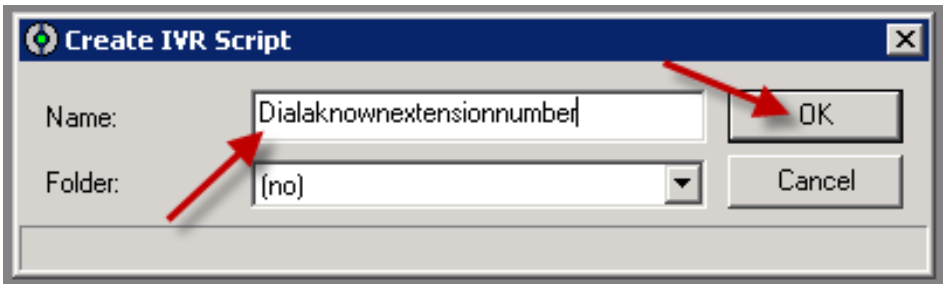
1. From the **Goto** menu select **IVR-Editor**.



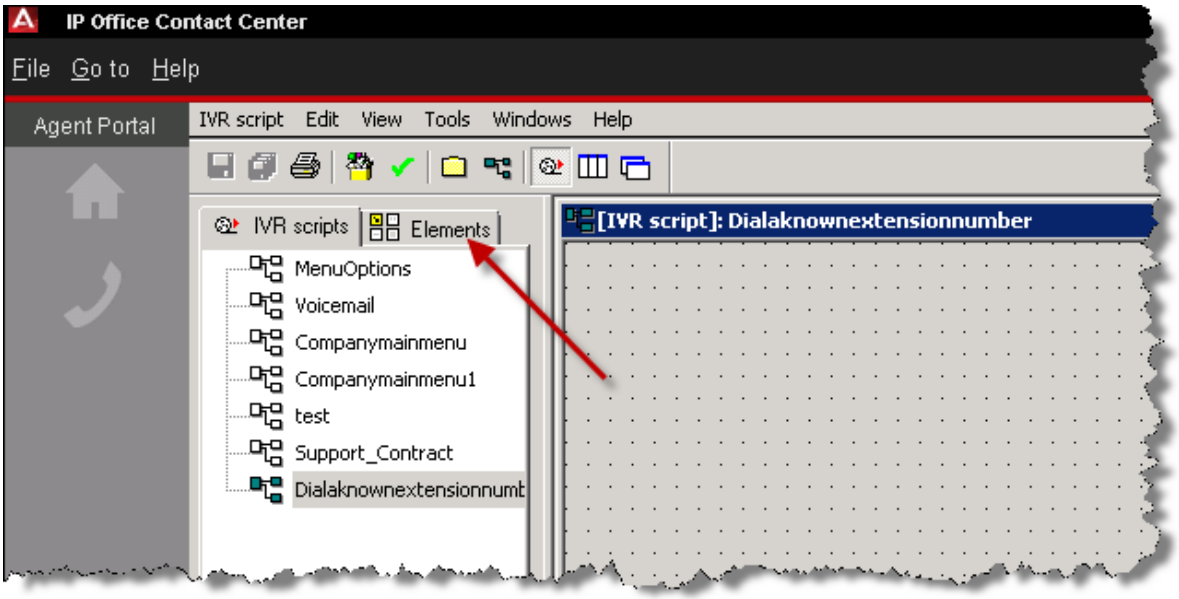
2. From the IVR script menu click **New** followed by **New IVR script**.



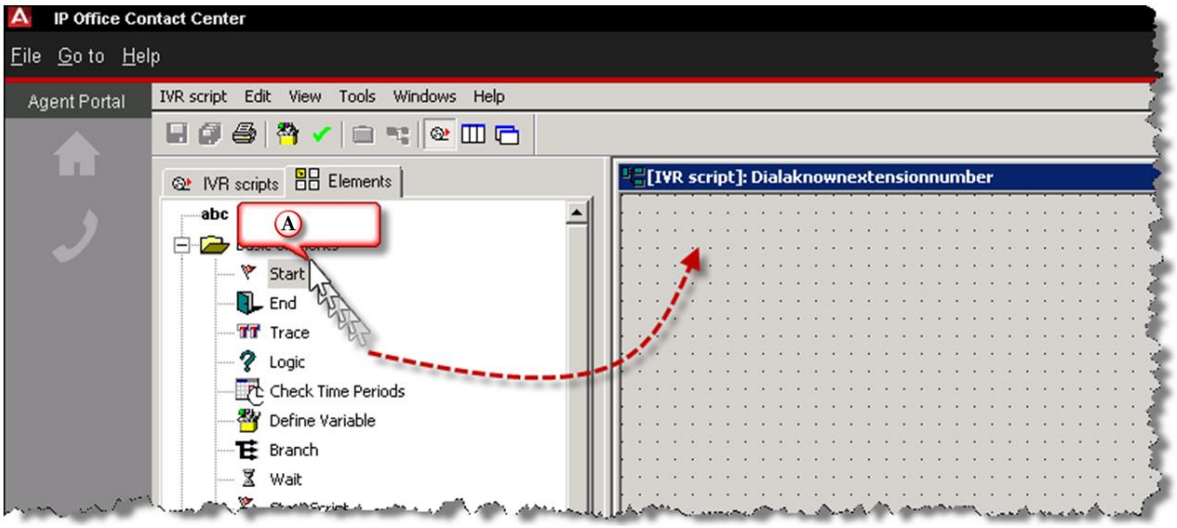
3. In the **Name** field enter **Dialaknownextensionnumber** and click the **OK** button.



4. Click the **Elements** tab.

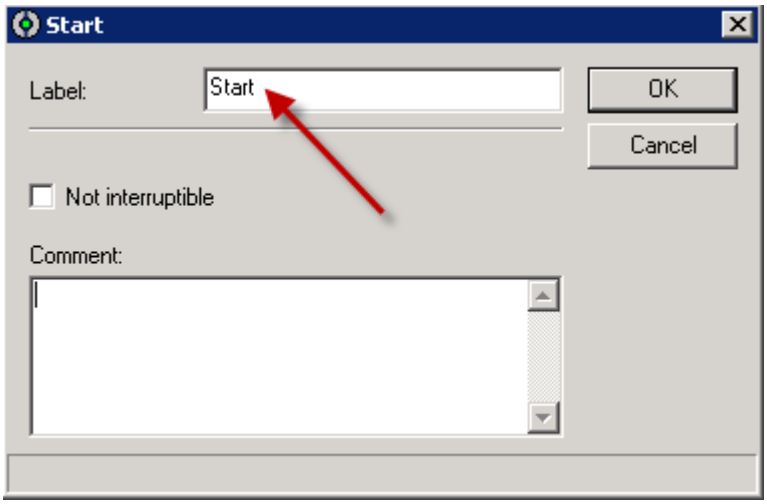


5. Drag a **Start** element into the IVR script Working Area.

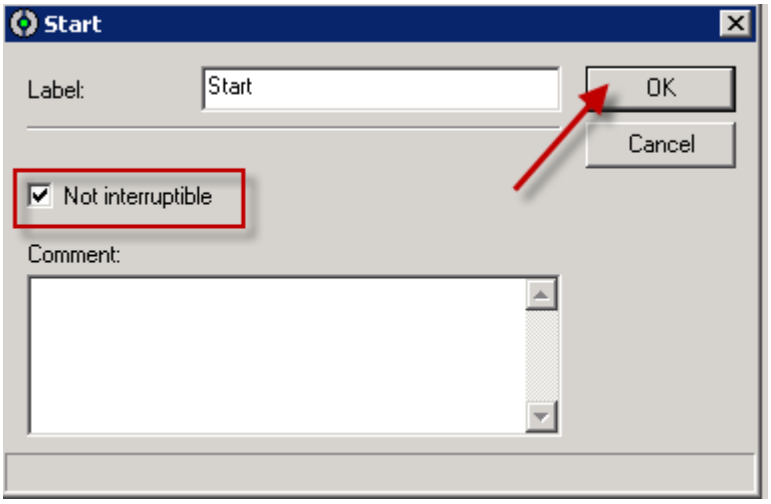


A. Click and drag.

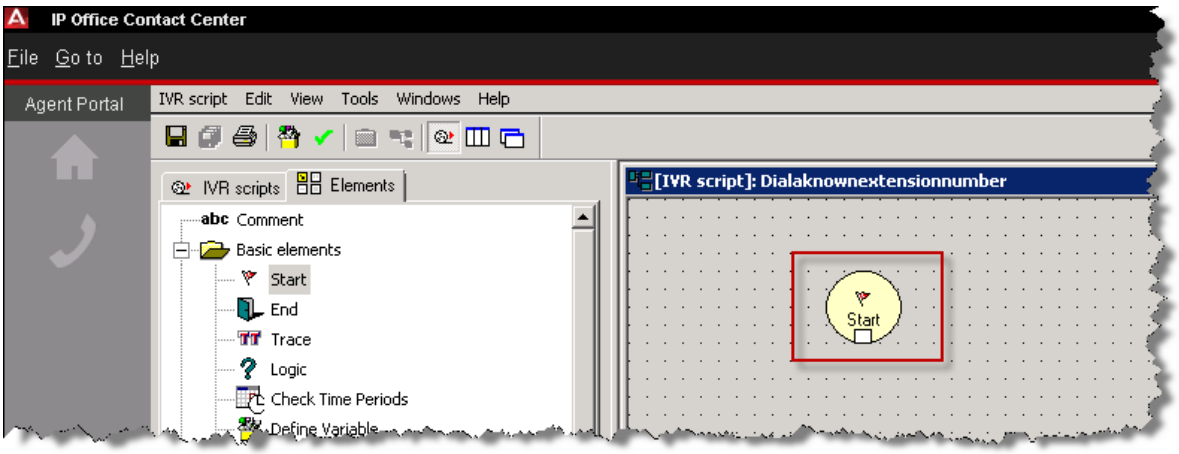
6. In the **Label** field enter **Start**.



7. Click the option for **Not interruptible** and then select the **OK** button.



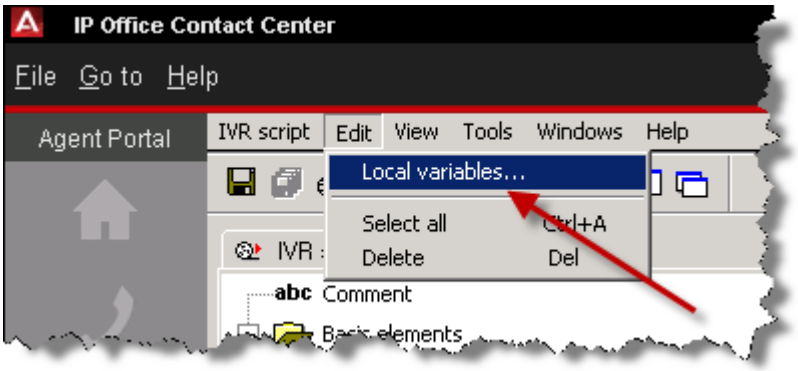
8. The configured element is displayed.



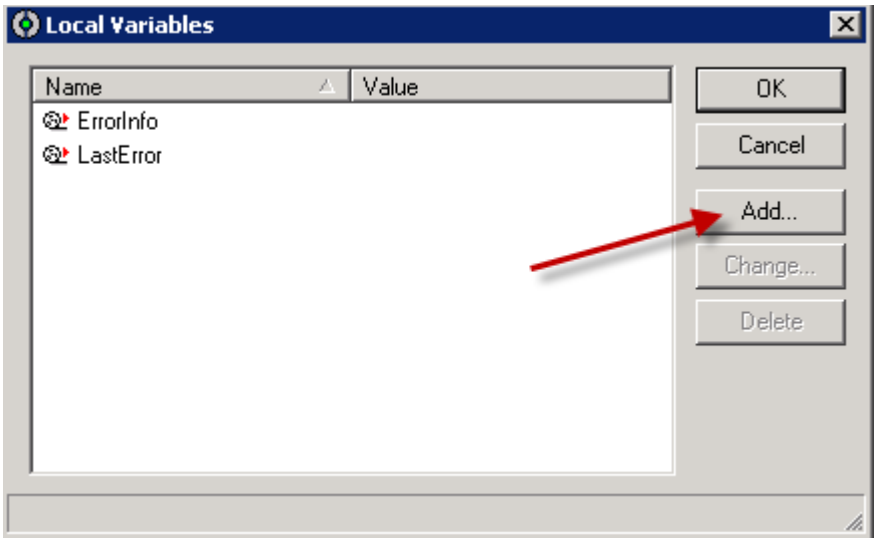
Creating a Local Variable to Record the DTMF Digits entered by the Caller

We will now create a local variable that can be used to record either the DTMF digits entered by the caller to reach an extension or those digits entered incorrectly by the caller. An option to record how many times they have entered an incorrect extension number (Retries) will also be configured.

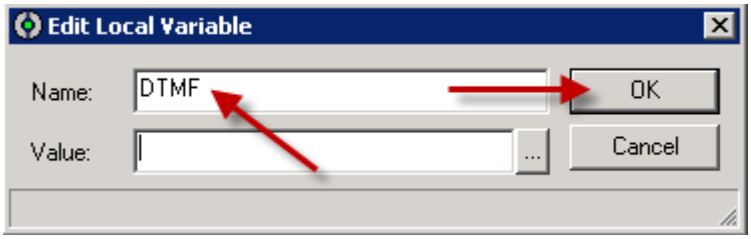
1. Click **Edit** from the menu and select **Local variables**.



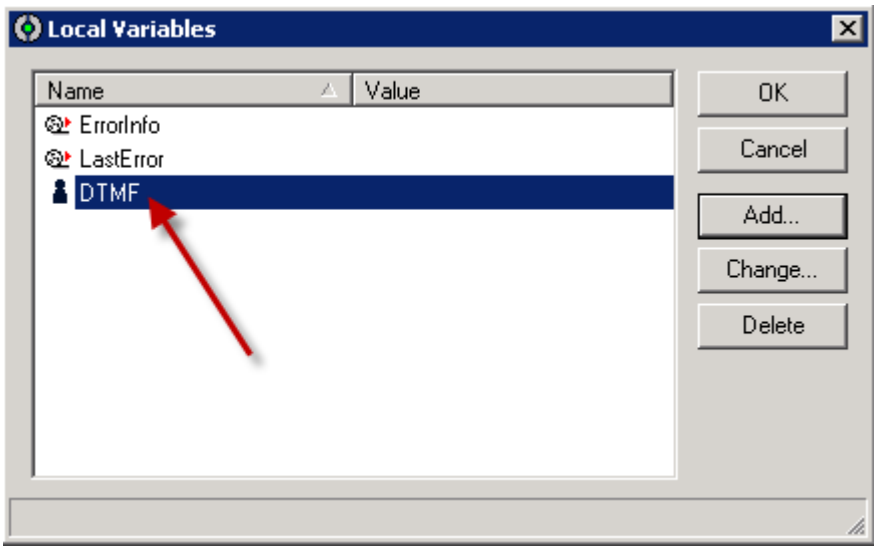
2. Click the **Add…** button.



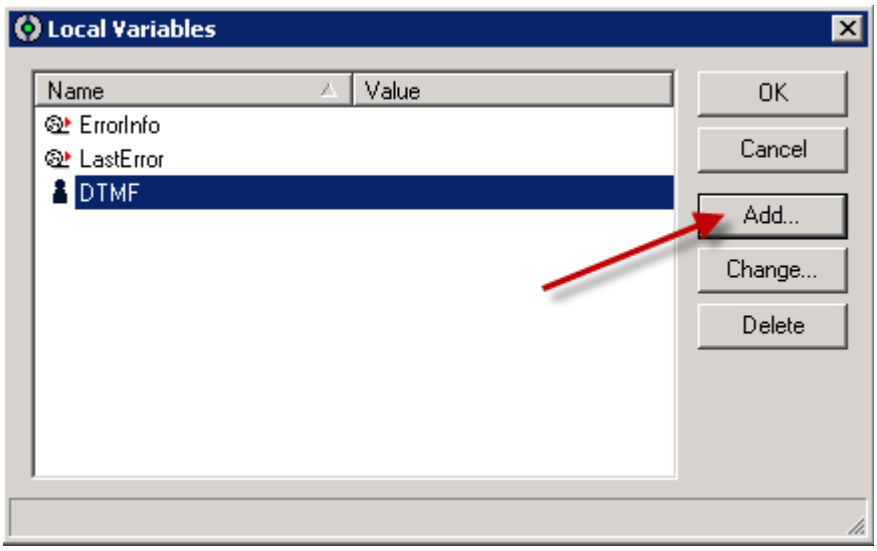
3. In the **Name** field enter **DTMF** and click the **OK** button.



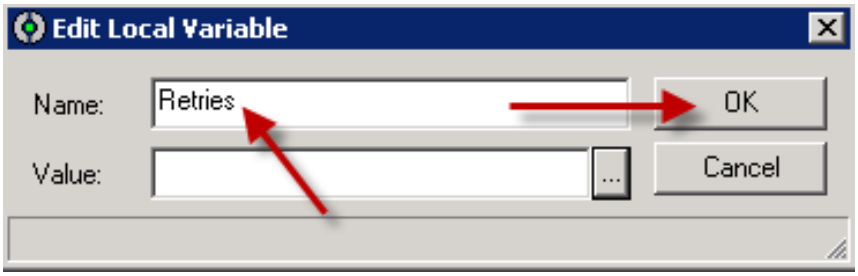
4. The variable will be displayed.



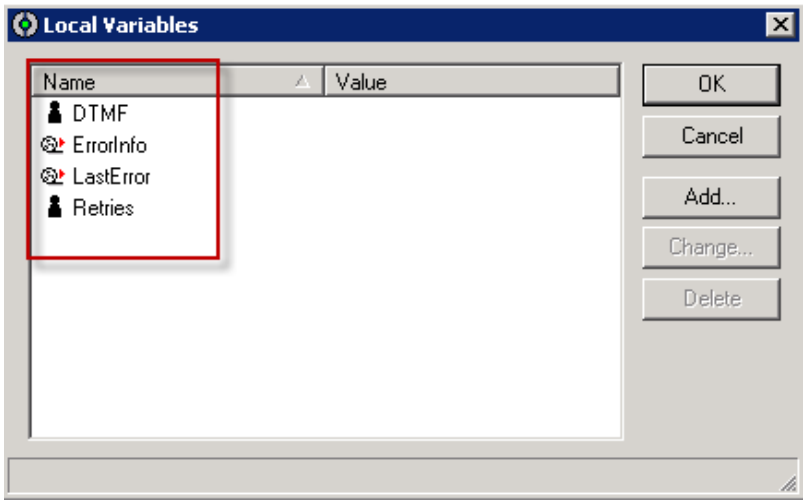
5. Click the **Add..** button.



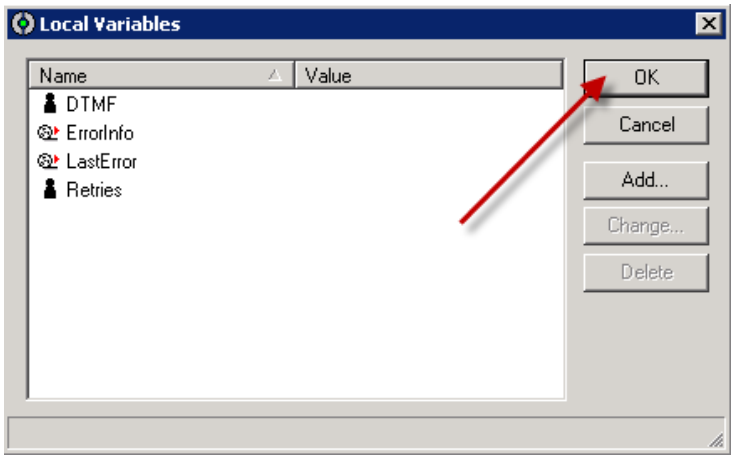
6. In the **Name** field enter **Retries** and click the **OK** button.



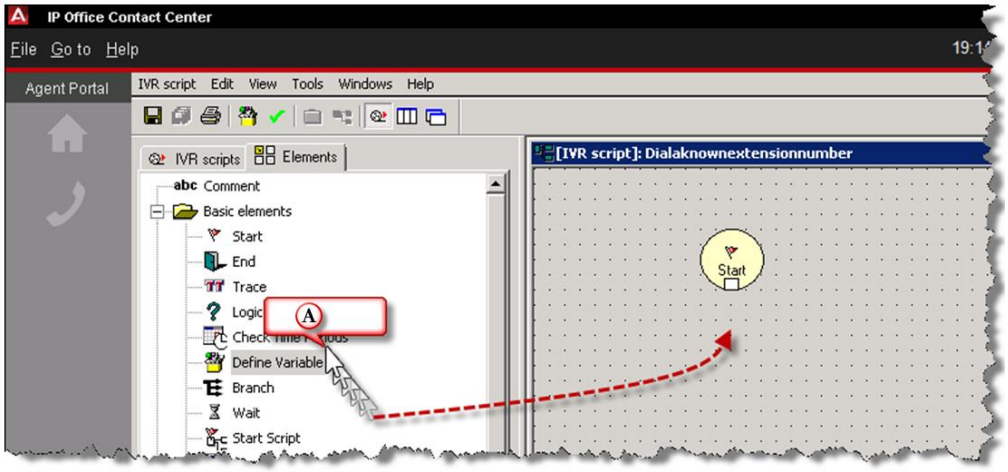
7. The variables will be displayed.



8. The local variables have now been created, click the **OK** button.

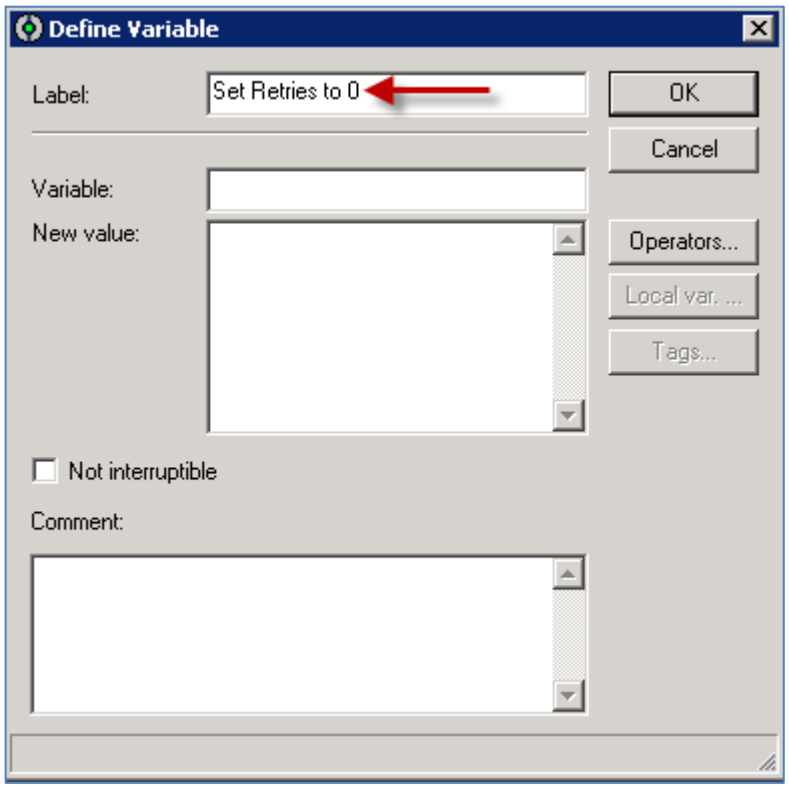


9. We now need to use a **Define Variable** element to reset the Retries variable to 0, when a new call enters the IVR script. Drag the element into the IVR script working area.

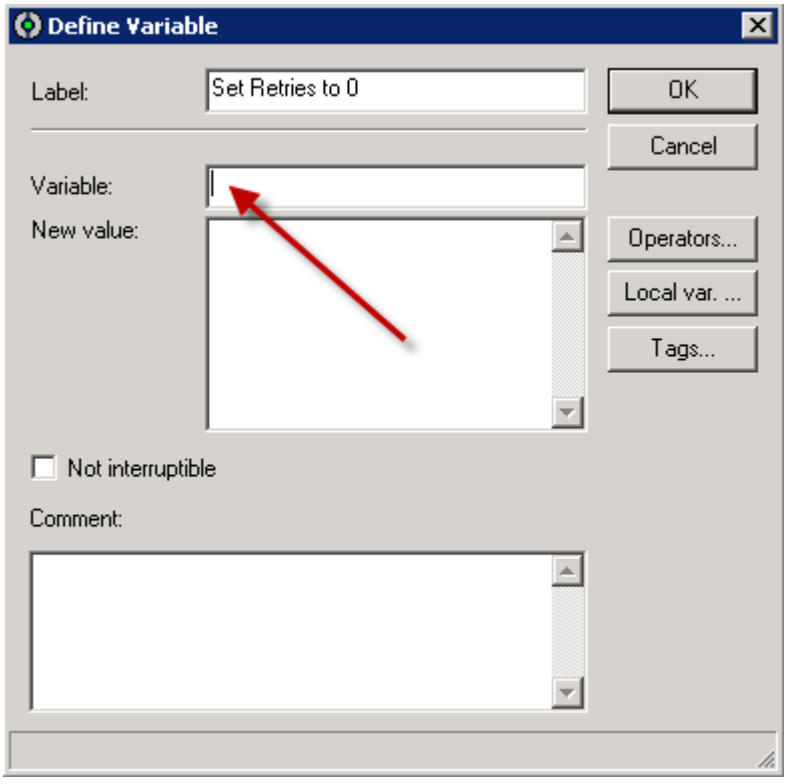


A. Click and drag.

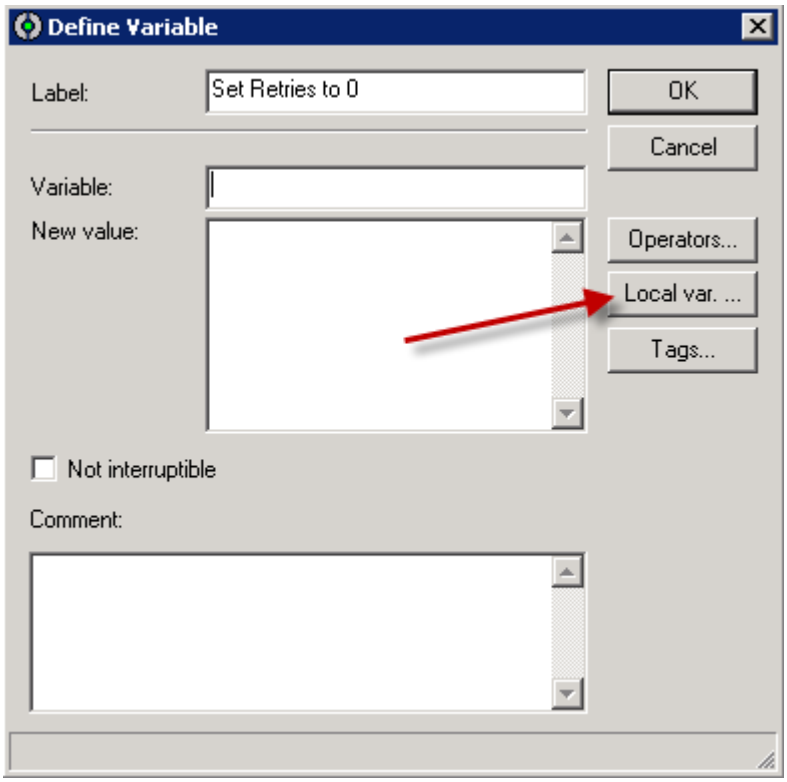
10. In the **Label** field enter **Set Retries to 0**.



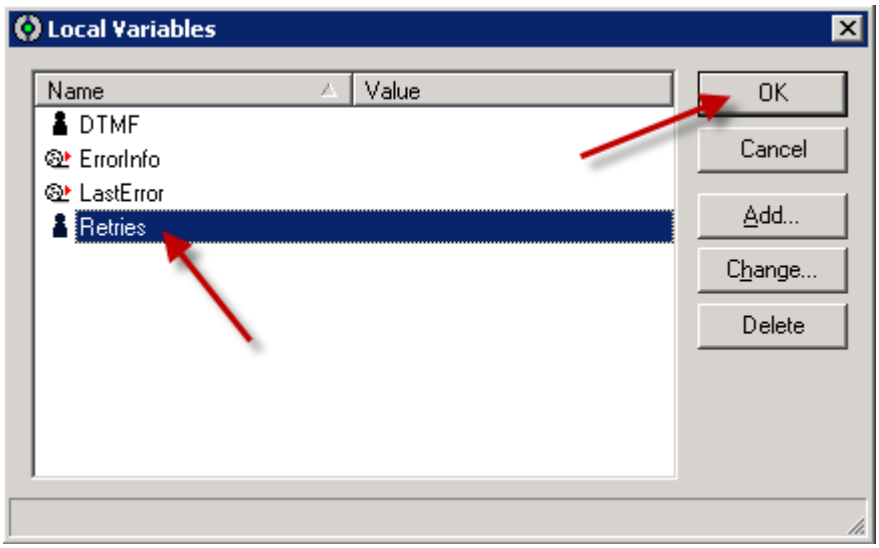
11. Using the mouse left click in the **Variable** field.



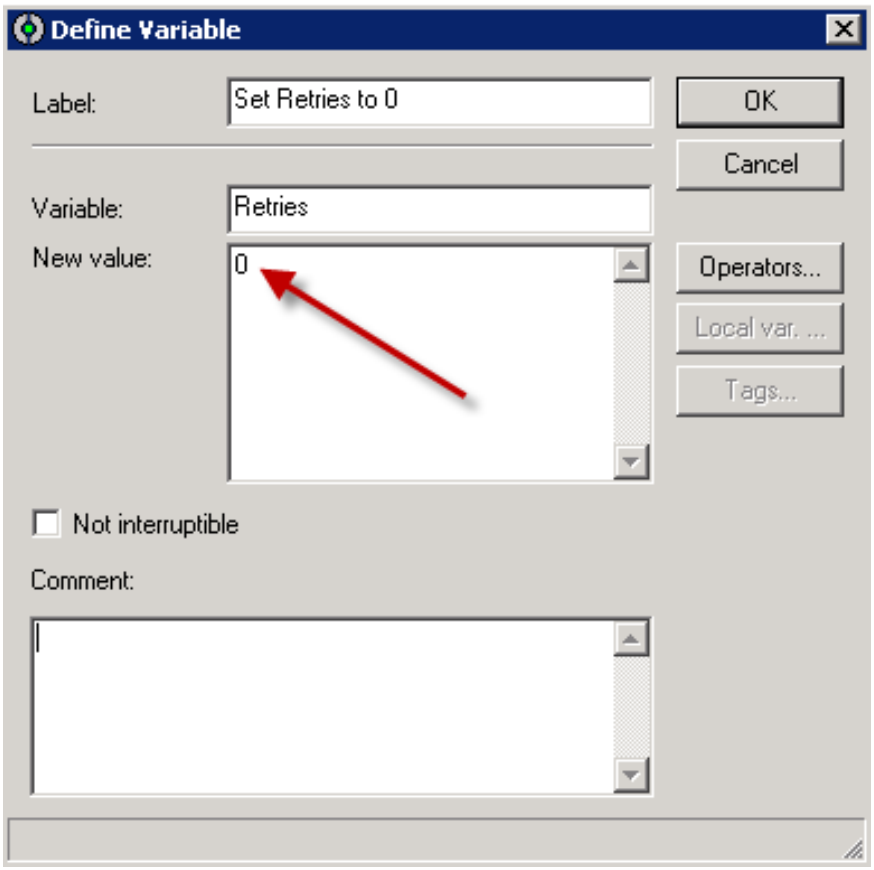
12. Click the **Local var….** button.



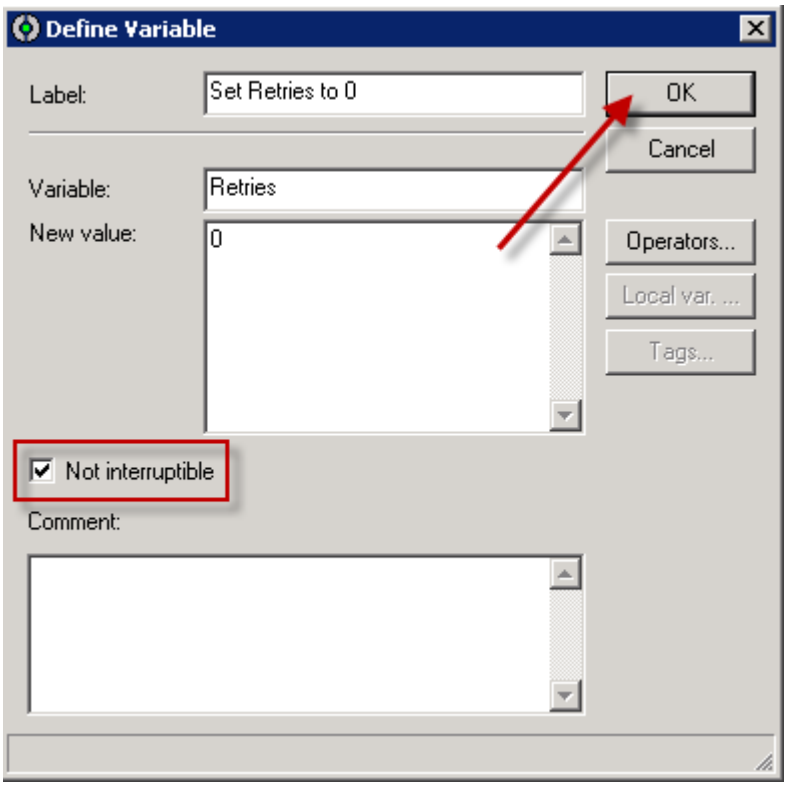
13. Select **Retries** and select the **OK** button.



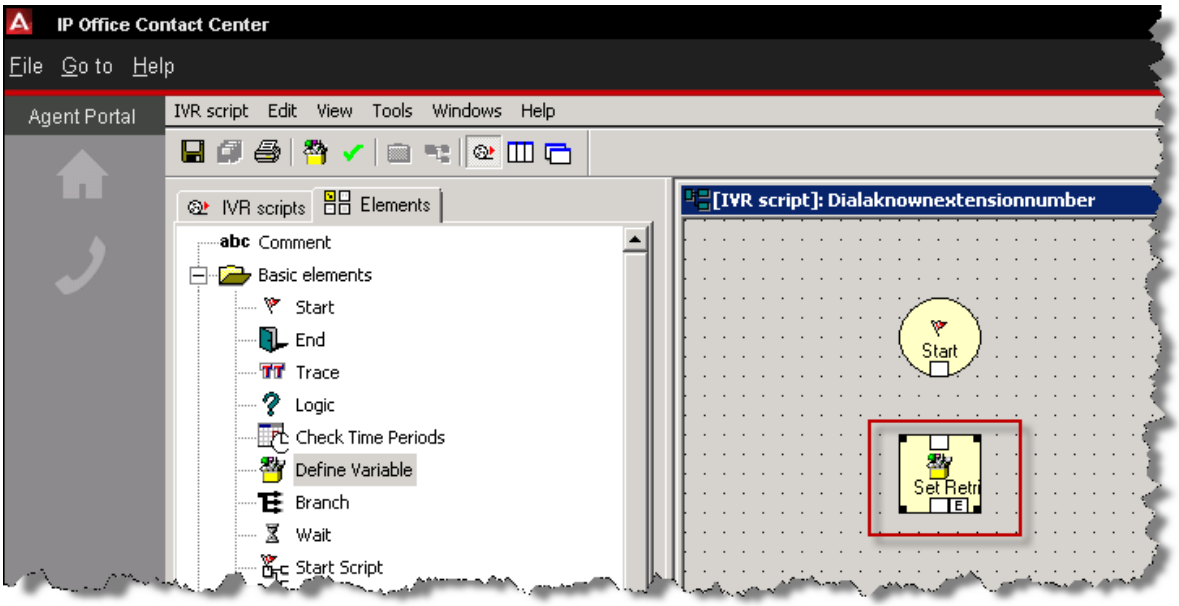
14. In the **New Value** field enter **0**.



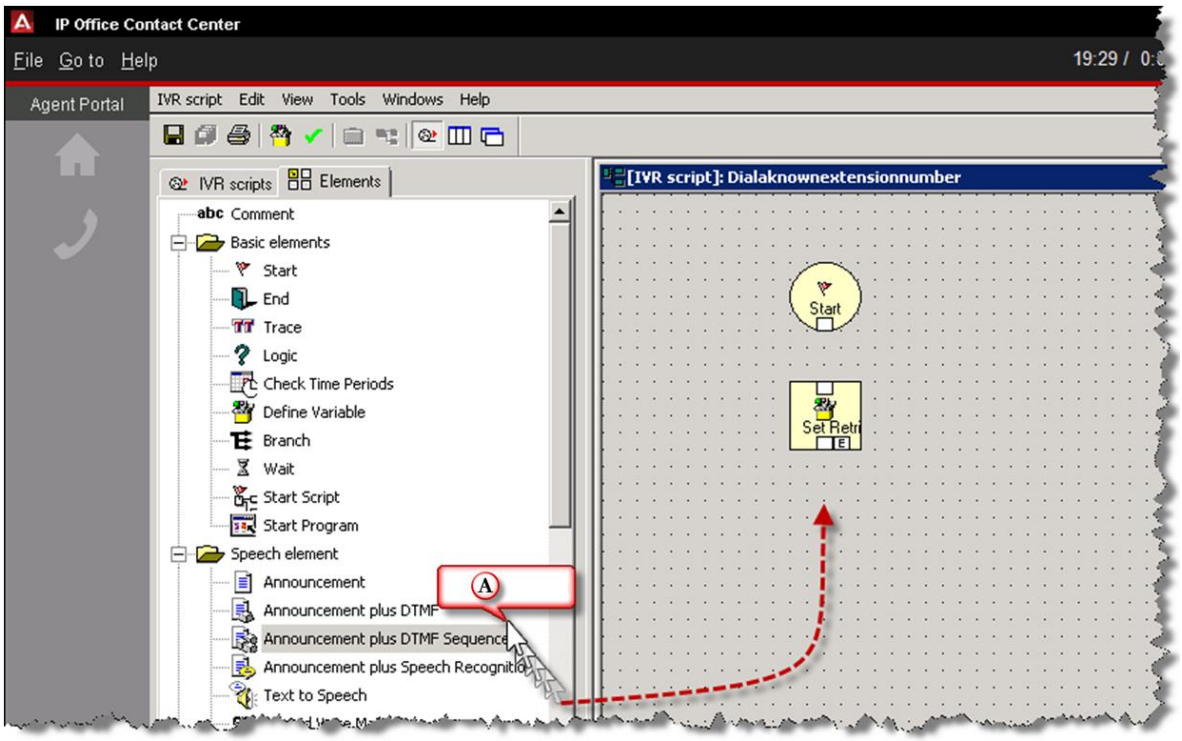
15. Click the option for **Not interruptible** and then click the **OK** button.



16. The configured element is displayed.

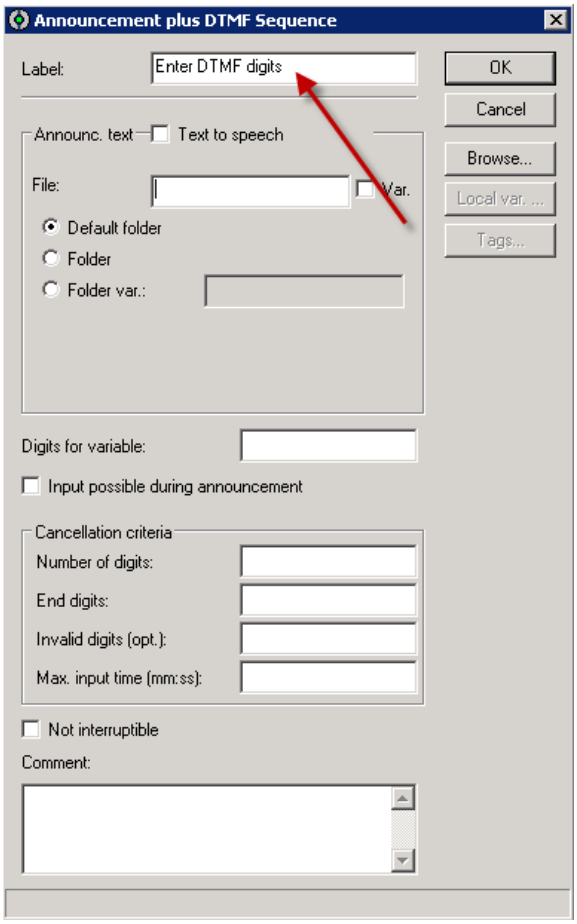


17. We will now configure an element that will prompt the customer to enter the required extension number using DTMF via their handset. This feature can be completed using the **Announcement plus DTMF Sequence** element. Drag the element into the IVR script working area.

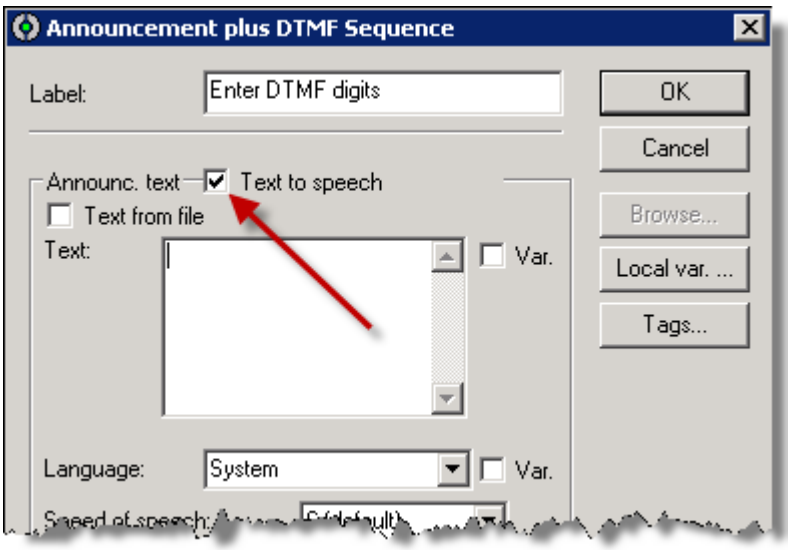


A. Click and drag.

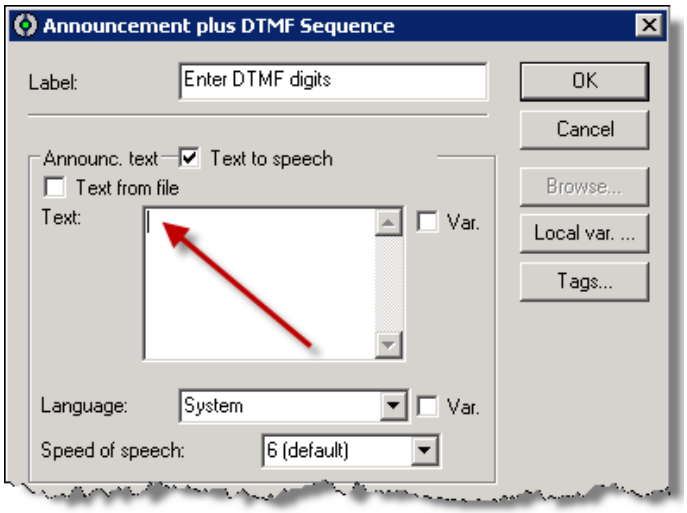
18. In the **Label** field enter **Enter DTMF digits**.



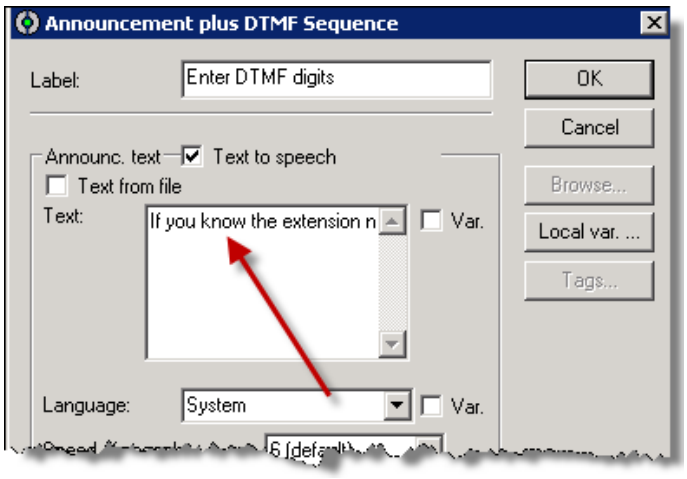
19. Click the **Text to speech** check box.



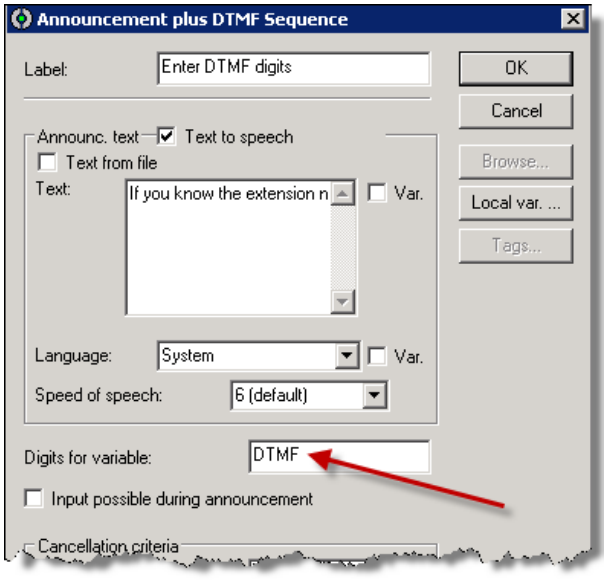
20. Left mouse click within the **Text to speech** field.



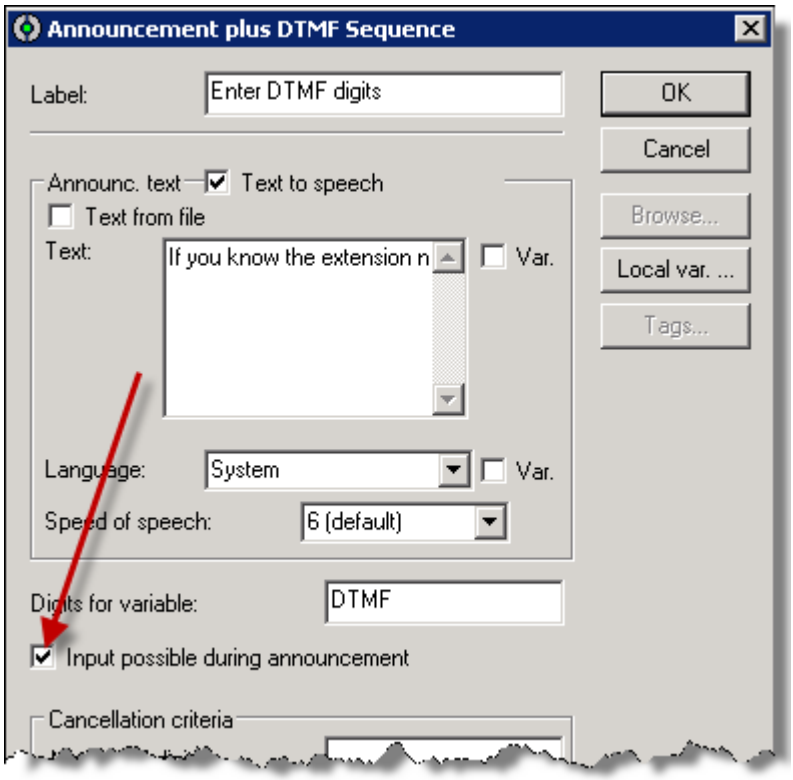
21. In the **Text** field enter **If you know the extension number you wish to dial. Please dial it now.**



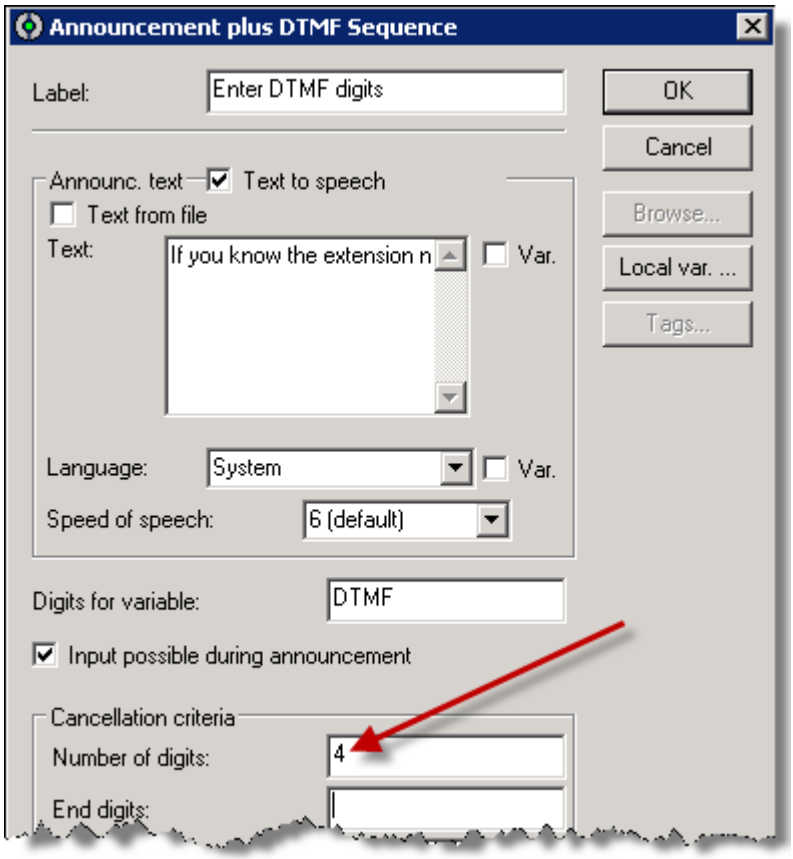
22. In the **Digits for variable** field enter **DTMF**.



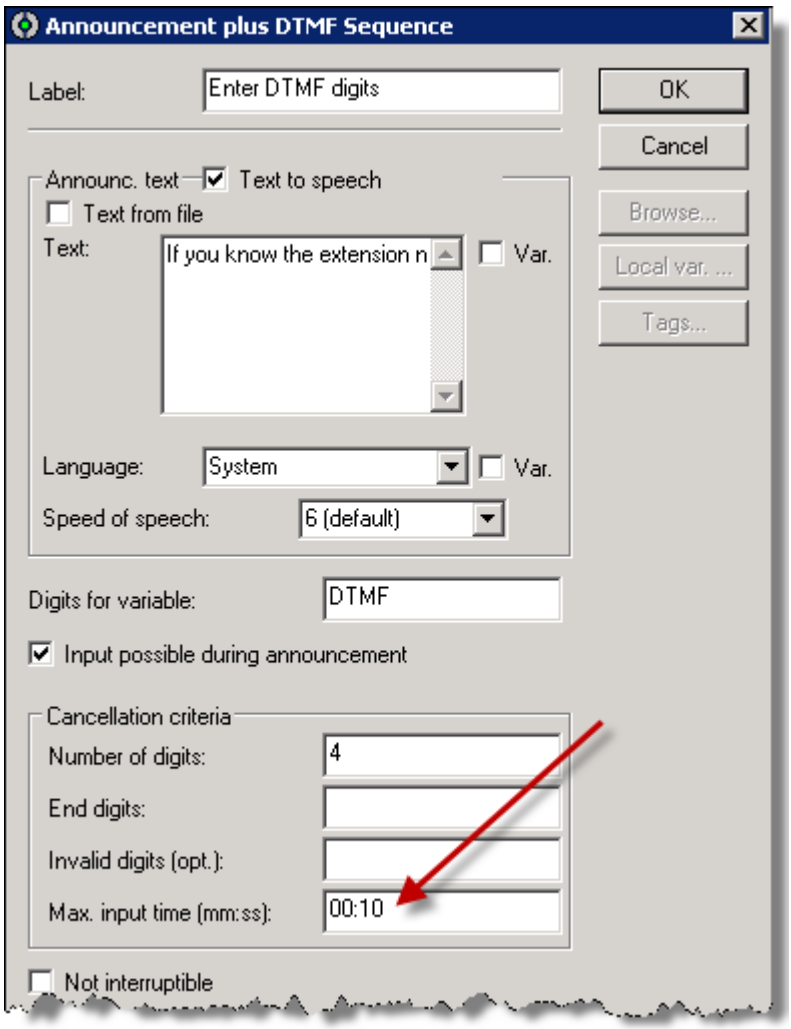
23. Click the **Input possible during announcement** check box.



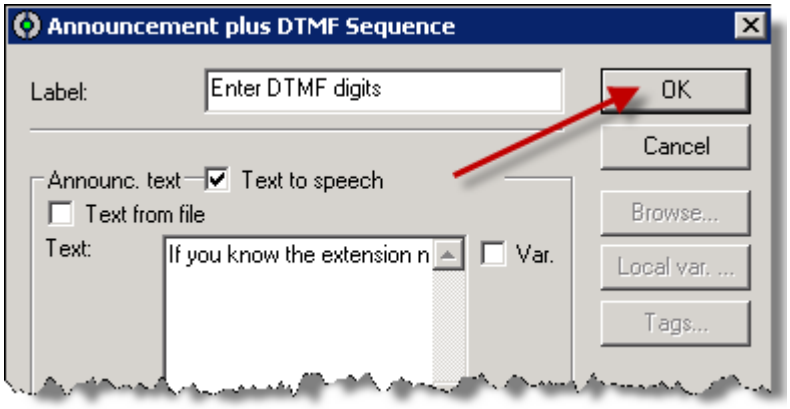
24. In the **Number of digits** field enter **4** (This is the digit extension length on the PBX).



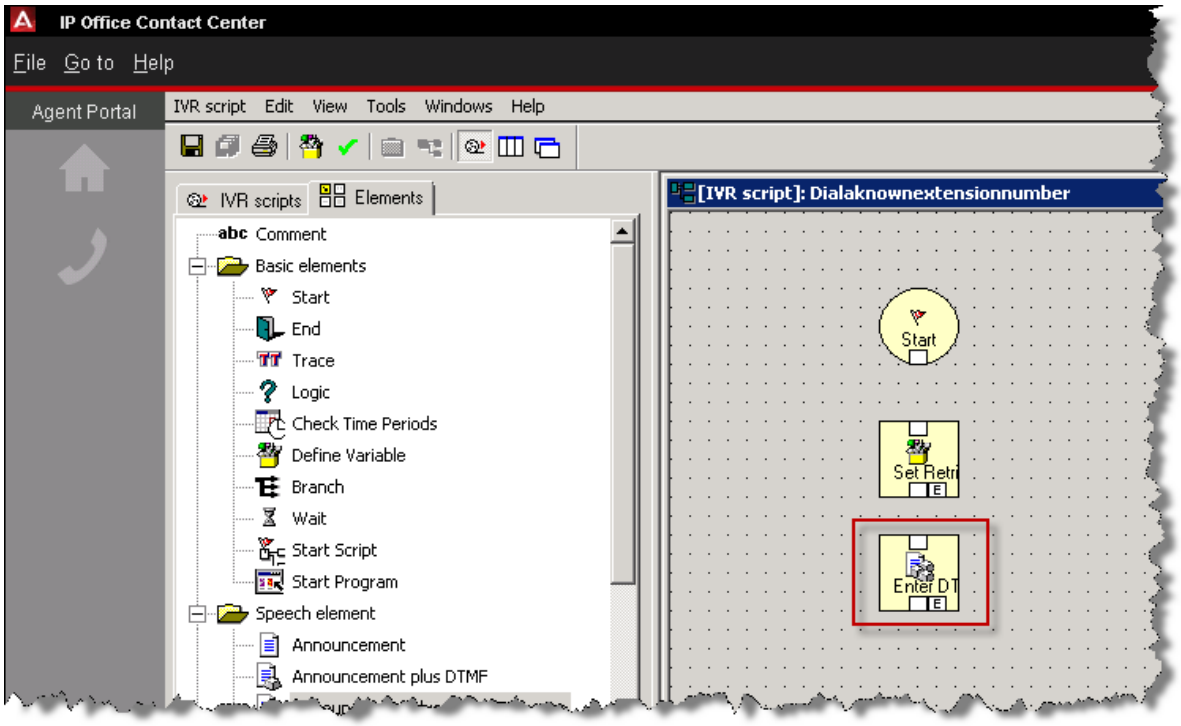
25. In the **Max. input time (mm:ss)** field enter **00:10**. This will allow 10 seconds for a caller to enter the 4 digit extension number.



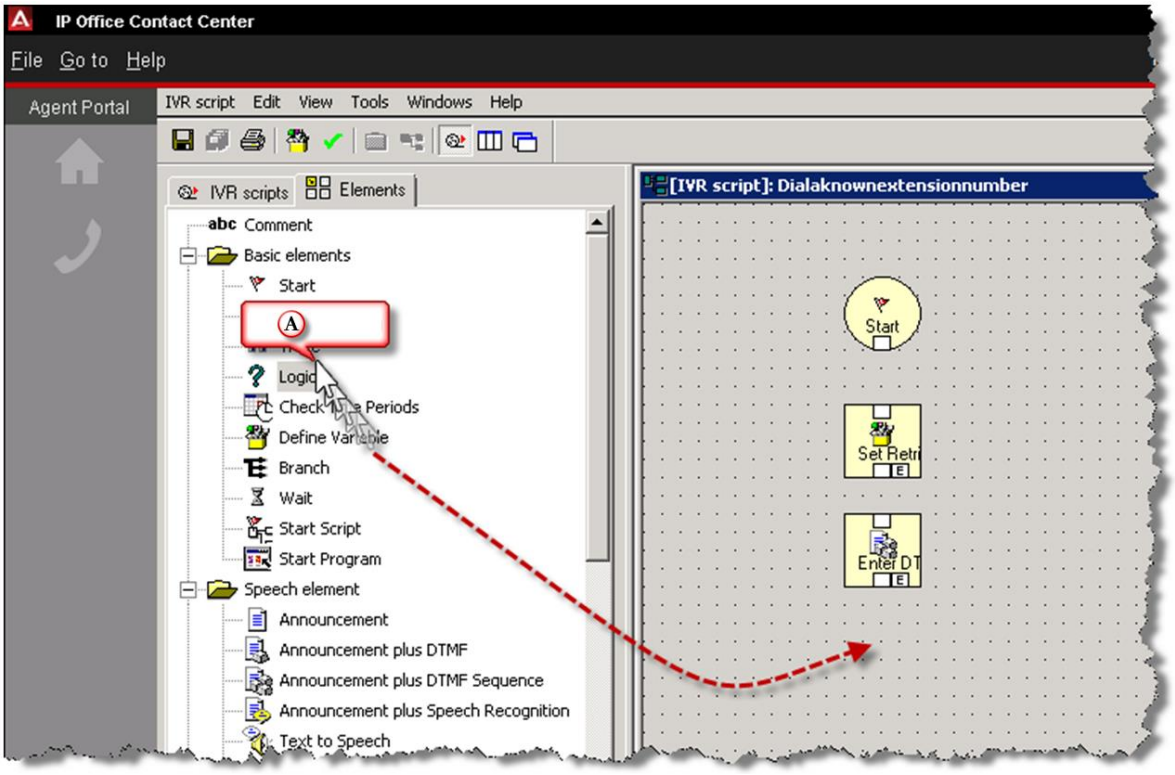
26. Then select the **OK** button.



27. The configured element is displayed.

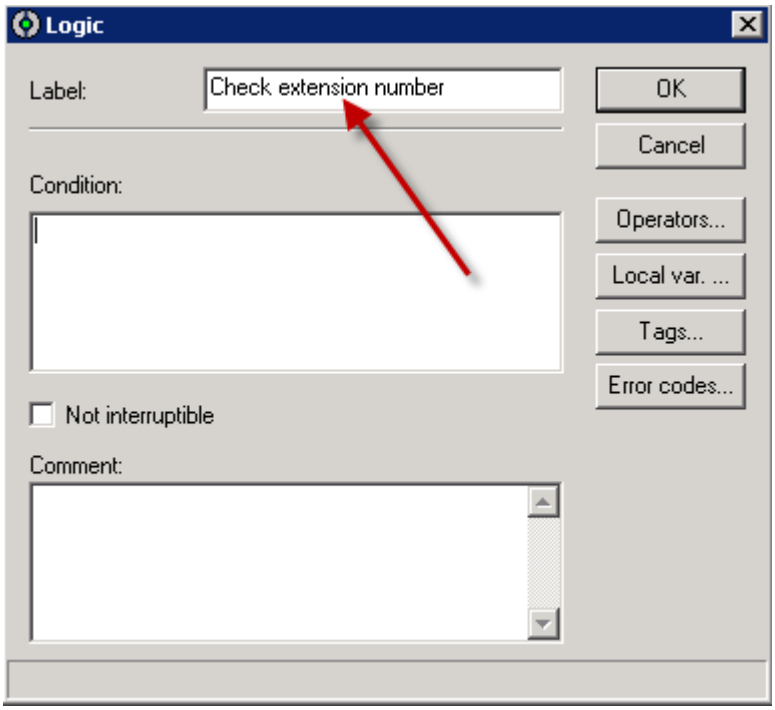


28. Now we need to check that the extension number requested exists on the IP Office PBX. For this validation process, we can use a **Logic** element containing a range of extension numbers. Drag the element into the IVR script window.

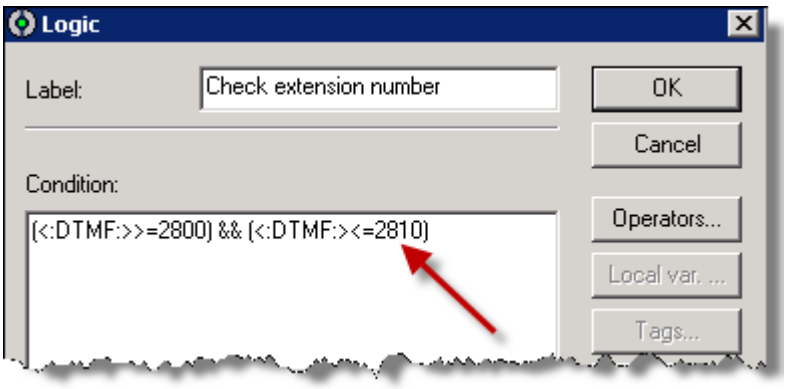


A. Click and drag.

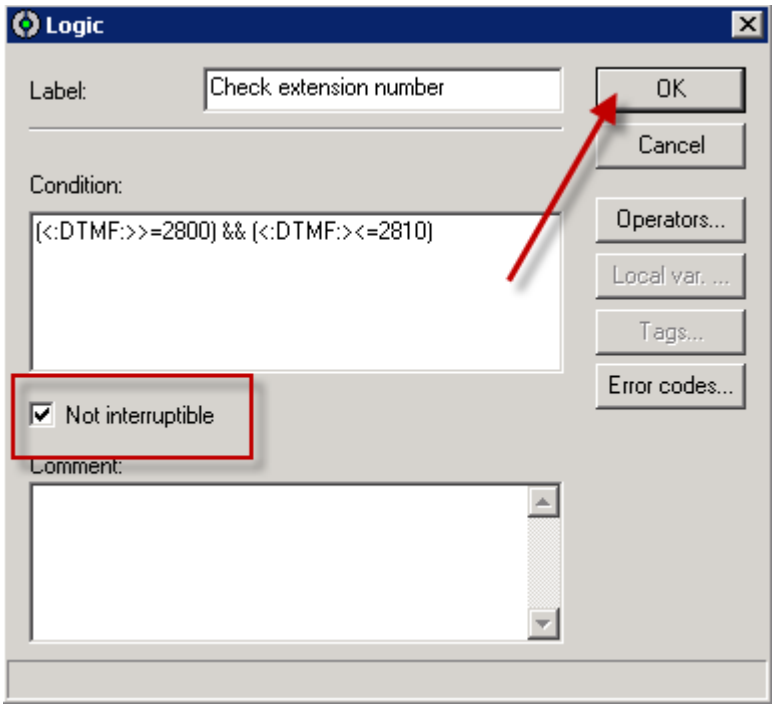
29. In the **Label** field enter **Check extension number**.



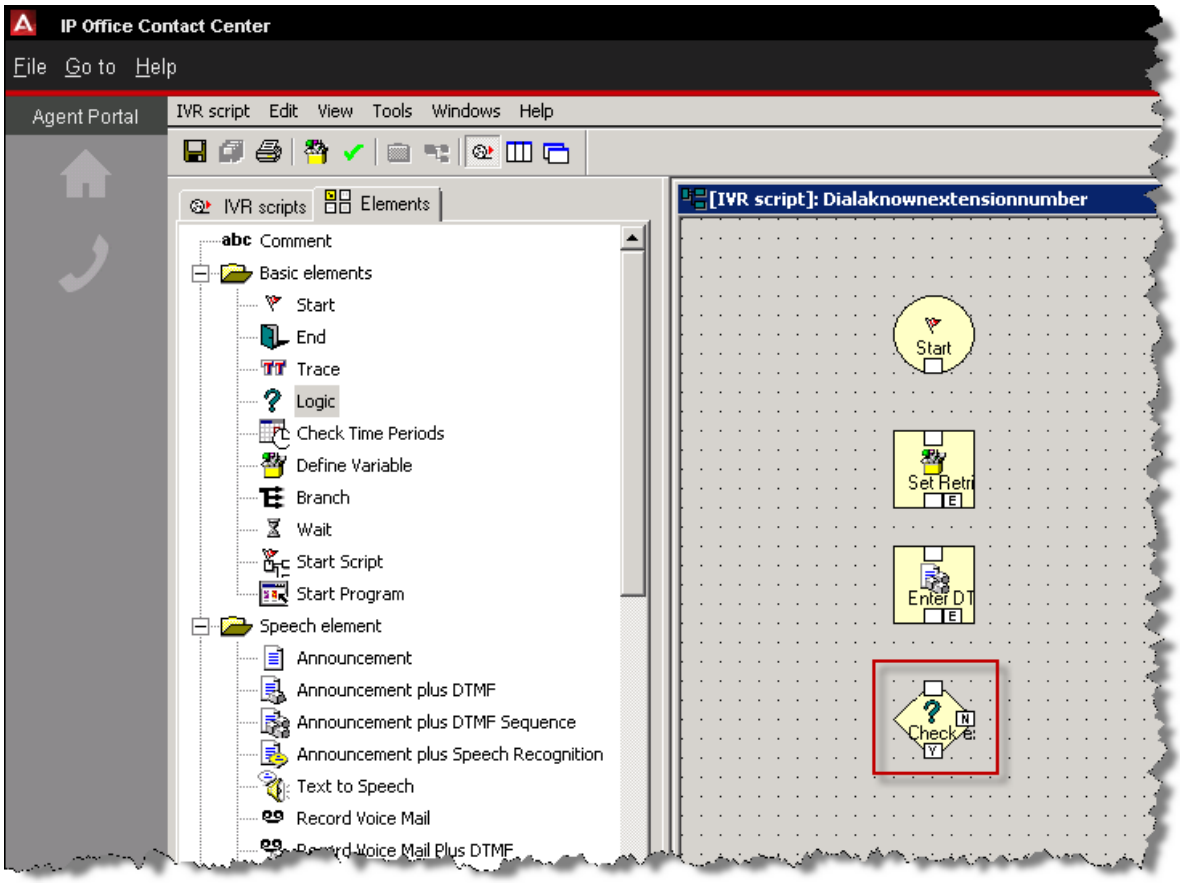
30. In the **Condition** field enter **(<:DTMF:>>=2800) && (<:DTMF:><=2810)**. In this example, the extension range is 2800 to 2810.



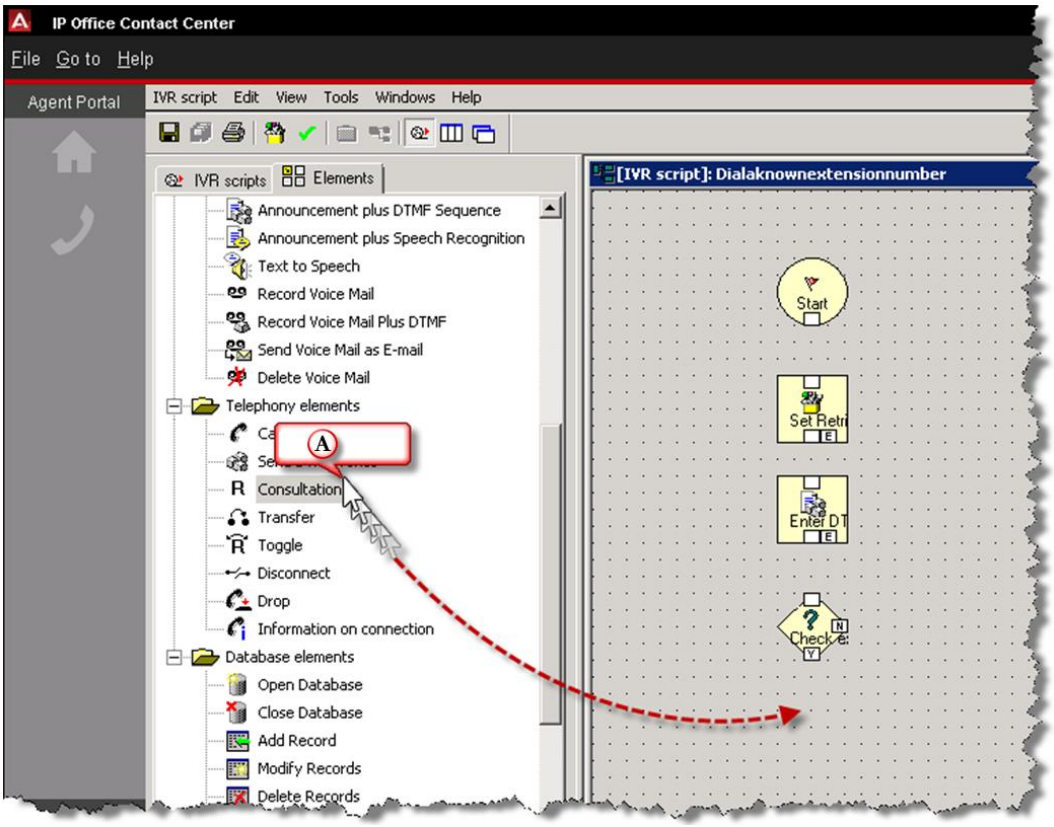
31. Click the **Not interruptible** checkbox and click the **OK** button.



32. The configured element is displayed.

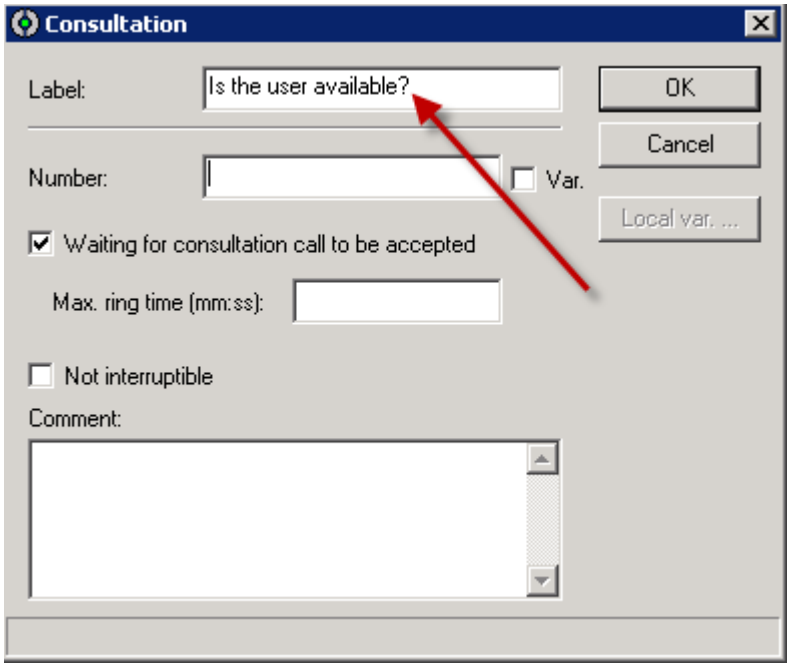


33. We do not want the call to be passed immediately to the chosen extension, as the extension may be busy or the user away from their phone. Therefore we will use a **Consultation** element which will only pass the call when the extension answers. Drag the element into the IVR script.

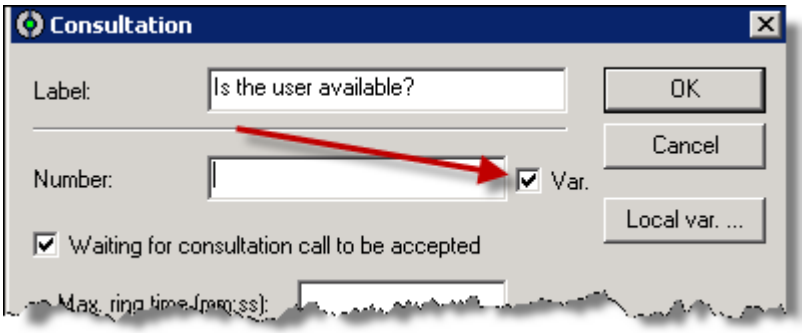


A. Click and drag.

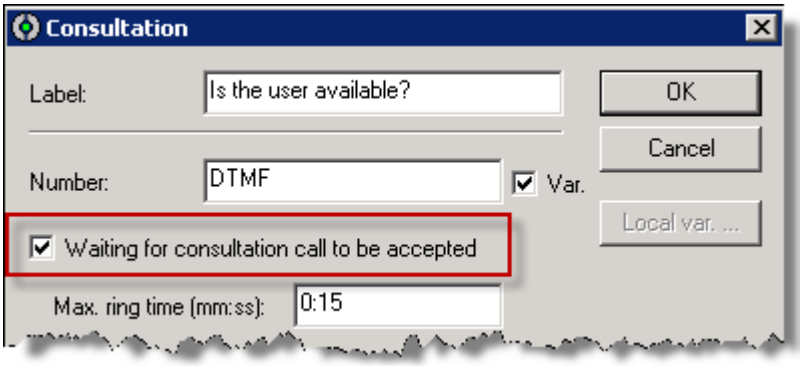
34. In the **Label** field enter **Is the user available**?



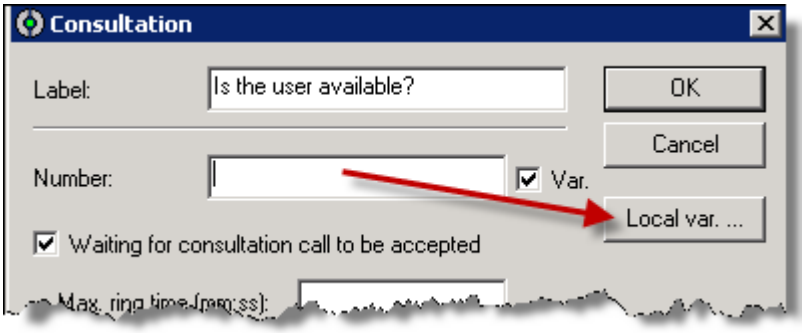
35. Click the **Var.** check box.



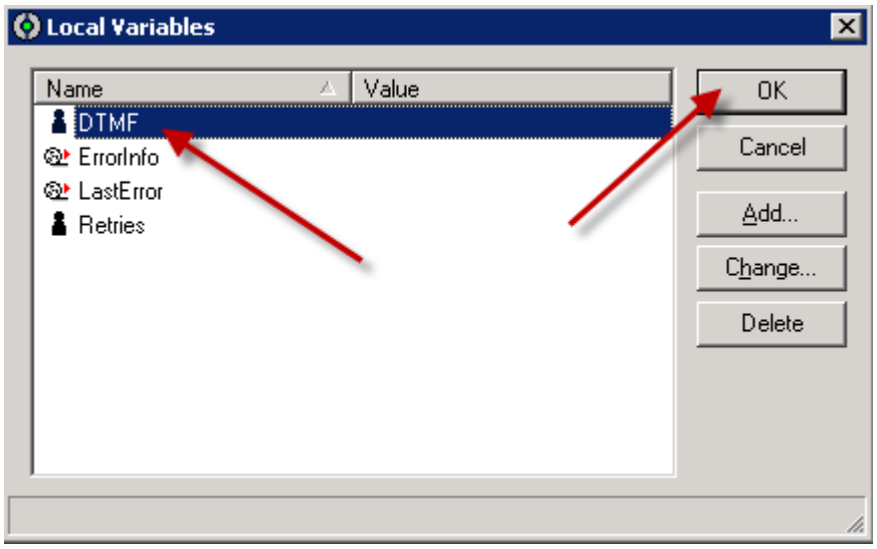
36. Ensure that the **Waiting for consultation call to be accepted** check box is selected.



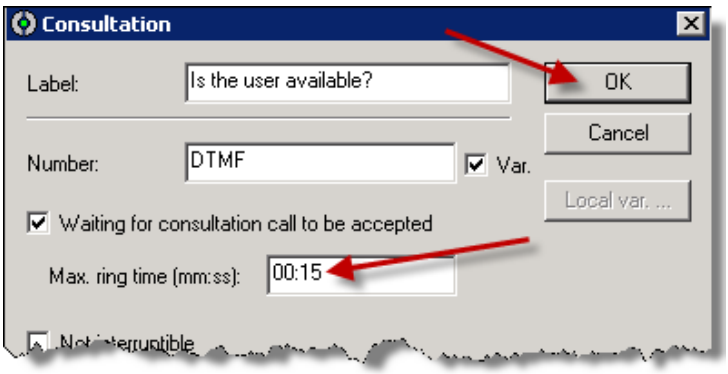
37. Click the **Local var.** button.



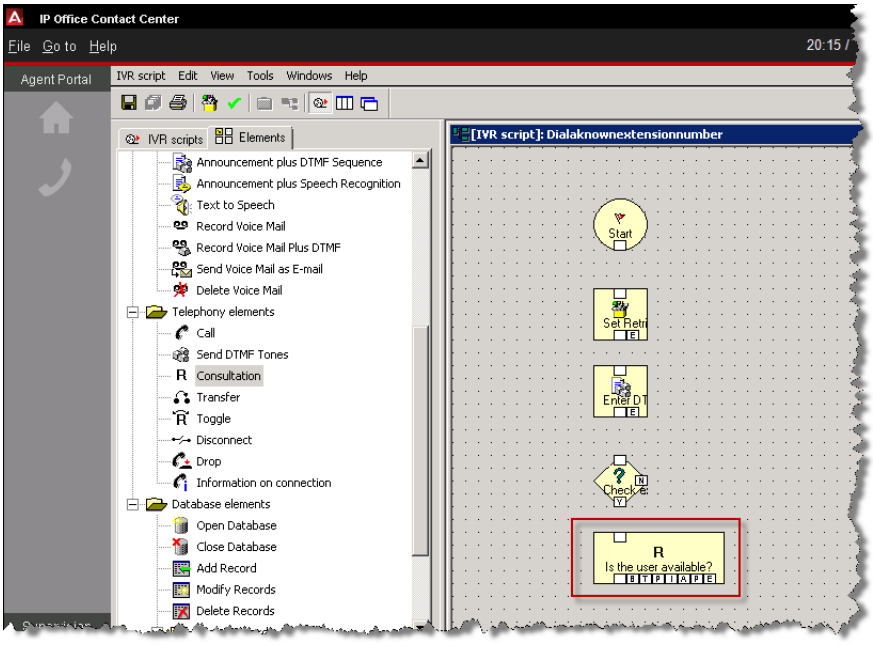
38. Select the **DTMF** local variable and select the **OK** button.



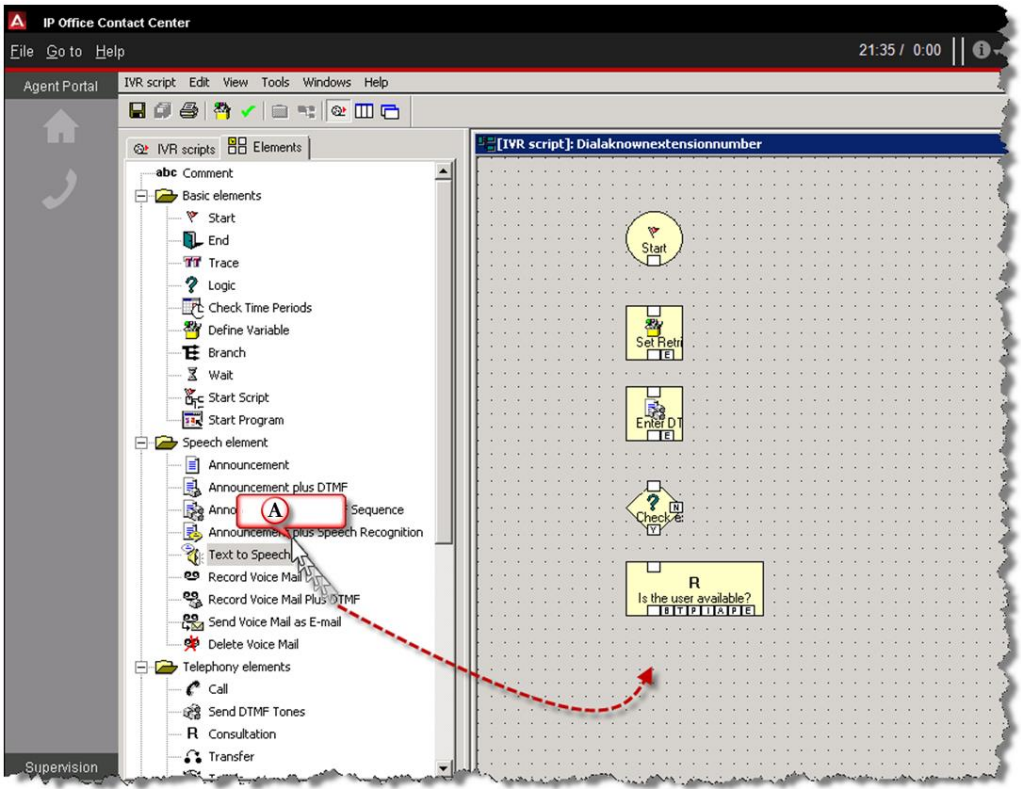
39. In the **Max. ring time (mm:ss)** field enter **00:15** and then click the **OK** button.



40. The configured element is displayed.

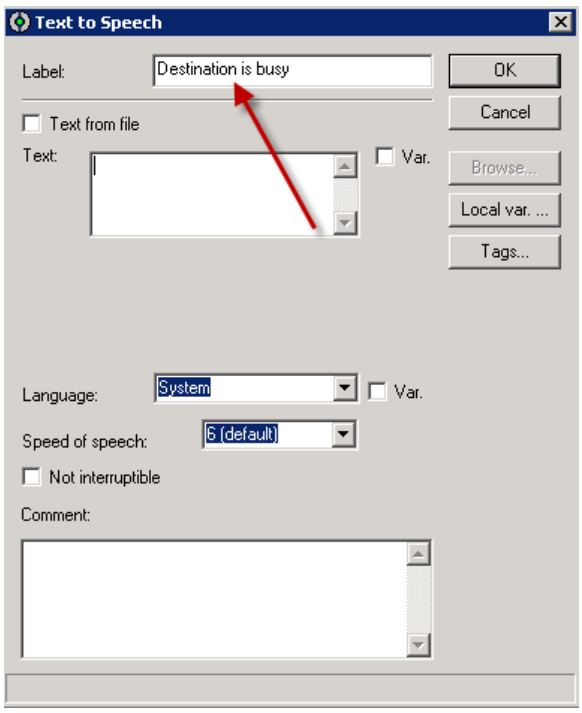


41. We will now add an announcement to let the caller know that the destination extension is busy. This can be achieved by using a **Text to Speech** element. Drag the element into the IVR script working area.

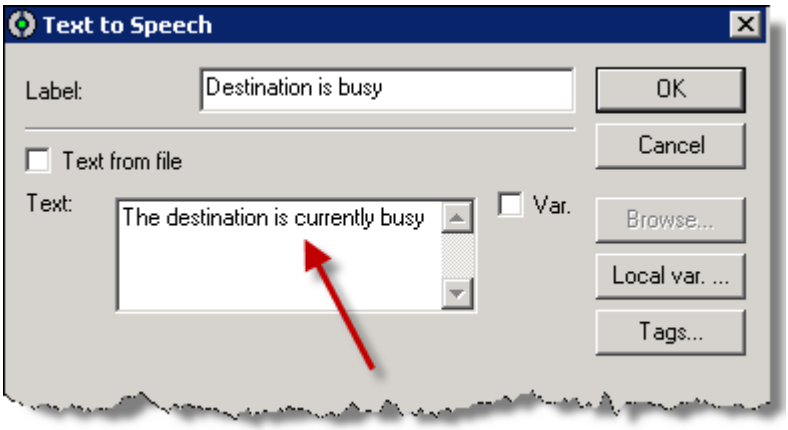


A. Click and drag.

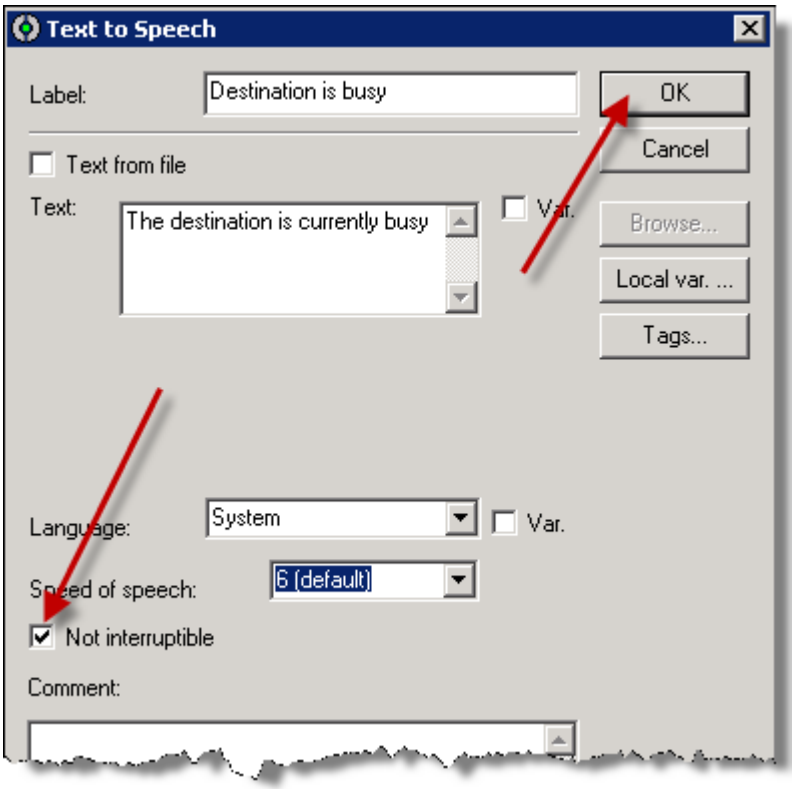
42. In the **Label** field enter **Destination is busy**.



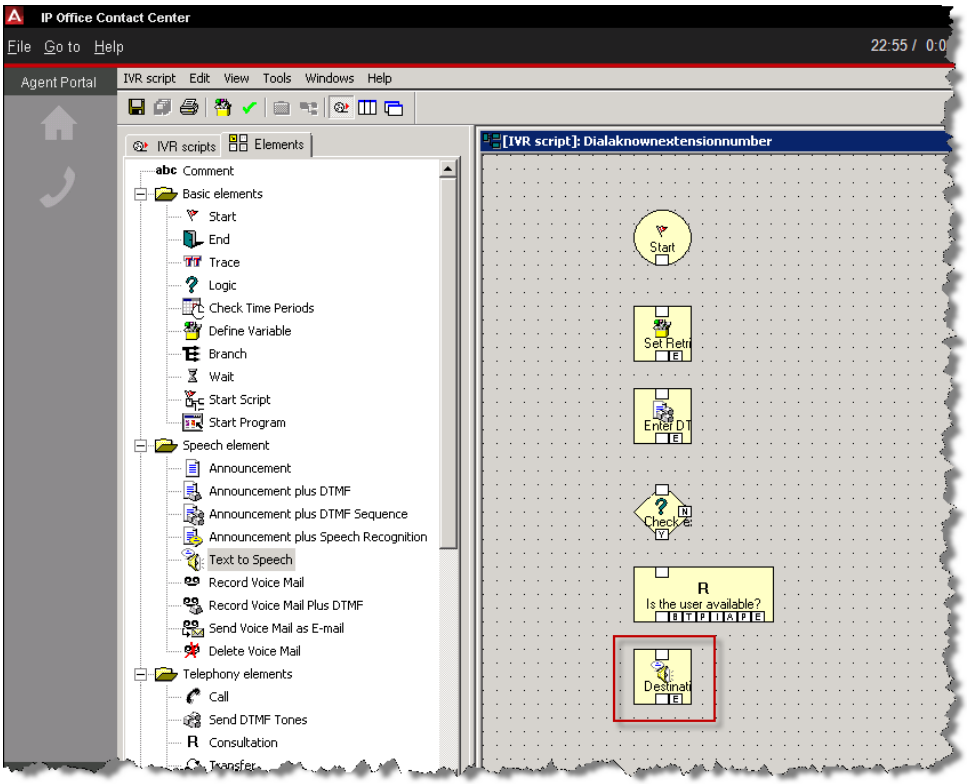
43. In the **Text** field enter **The destination is currently busy**.



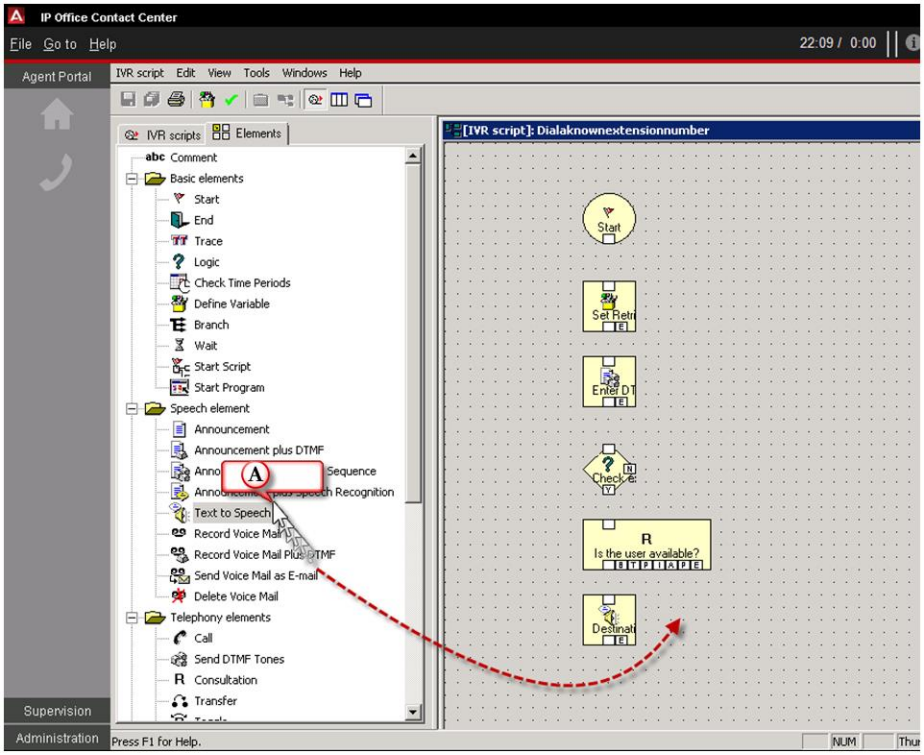
44. Click the **Not interruptible** check box and then select the **OK** button.



45. The configured element is displayed.

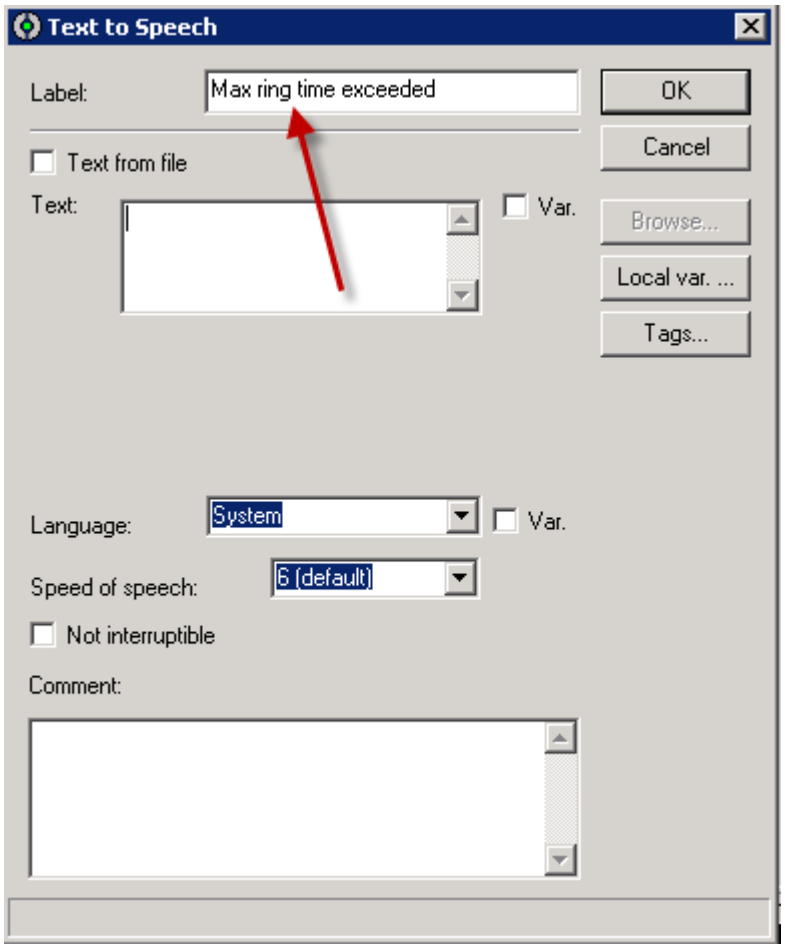


46. Next, an announcement will be added to the call flow that will indicate that Maximum ring time is exceeded. This process can be achieved by using a **Text to Speech** element. Drag the element into the IVR script working area.

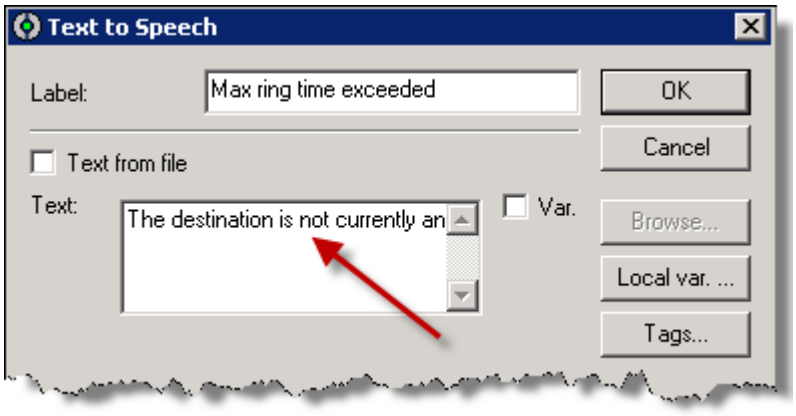


A. Click and drag

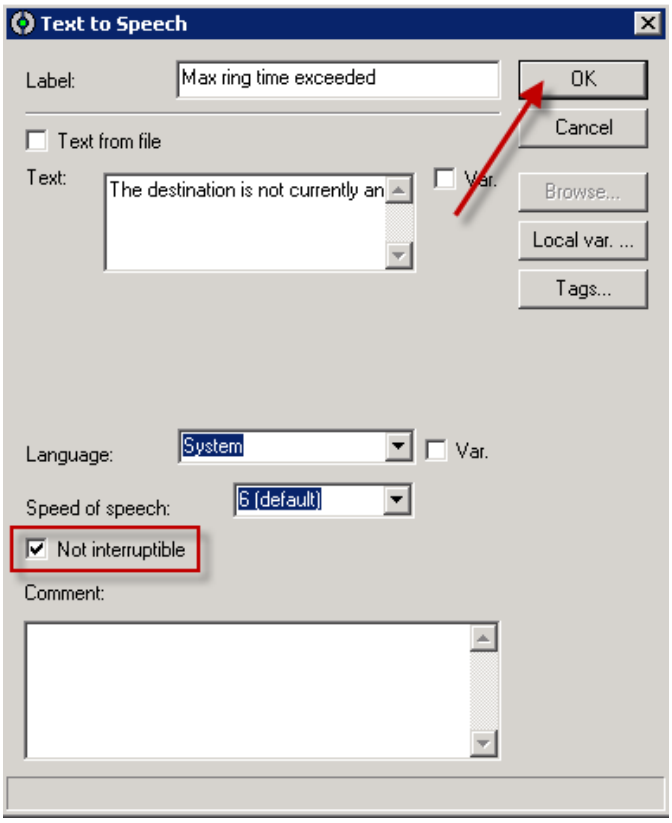
47. Enter a **Label** for the element.



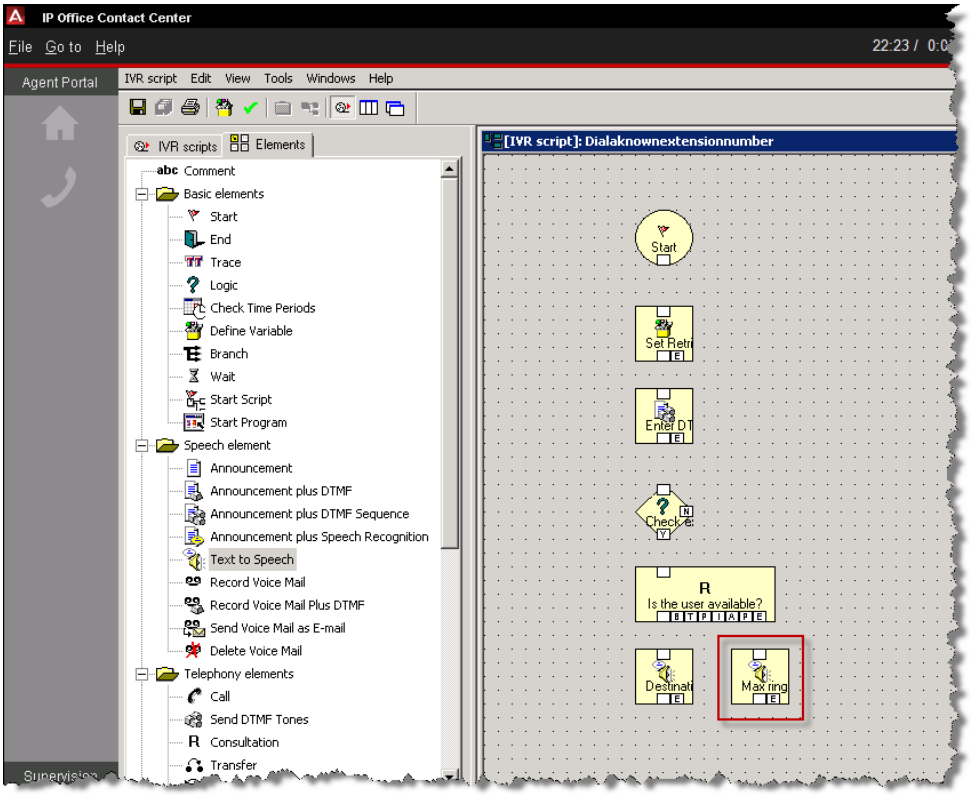
48. In the **Text** field, enter **The destination is not currently answering.**



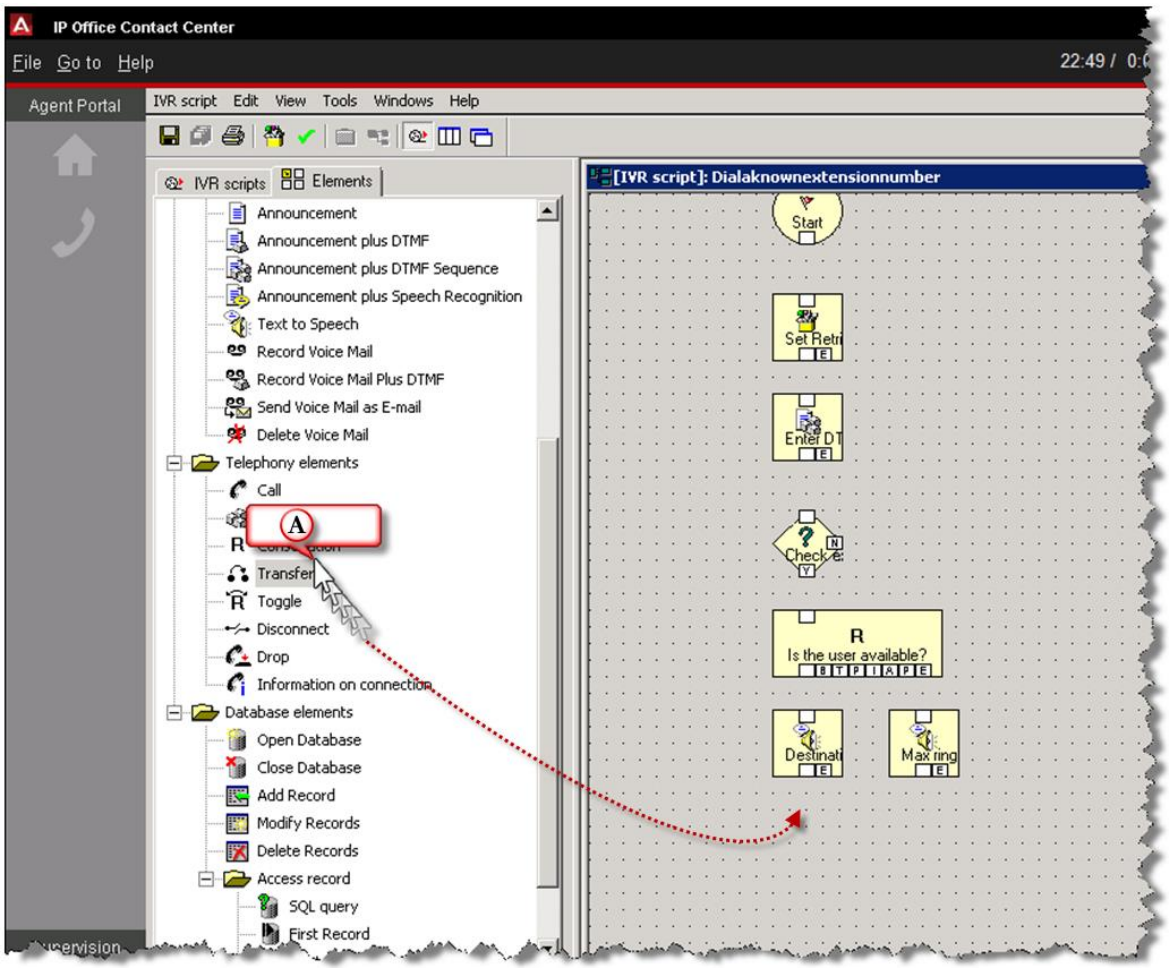
49. Click the **Not interruptible** check box and then click the **OK** button.



50. The configured element is displayed.

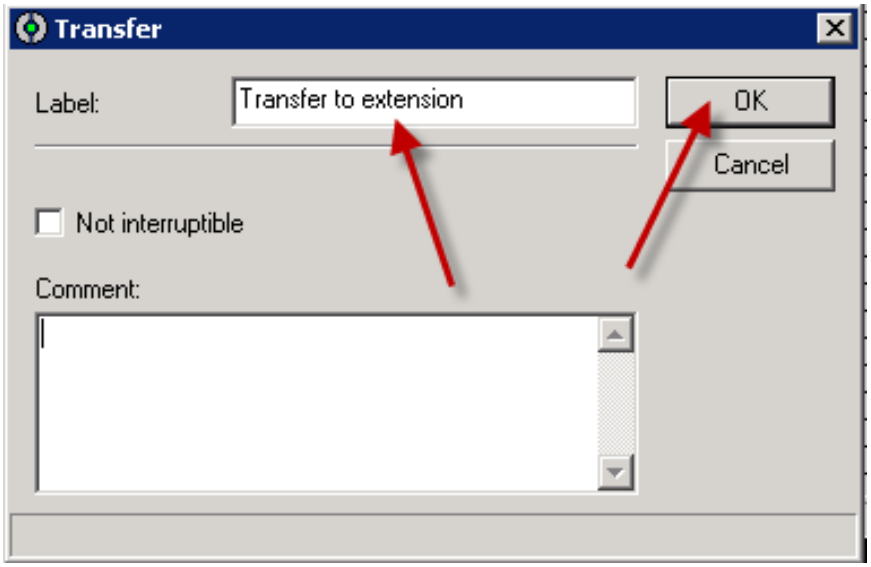


51. We will now create an option to transfer the call to the required destination using the **Transfer** element. Drag the **Transfer** element into the IVR script working area.

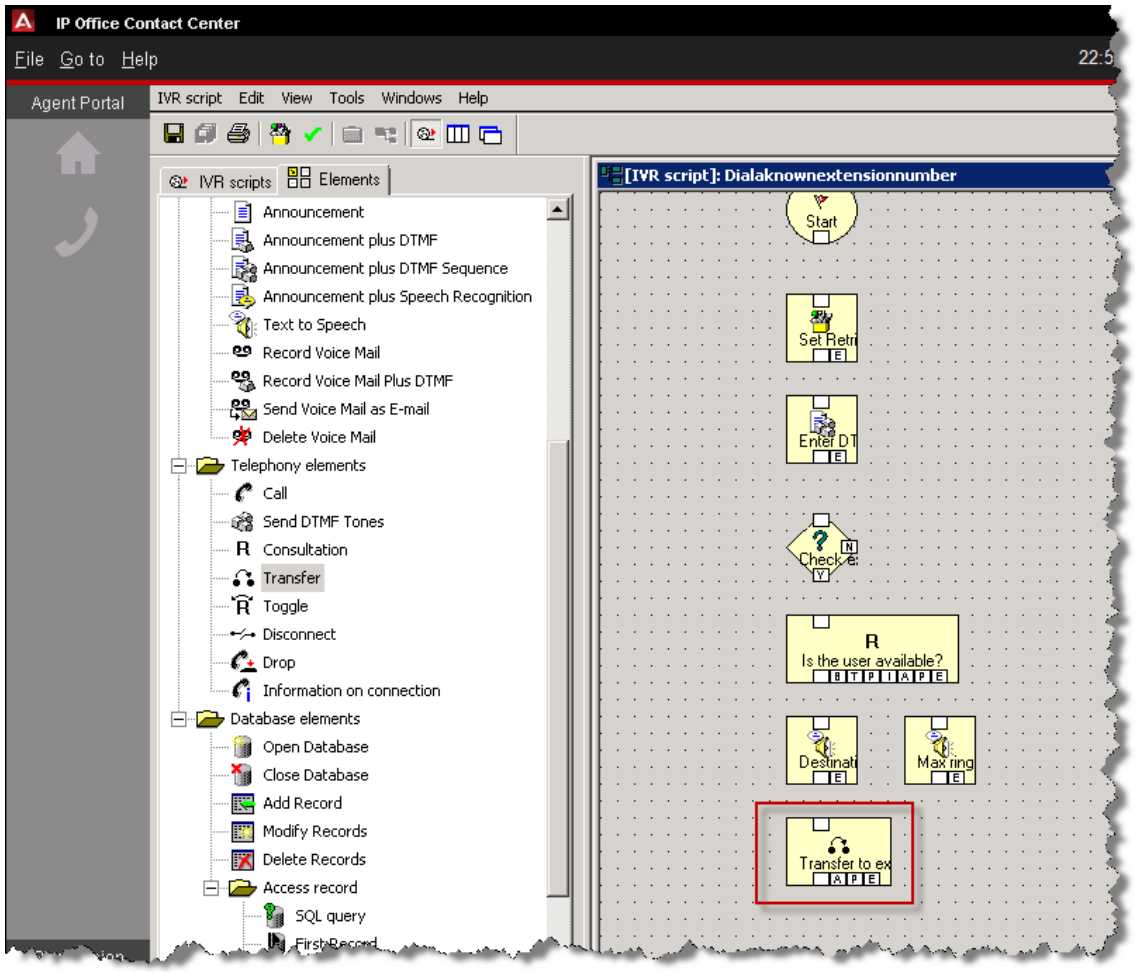


A. Click and drag.

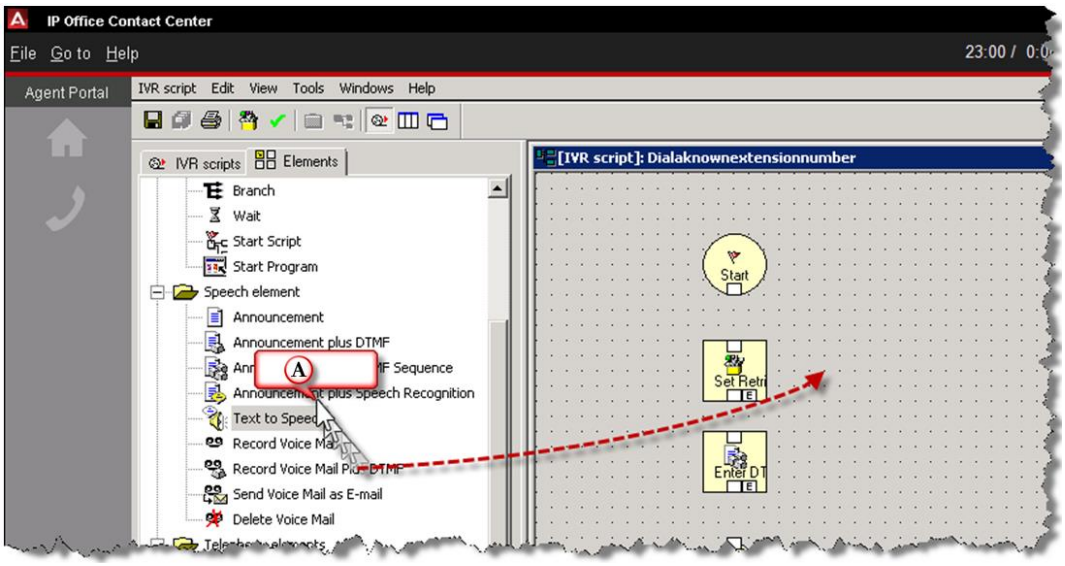
52. In the **Label** field enter **Transfer to extension** and select the **OK** button.



53. The configured element is displayed.

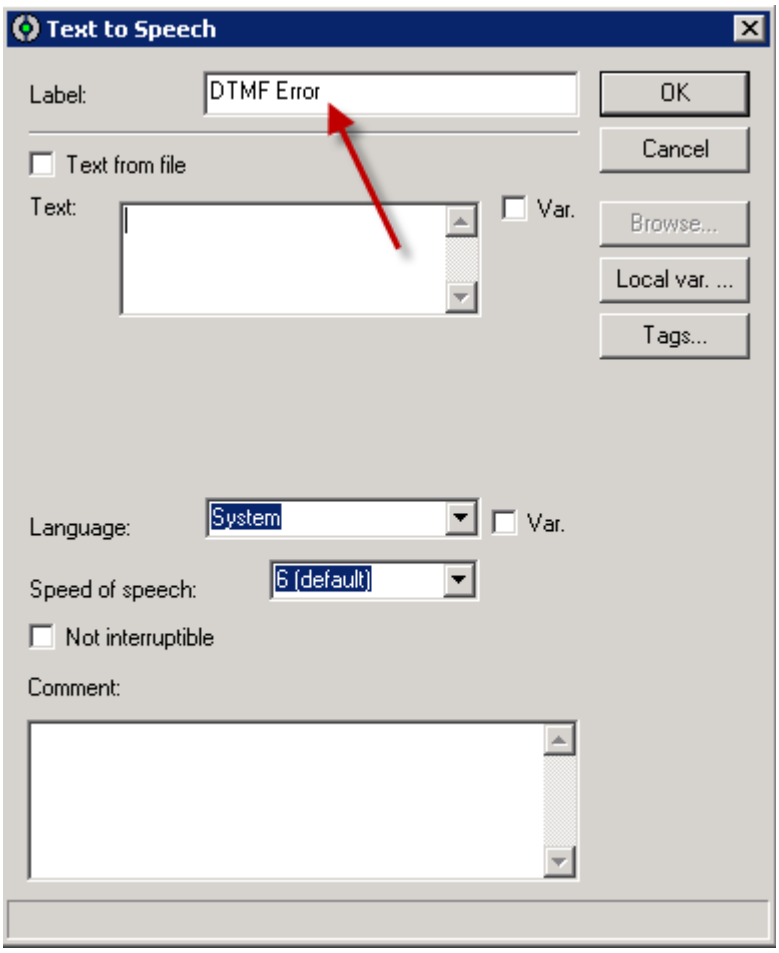


54. An announcement is required for circumstances when there is a problem capturing the DTMF entered by the caller. This is achieved using a **Text to Speech** element. Drag the element into the IVR script working area.



A. Click and drag.

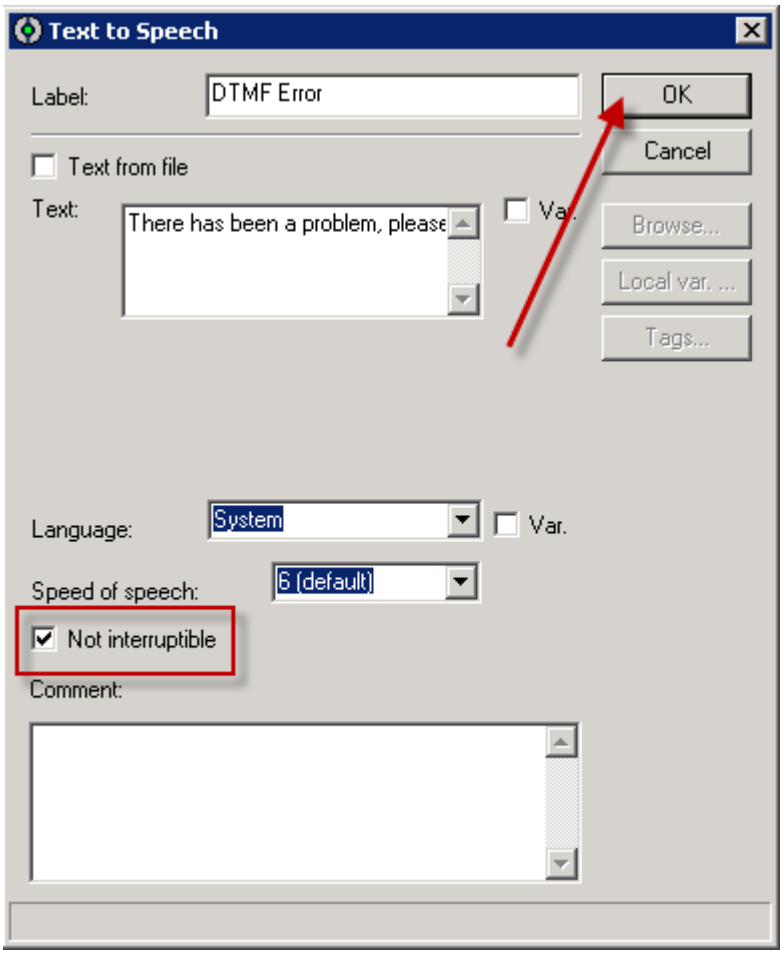
55. In the **Label** field enter **DTMF Error**.



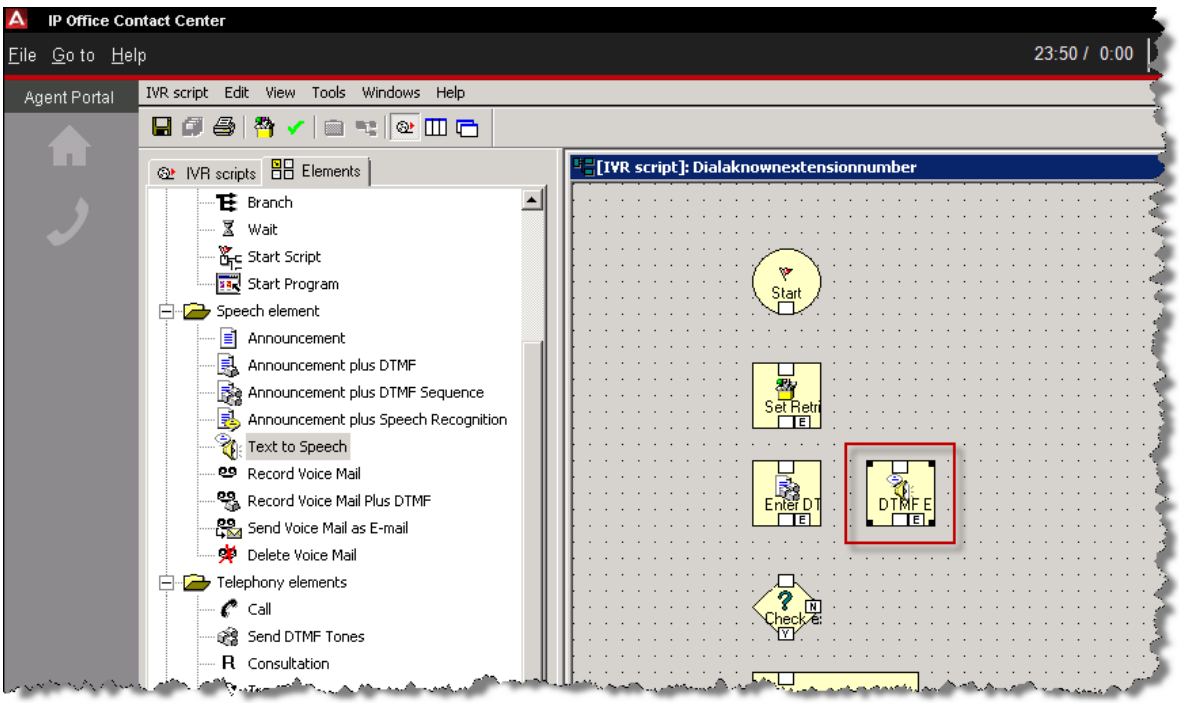
56. The **Text** field enter **There has been a problem, please hang up**.



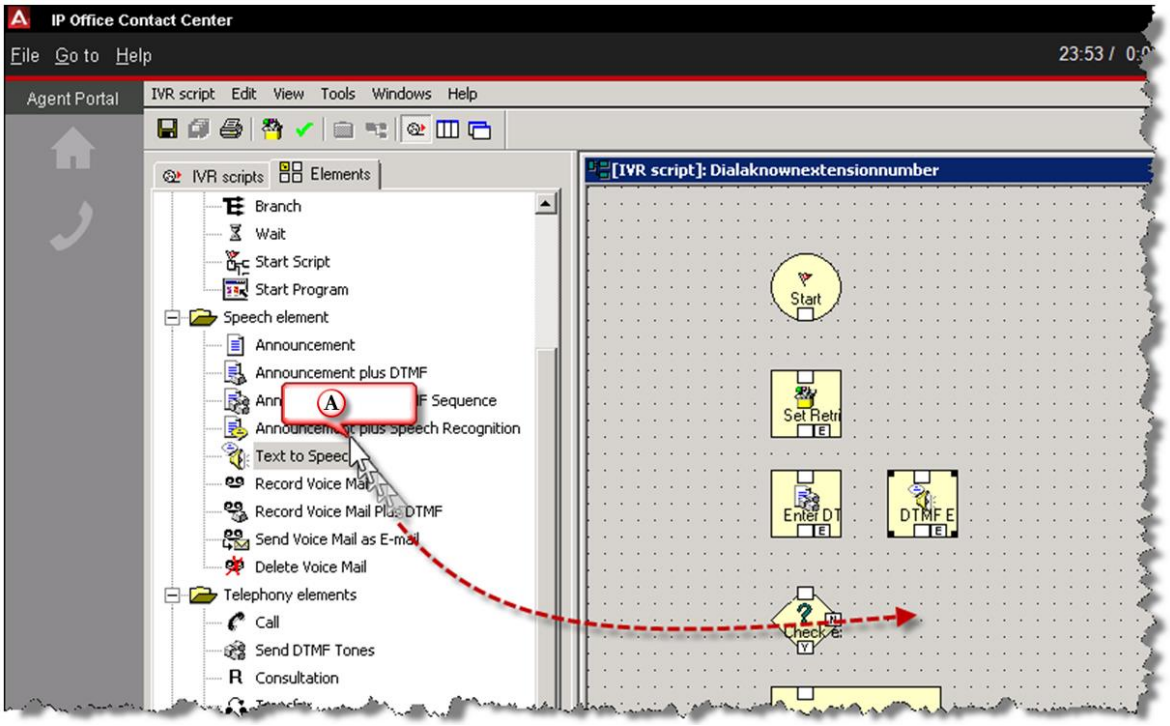
57. Click the **Not interruptible** check box and then select the **OK** button.



58. The configured element is displayed.

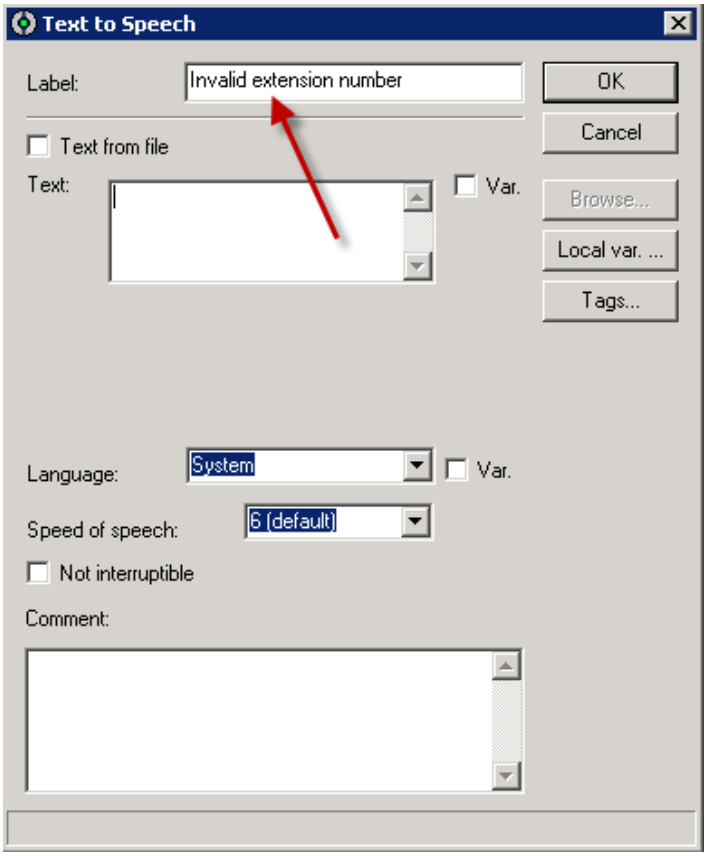


59. We will now add an announcement to inform the caller that they have dialed an invalid extension number. This can be achieved using a **Text to Speech** element. Drag the **Text to speech** element into the IVR working area.

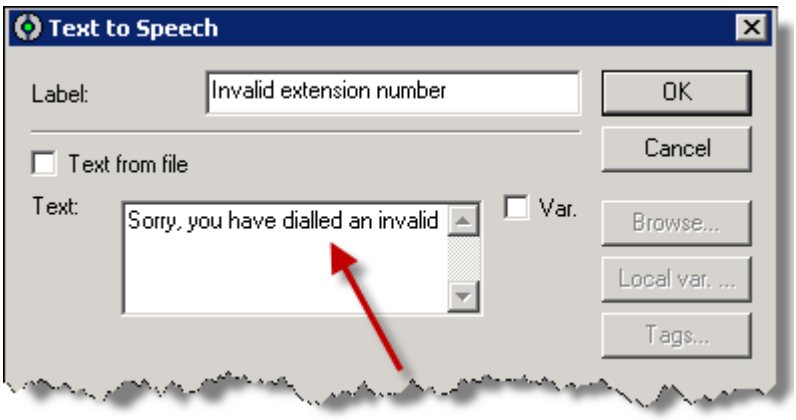


A. Click and drag.

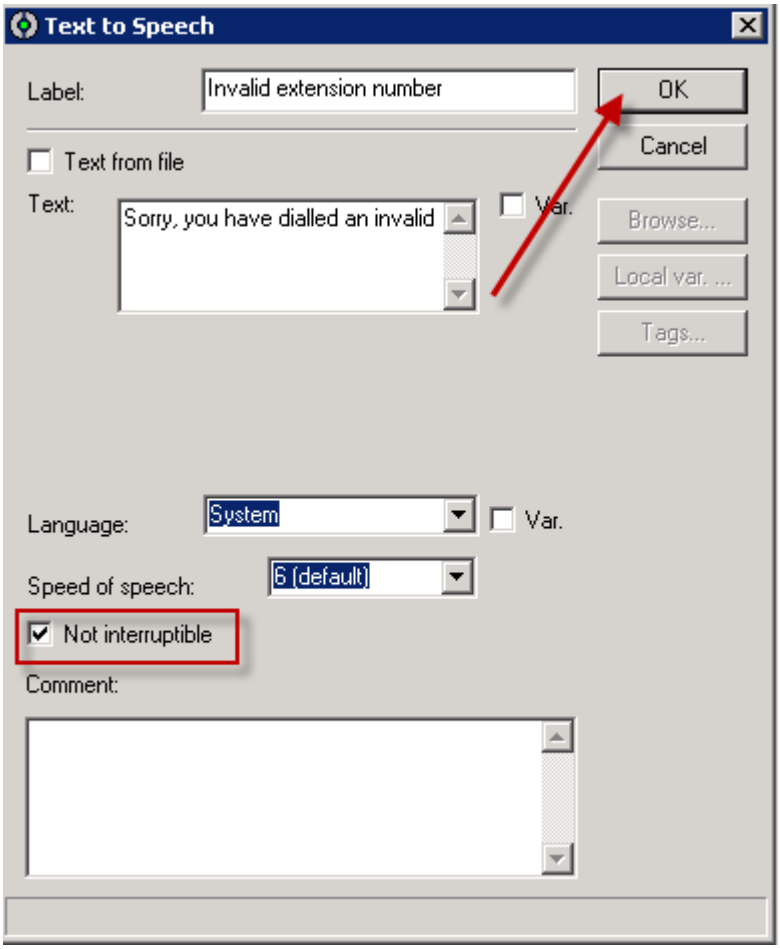
60. .In the **Label** field, enter **Invalid extension number**.



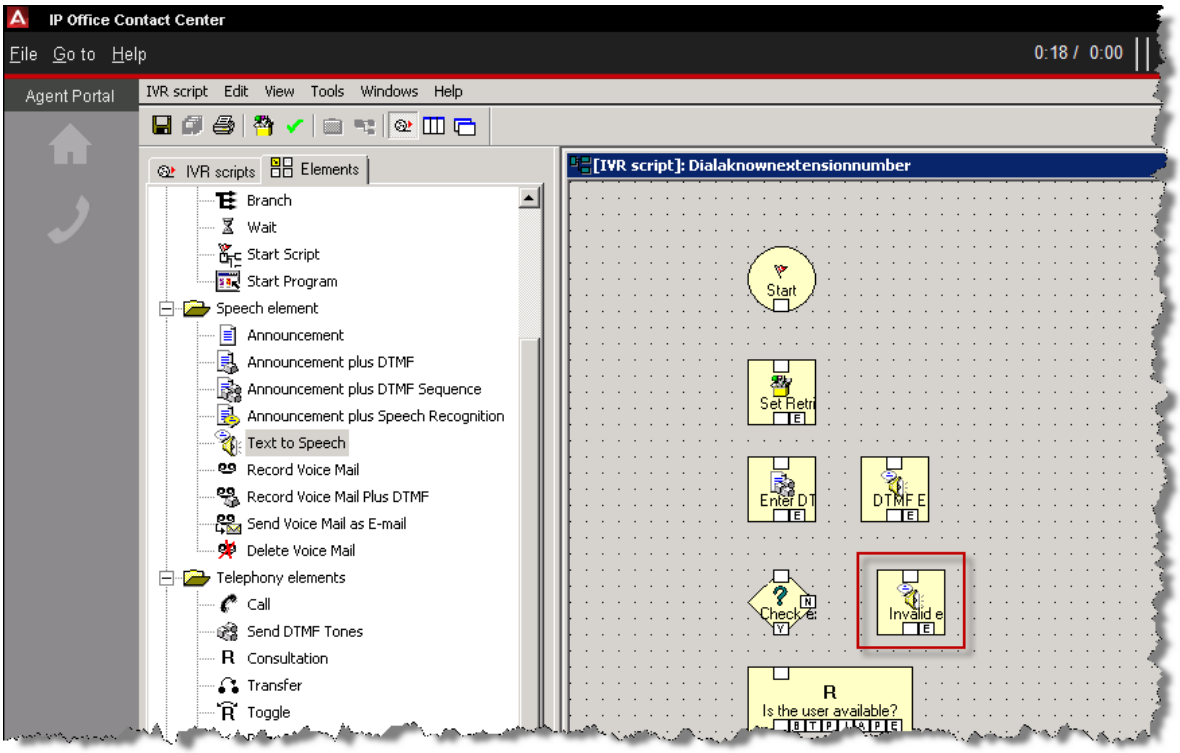
61. In the **Text** field enter **Sorry, you have dialed an invalid extension number. Please hold and wait for the prompt to try again**.



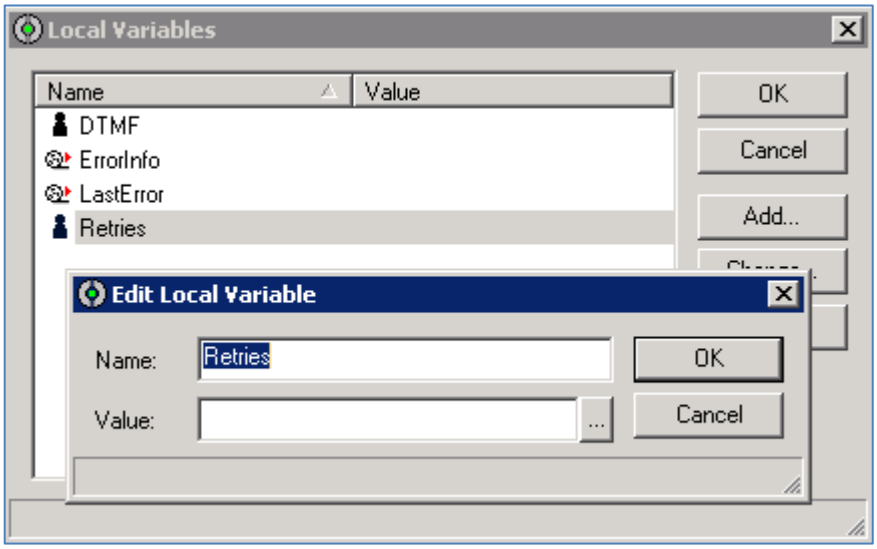
62. Click the **Not interruptible** check box and then select the **OK** button.



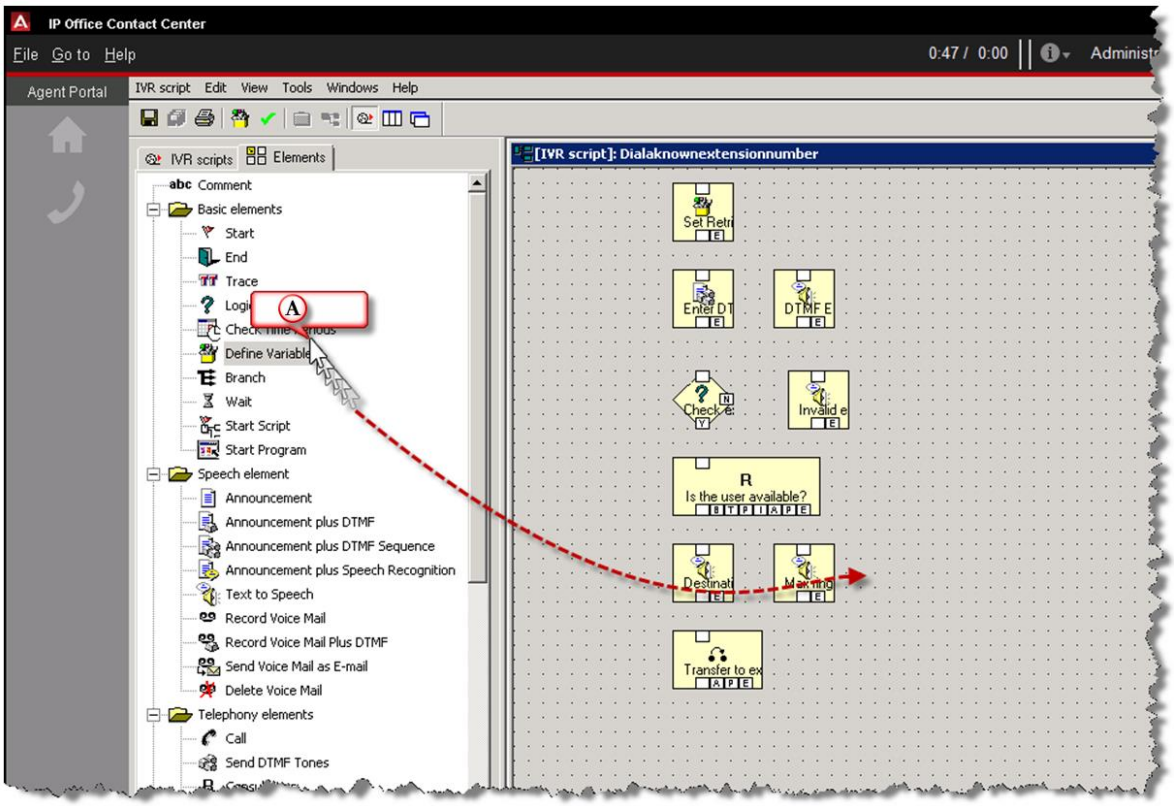
63. The configured element is displayed.



64. An element is required, that will add a retry value to the '**Retries'** local variable that was previously configured.

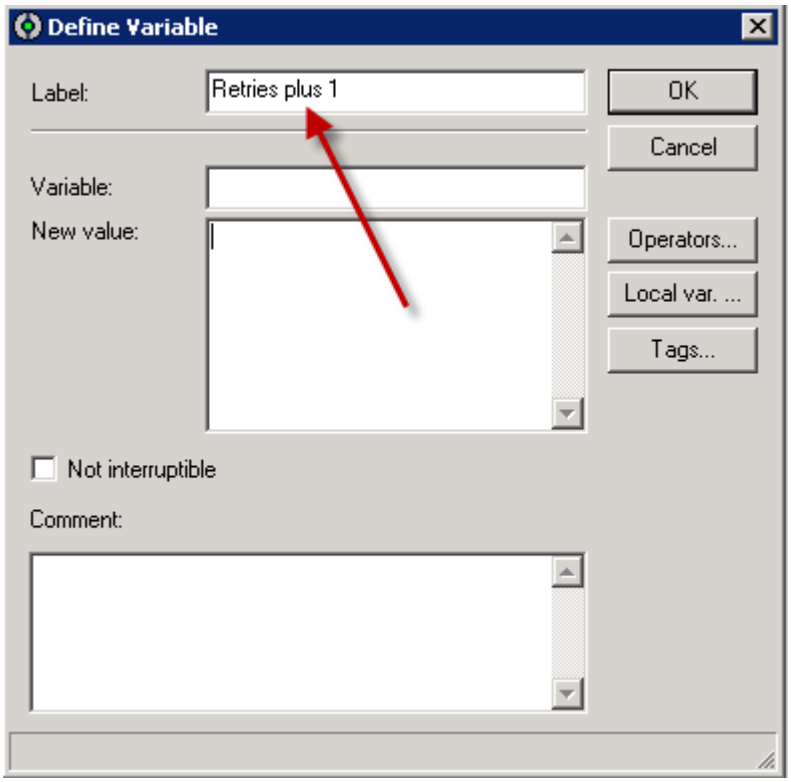


65. This can be achieved by using a **Define Variable** element. Drag the element into the IVR script working area.

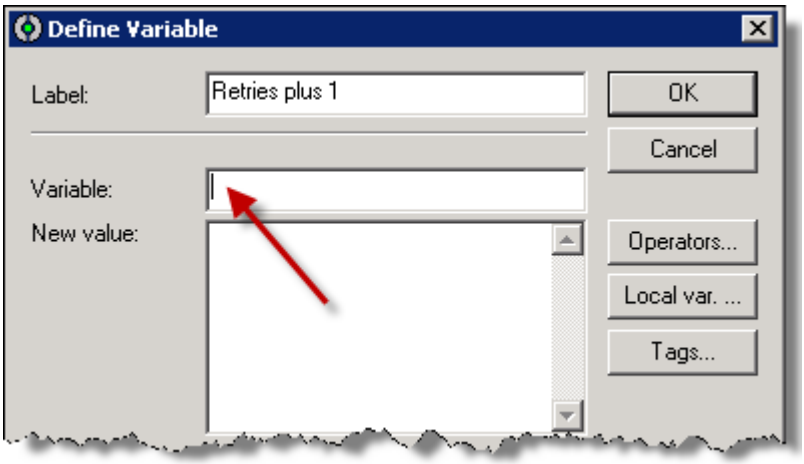


A. Click and drag.

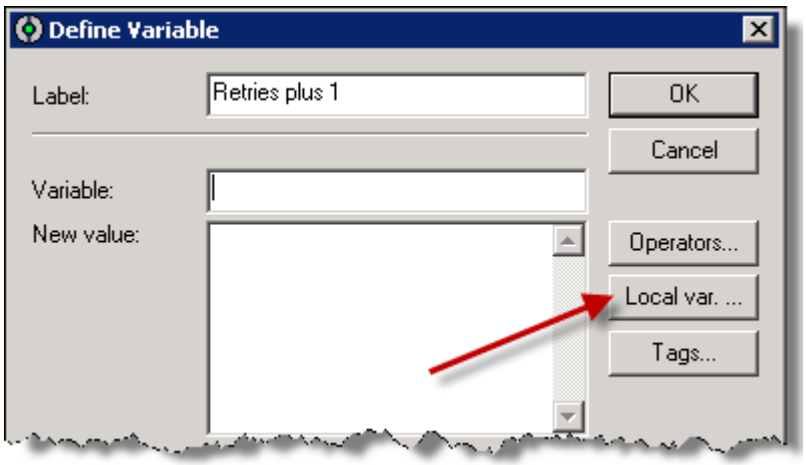
66. In the **Label** field enter **Retries plus 1**.



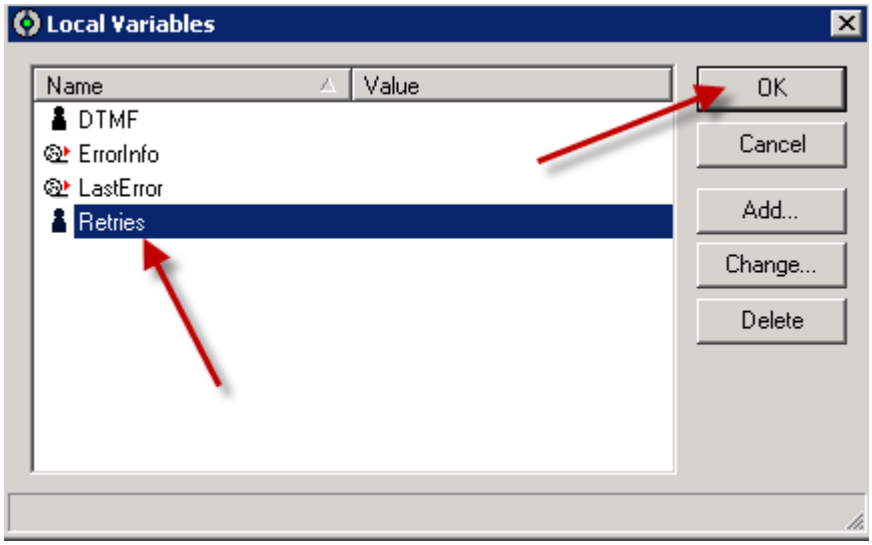
67. Using the left mouse button, click the **Variable field**.



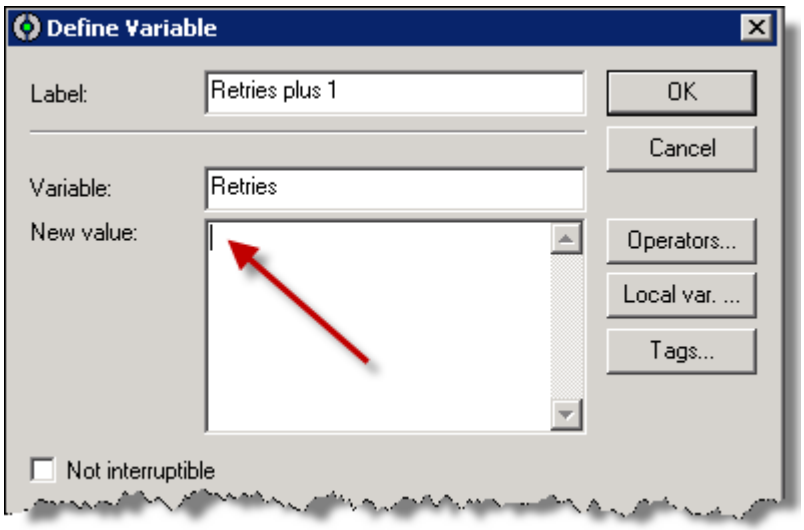
68. Click the **Local Variable** button.



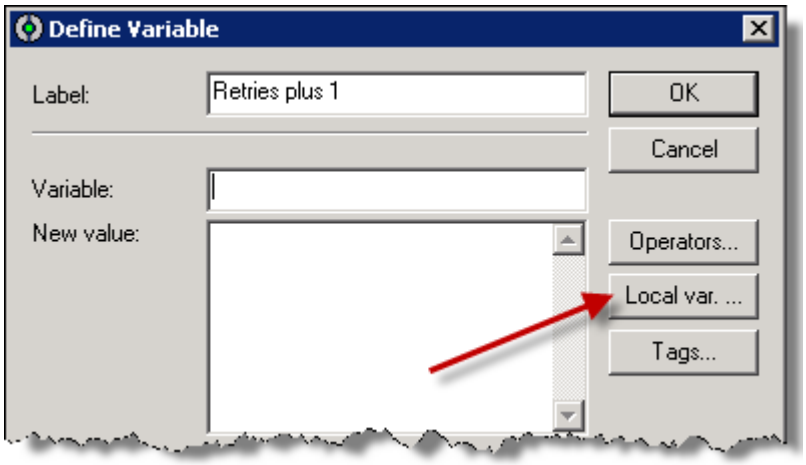
69. Click **Retries** local variable and the select the **OK** button.



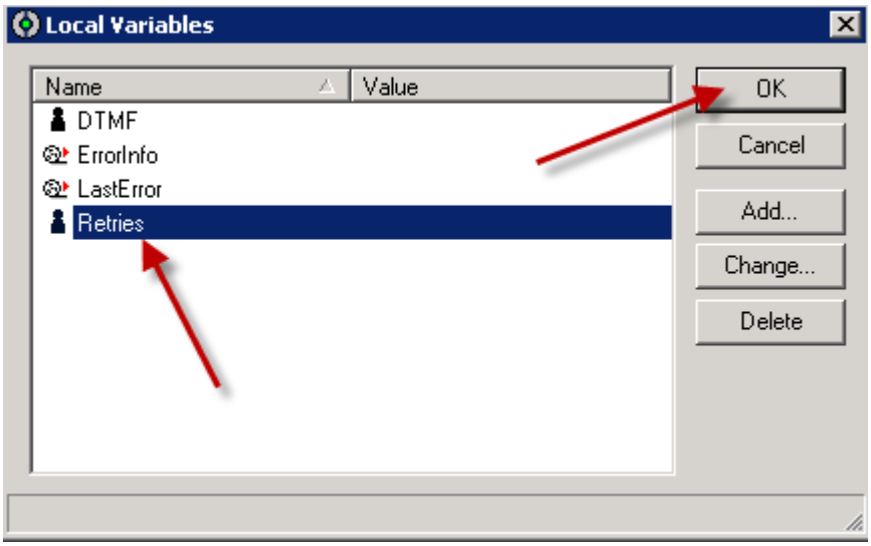
70. Using the left mouse button, click the **New value** field.



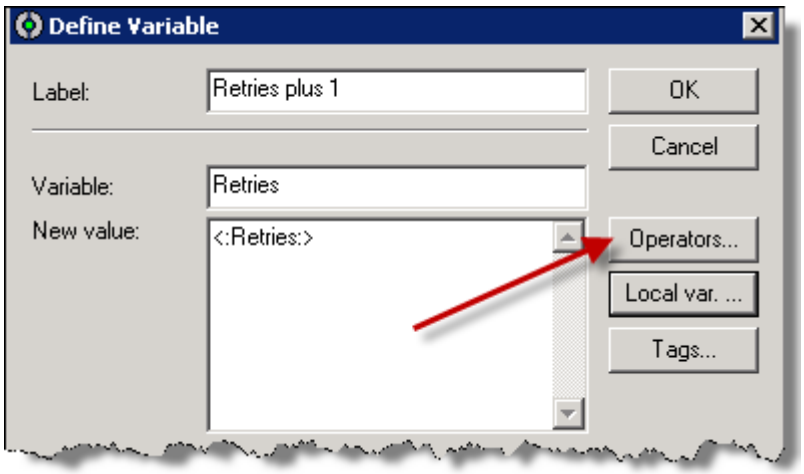
71. Click the **Local Variables** button.



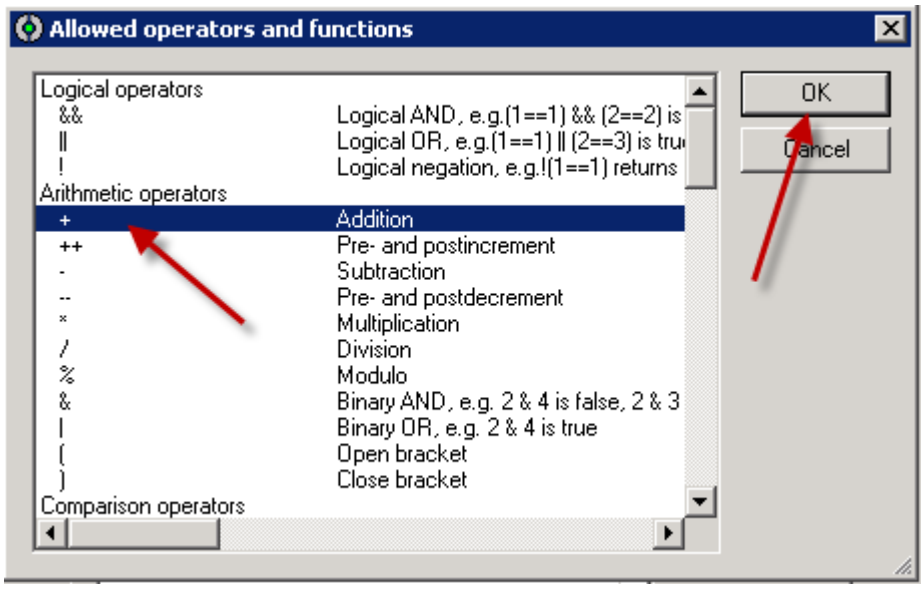
72. Click the **Retries** local variable and select the **OK** button.



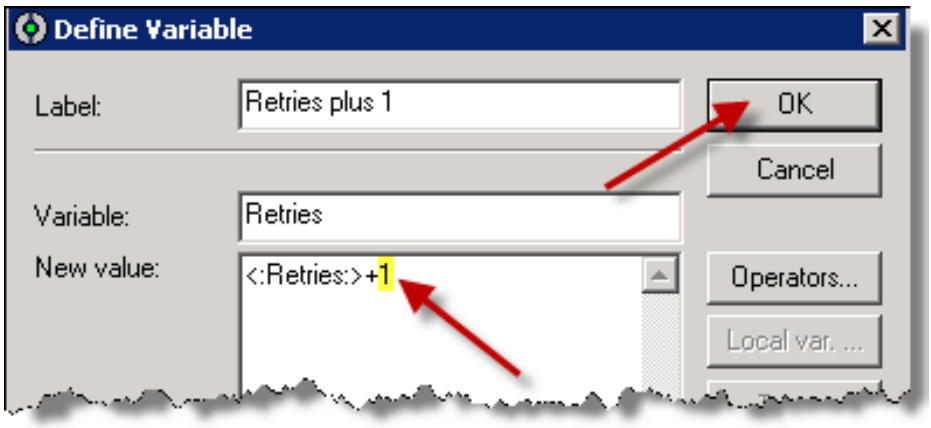
73. Click the **Operator…** button.



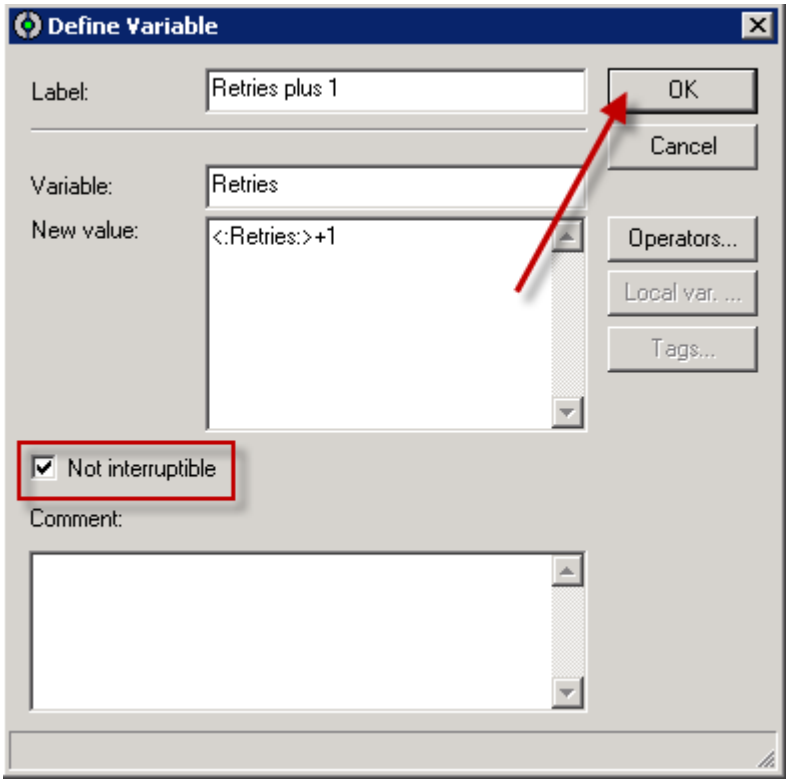
74. Select the **+ Addition** operator and select the **OK** button.



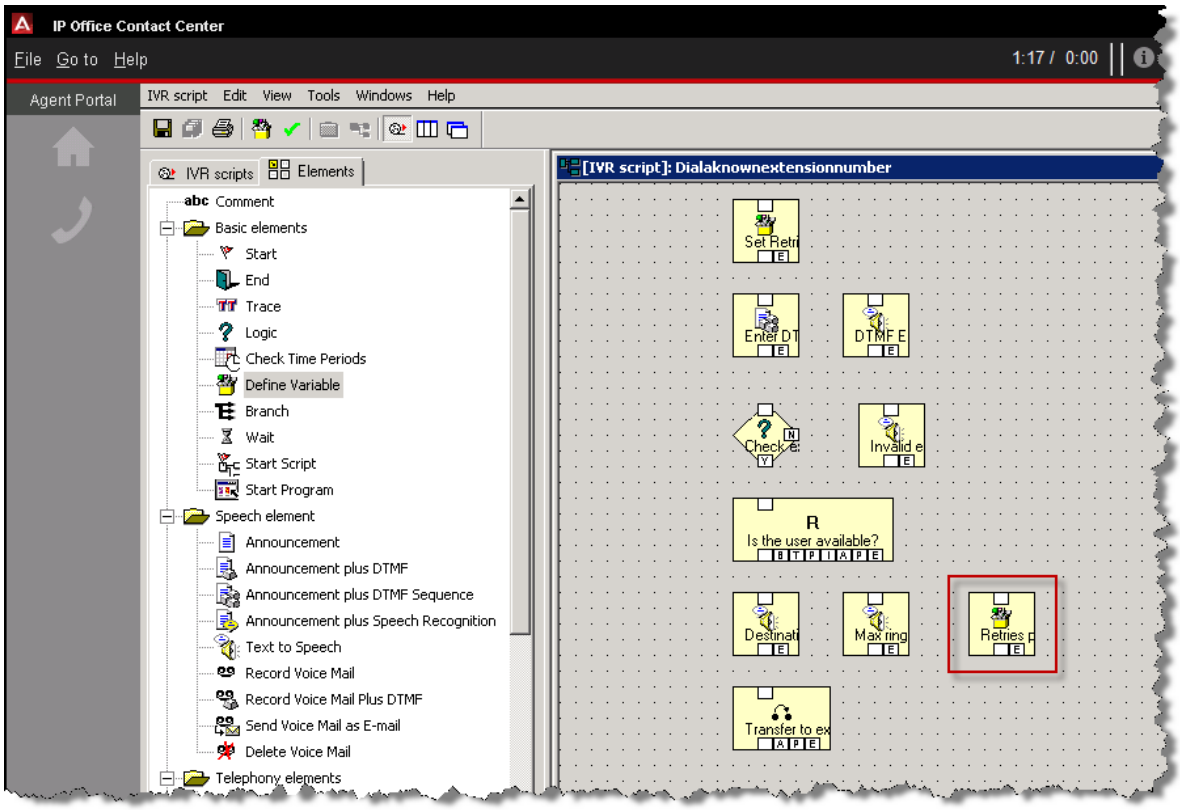
75. At the end of the **New value** type **1** and then click the **OK** button. This value within the variable will be referenced later by a Logic element that will have a configured retry limit of 3.



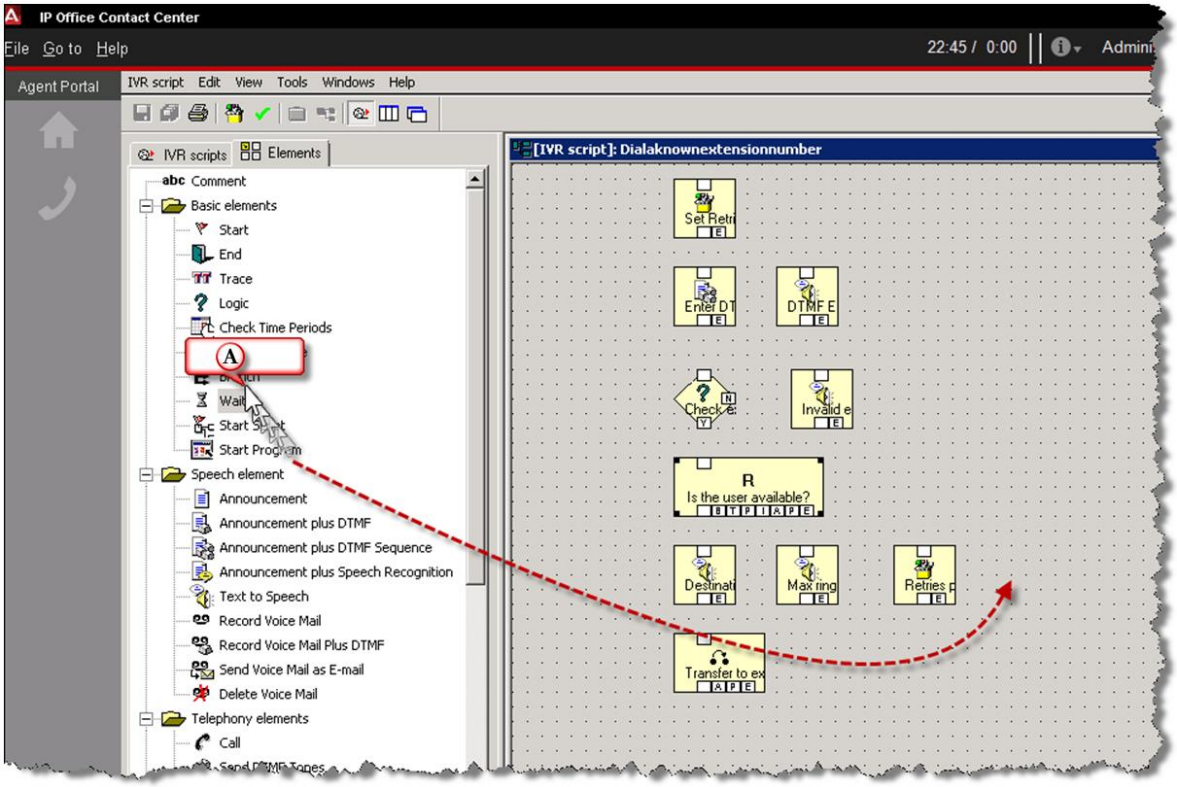
76. Click the option **Not interruptible** and then select the **OK** button.



77. The configured element is displayed.

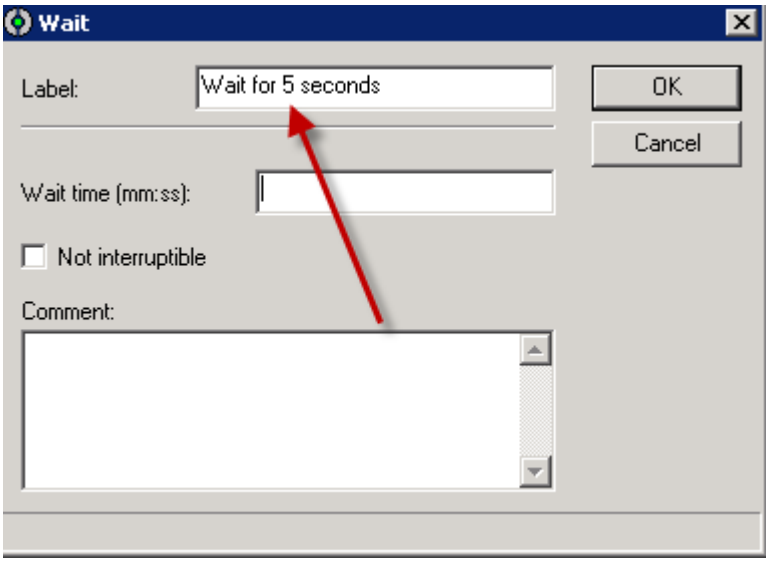


78. We will now add a small delay into the IVR script, that will provide a pause before the caller is again requested to enter the required destination extension. This can be achieved using a **Wait** element. Drag the element into the IVR script working.

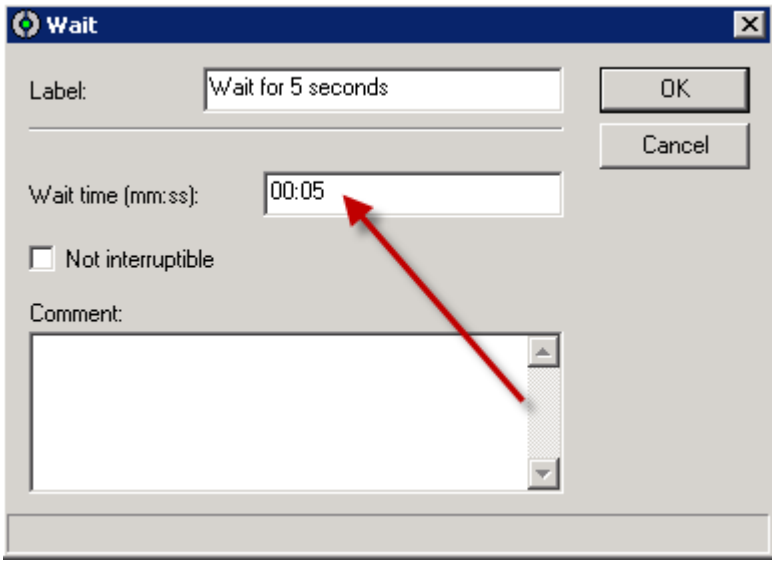


A. Click and drag.

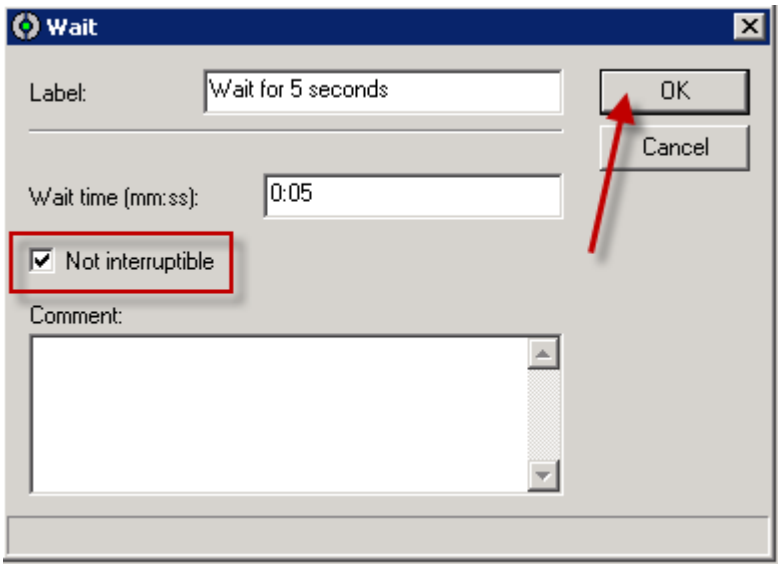
79. In the **Label** field enter **Wait for 5 seconds**.



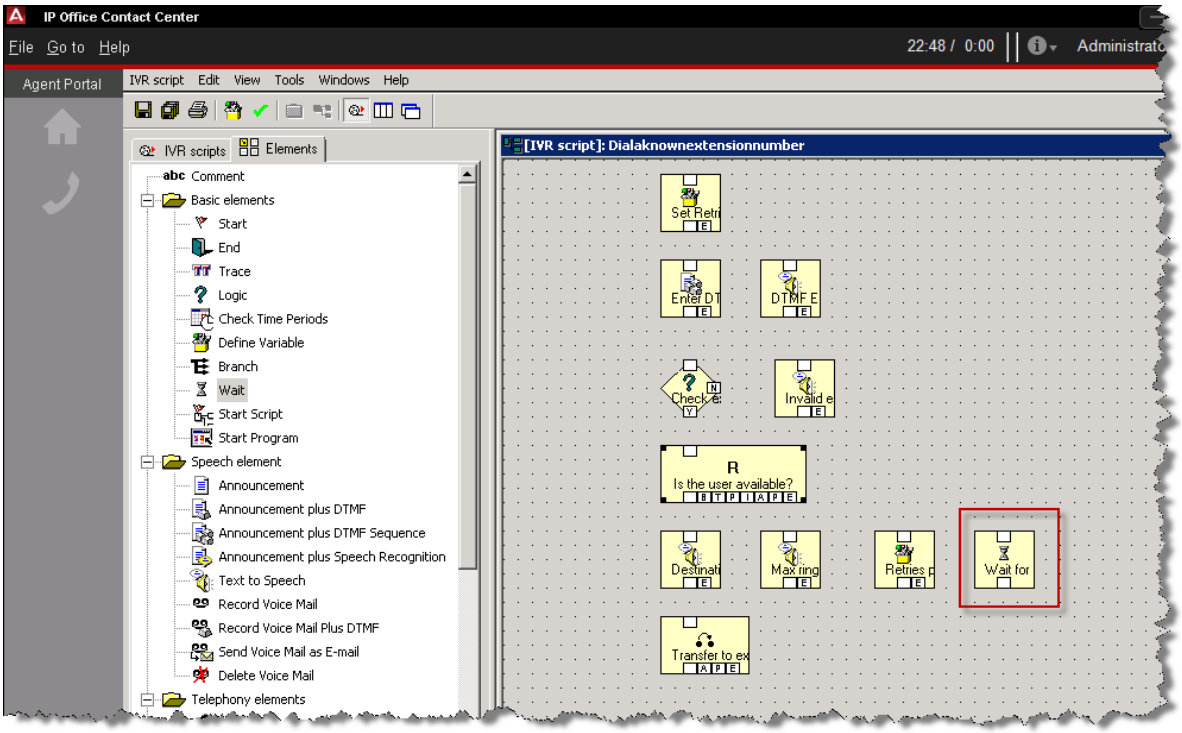
80. In the **Wait time (mm:ss)** field enter **00:05**.



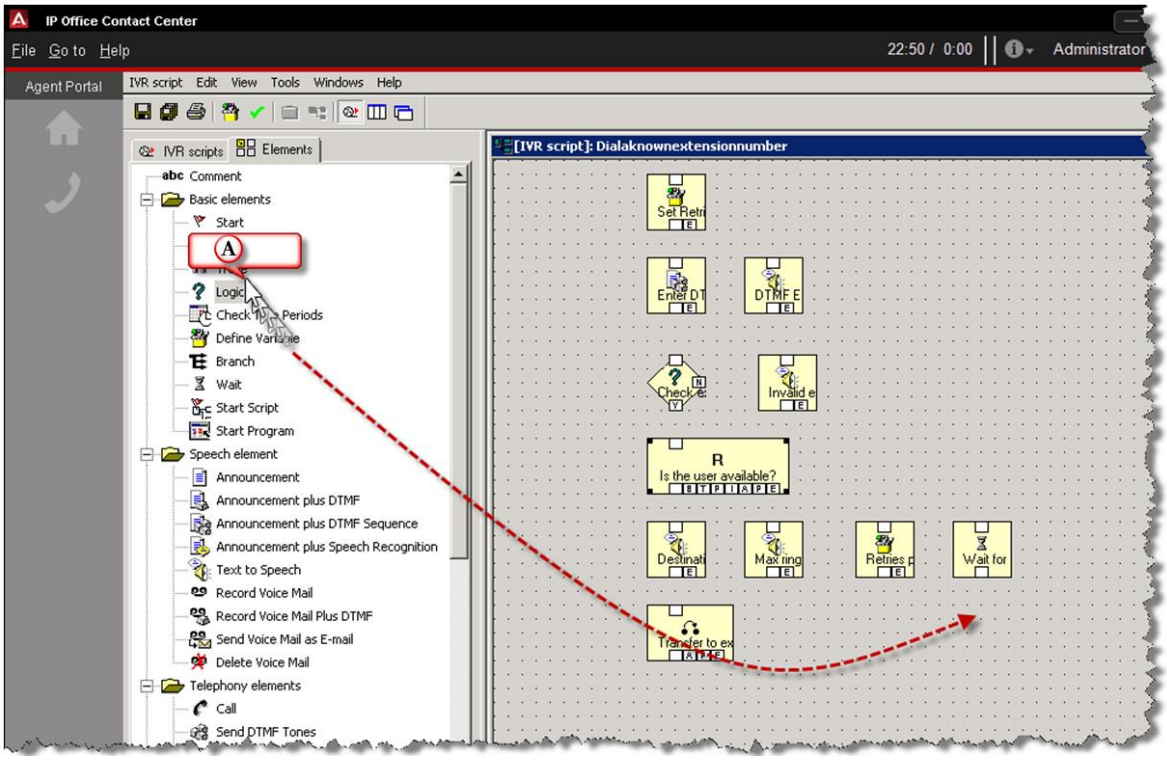
81. Click the **Not interruptible** check box and select the **OK** button.



82. The configured element is displayed.

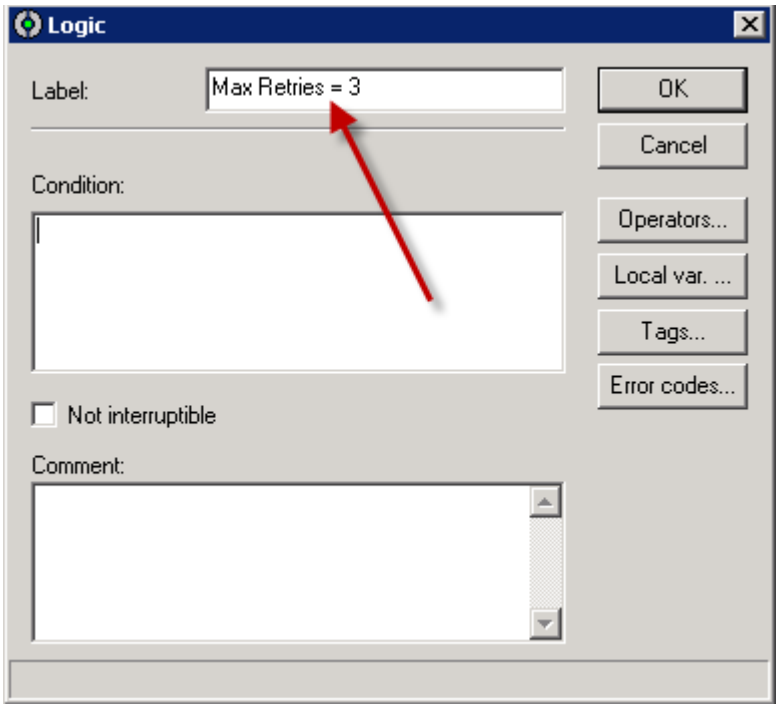


83. An element will now be added that will check how many times the Caller has attempted to enter DTMF digits. In this example, we have set a limit of three. This can be achieved using a **Logic** element. Drag the element into the IVR script working area.

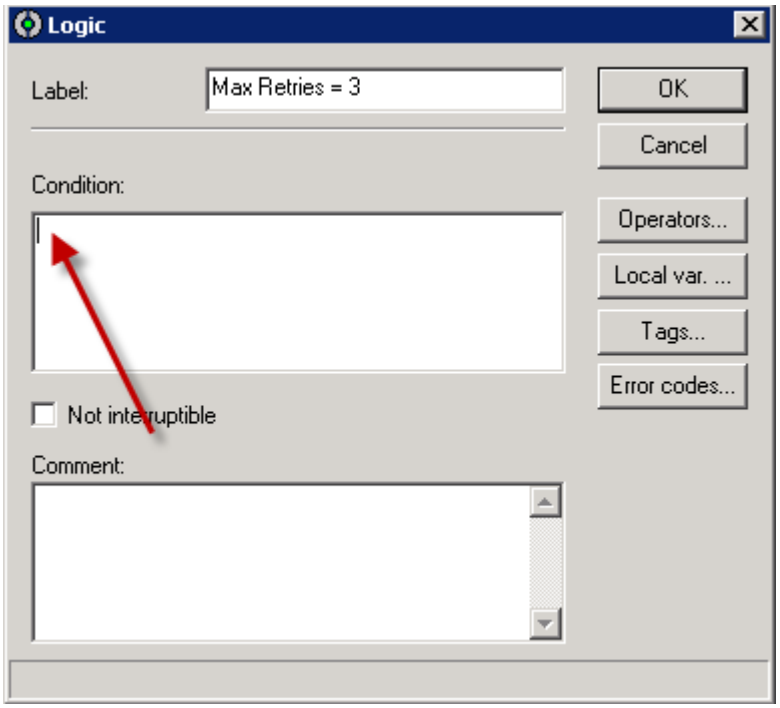


A. Click and drag

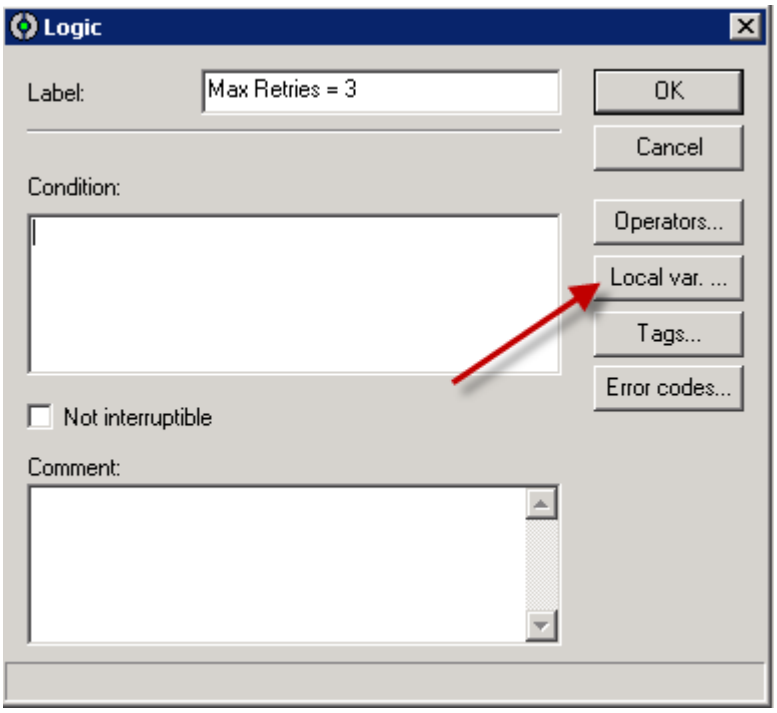
84. In the **Label** field enter **Max Retries = 3**.



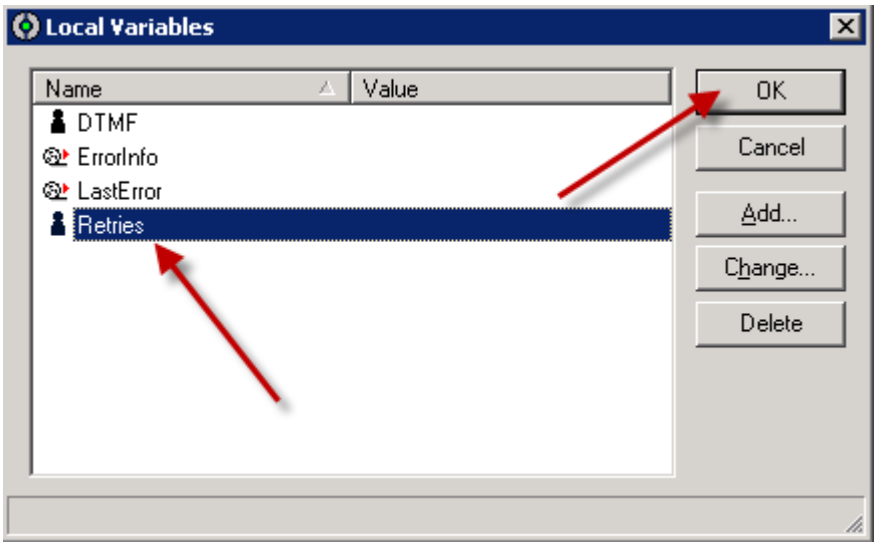
85. Click within the **Condition** field.



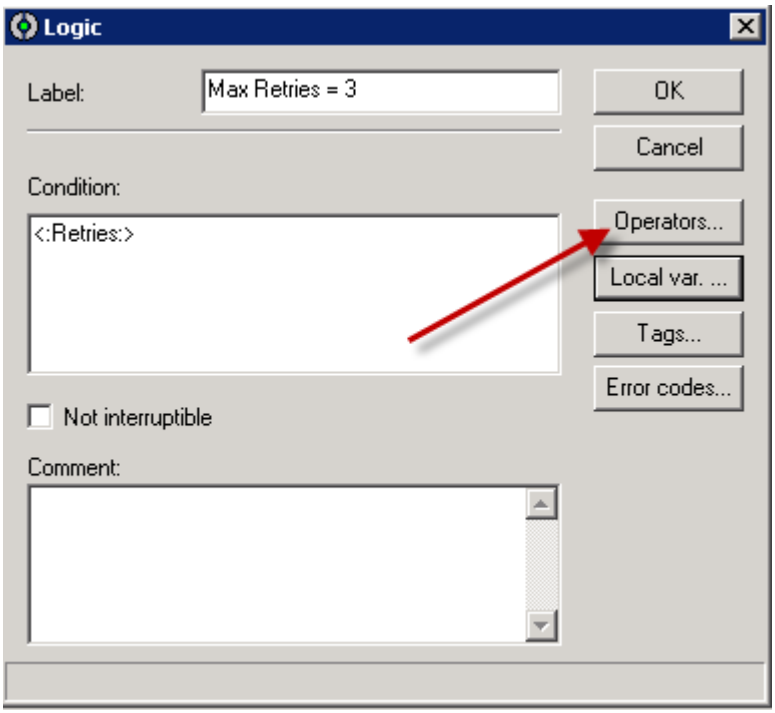
86. Click the **Local var…** button.



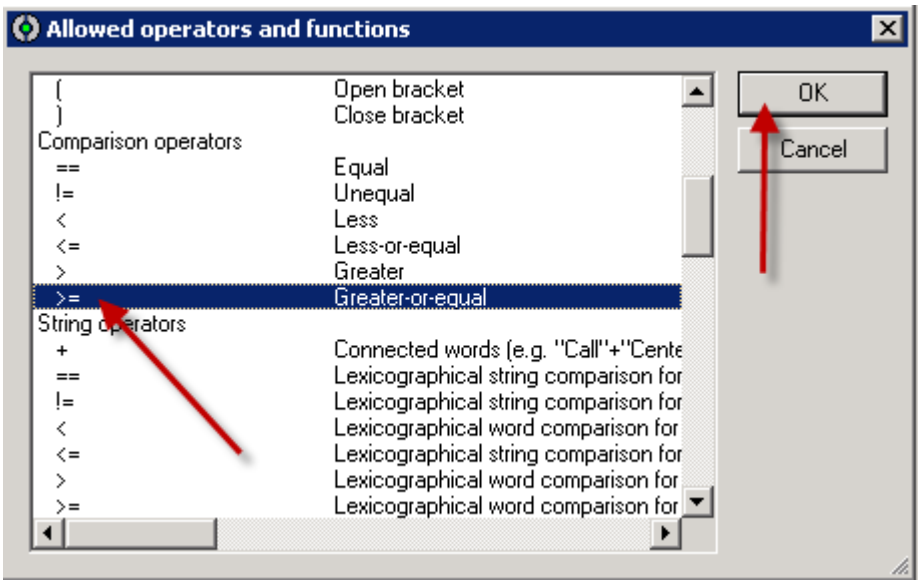
87. Click **Retries** and then click the **OK** button.



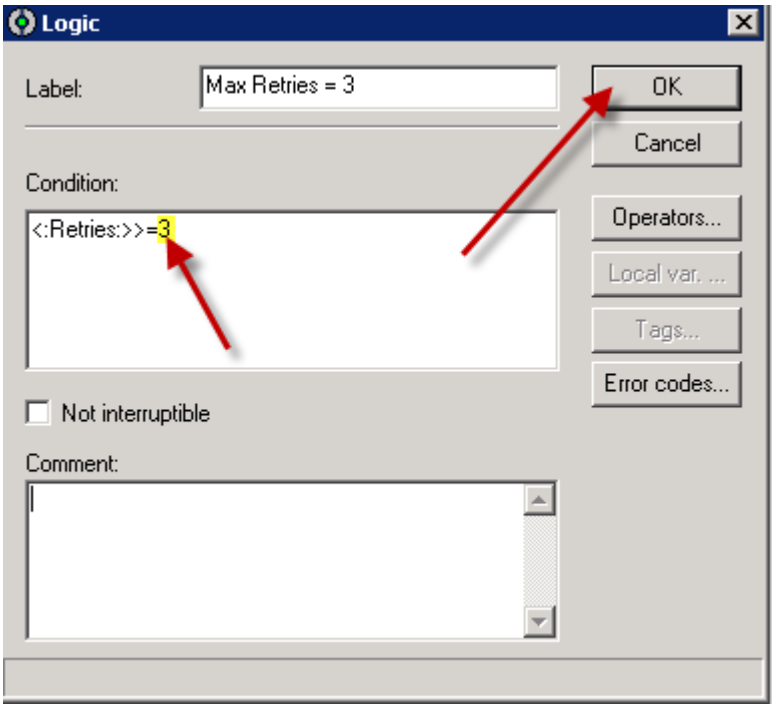
88. Click the **Operators…** button.



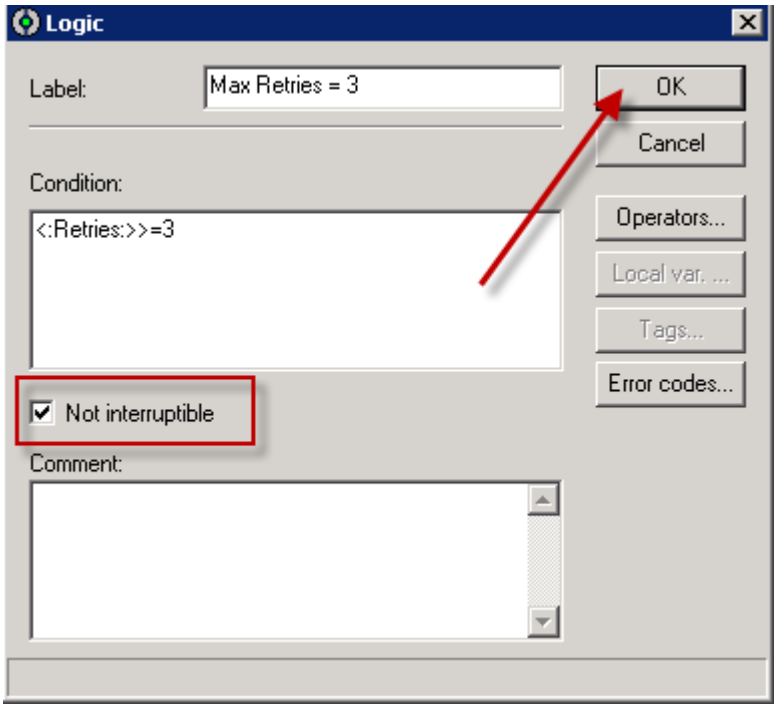
89. Select the **>= Greater-or-equal** operator and then click the **OK** button.



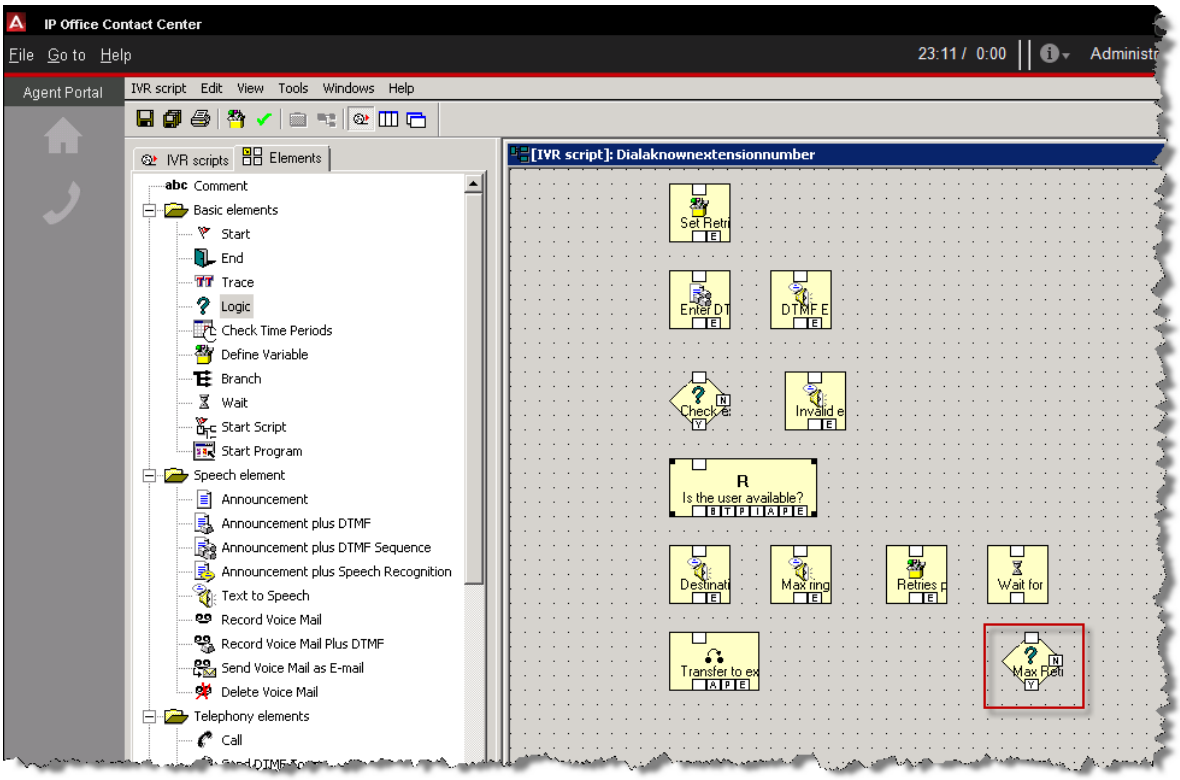
90. At the end of the condition field add a **3** and then select the **OK** button.



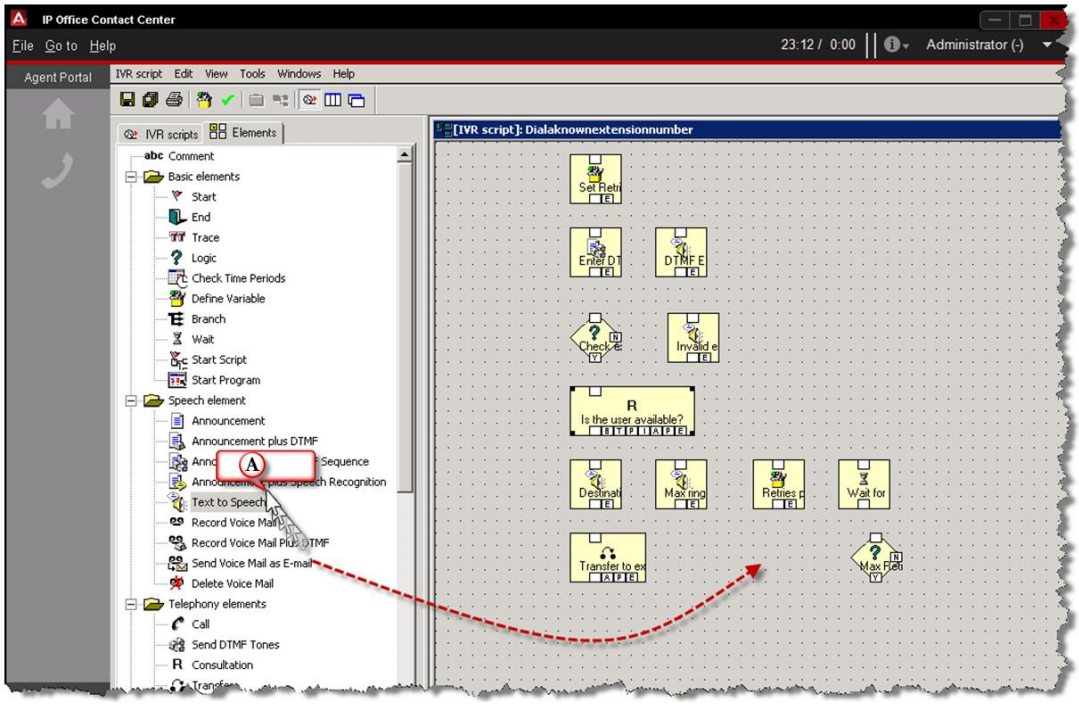
91. Click the **Not interruptible** check box and then click the **OK** button.



92. The configured element is displayed.

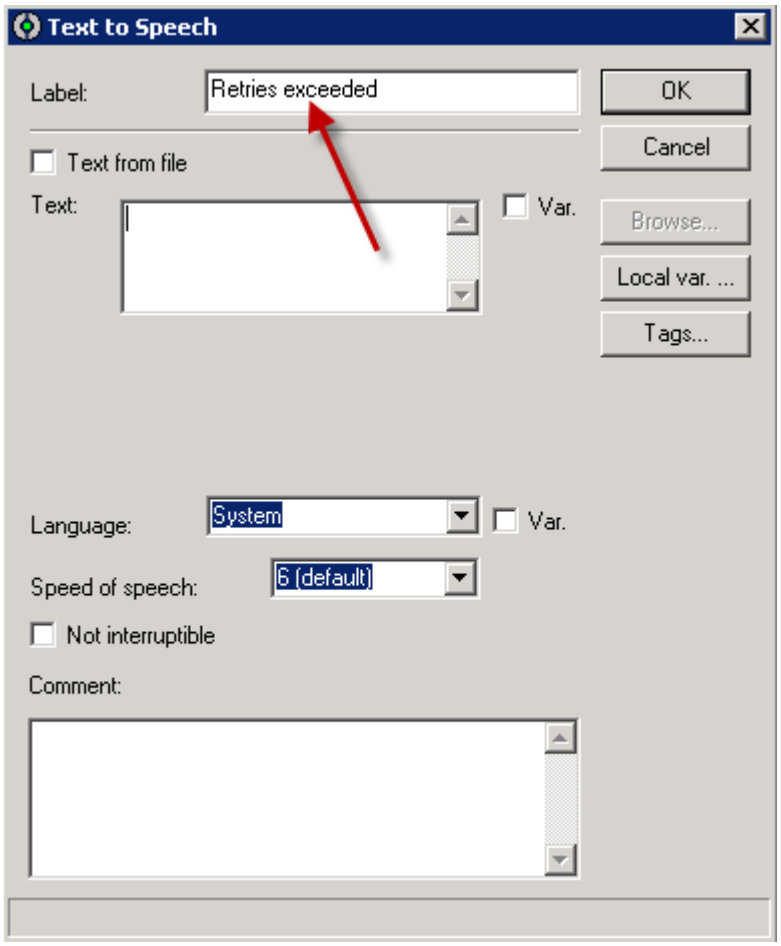


93. For situations when the caller has exceeded the retries limit, an announcement should be played requesting that the caller hang up. This can be achieved using a **Text to speech** element. Drag the element into the IVR working area.

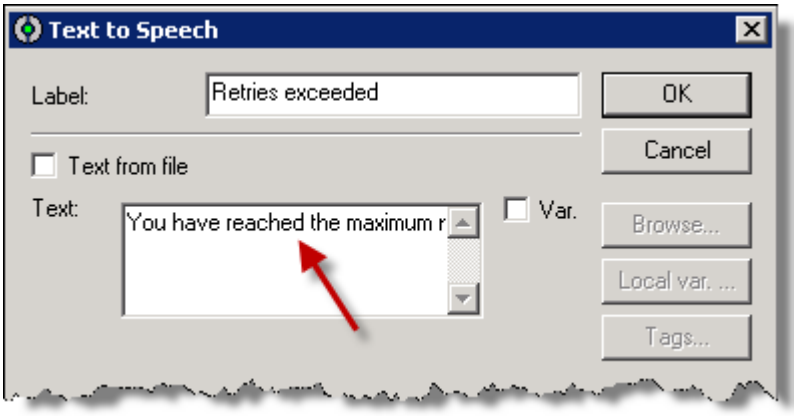


A. Click and drag.

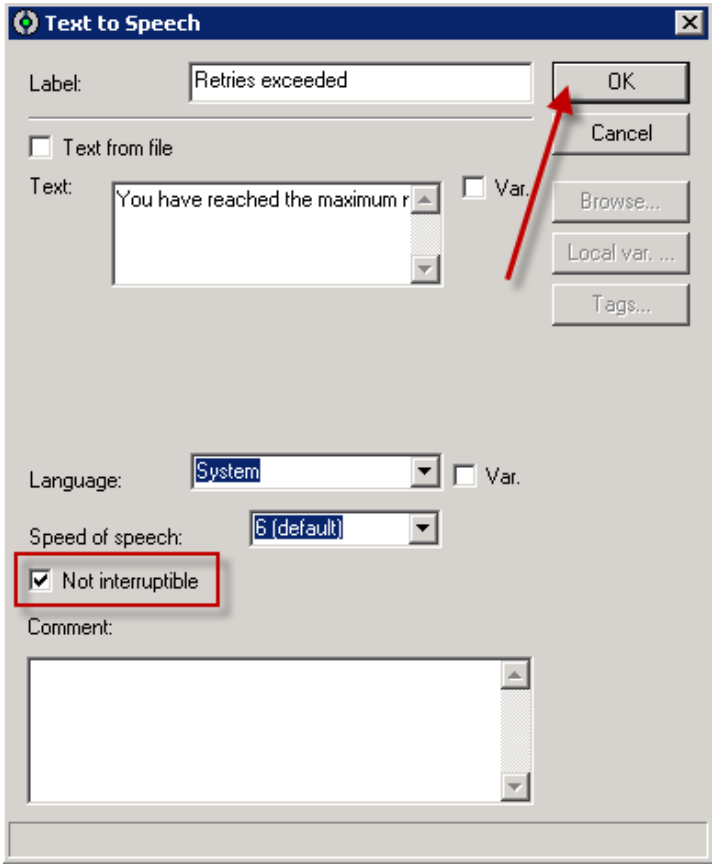
94. In the **Label** field enter **Retries exceeded.**



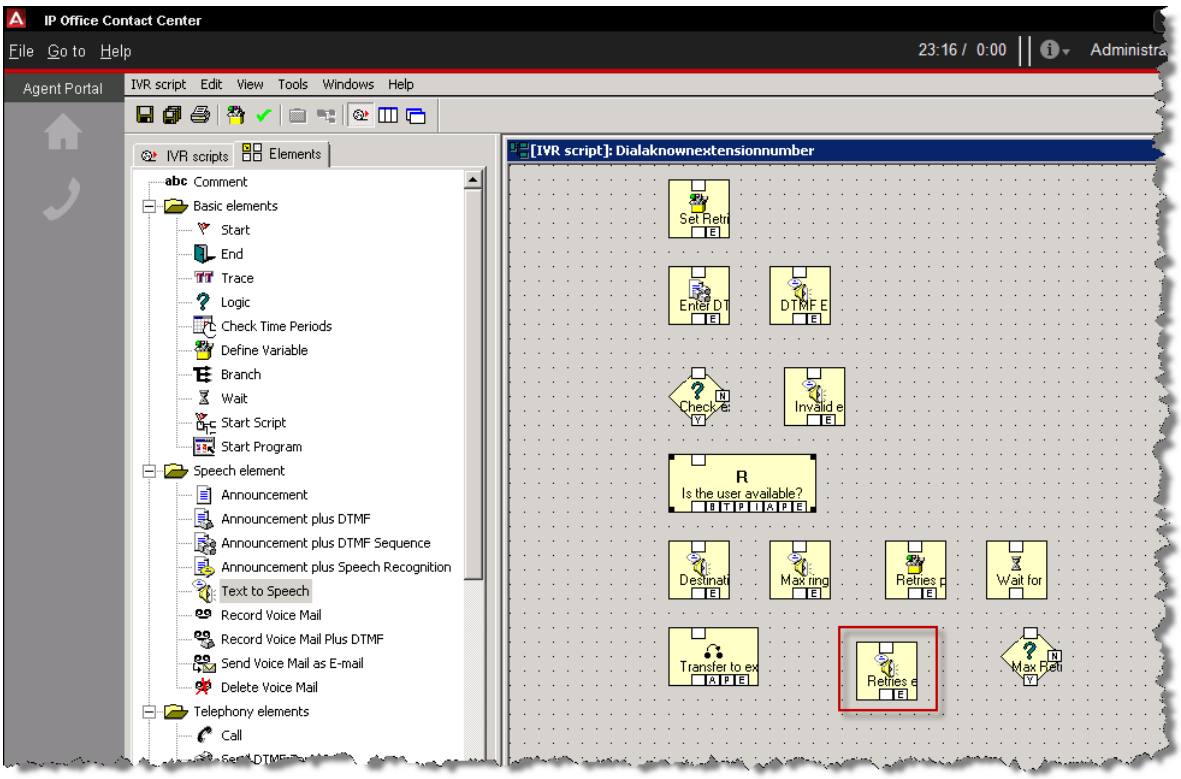
95. In the **Text** field, enter **You have reached the maximum number of retries. Please hang up and redial if you wish to try again**.



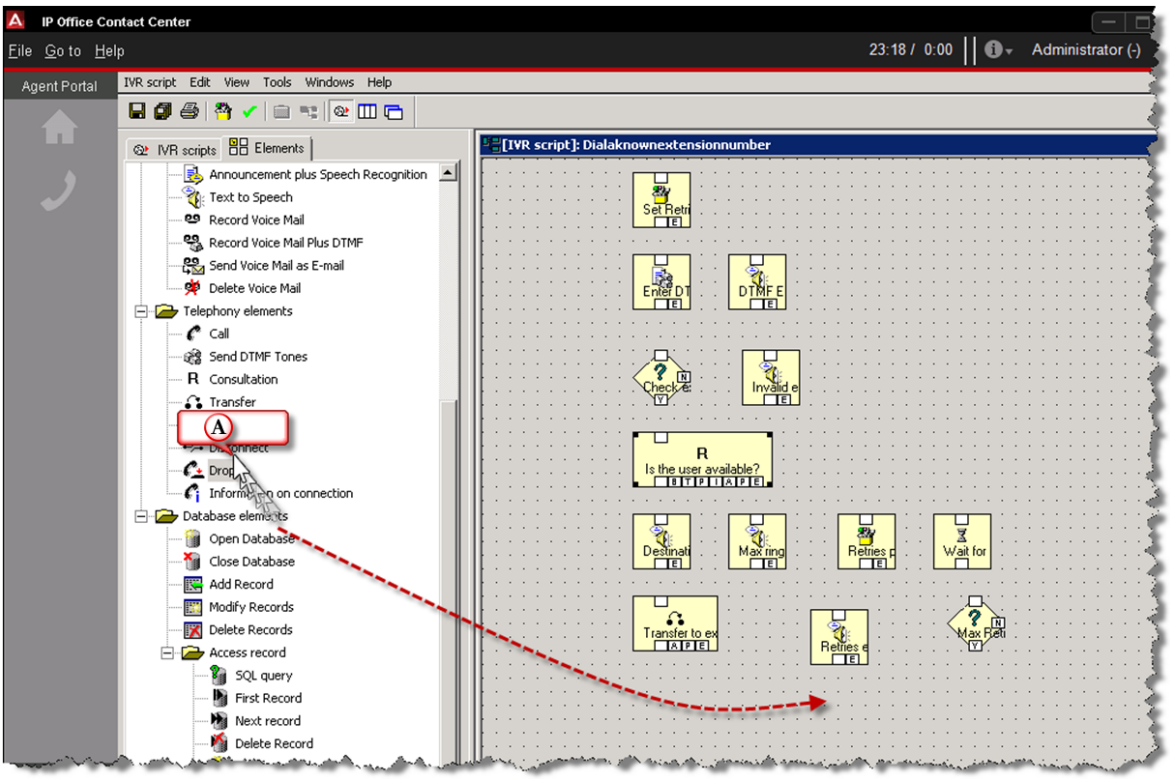
96. Click the **Not interruptible** checkbox and then select the **OK** button.



97. The configured element is displayed.

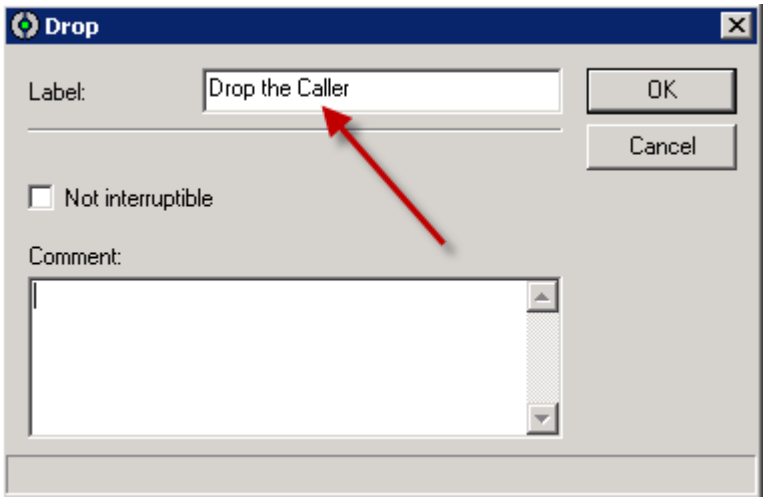


98. In this example, after the Maximum retries message has been played the caller will be disconnected. This can be achieved by using the **Drop** element. Drag the element into the IVR working area.

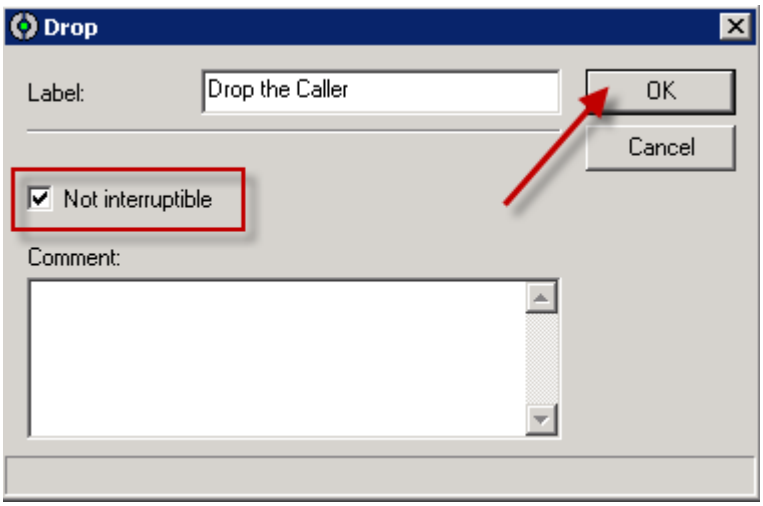


A. Click and drag.

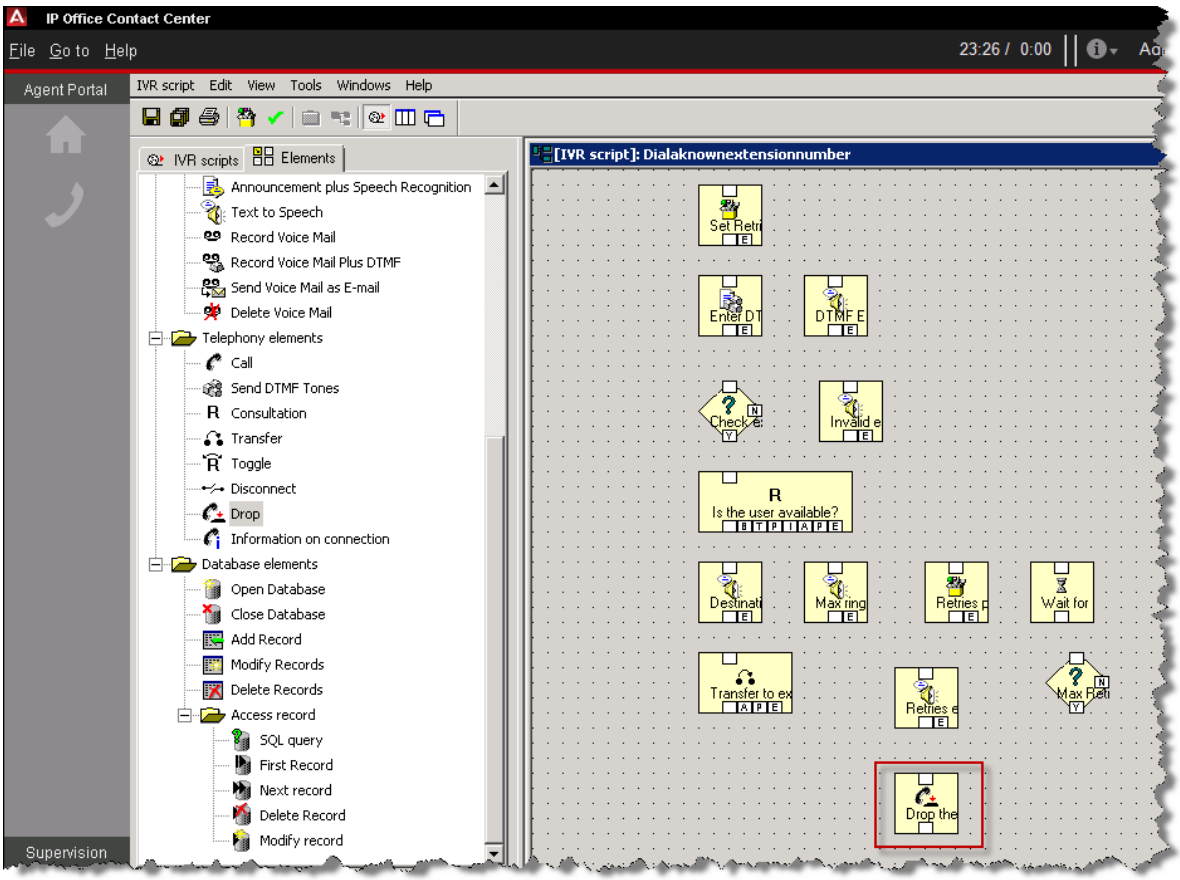
99. In the **Label** field enter **Drop the Caller**.



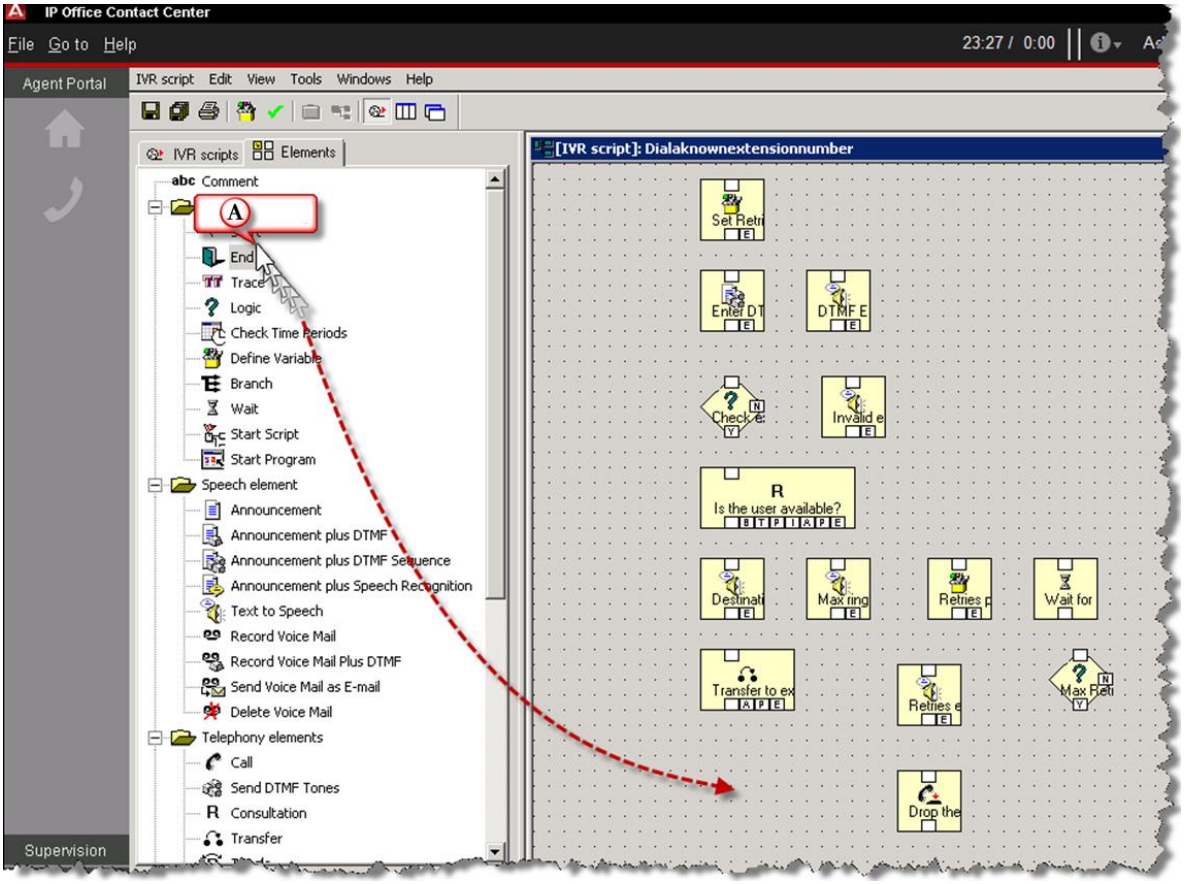
100. Click the **Not interruptible** check box and then click the **OK** button.



The configured element is displayed.

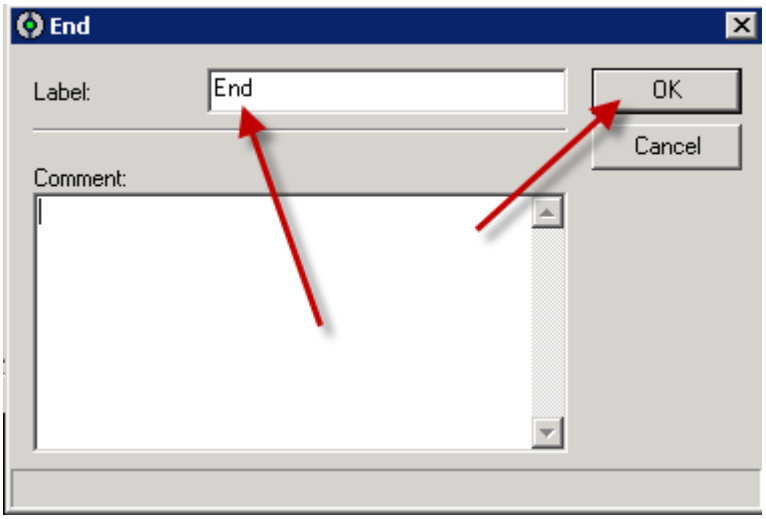


101. The IVR script can now be ended by using the **End** element. Drag the element into the IVR working area.

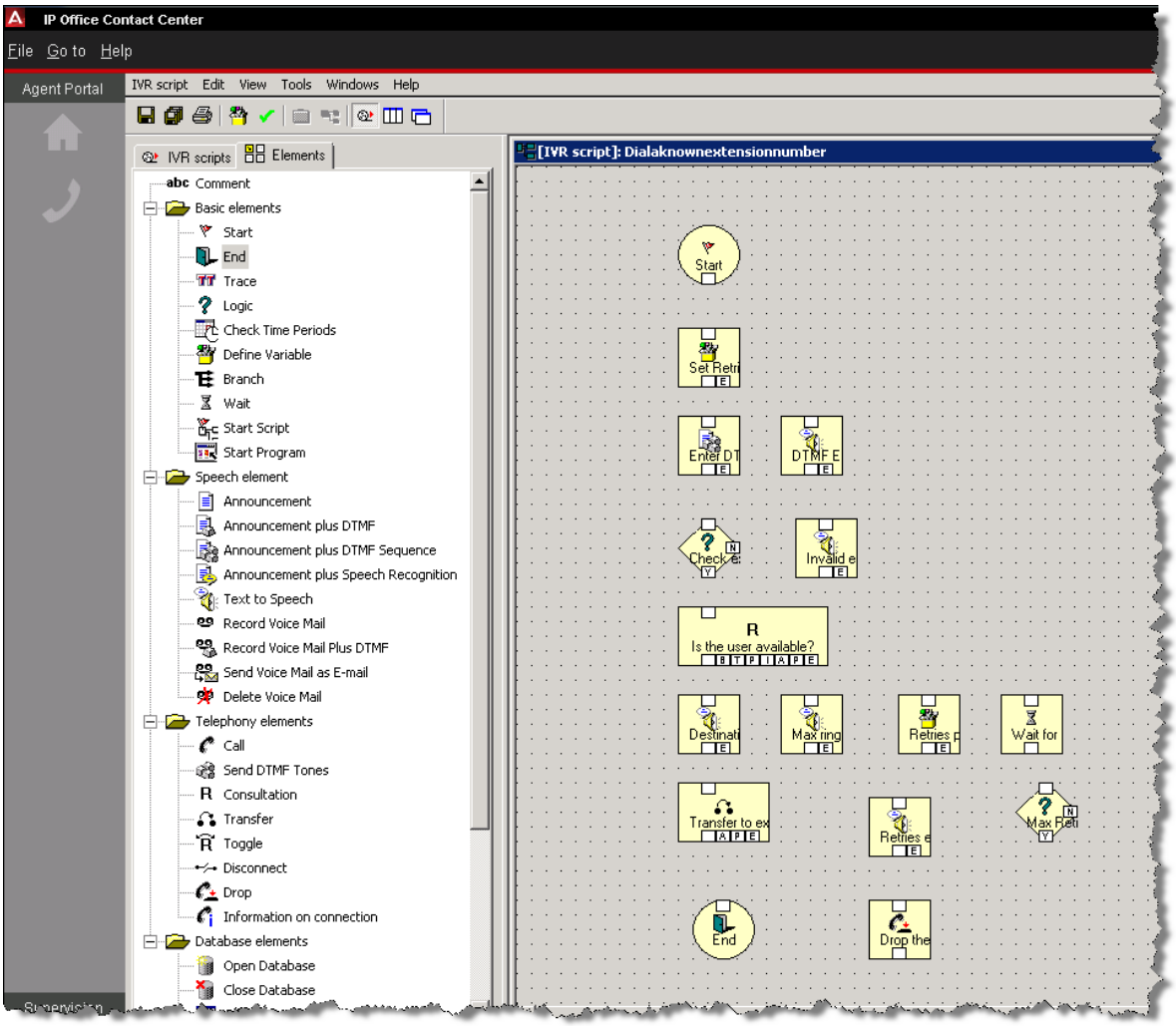


A. Click and drag.

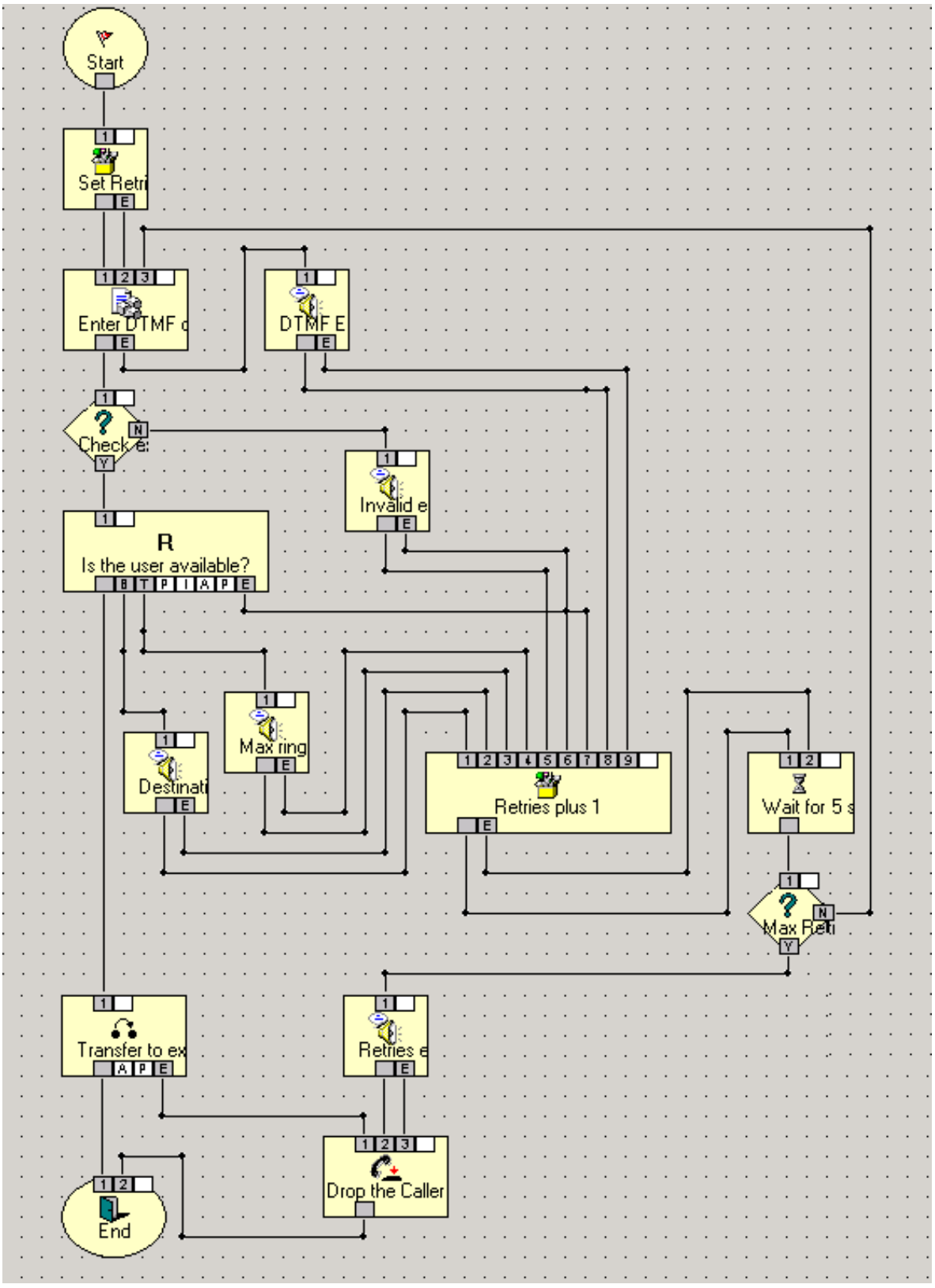
102. In the **Label** field enter **End** and then click the **OK** button.



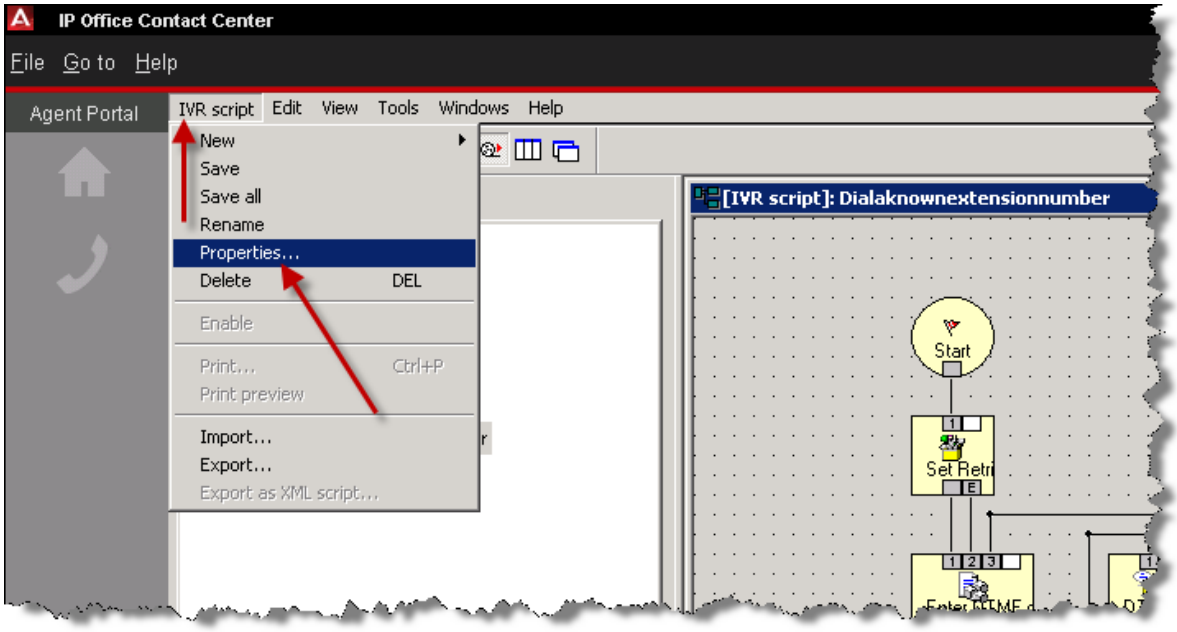
103. The configured IVR script is displayed.



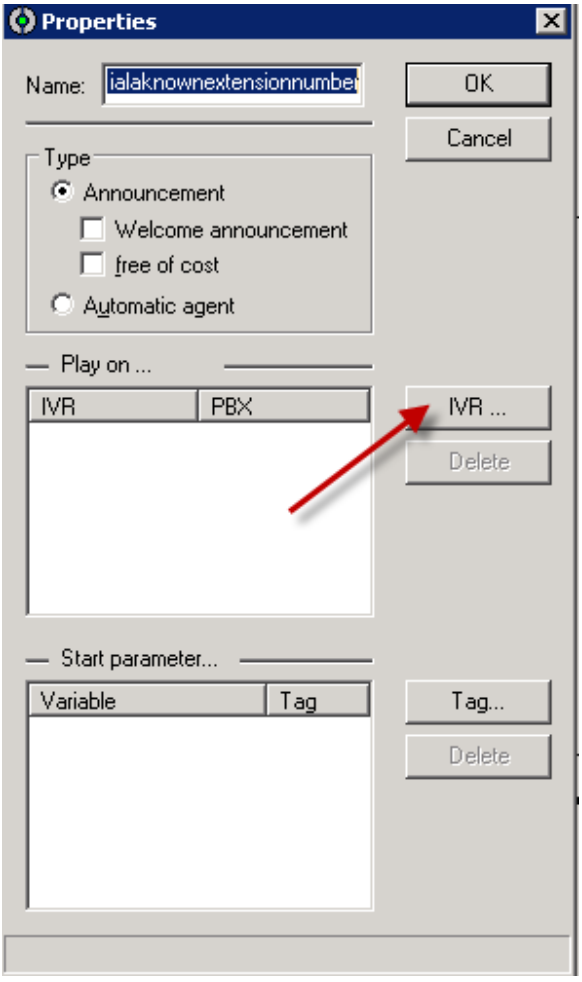
We now need to link all of the elements together, as illustrated below.



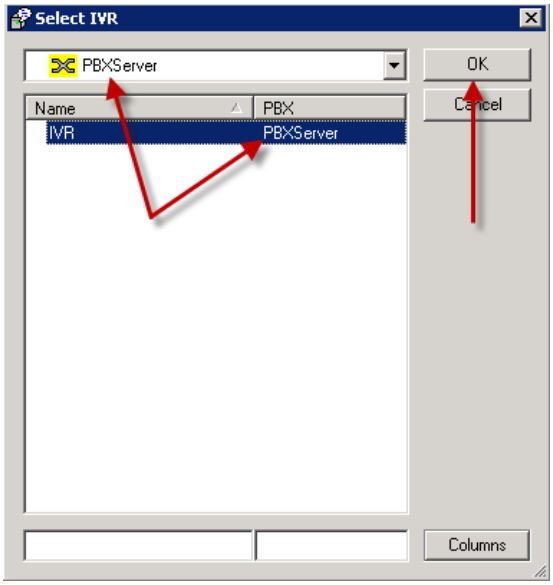
104. Now that all the connections have been created, the IVR script must be enabled. Select IVR Script and click **Properties**.



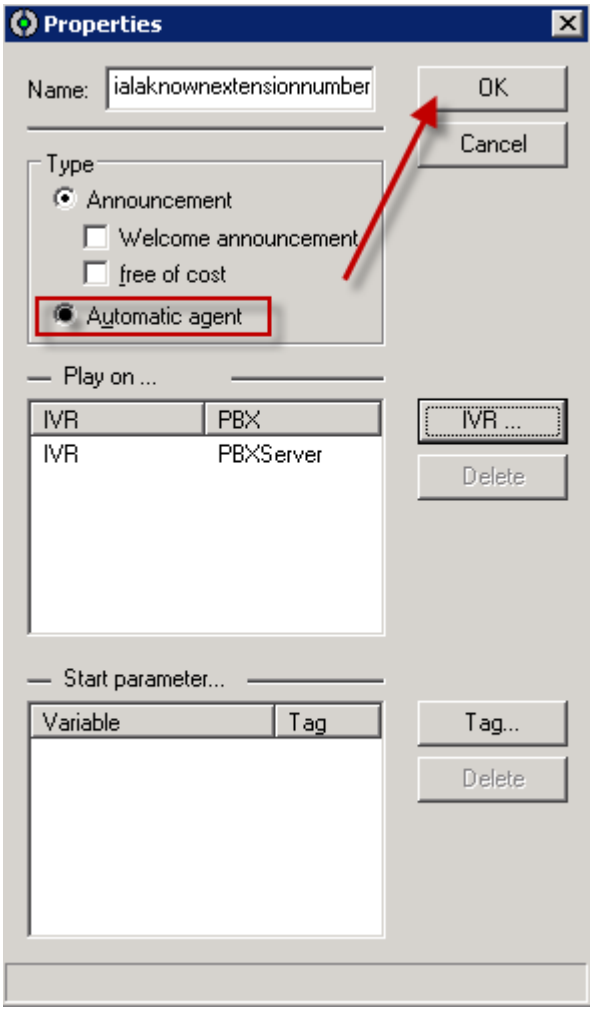
105. Click the **IVR …** button.



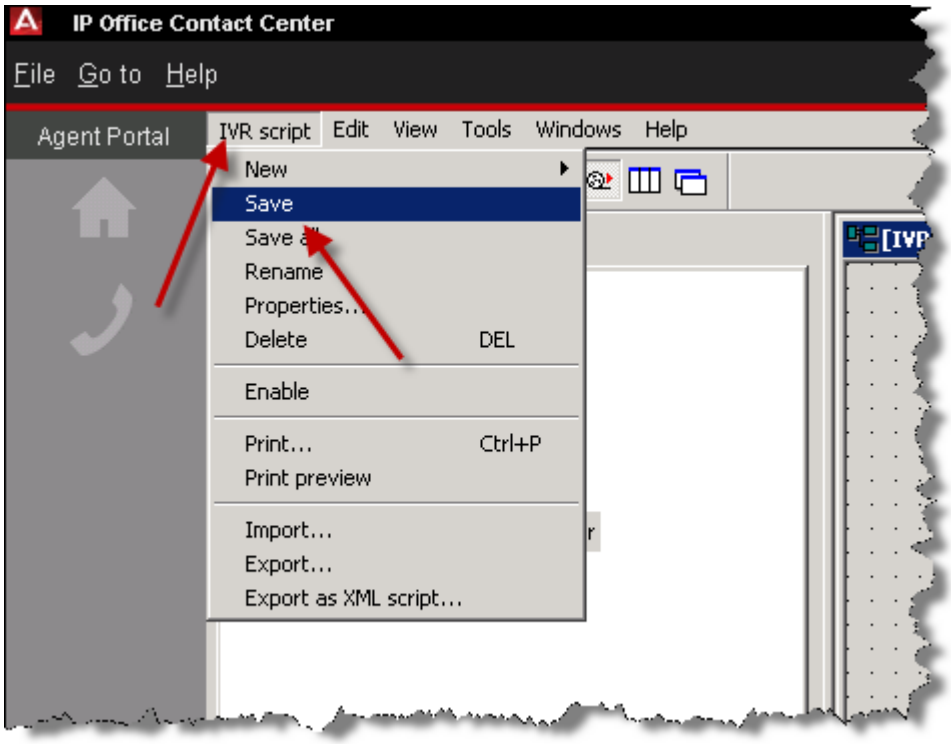
106. From the drop down list, select **PBXServer** and then select **IVR** followed by the **OK** button.



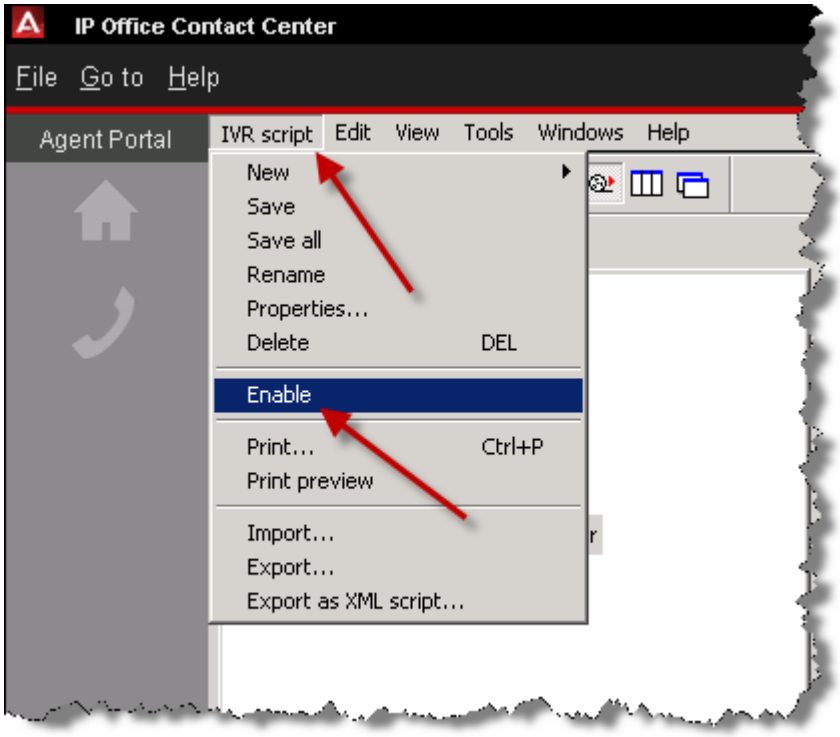
107. Choose the options for Automatic agent and then click the **OK** button.



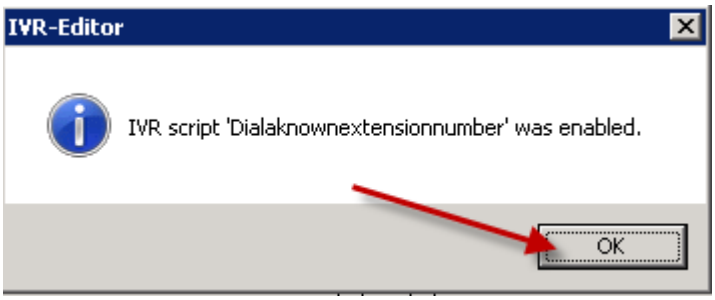
108. Select the **IVR script** menu and click the **Save** option.



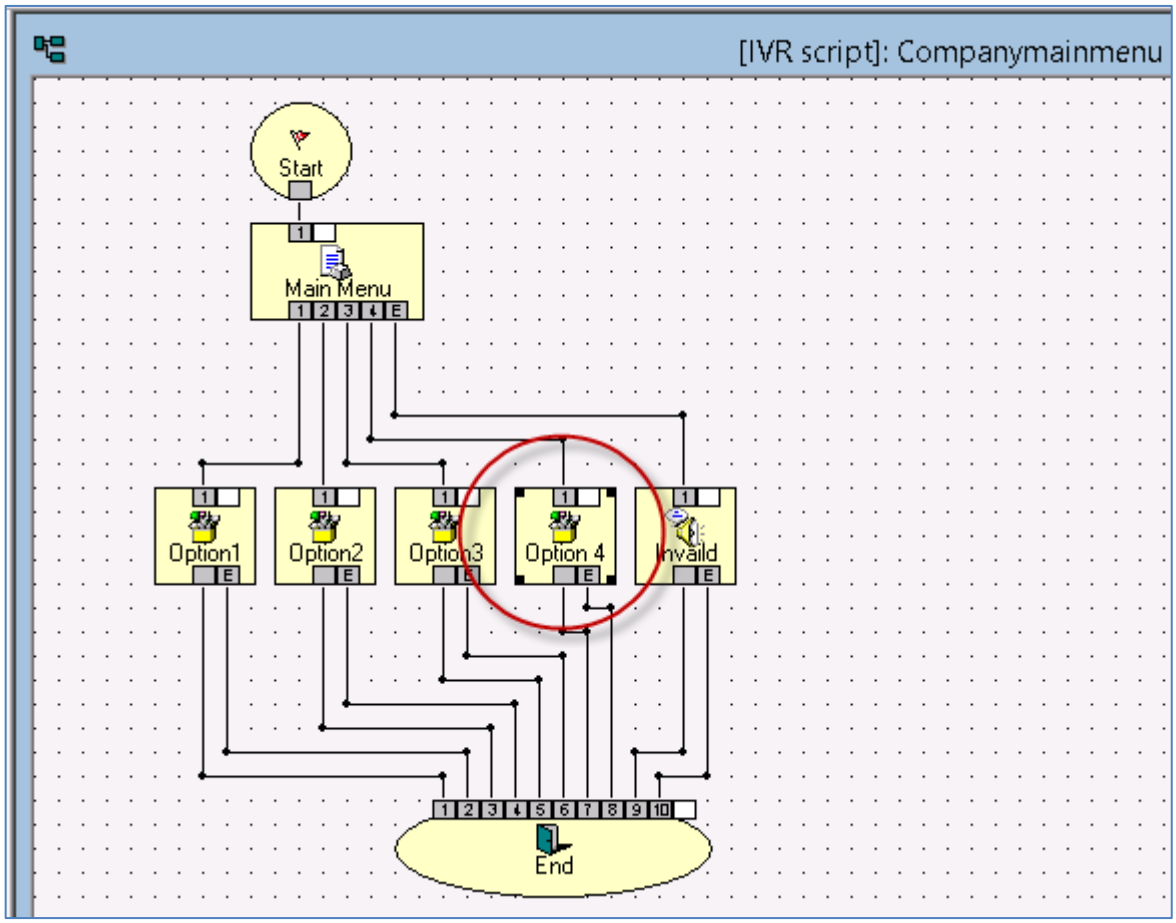
109. Click **IVR script** and select the **Enable** option.



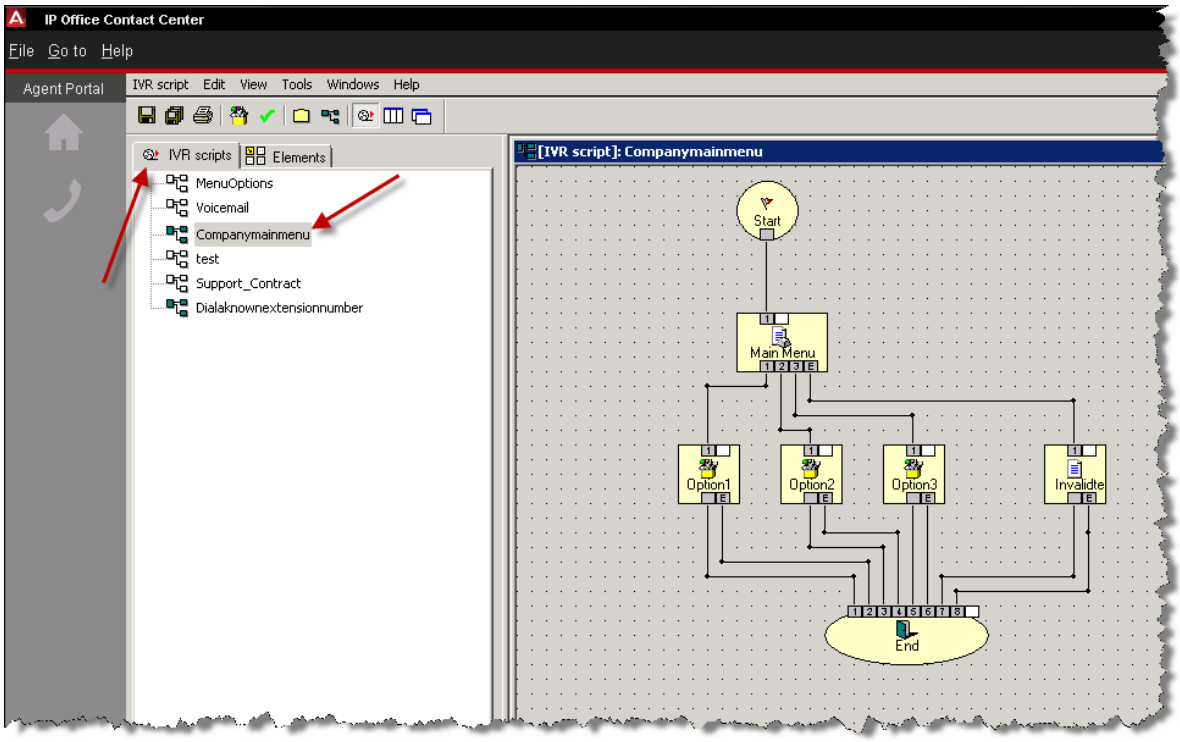
110. Click the **OK** button when prompted.



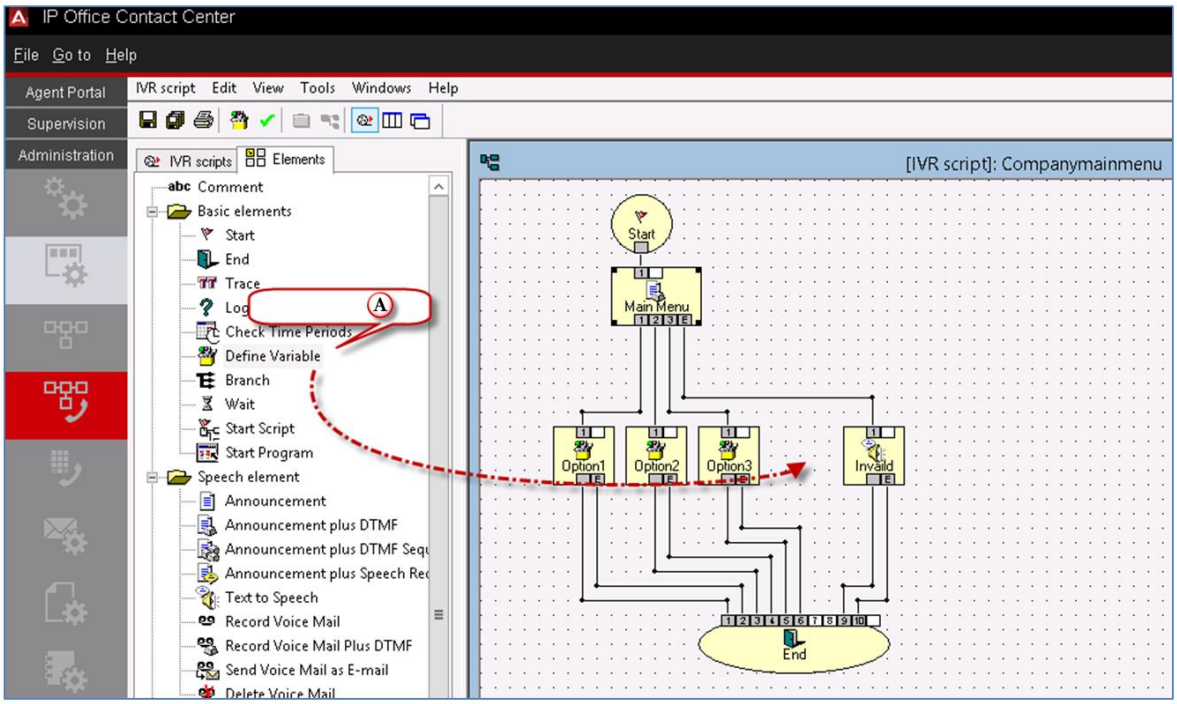
111. Now the IVR is complete, we will link the new IVR script into an existing Companymainmenu IVR Script.



112. In this example, the **companymainmenu IVR** script that was previously configured in this guide will be utilized. Open the required IVR script.

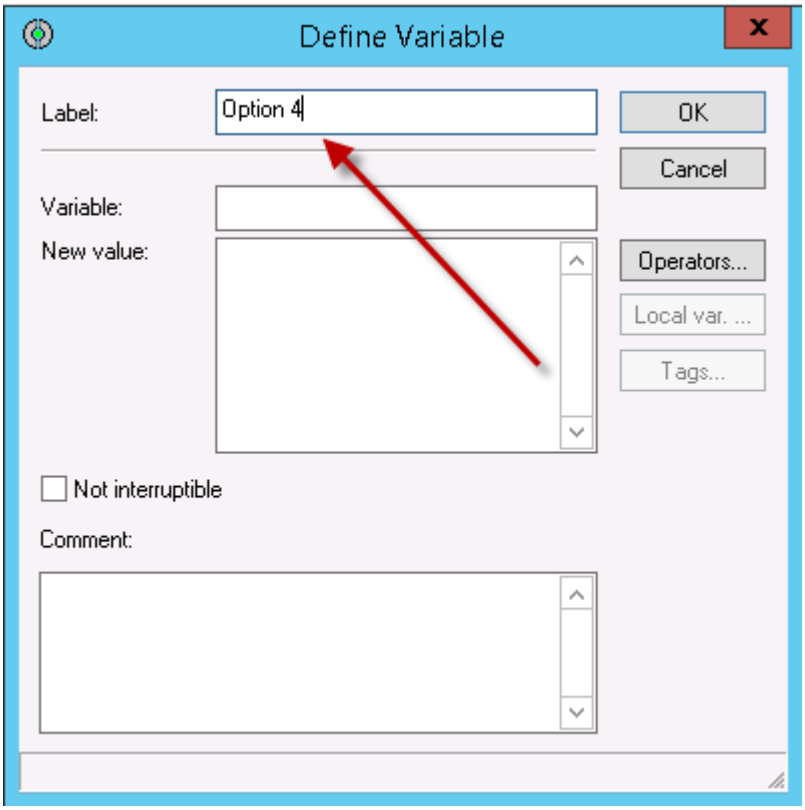


113. Then drag the **Define Variable** element in to the IVR working area.

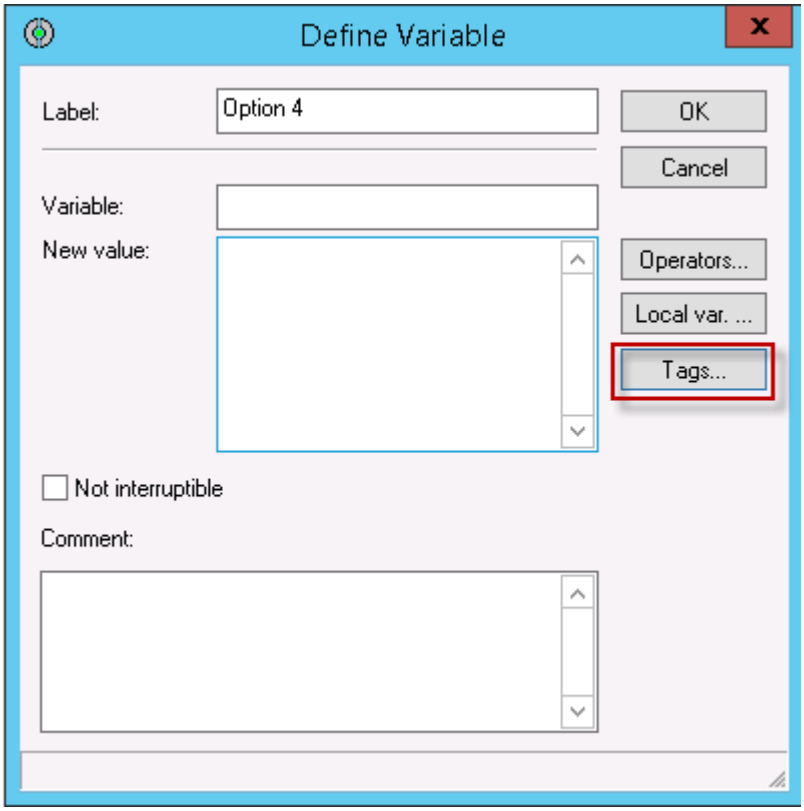


A. Click and drag.

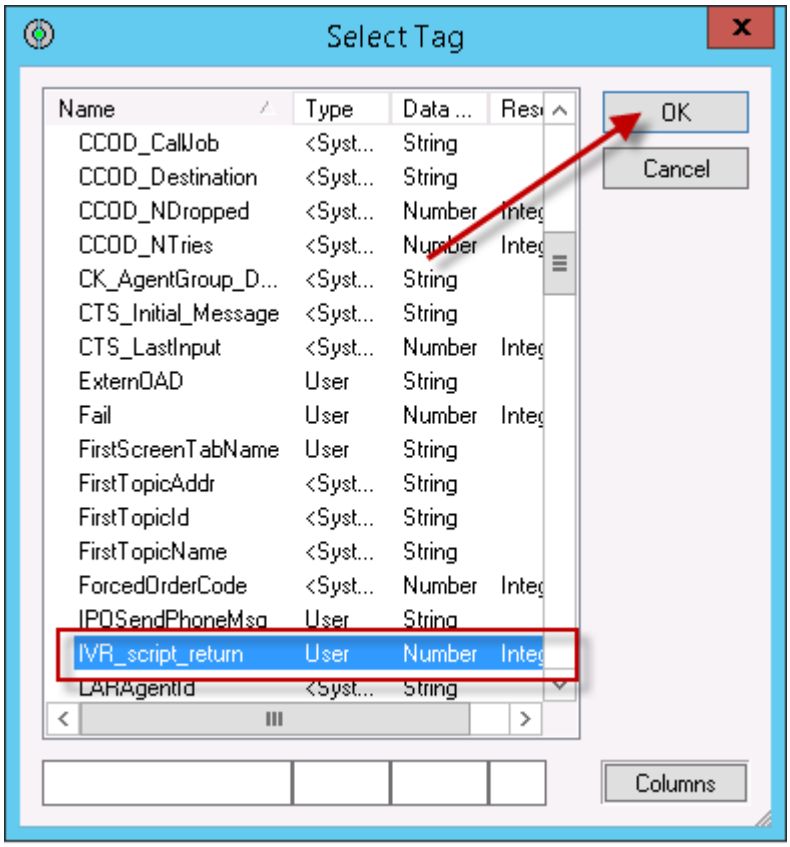
114. In the **Label** field enter **Option 4**.



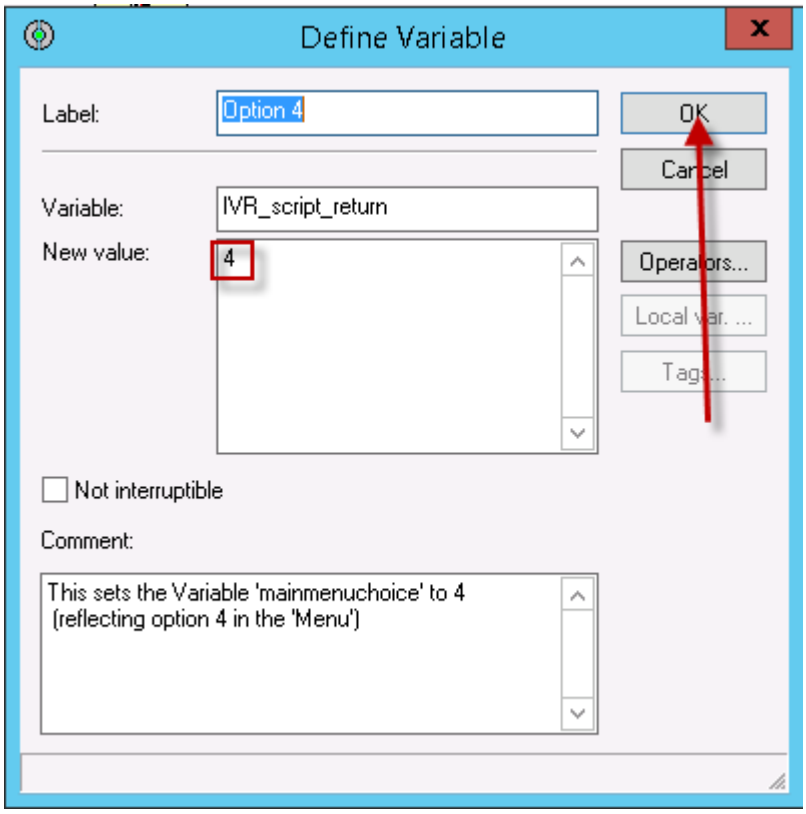
115. Then click the in the **Variable field** and then choose **Tags…**.



116. Select the tag **IVR_script_return** and click the **OK** button.

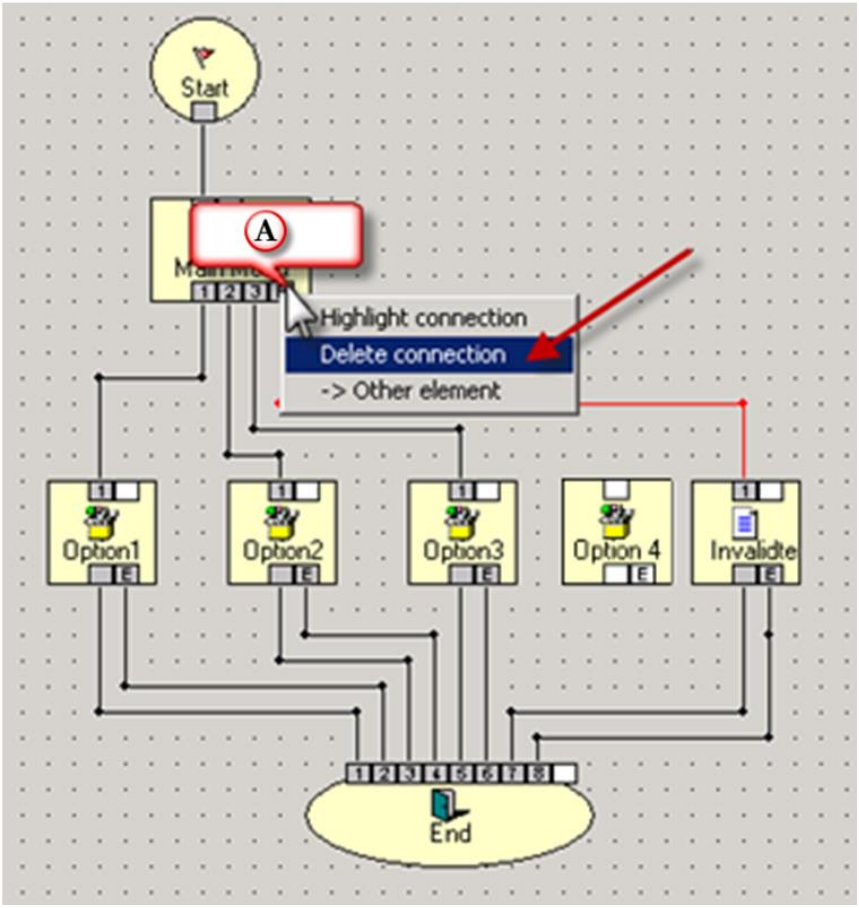


117. Click in the **New Value** field and type **4** and then click the **OK** button.



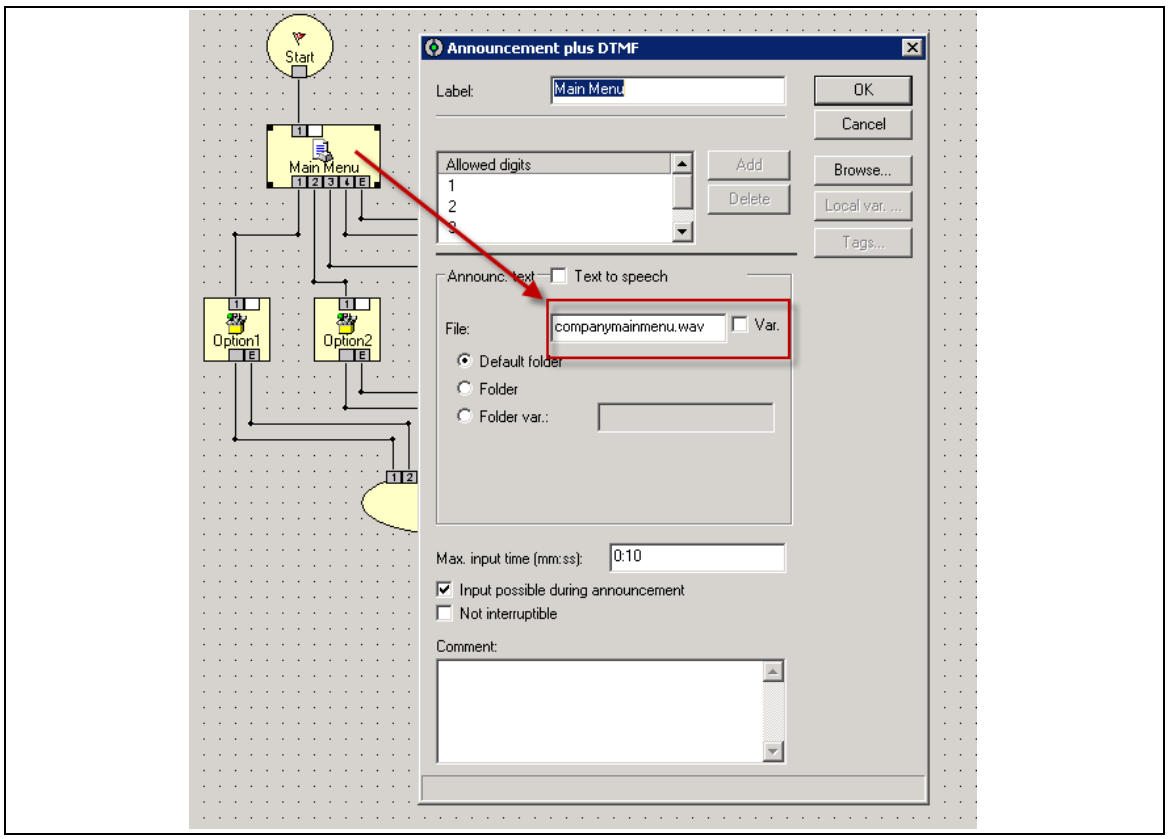
118. Next, adjust the **Main Menu** element to have four options.

Note: The E must be disconnected before adding the 4.

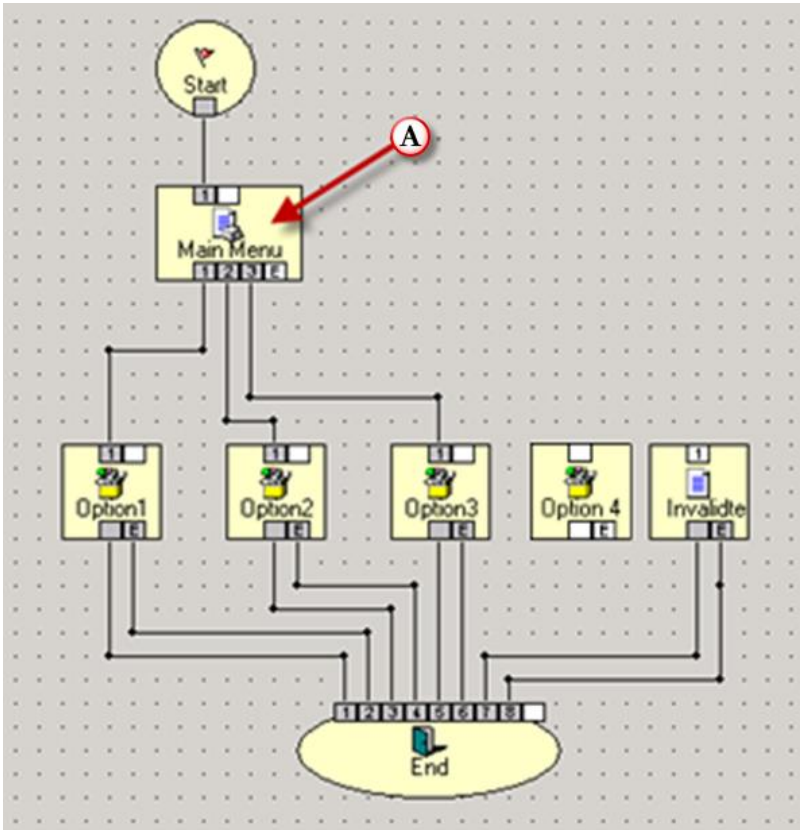


A. Right click.

Note: Please be aware that you should update the announcement used by this menu, to inform callers of the new, 4th option.

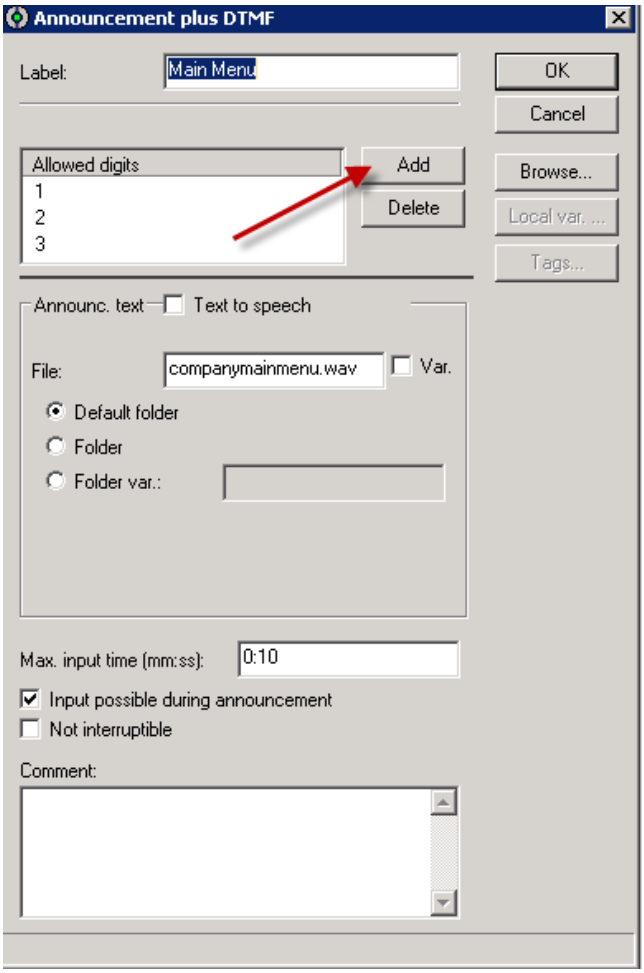


119. Double left click on the **Main Menu**

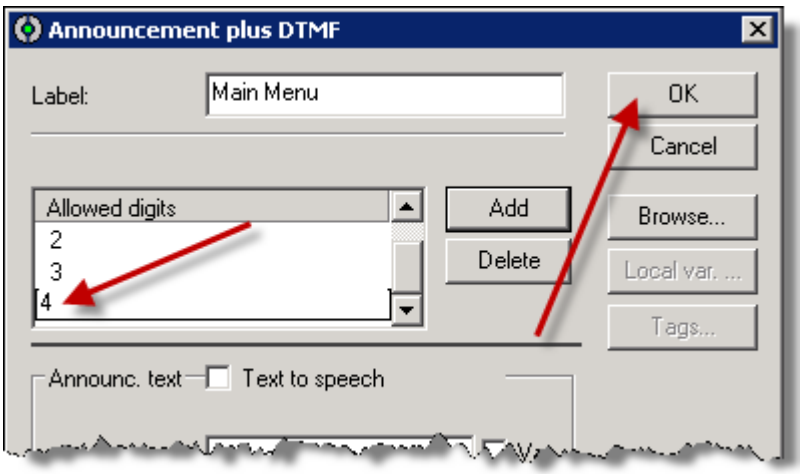


A. Double left click.

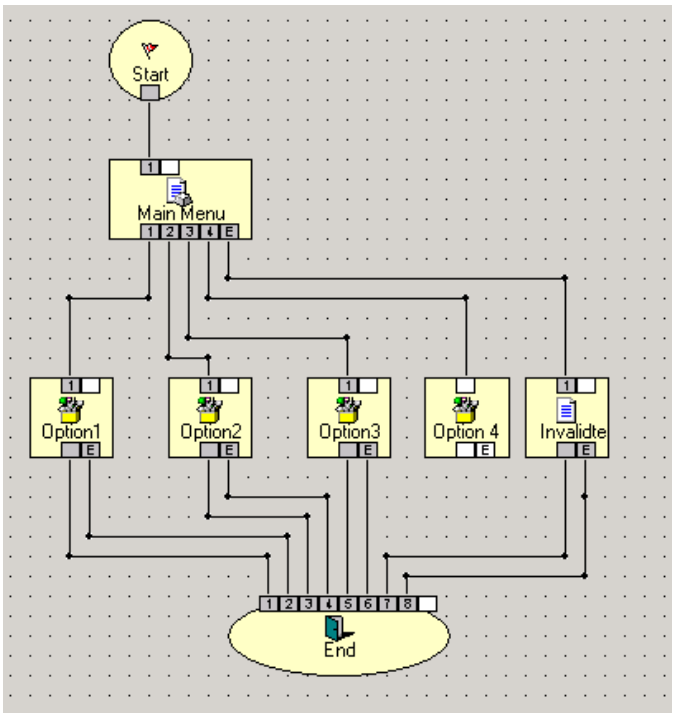
120. Click the **Add** button.



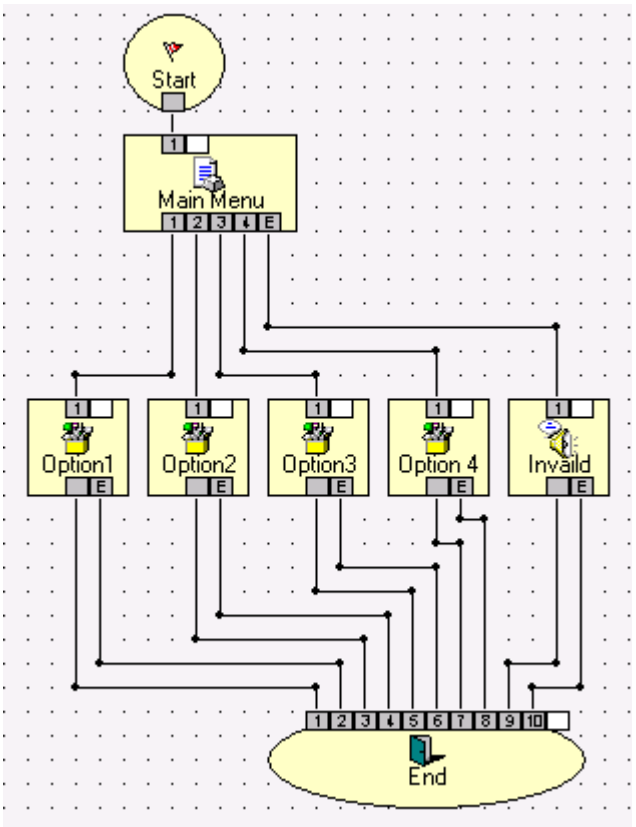
121. Enter a digit **4** and then click the **OK** button.



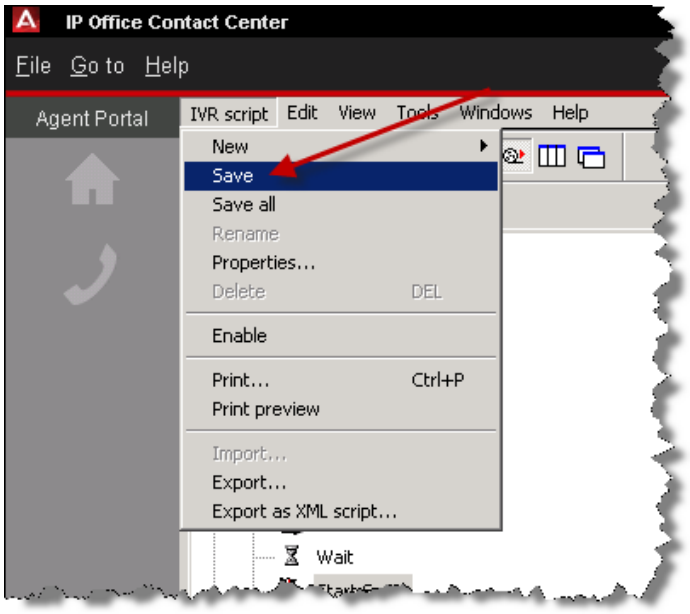
122. Now rearrange the IVR to include the new Option 4.



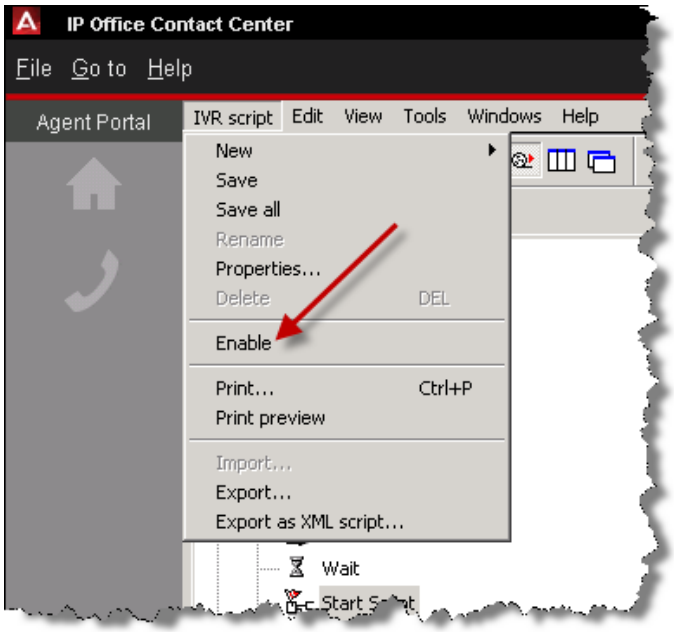
123. Now connect the new element into the IVR Script.



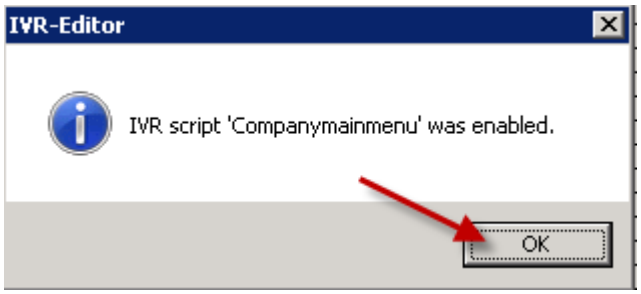
124. Click the **IVR Script link** and select **Save.**



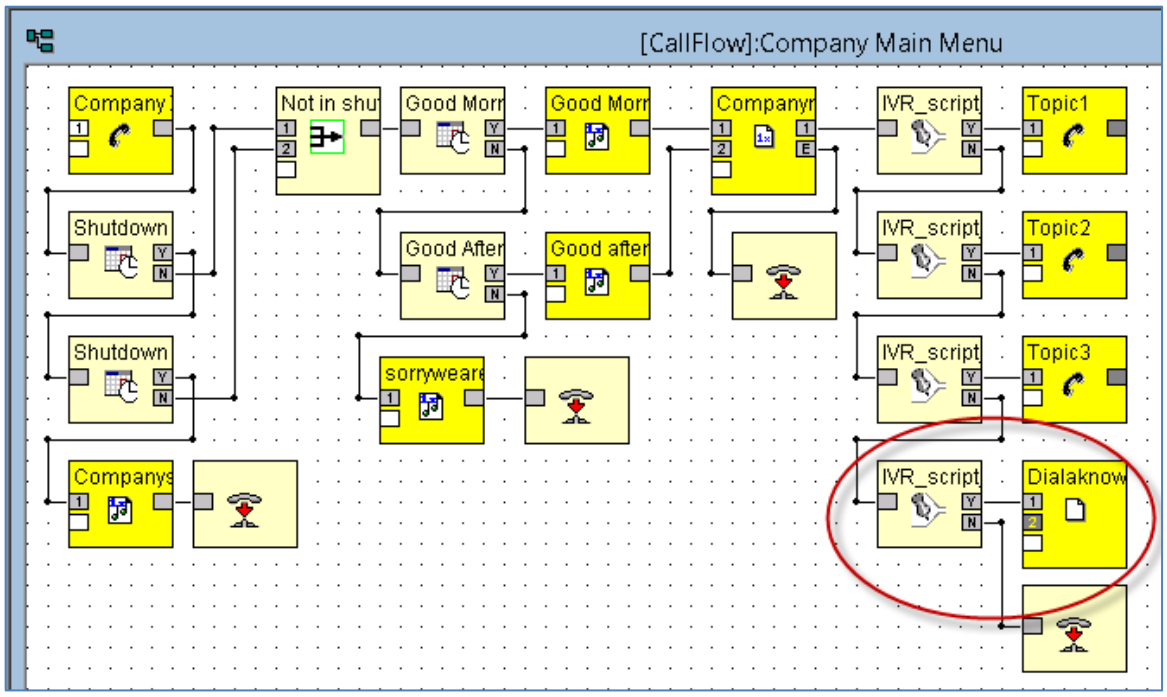
125. Click the **IVR Script link** and click **Enable**.



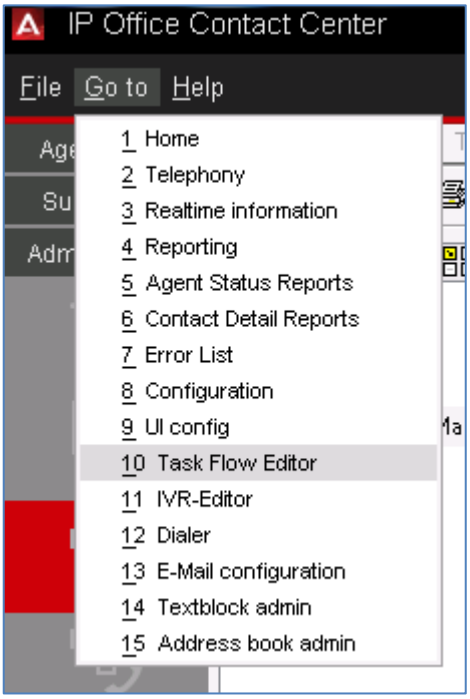
126. Click the **OK** button.



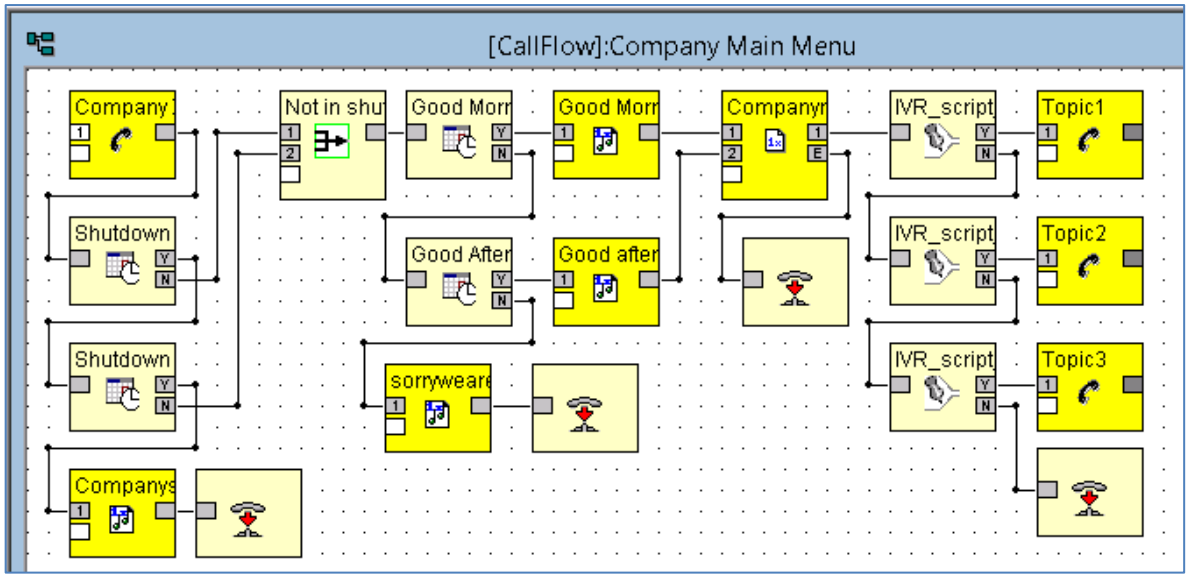
127. Now we need to add this option into the CompanyMainmenu Call flow.



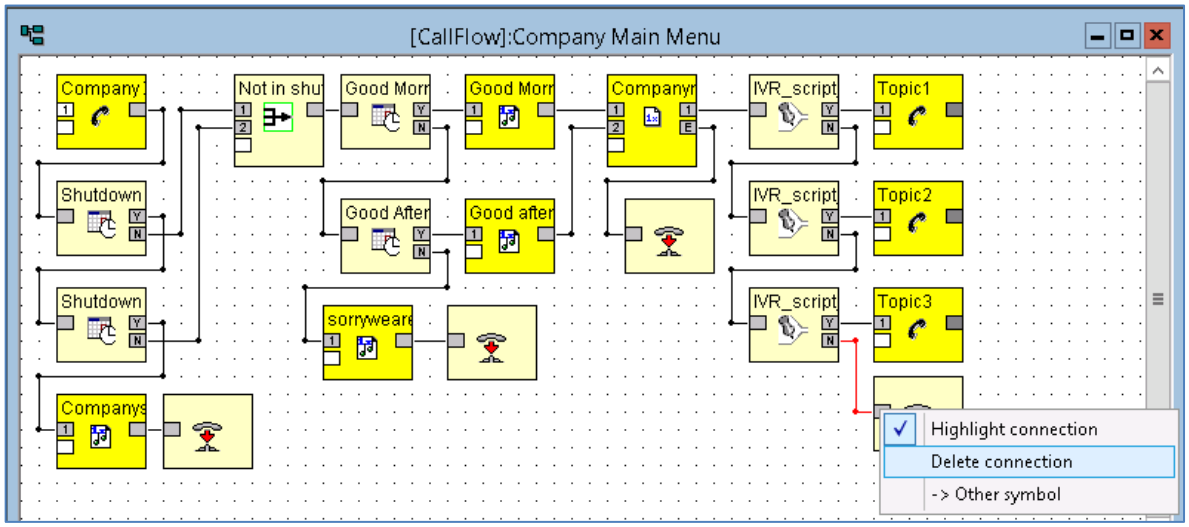
128. Choose the **Go to** menu and select **Task flow Editor**.



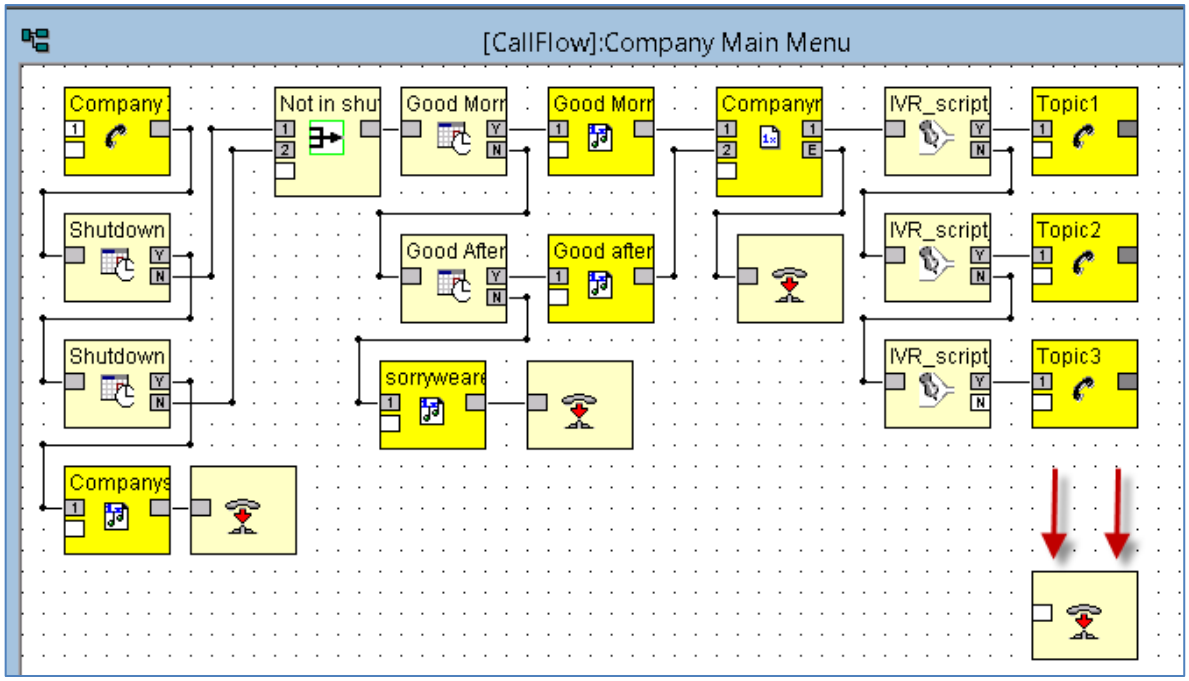
129. Open the **CompanyMainMenu** Call flow.



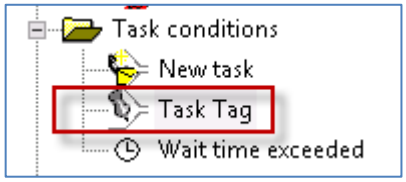
130. Highlight the connection and using the right mouse button click **Delete connection**.



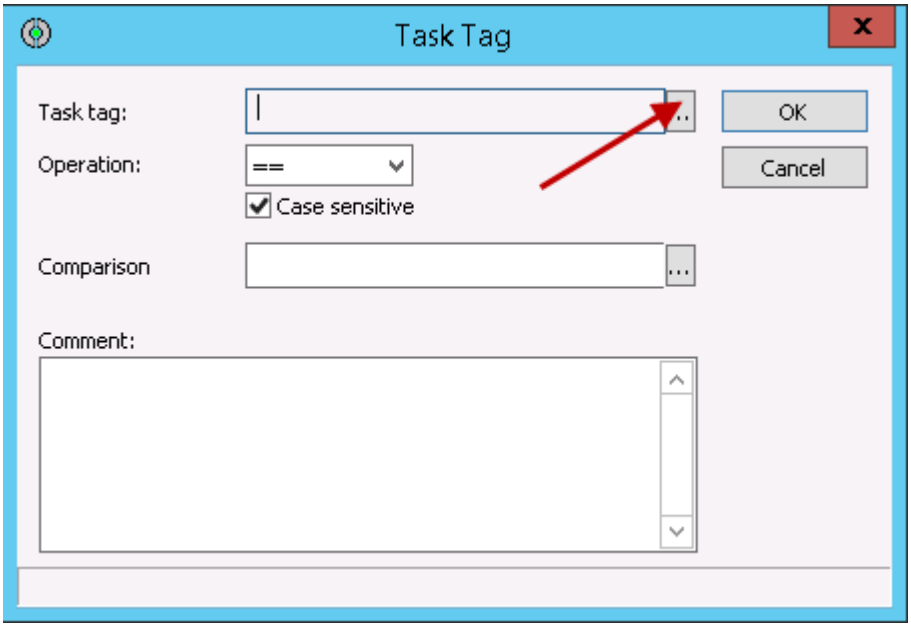
131. Move the drop element to leave space for option 4.



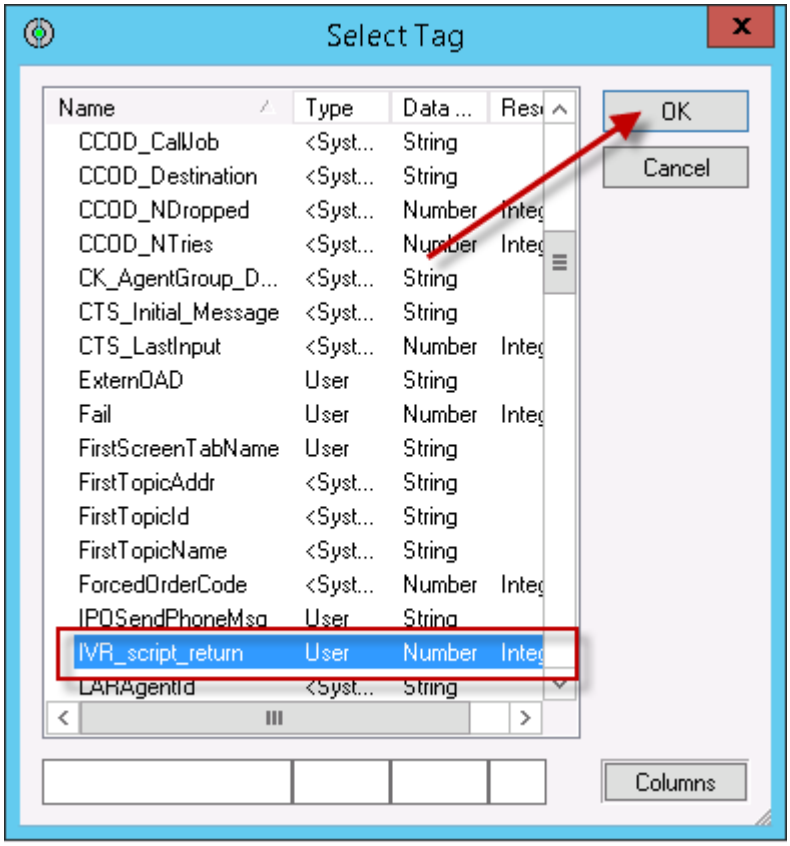
132. Drag a **Task tag** element into the Call flow working area.



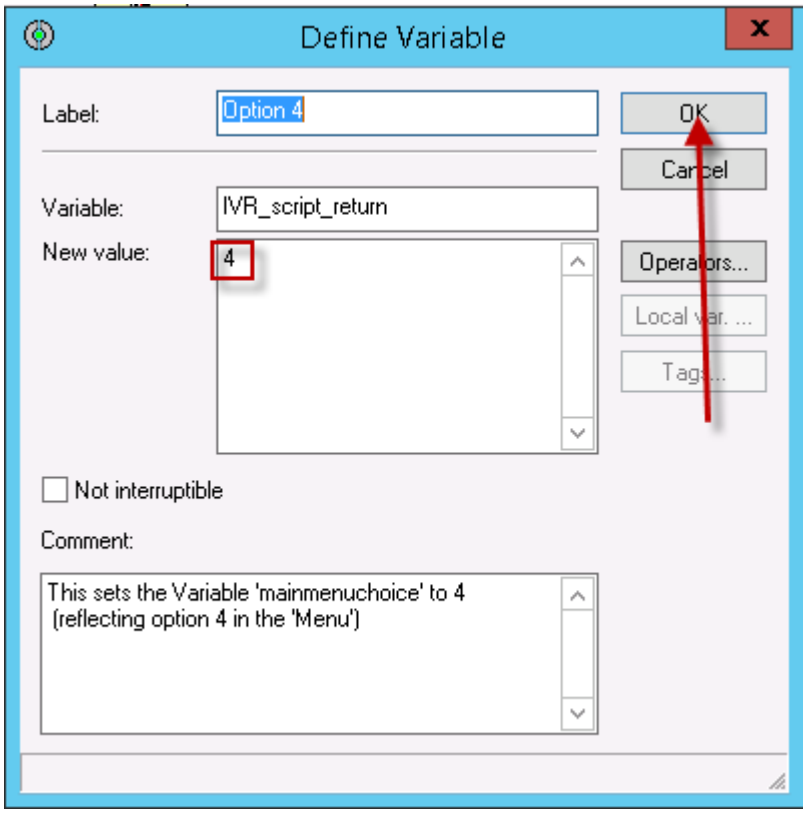
133. Choose the builder button at the end of the **Task tag** field.



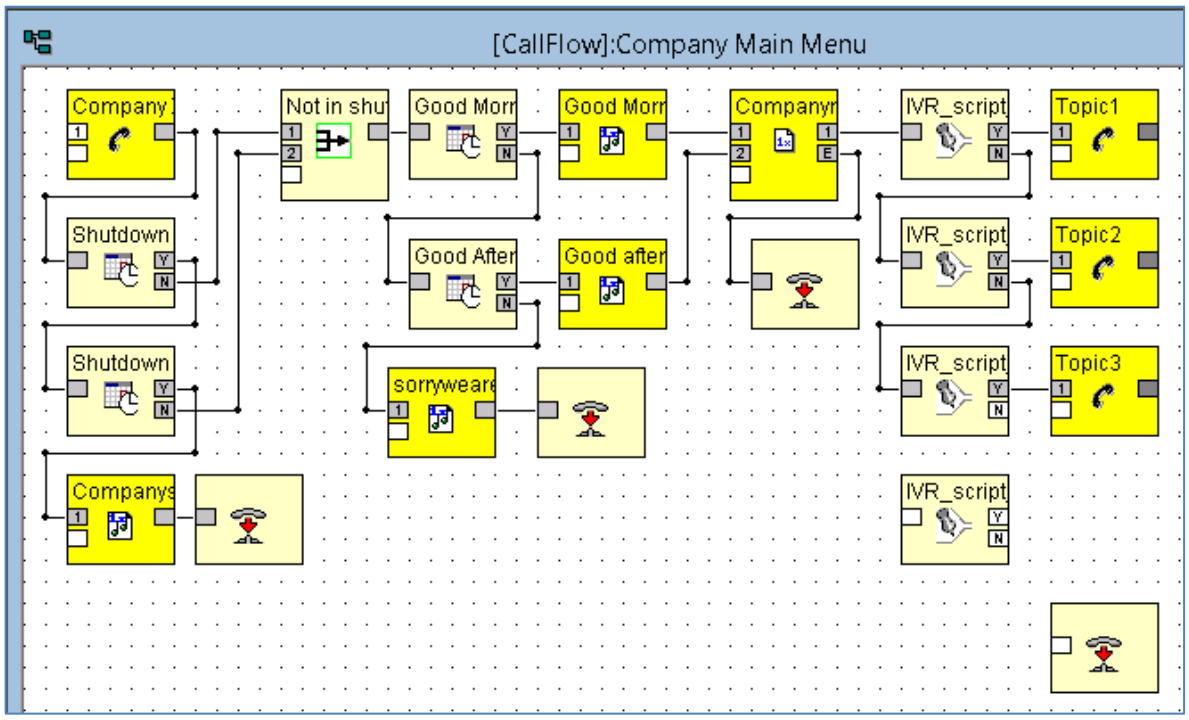
134. Select the tag **IVR_script_return** and then click the **OK** button.



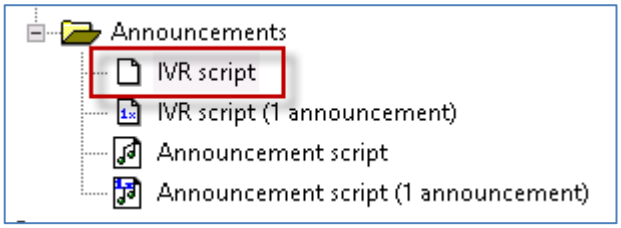
135. Type **4** in the **New Value** field and then click the **OK** button.



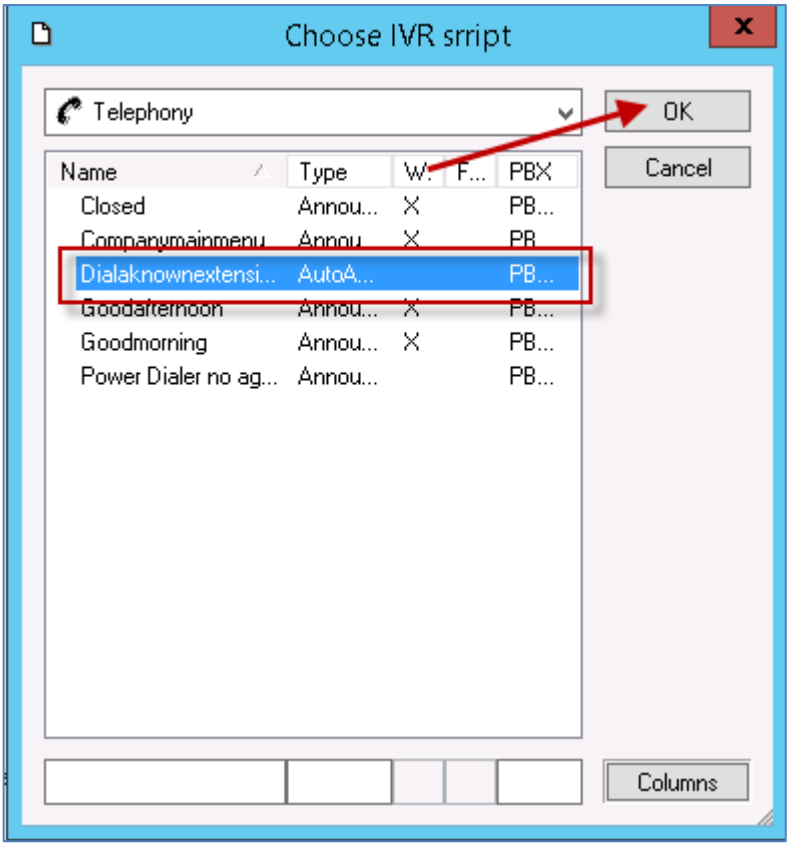
136. The Task Tag element is displayed.



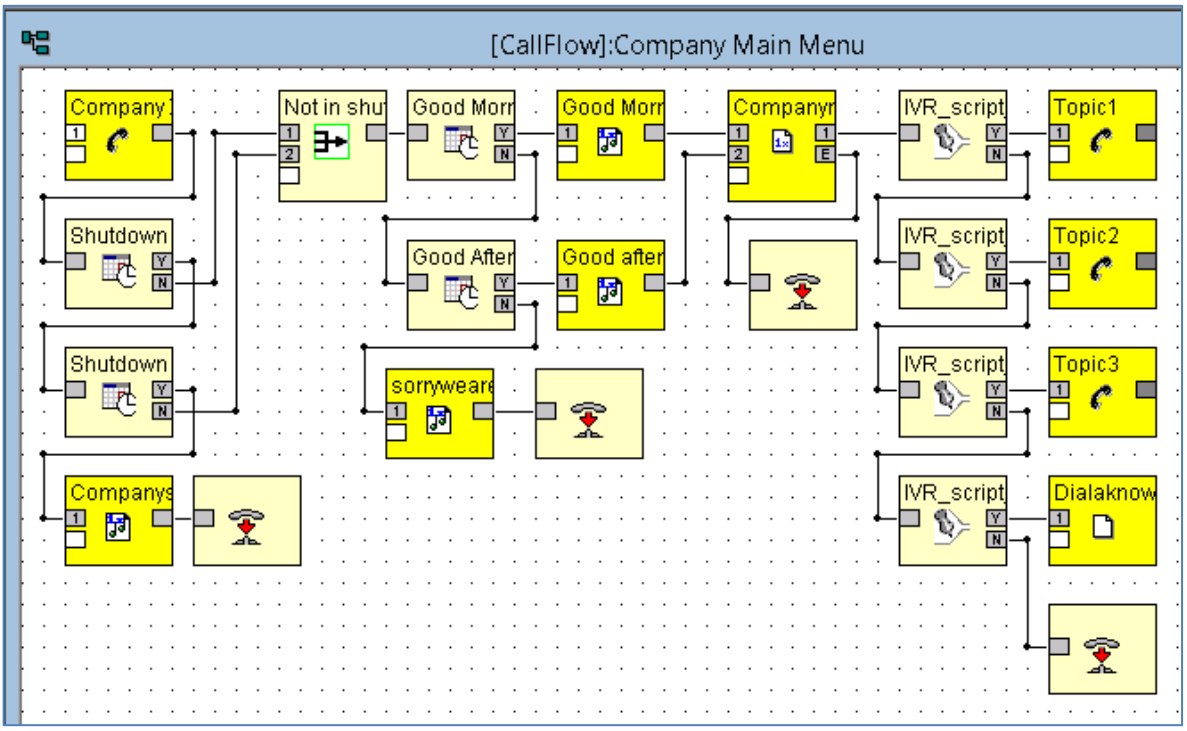
137. We now need to send the caller to the IVR, this can be done using a IVR script. Drag the element into the call flow window.



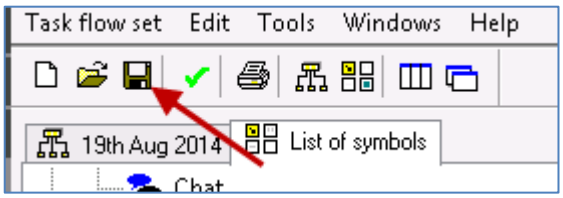
138. Select the **Dialaknownextension** IVR script and then select the **OK** button.



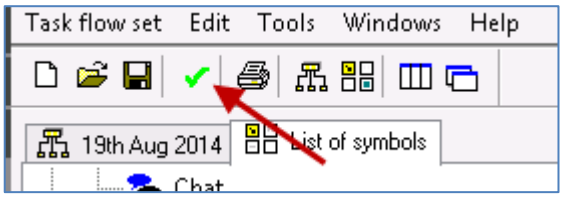
139. The IVR script is now displayed. Now connect the elements together.



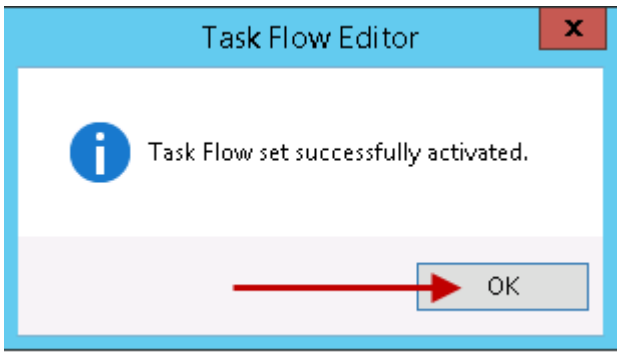
140. **Save** the modified Call flow.



141. Select to **Activate** the Call flow.



142. When prompted select the **OK** button.



Installing Additional Languages for Text To Speech Files

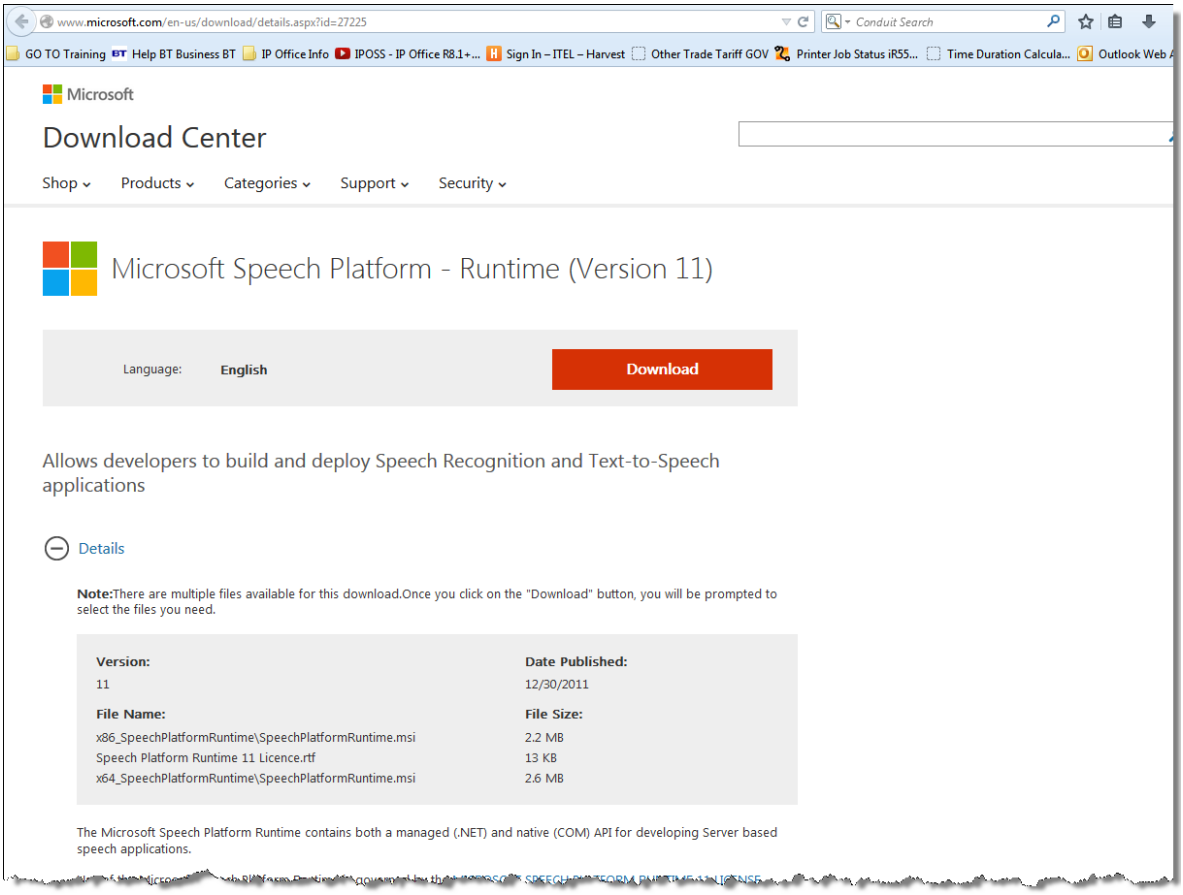
Microsoft languages for TTS are feely available and can be downloaded from Microsoft's websites. Microsoft has produced installation files for all standard European languages.

The languages are preinstalled with Windows 2012 server.

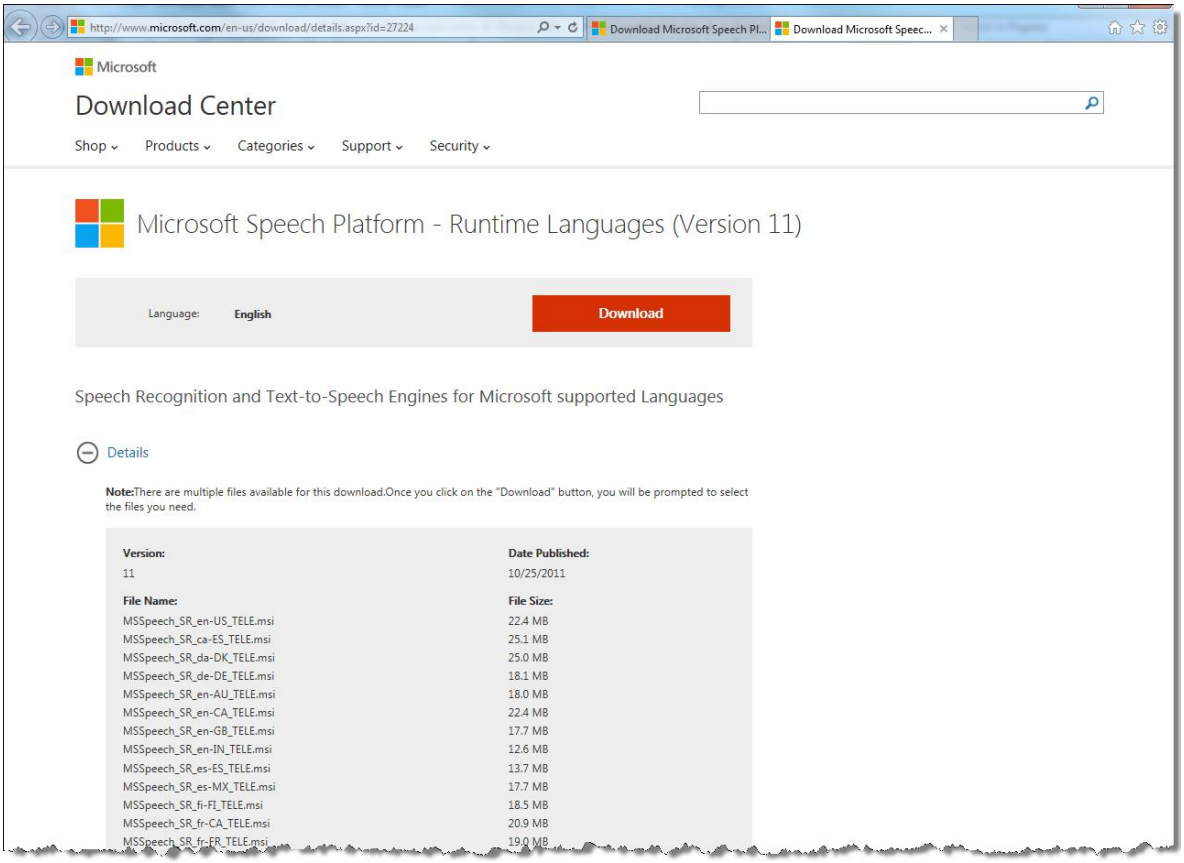
To install additional languages for a Windows 2008 server:

Download and install the languages from Microsoft's Download Center. Download the Runtime (x86) and the appropriate languages.

Link for runtime (x86)
http://www.microsoft.com/en-us/download/details.aspx?id=27225



Link for languages
http://www.microsoft.com/en-us/download/details.aspx?id=27224
The MSSpeech files are required. All of the files are installation files (msi).



Configuring languages within the Voice Control Speech Configuration Dialog Box

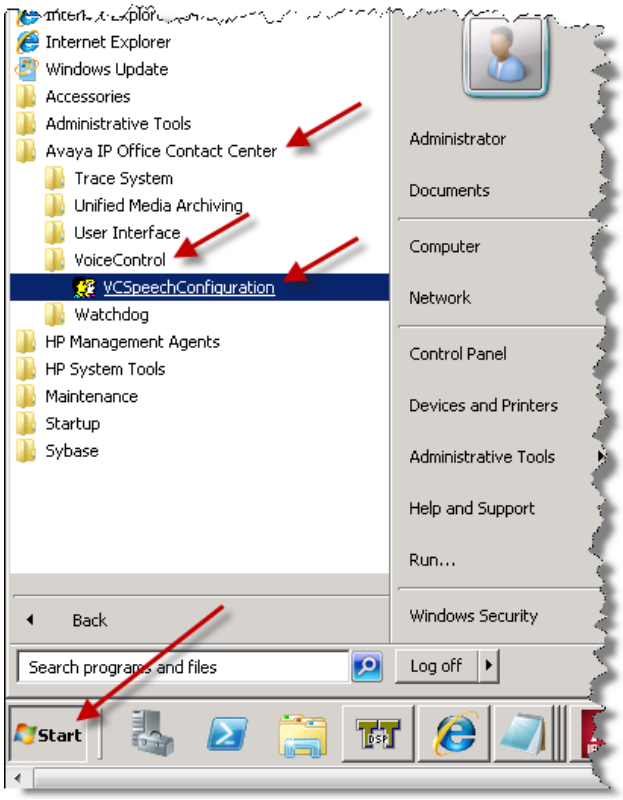
The engines or announcers (TTS) allocated to the individual languages in the Voice Control language configuration, are referenced in:

- the IVR editor in the voice recognition elements
  or
- announcements via TTS under the name of the language.

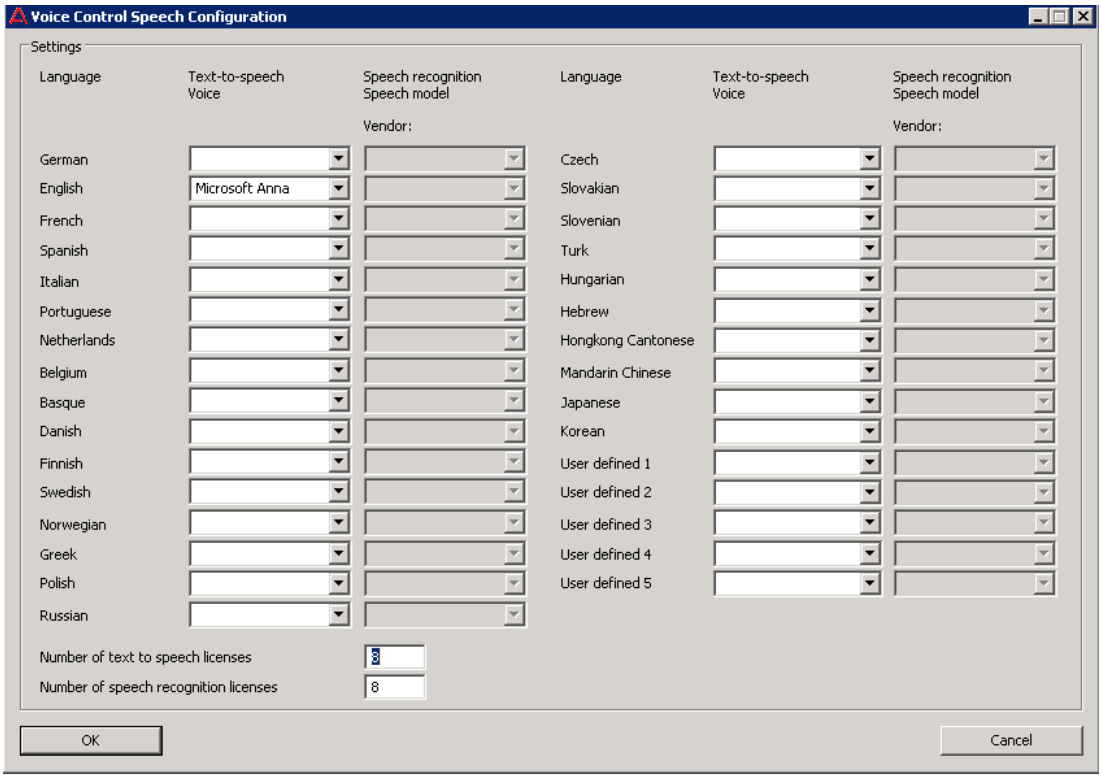
Example: In the TTS element, when choosing "English" the announcer assigned in the language configuration is used.

To be able to run the installed engine(s):

1. Click **Start** followed by **All Programs**, **Avaya IP Office Contact Center - Voice Control, VCSpeechConfiguration**.



2. The **Settings** dialog box is displayed.



3. Select the languages installed for Text To Speech as required.

Avaya Documentation

- http://support.avaya.com/

Avaya IP Office Contact Centre Task Based Guides

- IP Office Contact Centre Configuration Maps
- IP Office Contact Centre Installation
- IP Office Contact Centre Telephony User Interface Configuration
- IP Office Contact Centre Task Flow Editor -Telephony
- IP Office Contact Centre Reporting
- IP Office Contact Centre IVR Scenarios
- IP Office Contact Centre Contact Recorder Configuration
- IP Office Contact Centre Email & Chat Service
- IP Office Contact Centre Maintenance
- IP Office Contact Centre Dialler Configuration

Please note, only the IP Office Contact Centre Task Based Guides listed above are available from Avaya. Further IP Office Task Based Guide documentation as listed below is available directly from ITEL. http://www.iteluk.com/

ITEL IP Office Task Based Guides

Initial Installation

1. IP Office Configuration Maps
2. IP Office Hardware Installation
3. IP Office Initialisation
4. IP Office Manager
5. IP Office Voicemail Pro Initial Installation Guide
6. IP Office Small Community Networking
7. IP Office Customer Call Reporter Initial Installation Guide
8. IP Office Server Edition Configuration
9. IP Office Security Policies

UCM

10. IP Office Unified Communications Module

Core Telephony

11. IP Office Telephony and Call Routing
12. IP Office Short Codes Summary
13. IP Office Hunt Group Setup and Operation
14. IP Office Conferencing
15. IP Office IP Telephony Guide
16. IP Office Computer Telephony Integration – 1st Party

Users, Telephone & Softphone Configuration

17. IP Office Configuring IP Office Phones and User Accounts
18. IP Office Call Handling
19. IP Office Configuring the IP Office Softphone

Auto Attendant & Voicemail

20. IP Office Embedded Voicemail (Intuity Mode) Flowchart
21. IP Office Auto-Attendant Setup and Operation
22. IP Office Embedded Voicemail
23. IP Office Embedded Voicemail Flowchart

Voicemail Pro

24. IP Office Voicemail Pro Summary Guide
25. IP Office Voicemail Pro – Voicemail User Guide

One X Portal & IP Office Applications

26. IP Office One X Portal Guide
27. IP Office One X Mobile Preferred Implementation
28. IP Office Plug-in for Microsoft® Outlook®
29. IP Office MS Lync Plugin
30. IP Office Avaya Flare
31. IP Office One X Mobile Essential

Customer Call Reporter – CCR

32. IP Office Customer Call Reporter Configuration Guide
33. IP Office Customer Call Reporter Wallboard Guide

Contact Store & Receptionist Console

34. IP Office Contact Store
35. IP Office Receptionist Console

Maintenance

36. IP Office Backup and Restore
37. IP Office System Status Application
38. IP Office Upgrade Guide