Avaya

Contact Center Control Manager

Visual Call Flow Designer

User's Guide

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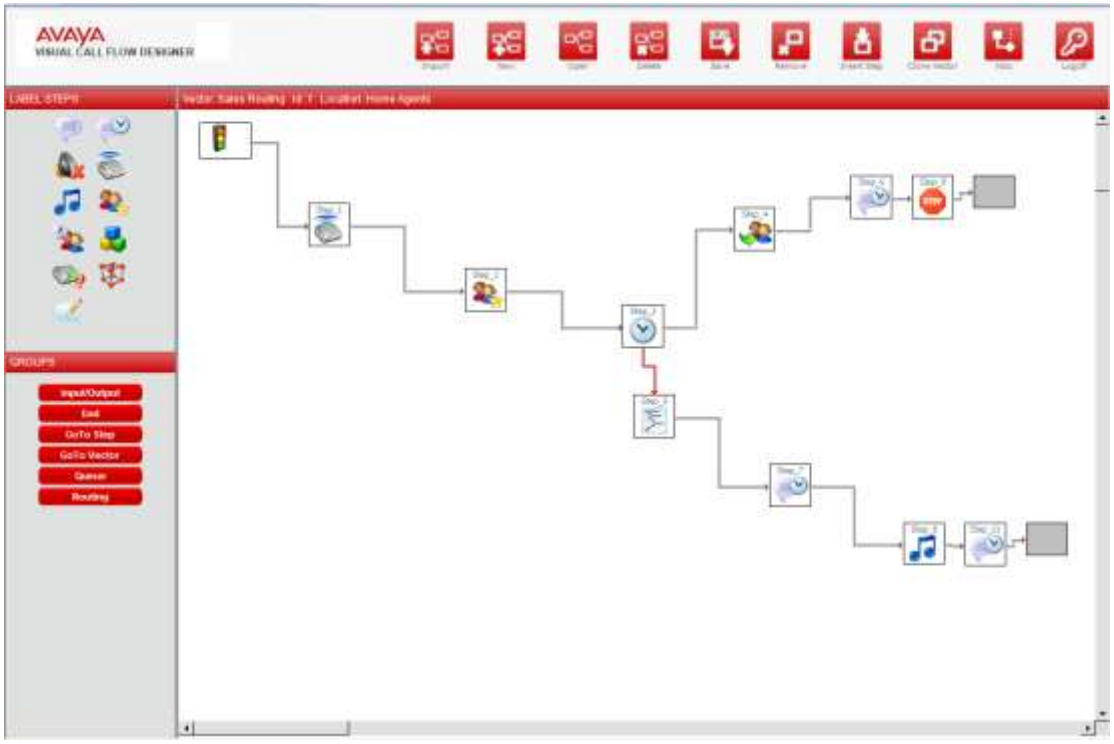
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Visual Call Flow Designer - Overview

AVAYA AURA™ CONTACT CENTER CONTROL MANAGERº Administration includes a visual call flow designer that allows users to design vectors that reside within the Call Center Software on an Avaya Communication Manager (CM) instance with a web based graphical tool that is wrapped by the AVAYA AURA™ CONTACT CENTER CONTROL MANAGER security engine.



The call flow designer allows designing any vector that can be built through the AVAYA Site Administration (ASA) tool with an easy to use drag and drop interface.

Each one of the vectors commands (*queue-to*, *route-to*, *announcement* and etc) is managed through the AVAYA AURA™ CONTACT CENTER CONTROL MANAGER internal security and engine and has "Insert/update/delete" permissions, a thing that allows providing users with permissions only to relevant steps/actions in specific vectors.

The call flow designer is accessible from the AVAYA AURA™ CONTACT CENTER CONTROL MANAGER administrative screen or by a direct URL (Uniform Resource Locator). Simply use the same username and password for the visual call flow designer and for AVAYA AURA™ CONTACT CENTER CONTROL MANAGER Administration.

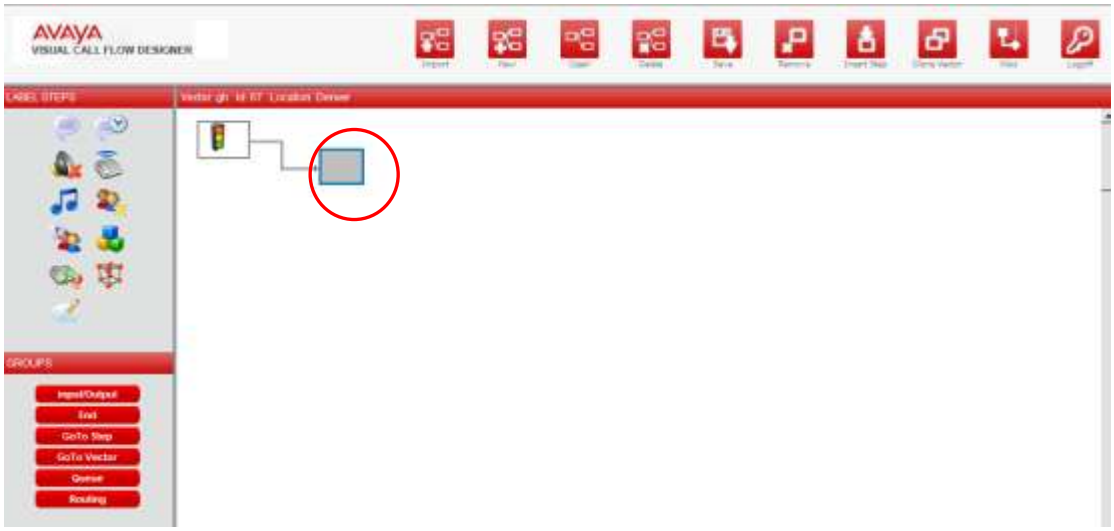
Note: In some version of Microsoft Internet Explorer (I.E.) you might need to click on the F11 button after login process has complotted in order to be able to see the entire User Interface (U.I.). Some tabs and options may be hidden due to screen resolution.

The top toolbar buttons allow you to:



- Validate Vector
- Import Vector
- Create a New Vector
- Open a Saved Vector from the ACCM Database
- Delete a Saved Vector
- Save a Vector
- Remove a Vector Step
- Insert Step
- Clone Vector
- Export Vector to Visio
- Logoff

To create a new vector click on the "new" action button and simply drag and drop the vector step icons into the grey placeholder or placeholders available.



Subsequent placeholders will become available as the vector's flow is being constructed.

Also, by *right-clicking on a vector step* you can edit its properties.

Step Groups

The different vector steps that might be used inside a vector are grouped into groups based on their characteristics.

In the left bottom side of the screen you can find the following groups:



Group Name	Description of Command Line Activity
Input/output	Announcement
End	The "End" group includes all steps that are closing a routing rule (such as *stop*)
Go to step	The "Go to Step" group includes steps that require a decision in the vector. This creates a decision point
Go to Vector	The "Go to Vector" group includes steps that require a decision in the vector. This creates a decision point
Queue	The "Queue" group includes all the steps that queue the calls in the vector
Routing	The "Routing" group includes all the steps that performs the "*route-to*" and "*messaging*" commands

Vector Step Types

Group	Step type	Icon	CM Vector step
Input/Output	Announcement		*Annoucement XXXXXX*
	Time Announcement		*Wait X seconds hearing XXXXX (announcnement number) then* _____
	Silence		*Wait X seconds hearing silence*
	Ringback		*Wait X seconds hearing ringback*
	Music		*Wait X seconds hearing music*
	Reply		*Reply-best* (disabled in version 2.1 of AVAYA AURA™ CONTACT CENTER CONTROL MANAGER)
	Consider		*Consider skill/location ___ pri X adjust by Y*
	Collect		*Collect X digits afer announcment XXXXXX for* ___ (variable)
	Converse		*Converse on skill ___ pri _ passing ___(parameter) and ___ (parameter)*

	Set		*Set ___(variable) = ____(variable/operator) ADD ____(variable/operator)*
End	Stop		*Stop*
	Busy		*Busy*
	Disconnect		*Discconnect after announcement ____ (number/none)*
	Return		*Return*
Go to step	Caller Info		*Go to step X if ani/digits/iidigits _____(=,<,>…) _____(number or variable)*
	Time of Day		*Go to step X if time of the day is X to Y*
	Holiday		*Go to step X if holiday in table ___ (number of holiday table)*
	Server		*Go to step X if server ___ (=,<>) ____-(main/ess/lsp)*
	Variable		*Go to step X if _____(variable) _____(=,<>,<…) _____(variable/numer)* Or *Go to step X if _____(variable) _____(in/not in) _____(table*

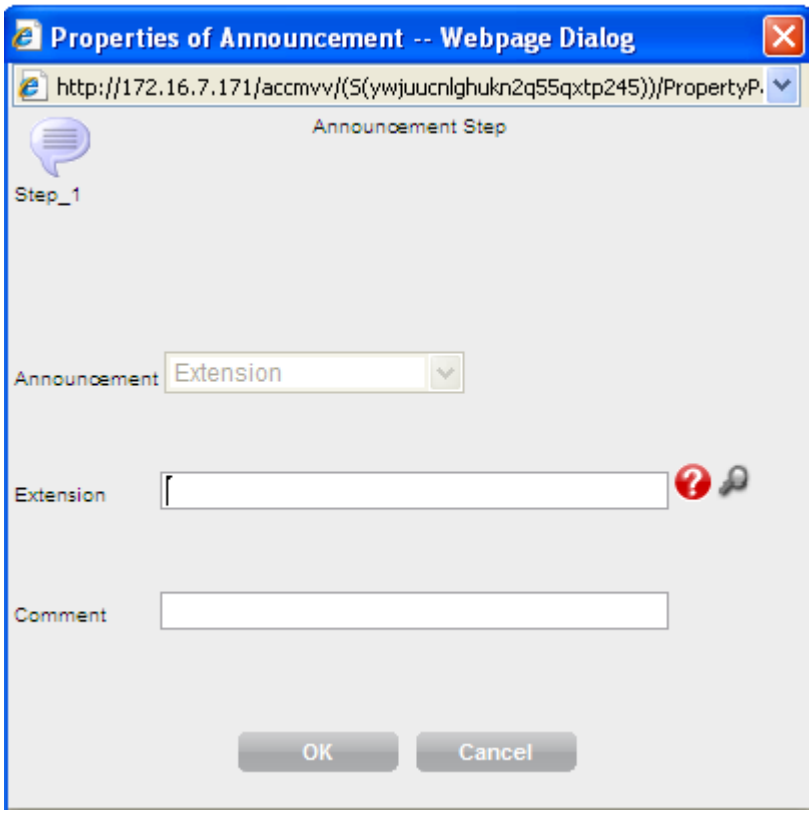
			number)
	Media Gateway / Port- Network		Go to step X if server _____(=,<>) _____(Main/ESS/LSP)
	Agent Activity		*Go to step X if _____(available agents / staffed agents) _____(=,<>,<…) _____(variable/number)*
	Center Info		*Go to step X if _____(count calls / expected wait / rolling asa) _____(to/in)* _____(=,<>,<…) _____(variable/numer)
	Queue Activity		*Go to step X if _____(rolling-asa/calls queued/ interflow –qpos / oldest call waiting /* wait imporved) _____(=,<>,<…) _____(variable/numer)
	Unconditional Go-To		*Go to step X unconditionally*
Queue	Agent Activity		*Check skill X if _____(available agents / staffed agents) _____(=,<>,<…) _____(variable/numer)*
	Unconditionally		*Queue the call to a skill unconditionally*
	Queue Activity Step		*Check X if _____(rolling-asa/calls queued/ interflow –qpos / oldest call waiting / wait imporved) _____(=,<>,<…) _____(variable/numer)*

	Center Info		*Check skill X if _____(count calls / expected wait / rolling asa) _____(to/in) _____(=,<>,<…) _____(variable/numer)*
Go to Vector	Caller Info		*Go to Vector X if ani/digits/iidigits _____(=,<,>…) _____(number or variable)*
	Time of Day		*Go to Vector X if time of the day is X to Y*
	Holiday		*Go to Vector X if holiday in table ___ (number of holiday table)*
	Server		*Go to Vector X if server ___ (=,<>) ____-(main/ess/lsp)*
	Variable		*Go to Vector X if _____(variable) _____(=,<>,<…) _____(variable/numer)* Or *Go to Vector X if _____(variable) _____(in/not in) _____(table number)*
	Media Gateway / Port- Network		Go to *Vector* X if server _____(=,<>) _____(Main/ESS/LSP)
	Agent Activity		*Go to Vector X if _____(available agents / staffed agents) _____(=,<>,<…) _____(variable/number)*

	Center Info		*Go to Vector X if _____(count calls / expected wait / rolling asa) _____(to/in)* _____(=,<>,<…) _____(variable/numer)
	Queue Activity		*Go to Vector X if _____(rolling-asa/calls queued/ interflow –qpos / oldest call waiting /* wait imporved) _____(=,<>,<…) _____(variable/numer)
	Unconditional Go-To		*Go to Vector X unconditionally*

Announcement step

Provides the caller with a recorded announcement.

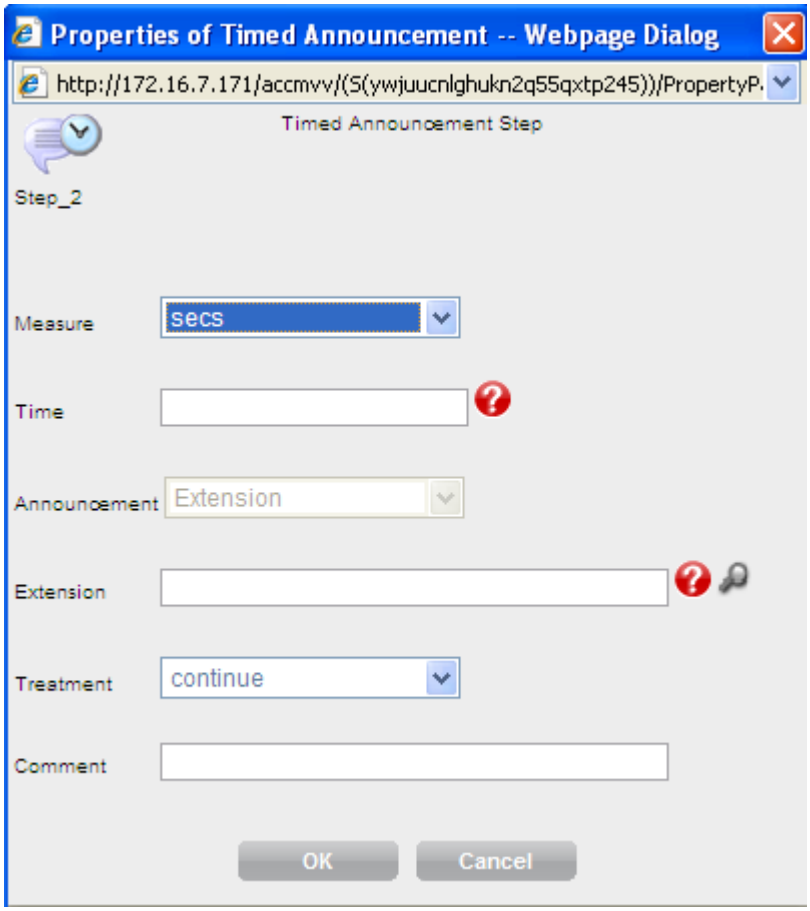


- Enter a valid announcement extension that is within the CM's dial plan being aware that announcements extensions can range from 3 to 7 digits in length. This 7-digit maximum size is enforced if vectoring is active.

When the caller will reach this step they will hear the full announcement and only after the announcement finishes they will move to the next vector step. It is generally a good idea to denote within comments the length of the announcement used.

Timed Announcement step

Provides the caller with a recorded announcement for the defined time period



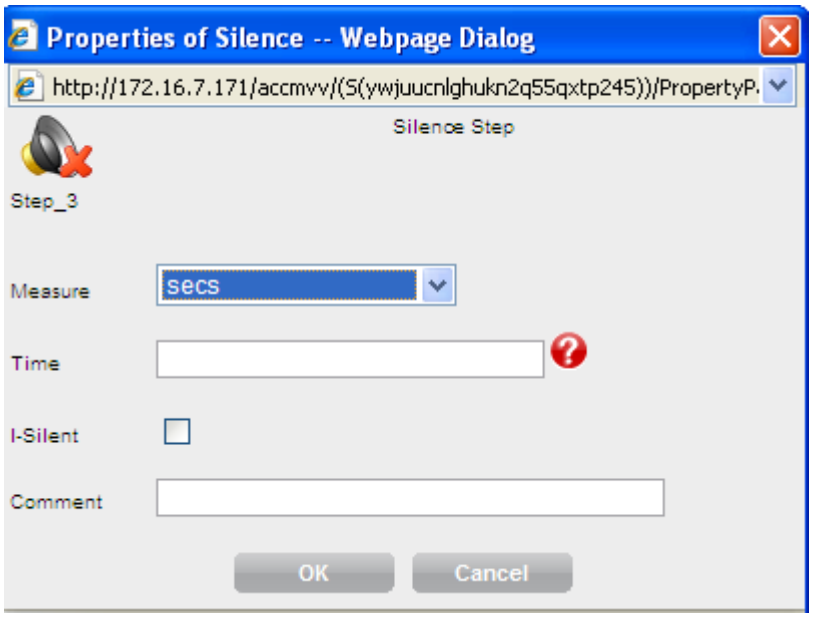
- Enter a valid announcement extension.
- Enter length of announcement in seconds
- Select the treatment (continue/music/ringback/silence)

When the caller reaches this step they will start to hear the announcement which will end after the defined time (the announcement will stop even in the middle) and

then the call will be treated based on the treatment selected. The use of continue will move the caller to the next step.

Silence

Plays silence.

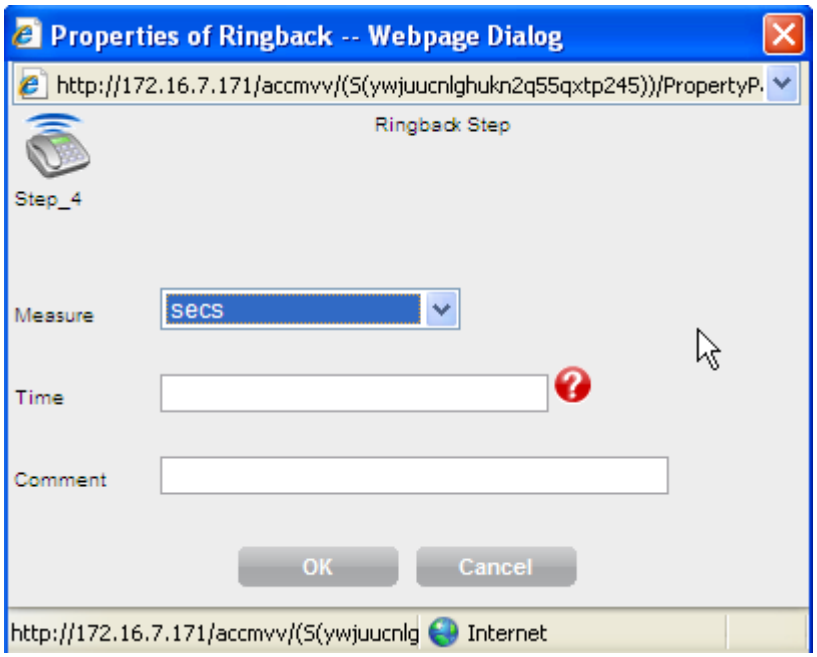


- Enter length in seconds

The caller will hear silence for the duration of the defined time.

Ring back

Plays ringback tone.

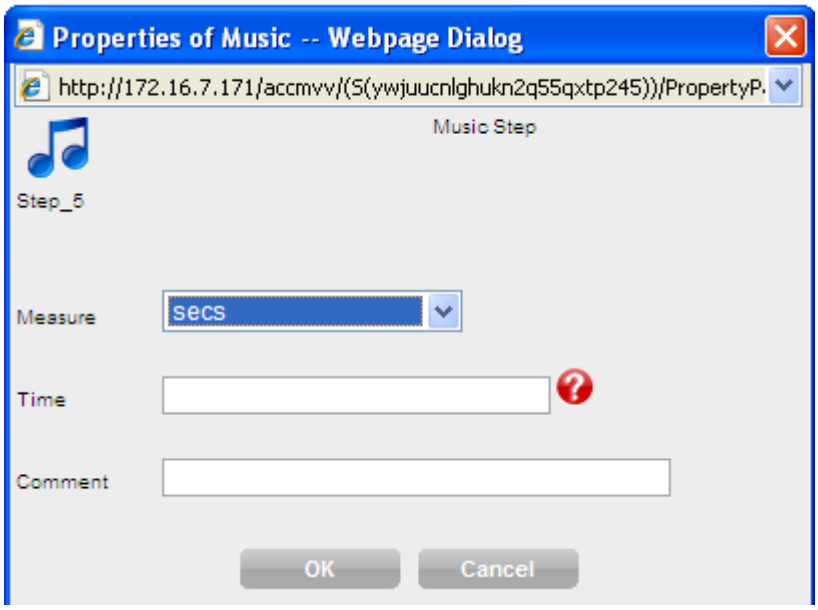


- Enter length in seconds

The caller will hear ringback for the duration of the defined time.

Music

Plays music (as defined in the Communication Manager).

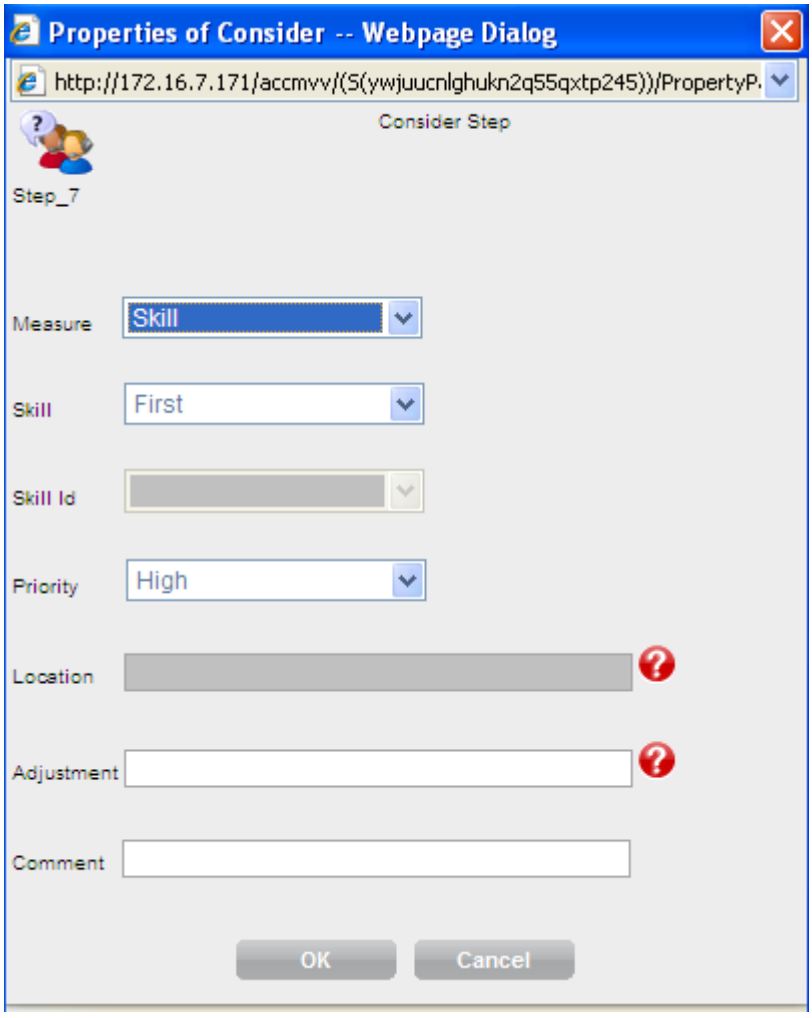


- Enter length in seconds

The caller will hear music for the duration of the defined time.

Consider

The *consider* command defines the resource (skill or location) that is checked as part of a Best Service Routing (BSR) consider series and obtains the data that BSR uses to compare resources. After the consider series has been executed, a *queue-to best* or *check-best* command can queue the call to the "best resource" that has been identified (for more information please refer to the Avaya Call Vectoring Guide).



Select Measure = skill or location

In case skill is selected:

- Select either 1st, 2nd or 3rd skill (VDN skills) or the direct Skill id
- If Skill ID is selected then you will have to select from the skill ID list (as defined in AVAYA AURA™ CONTACT CENTER CONTROL MANAGER).
- Select the skill priority

In case location is selected:

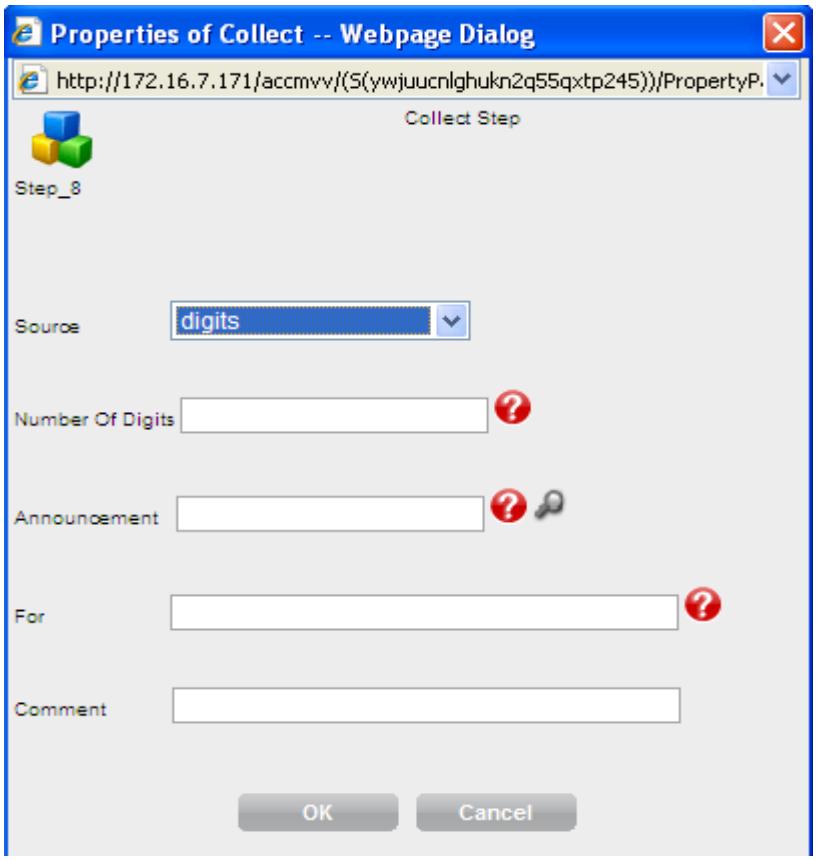
- Select the location number

Adjustment

You may have preferences as to which skills should answer certain types of arriving ACD calls. In Call Center Elite which includes both Single-Site Best Service Routing (BSR) and Multi-Site Best Service Routing BSR, the *adjust-by* portion of the *consider* command allows you to program these preferences into your vectors. (for more information please refer to the Avaya Call Vectoring Guide).

Collect

The collect digits command allows the user to enter up to 16 digits from a touch-tone phone as well as allowing vector to retrieve Caller INformation FOrwarding (CINFO) digits from the AT&T network. CED is the acronym for Call Entered Digits and CDPD is the acronym for Customer Date Provided Digits.



Source - *digits /ced/cped*

CED is the acronym for Call Entered Digits and CDPD is the acronym for Customer Date Provided Digits.

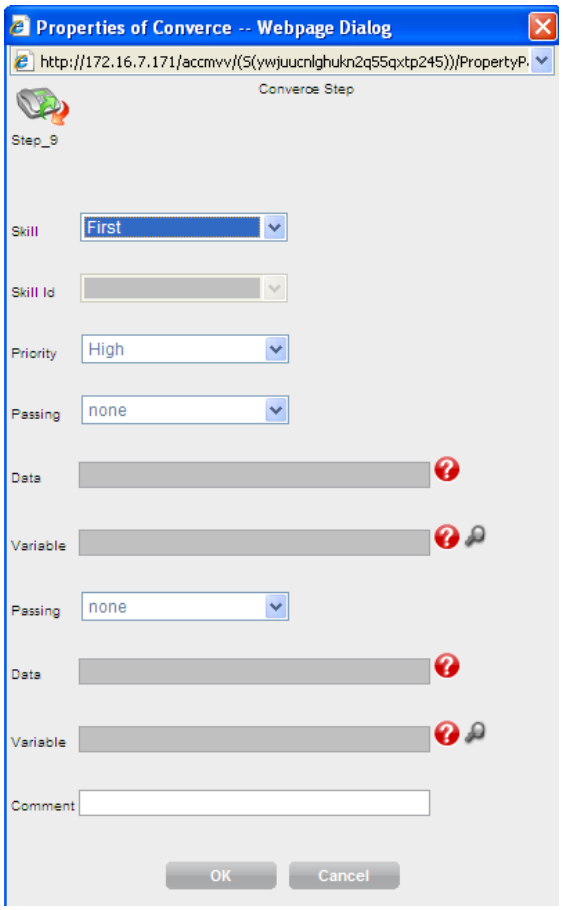
Number of digits – the quantity of digits the system will store

Annulment = which announcement will be played before the digits collection. Enter a valid message extension from the CM's dial plan.

For – where to store the collected digits (none/variable)

Converse

Voice Response Integration (VRI) allows integration of Call Vectoring with the capabilities of voice response units (VRUs), particularly the Avaya Interactive Response (IR) or a newer Avaya Voice Portal (AVP) system (for more information please refer to the Avaya Call Vectoring Guide).



In case skill is selected:

- Select either 1st, 2nd or 3rd skill (VDN skills) or the direct Skill id (number).
- If Skill ID is selected then you will have to select from the skill ID list (as defined in AVAYA AURA™ CONTACT CENTER CONTROL MANAGER).
- Select the skill priority

Passing Data with Converse-On:

Select what data to pass as part of the *converse-on* step in vectoring. There are several types of data that can be passed:

- VDN (Vector Directory Number)
- ANI (Automatic Number Identification)
- QPOS (Queue Position)
- WAIT

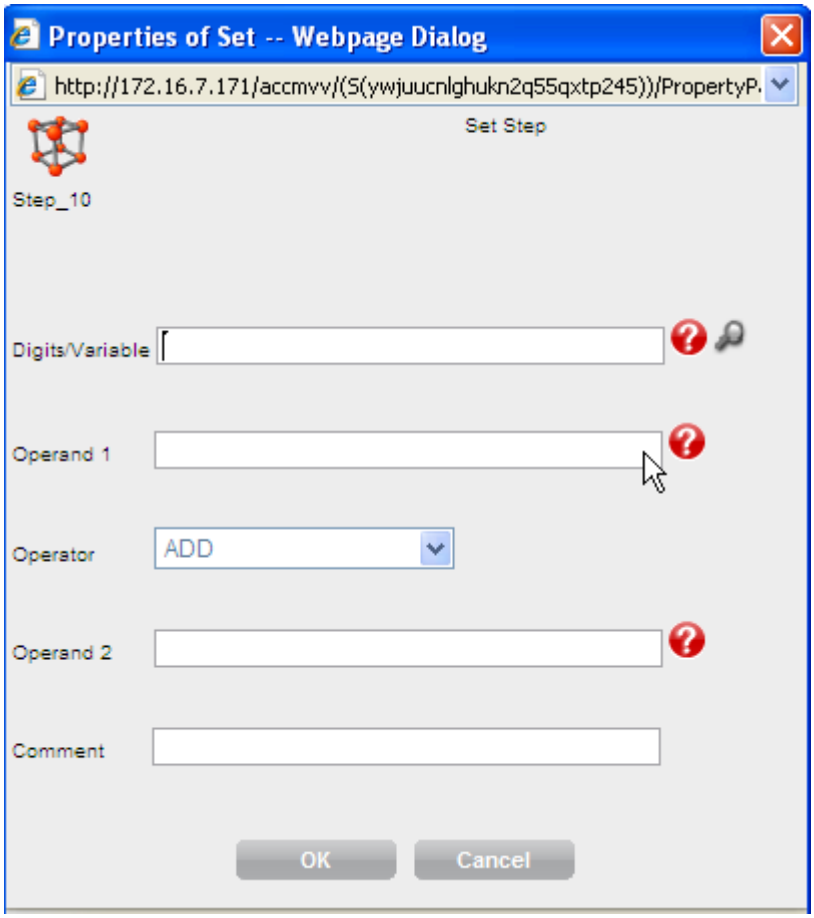
In case data is selected then you can enter manually the data required in the data field.

In case variable is selected you can enter which variable to pass

Set

The *set* vector command can do the following tasks:

- Perform numeric and digit string operations
- Assign values to a user-assignable vector variable or to the digits buffer during vector processing

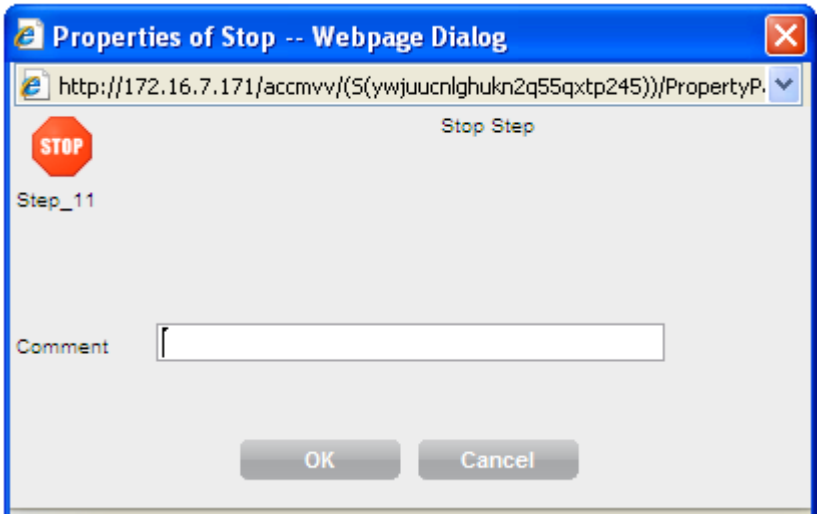


- Digits/variable - enter a digit or a variable
- Operand 1 – enter *digits/none/variable*
- Operator (select action)

- Operand 2 – enter *digits/none/variable*

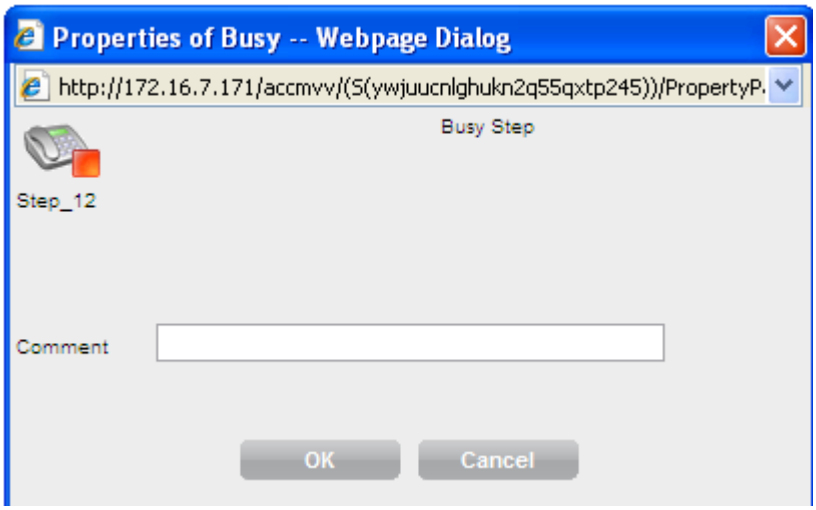
Stop

The *stop* command halts the processing of any subsequent vector steps.



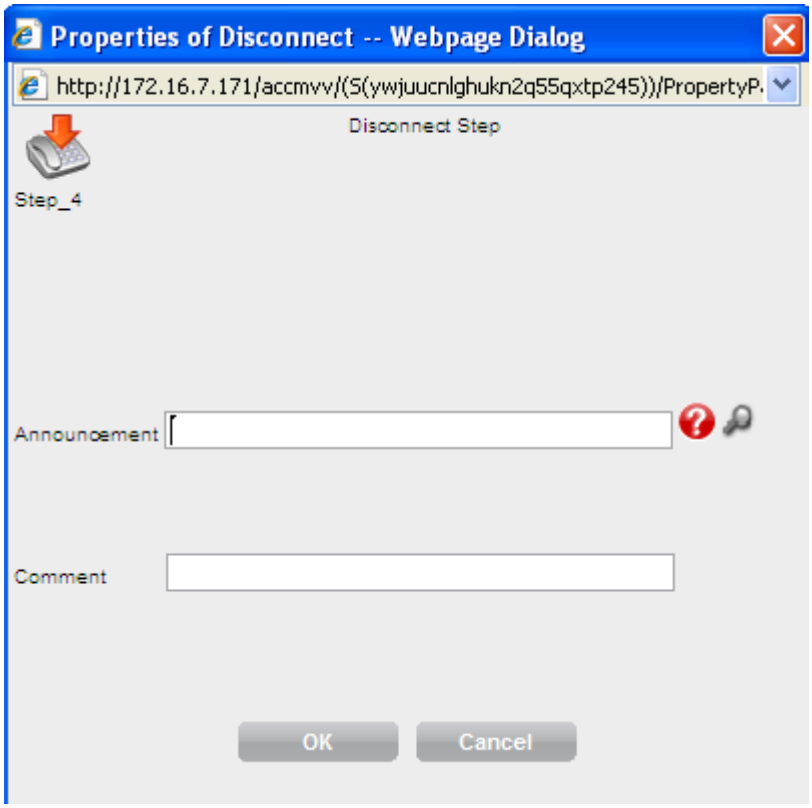
Busy

The *busy* command gives the caller a busy signal and causes termination of vector processing.



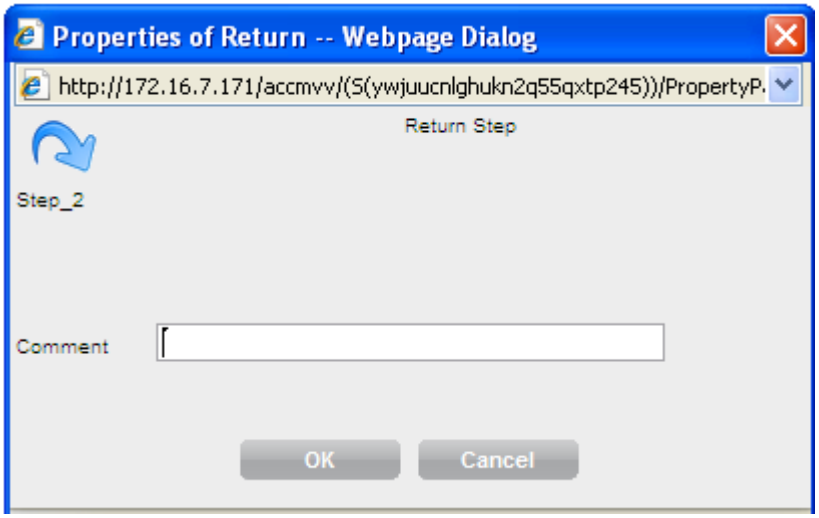
Disconnect

The *disconnect* command ends treatment of a call and removes the call from the Avaya Communication Manager (switch). Also allows the optional assignment of an announcement that will play immediately before the *disconnect* command.



Return

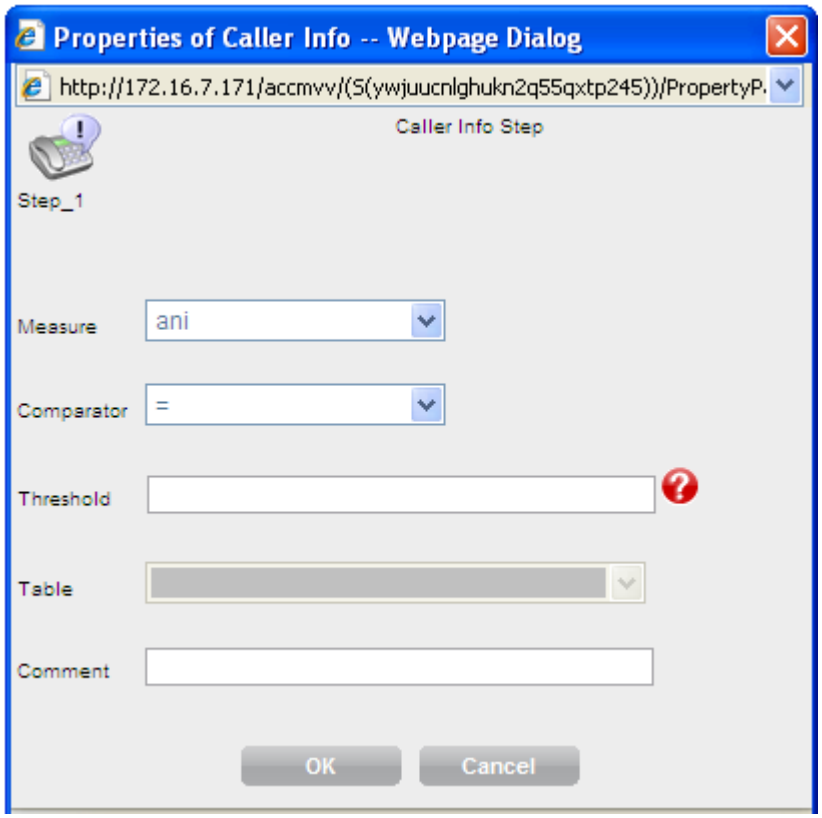
The *goto vector* command can invoke a subroutine call. After the subroutine has processed, the *return* command returns vector processing to the step following the *goto vector* command.



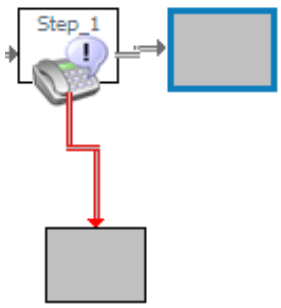
Caller Info

Allows the user to make a decision in the vector based upon the caller info details.

This step generates a junction in the vector with an "IF" decision



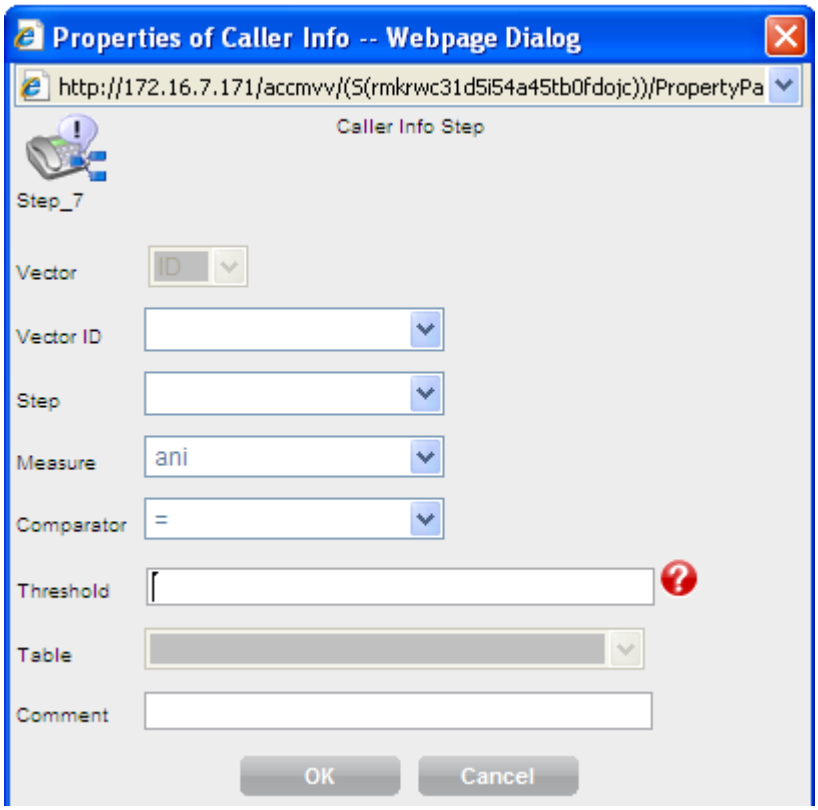
- Measure – *ANI, Digits, Information Indicator (II) Digits*
- Compare – select an action
- Threshold - enter a threshold



Caller Info – go to vector

Allows the user to make a decision in the vector based upon the caller info details.

This step generates a junction in the vector with an "IF" decision



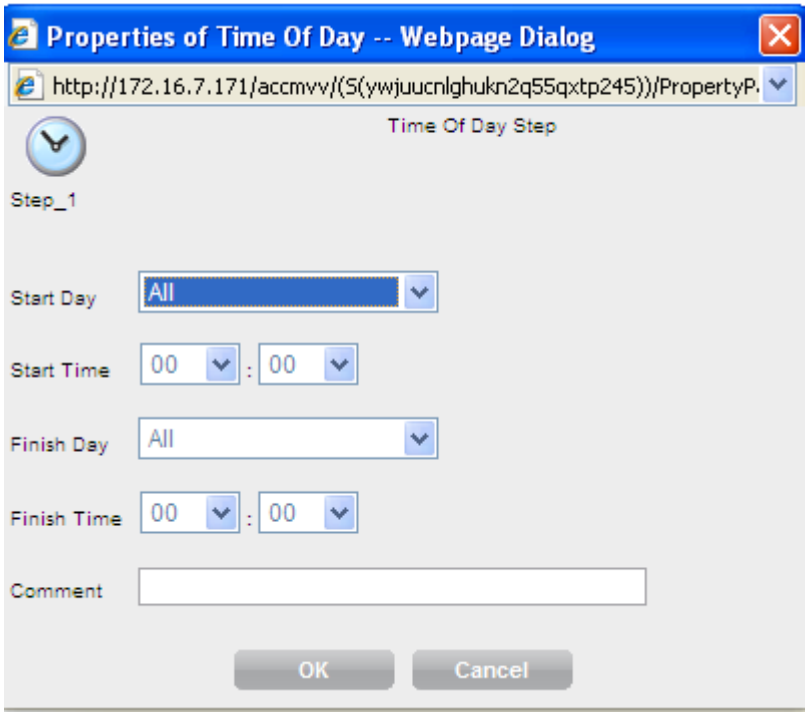
- Measure – *ANI, Digits, II-Digits*
- Compare – select an action
- Threshold - enter a threshold
- Vector ID – the vector number that the call will be routed to



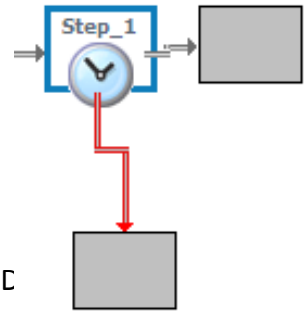
Time of the day

Allows the user to make a decision in the vector based on the time-of-day.

This step generates a junction in the vector with an "IF" decision



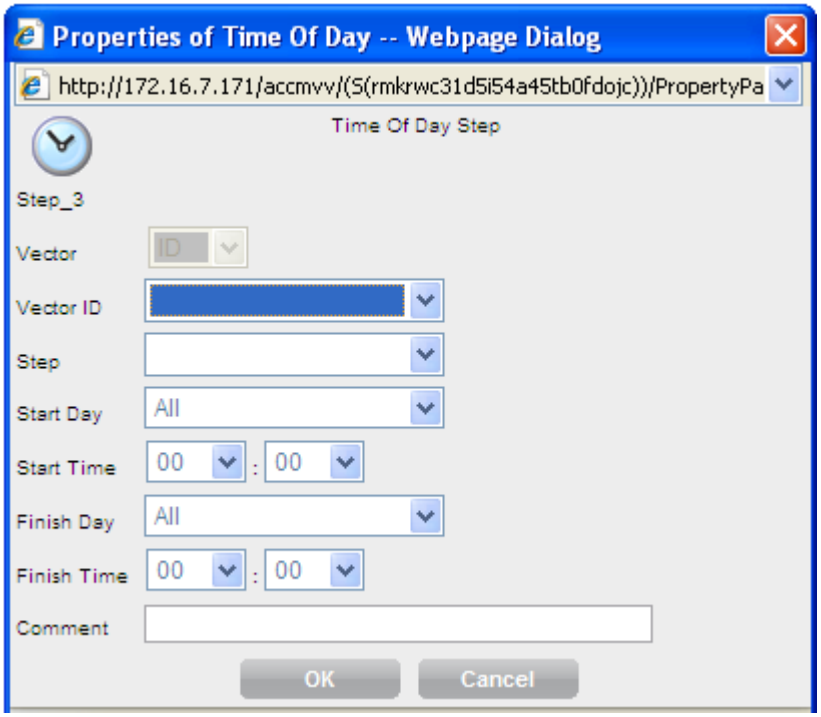
- start day – select the *day-of-week* or "*all*" for all days
- Start time
- Finish day – select the *day-of- week* or "*all*" for all days
- Finish time



Time of Day – go to vector

Allows the user to make a decision in the vector based upon time-of-day.

This step generates a junction in the vector with an "IF" decision



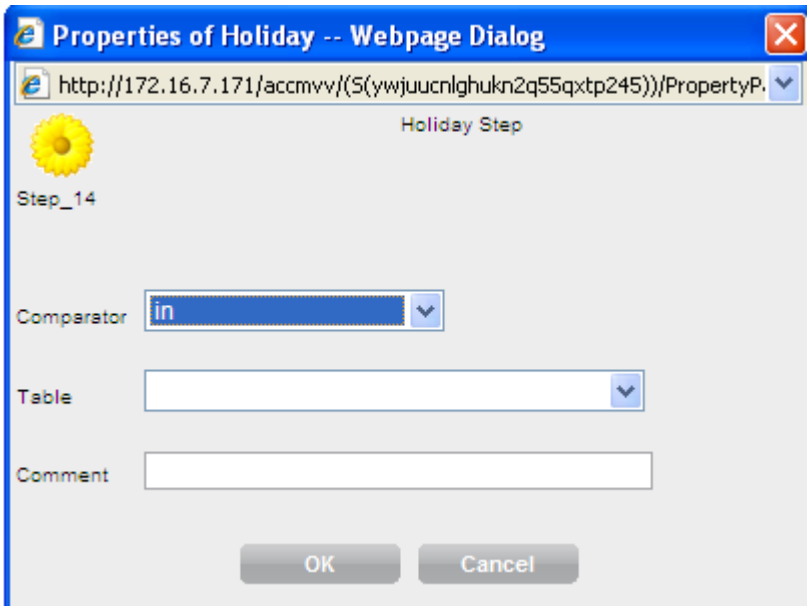
- start day – select the *day-of-week* or "*all*" for all days
- Start time
- Finish day – select the *day-of-week* or "*all*" for all days
- Finish time

- Vector id = the vector number that call will be routed 

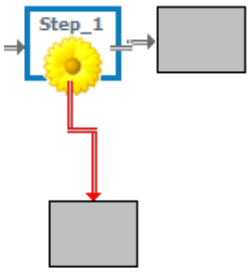
Holiday

Allows the user to make a decision in the vector based contents in the Holiday Table based within the Communication Manager.

This step generates a junction in the vector with an "IF" decision



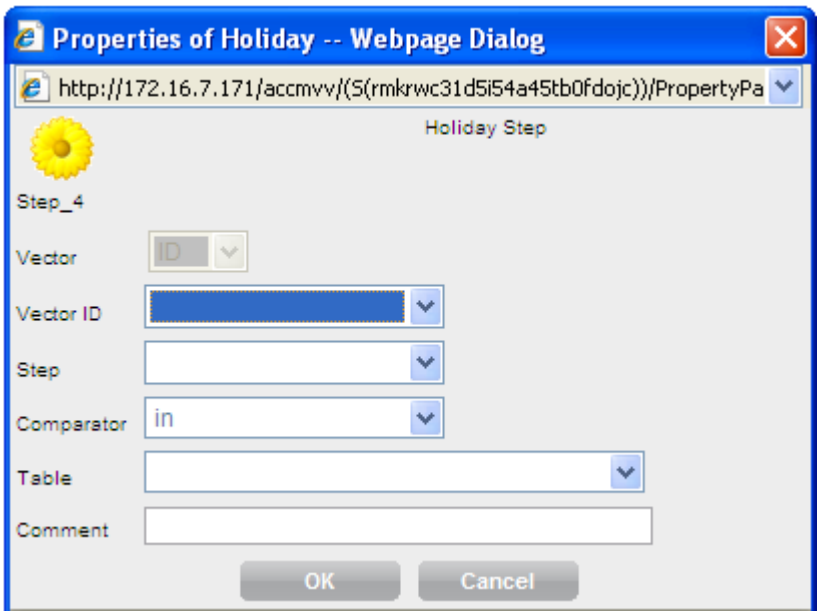
- Comparator – select either "in" or "not in"
- Table – CM Holiday Table number



Holiday – go to vector

Allows the user to make a decision in the vector based upon contents in the Holiday Table within the Communication Manager.

This step generates a junction in the vector with an "IF" decision



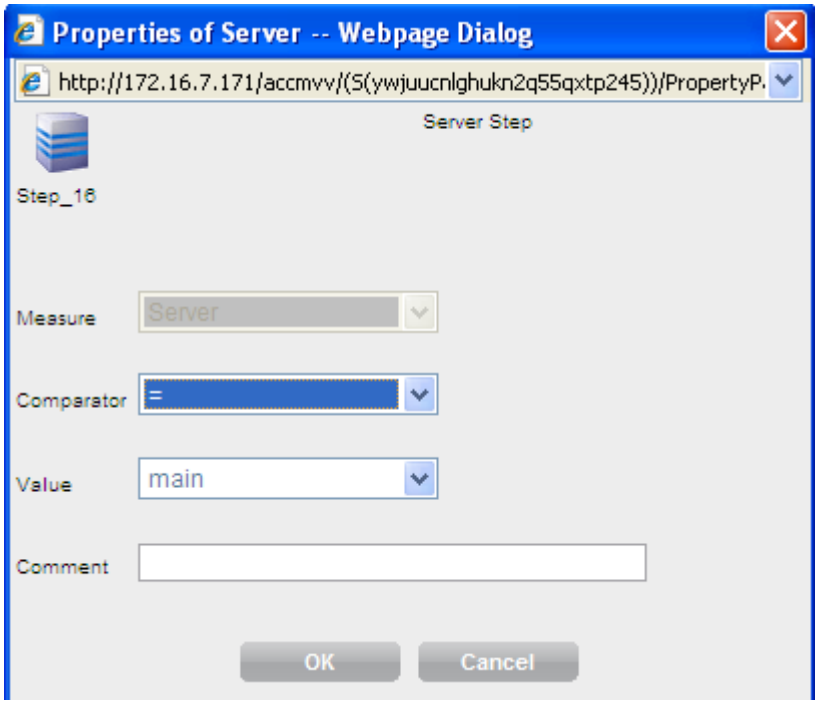
- Comparator – select either "in" or "not in" as in "in table" or " not in table"
- Table – CM holiday table number
- Vector id = the vector number that the call will be routed to



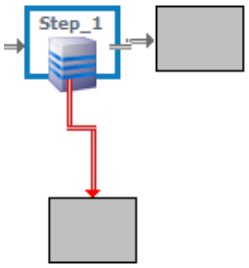
Server

Allows the user to make a decision in the vector based on the type of Avaya Server that is actually handling the call.

This step generates a junction in the vector with an "IF" decision



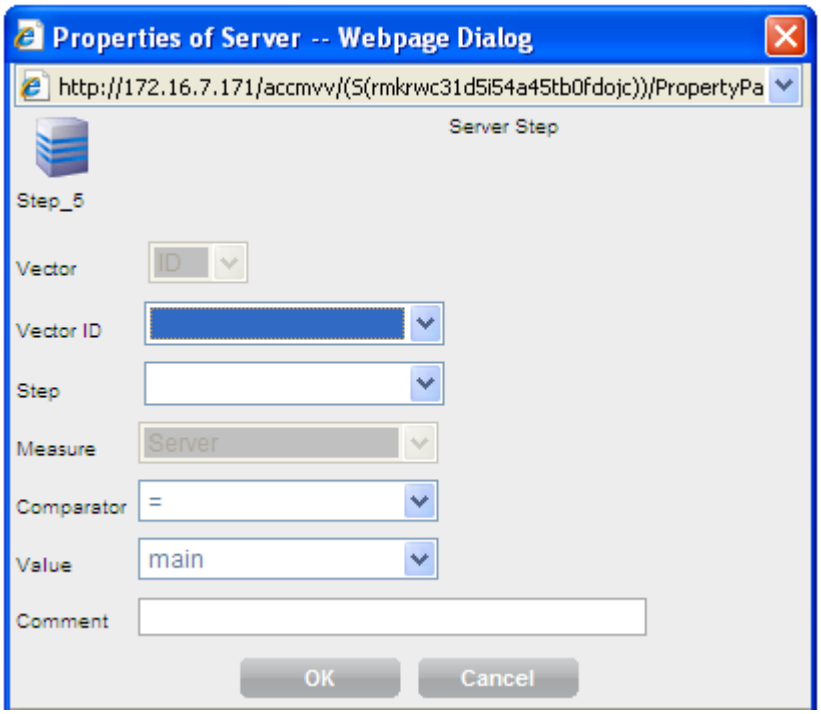
- Comparator = either = *or* <>
- Value = *Main* / *ESS* (Enterprise Survivable Server) / *LSP* (Local Survivable Server)



Server – go to vector

Allows the user to make a decision in the vector based on the type of Avaya Server that handles the call.

This step generates a junction in the vector with an "IF" decision



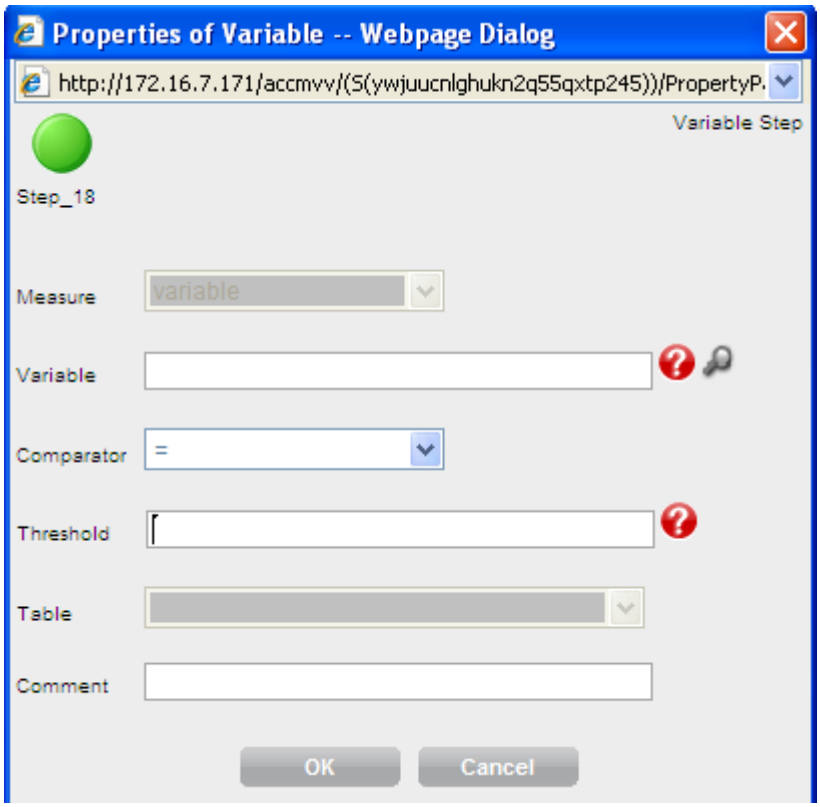
- Comparator = either = or <>
- Value = *Main / ESS / LSP*
- Vector id = the vector number that the call will be routed to



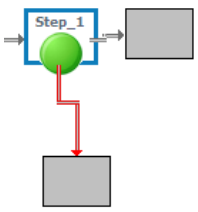
Variable

Allows the user to make a decision in the vector based on the type of Avaya Server that is handling the call.

This step generates a junction in the vector with an "IF" decision



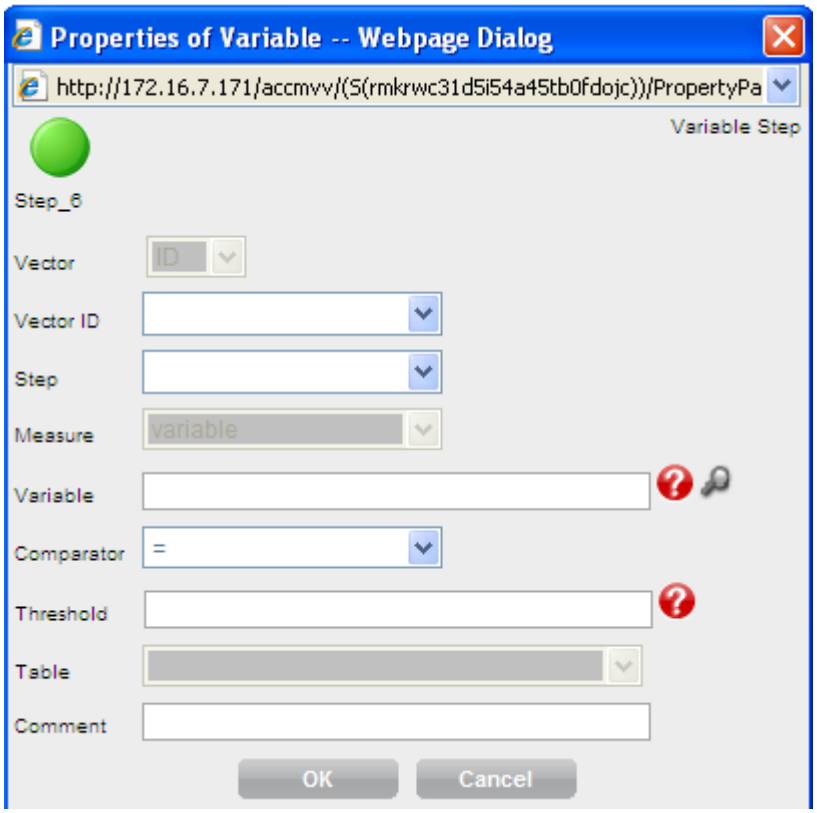
- Variable - is a variable within the Call Center Elite Software residing on the Avaya Communication Manager
- Comparator – select a comparator , in case "in" or "not in" are selected the table field will become active and a valid CM table should be selected (instead of a threshold)
- Threshold – select either a variable or a number



Variable – go to vector

Allows the user to make a decision in the vector based on the type of Avaya Server that is handling the call.

This step generates a junction in the vector with an "IF" decision



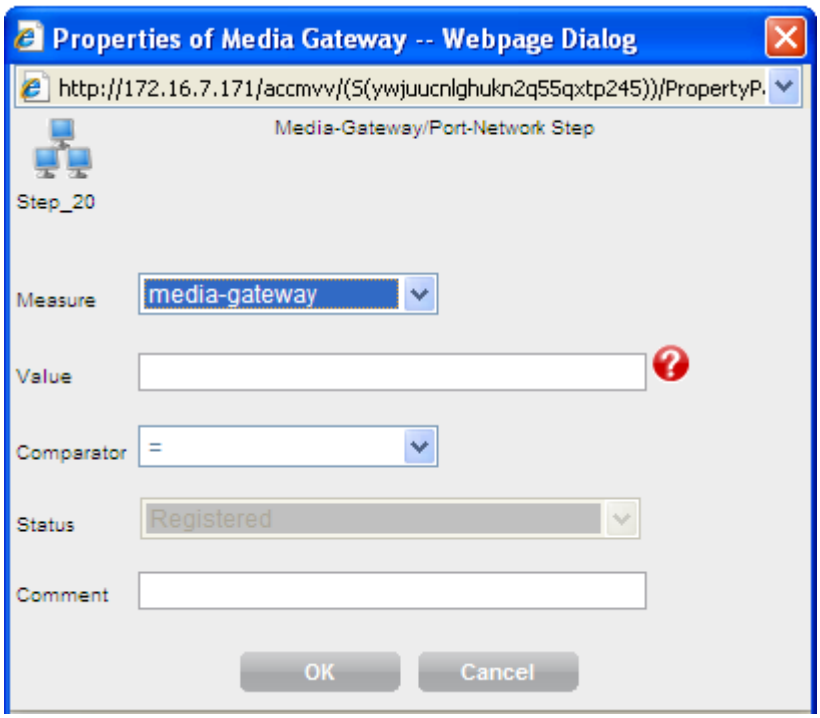
- Variable - variable found within the Elite software on the CM
- Comparator – select a comparator , in case "in" or "not in" are selected the table field will become active and a valid CM table should be selected (instead of a threshold)
- Threshold – select either a variable or a number
- Vector id = the vector number that the call will be routed to



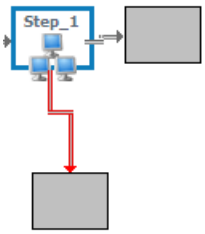
Media gateway / port network

Allows the user to make a decision within the vector based on the media gateway or port network that handles the call.

This step generates a junction in the vector with an "IF" decision



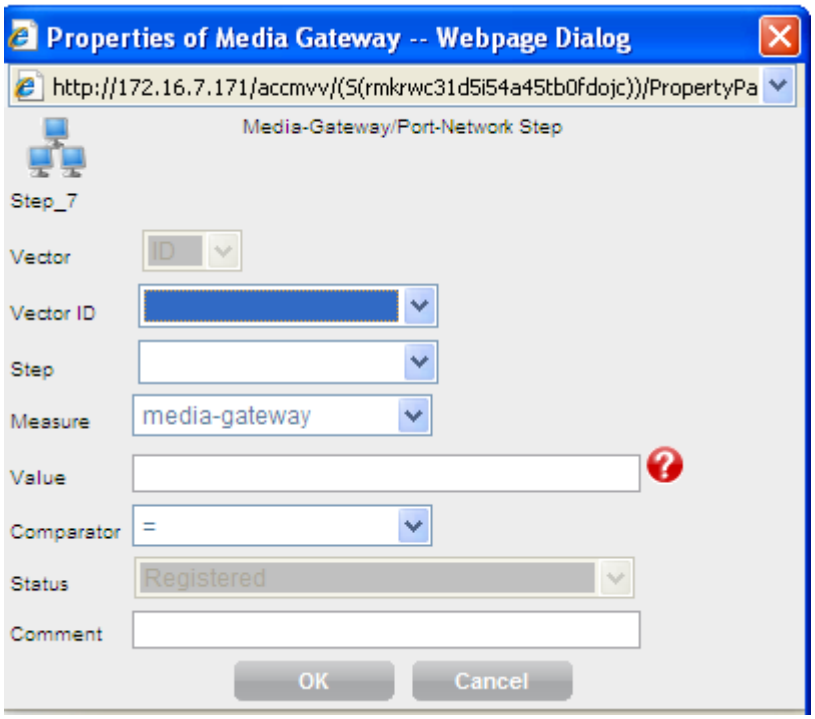
- Measure = select either a *port-network* or a *media-gateway*
- Value = enter the number of a port-network or media-gateway
- Comparator = select a valid comparator



Media gateway / port network – go to vector

Allows the user to make a decision within the vector based upon the media-gateway or the port- network that handles the call.

This step generates a junction in the vector with an "IF" decision



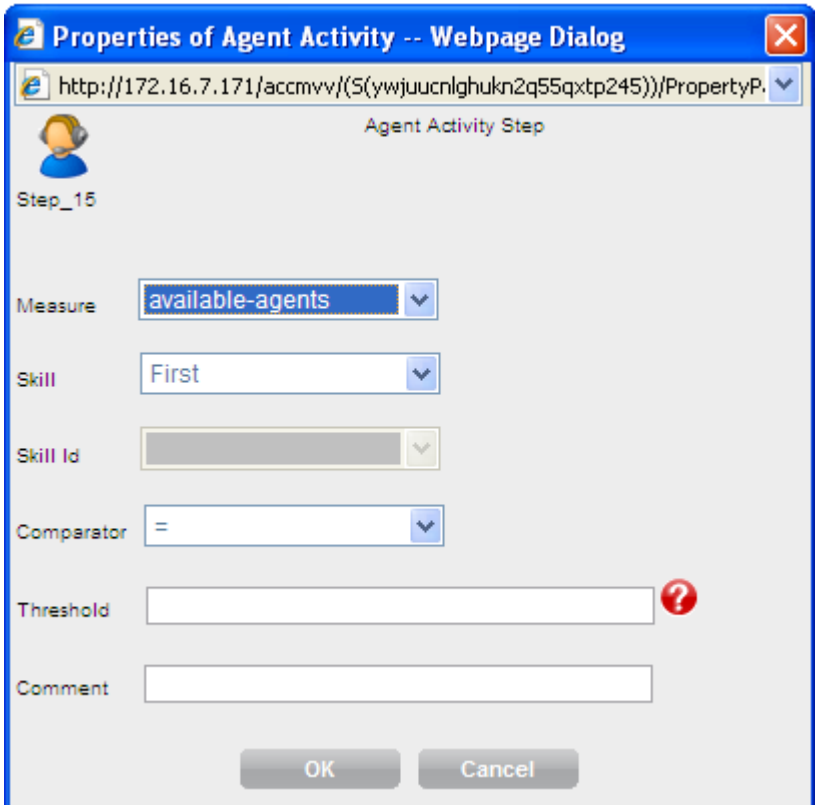
- Measure = select either a port network or a media gateway
- Value = enter the number of a port network or media gateway
- Comparator = select a valid comparator
- Vector id = the vector number that the call will be routed to



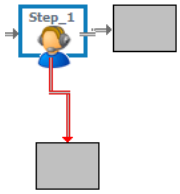
Agent activity

Allows the user to make a decision in the vector based on the agent staffing activity.

This step generates a junction in the vector with an "IF" decision



- Measure – select either *available agents* or *staffed agents*
- Select either 1st, 2nd or 3rd skill (VDN skills) or the direct skill id
- If Skill ID is selected then you will have to select from the skill ID list (as defined in AVAYA AURA™ CONTACT CENTER CONTROL MANAGER).
- Select the skill priority
- Comparator = select a valid comparator
- Select a threshold

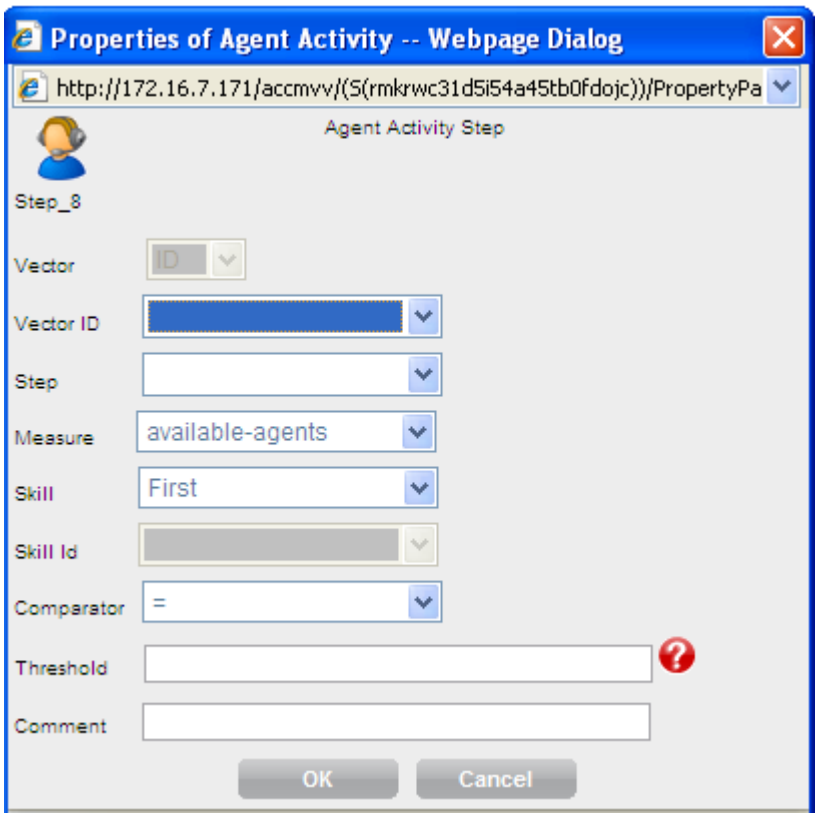


- Vector id = the vector number that the call will be routed to

Agent activity - go to vector

Allows the user to make a decision in the vector based on the agent staffing activity.

This step generates a junction in the vector with an "IF" decision



- Measure – select either *available agents* or *staffed agents*
- Select either 1st, 2nd or 3rd skill (VDN skills) or the skill id
- If Skill ID is selected then you will have to select from the skill ID list (as defined in AVAYA AURA™ CONTACT CENTER CONTROL MANAGER).
- Select the skill priority

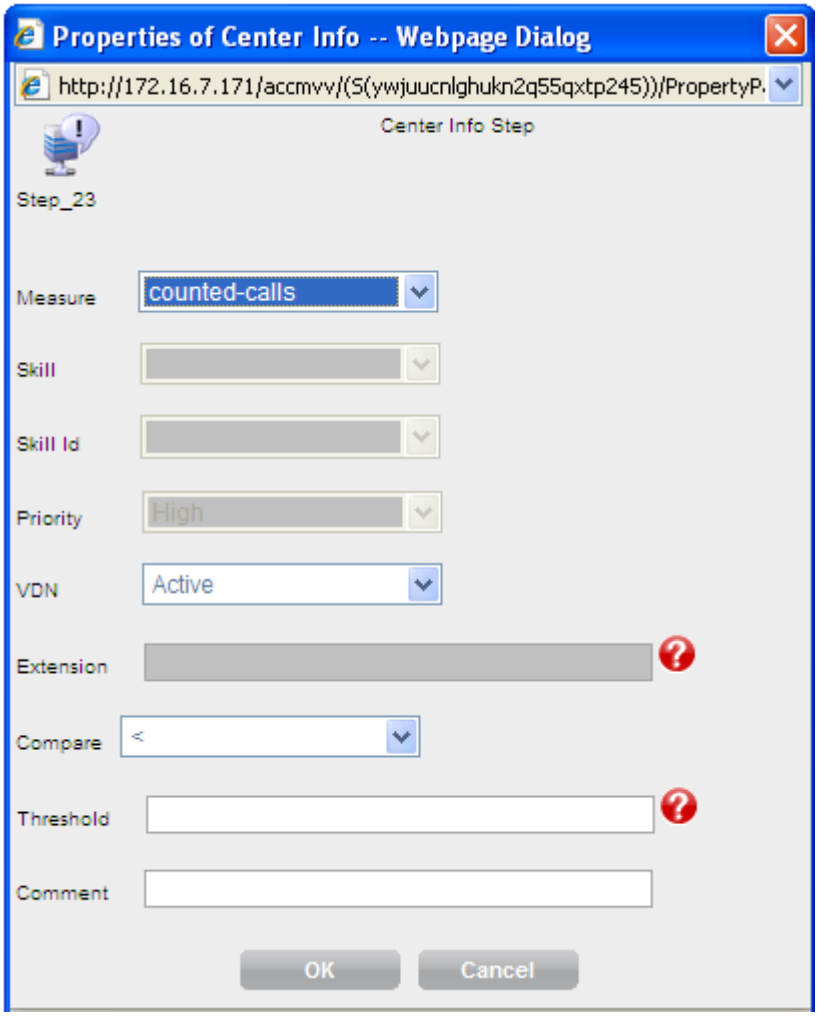


- Comparator = select a valid comparator
- Select a threshold

Center Info

Allows the user to make a decision in the vector based upon call center statistics.

This step generates a junction in the vector with an "IF" decision



- Measure :

Measure Value	Required Field

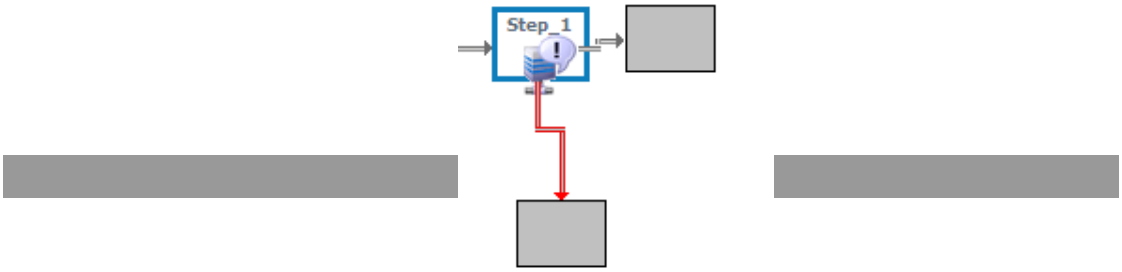
Counted calls	VDN
Expected Wait Time (EWT)	Skill
Rolling-VDN	VDN

Skill:

- Select either 1st, 2nd or 3rd skill (VDN skills) or the direct Skill Id
- If Skill ID is selected then you will have to select from the skill ID list (as defined in AVAYA AURA™ CONTACT CENTER CONTROL MANAGER).

VDN:

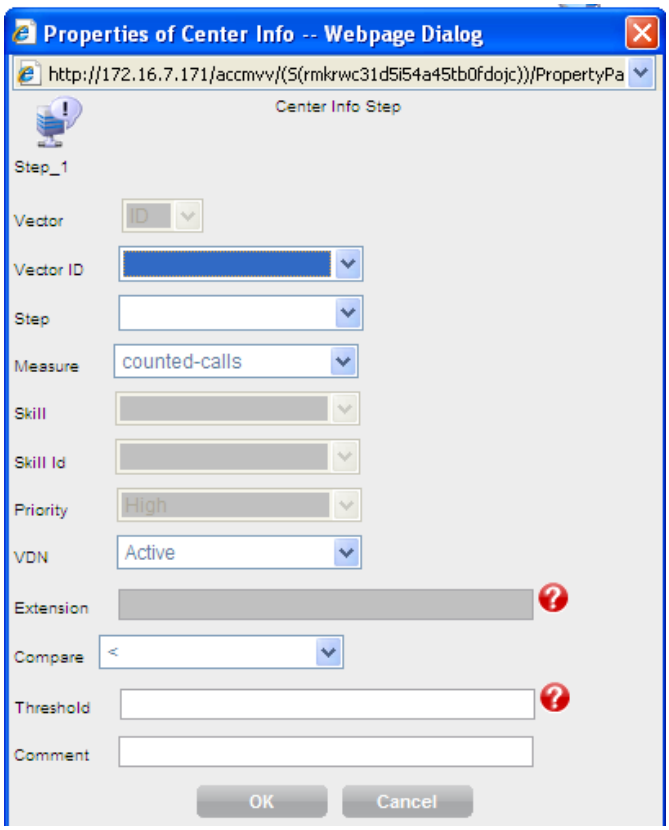
- Active – current VDN
- Latest – the previous VDN
- Extension – enter an extension in the extension field



Center Info – go to vector

Allows the user to make a decision in the vector based on call center statistics.

This step generates a junction in the vector with an "IF" decision



- Measure :

Measure Value	Required Field
Counted calls	VDN
Expected wait time (EWT)	Skill
Rolling-VDN	VDN

Skill:

- Select either 1st, 2nd or 3rd skill (VDN skills) or the Skill Id
- If Skill ID is selected then you will have to select from the Skill ID list (as defined in AVAYA AURA™ CONTACT CENTER CONTROL MANAGER).

VDN:

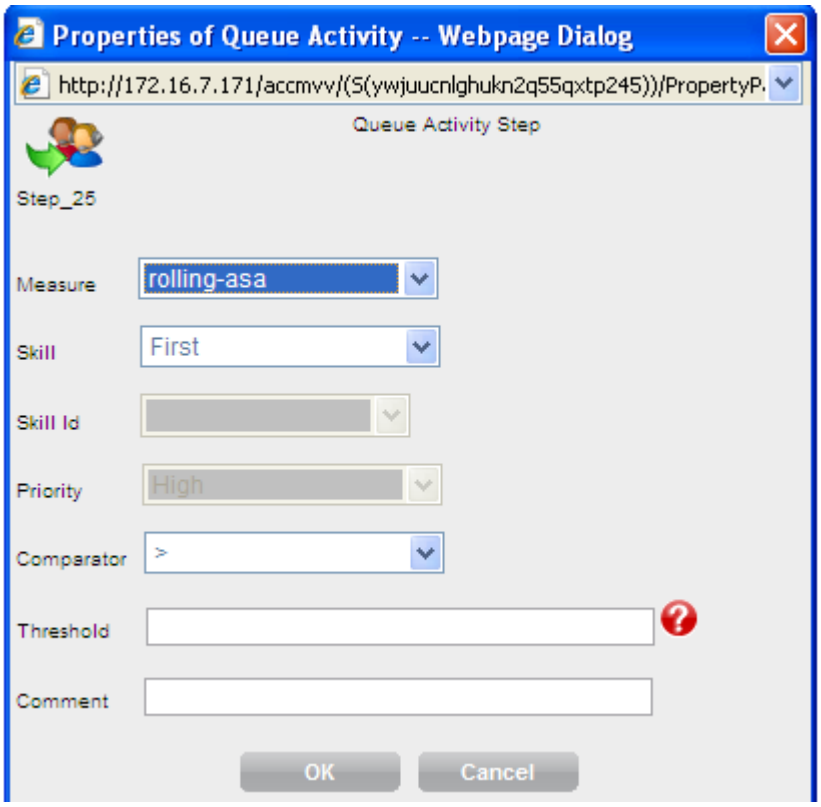
- Active – current VDN
- Latest – the previous VDN
- Extension – enter an extension in the extension field



Queue Activity

Allows the user to make a decision in the vector based on queue statistics.

This step generates a junction in the vector with an "IF" decision



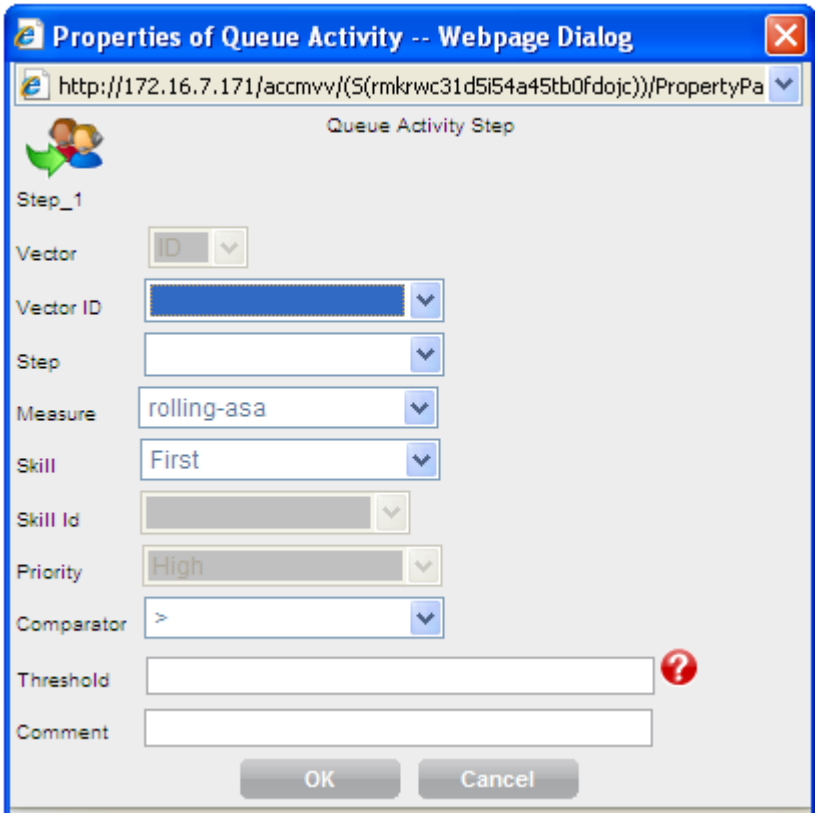
- Measure – *Rolling asa, calls queued, interflow-qpos, oldest call waiting, wait improved*
- Select either 1st, 2nd or 3rd skill (VDN skills) or the skill id
- If Skill ID is selected then you will have to select from the skill ID list (as defined in AVAYA AURA™ CONTACT CENTER CONTROL MANAGER).
- Comparator = select a valid comparator

- Select a threshold

Queue Activity – go to vector

Allows the user to make a decision in the vector based on queue statistics.

This step generates a junction in the vector with an "IF" decision

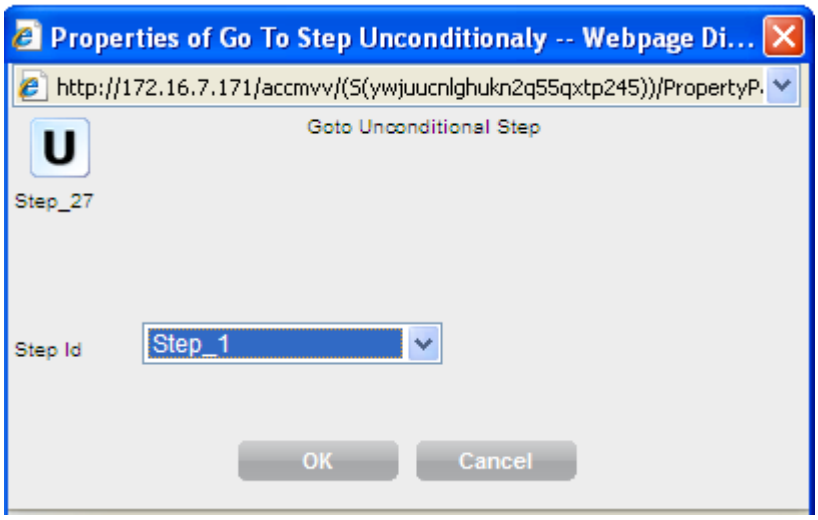


- Measure – *Rolling asa, calls queued, interflow-qpos, oldest call waiting, wait improved*
- Select either 1st, 2nd or 3rd skill (VDN skills) or the skill id
- If Skill ID is selected then you will have to select from the skill ID list (as defined in AVAYA AURA™ CONTACT CENTER CONTROL MANAGER).
- Comparator = select a valid comparator
- Select a threshold



Go to step unconditionally

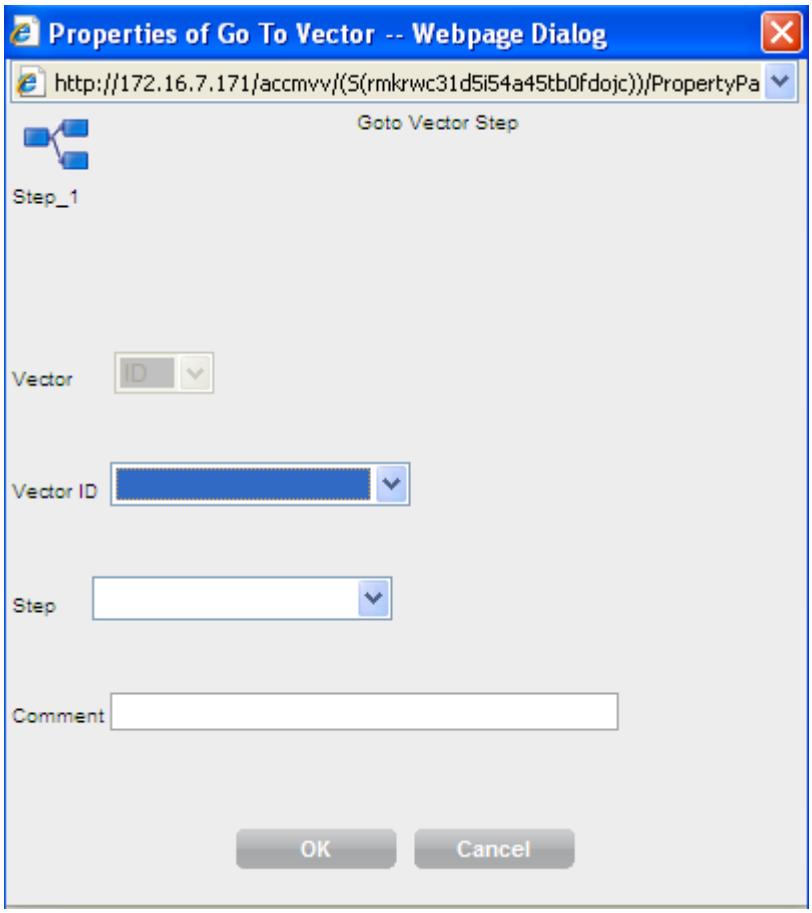
This step moves the call to another vector step *unconditionally*



Select a step from the selection menu.

Go to vector unconditionally

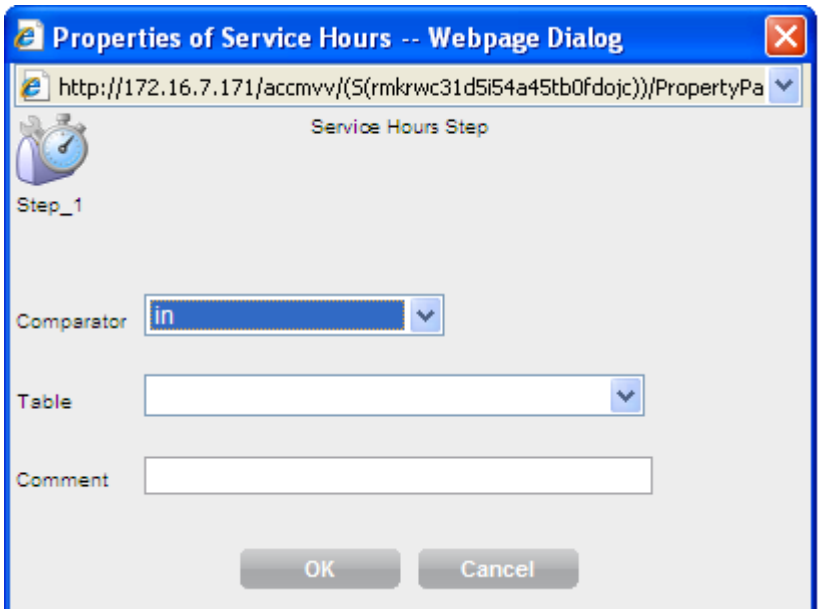
This step moves the call to another vector step *unconditionally*



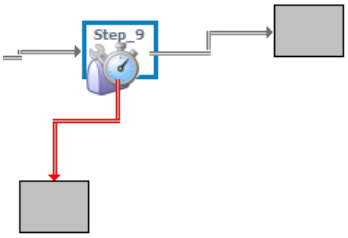
Select a step from the selection menu.

Service hours

This step moves the call to another vector step based on information within the selected Service Hours Table.

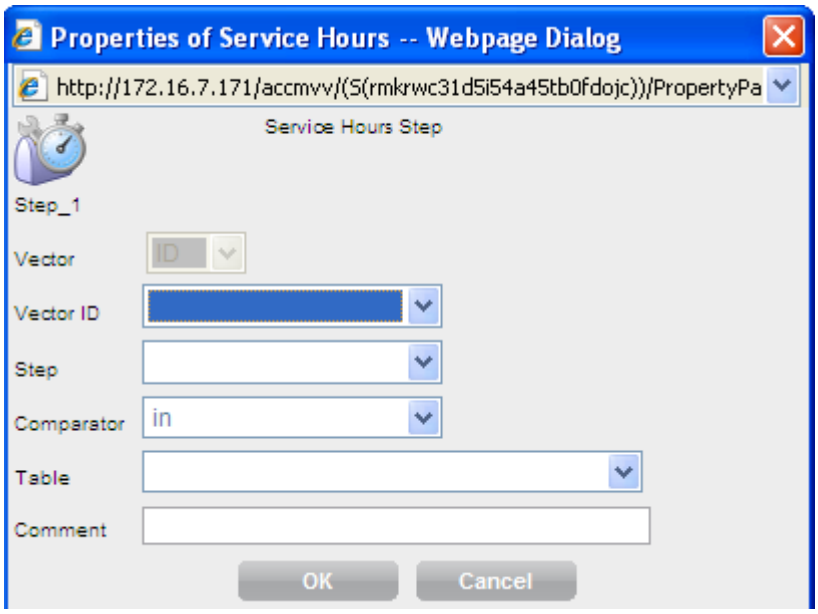


- Comparator = select a valid comparator
- Select the appropriate *service hours table*



Service hours – go to vector

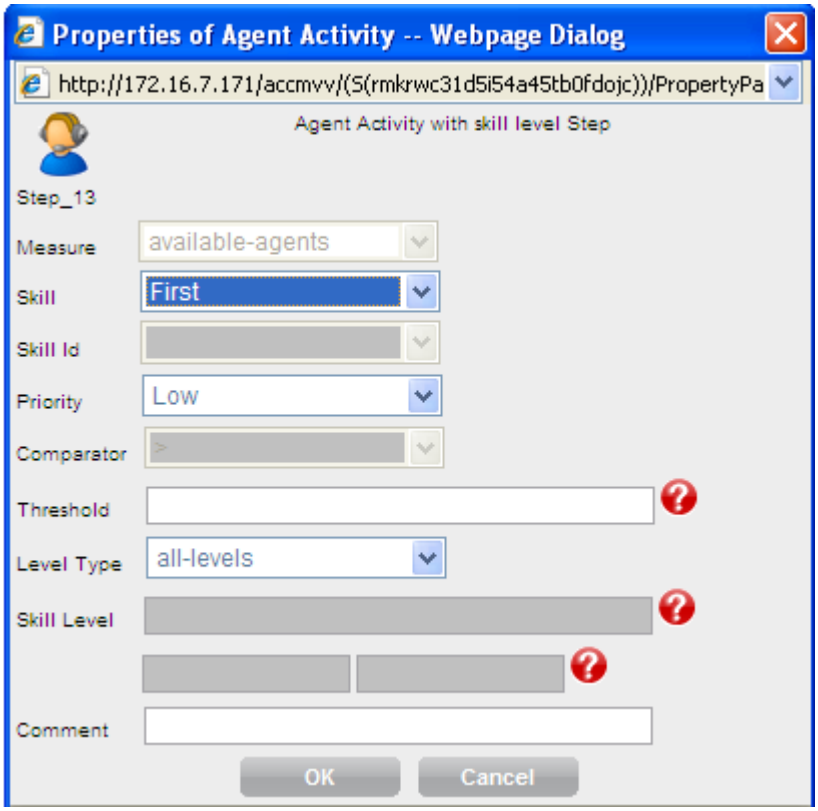
This step moves the call to another vector step based upon within the service hours table



- Vector id = The four digit number of the vector that the call will move to
- Step = The Step Number (ranging from 1-99) that the call will start from
- Comparator = select a valid comparator
- Select the desired *service hours table*

Agent activity

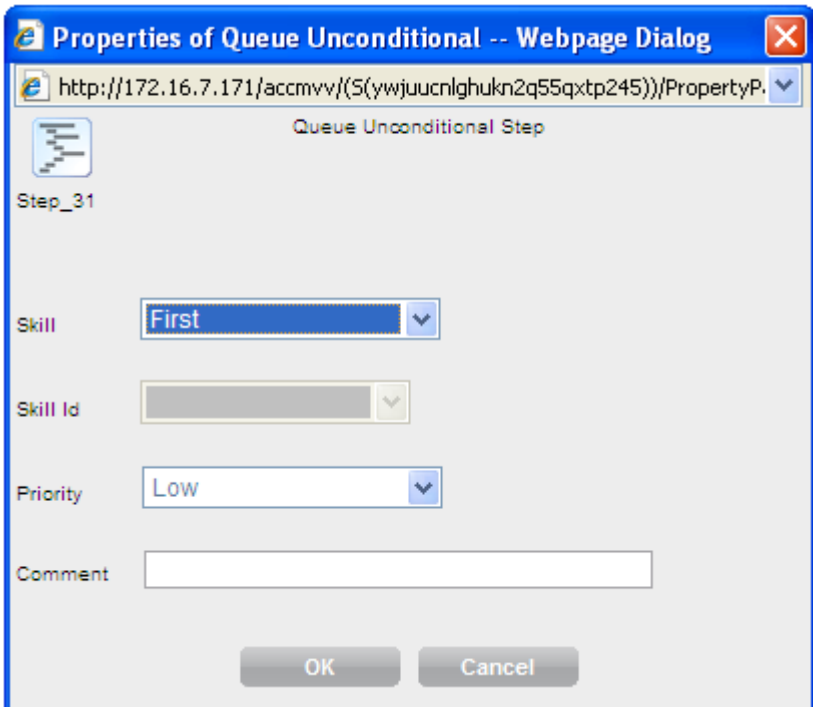
Checks the status of a skill/split for possible termination of the call to that skill (or possibly, split).



- Measure – select either *available agents / staffed agents*
- Select either 1st, 2nd or 3rd skill (VDN skills) or the direct Skill Id
- If Skill ID is selected then you will have to select from the skill ID list (as defined in AVAYA AURA™ CONTACT CENTER CONTROL MANAGER).
- Comparator = select a valid comparator
- Select a threshold

Queue unconditionally

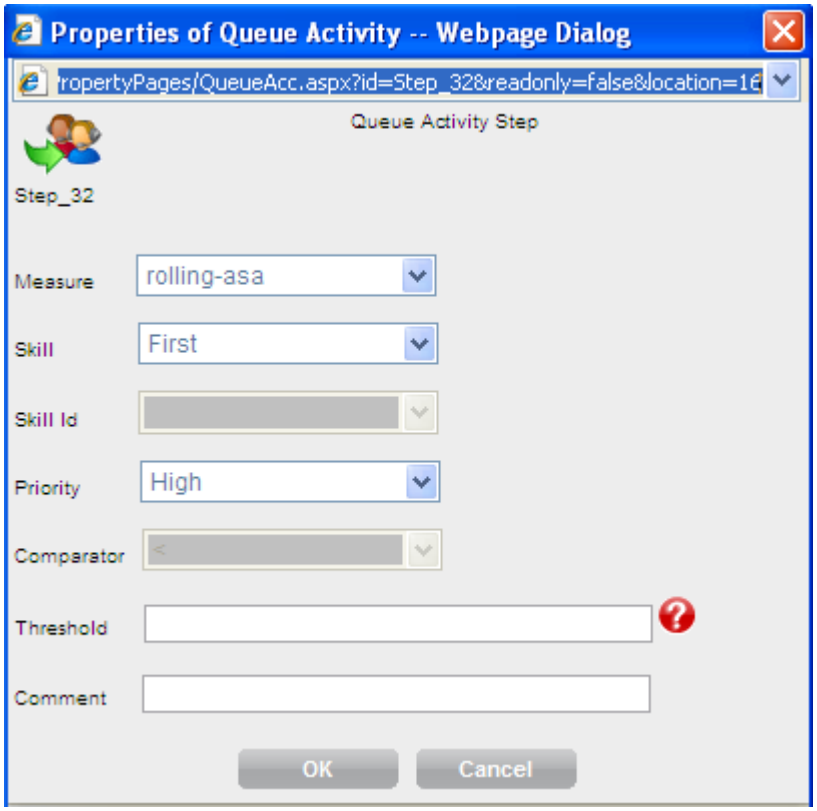
Inserts the call to a *queue unconditionally*.



- Select either 1st, 2nd or 3rd skill (VDN skills) or the direct Skill Id.
- If Skill ID is selected then you will have to select from the skill ID list (as defined in AVAYA AURA™ CONTACT CENTER CONTROL MANAGER).
- Priority

Queue activity

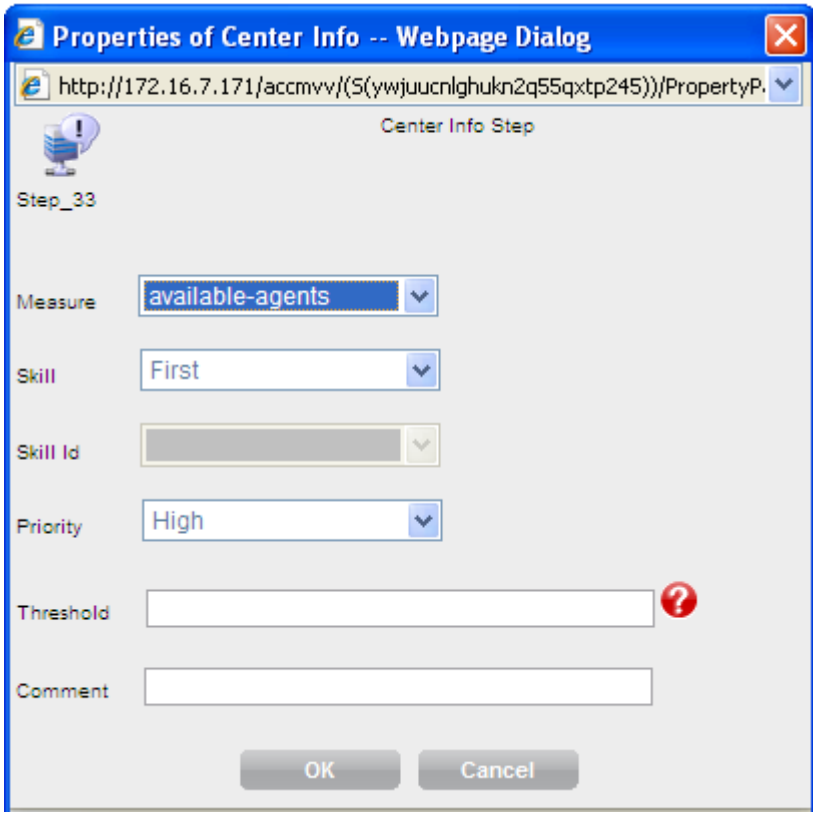
Checks the status of a skill or split for possible termination of the call to that skill or split.



- Measure – select either *rolling-asa, calls queued, oldest call waiting, wait improved*
- Select either 1st, 2nd or 3rd skill (VDN skills) or the Skill Id
- If Skill ID is selected then you will have to select from the skill ID list (as defined in AVAYA AURA™ CONTACT CENTER CONTROL MANAGER).
- Comparator = select a valid comparator
- Select a threshold

Center info

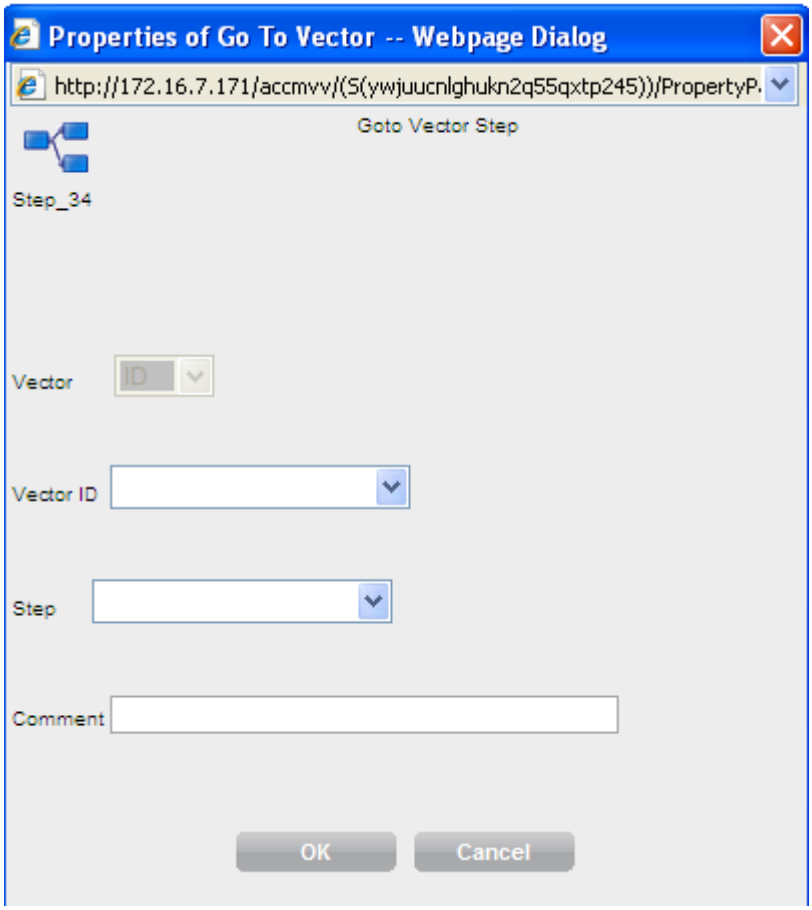
Checks the status of a skill or split for possible termination of the call to that skill or split.



- Measure – *expected wait time*
- Select either 1st, 2nd or 3rd skill (VDN skills) or the skill id
- If Skill ID is selected then you will have to select from the skill ID list (as defined in AVAYA AURA™ CONTACT CENTER CONTROL MANAGER).
- Comparator = select a valid comparator
- Select a threshold

Go to Vector Step

Moves the call to another vector.

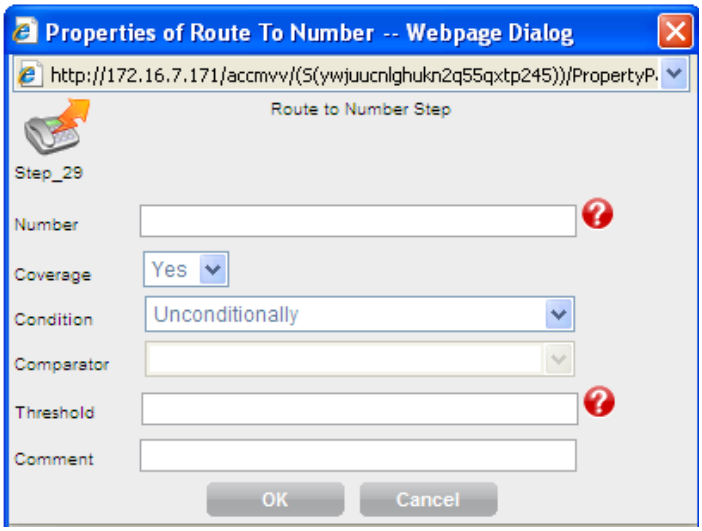


- Vector ID – select a valid vector number
- Step – select to which step number (ranges from 1 to 99) in the vector that the call will start with

Show vector button- when editing a vector this button allows us to jump directly to a vector in the *route-to vector* command

Route to number

Routes the call directly to another number (extension, vdn, skill/hunt group or any valid internal / external number)



Number – the number that the call will be routes to

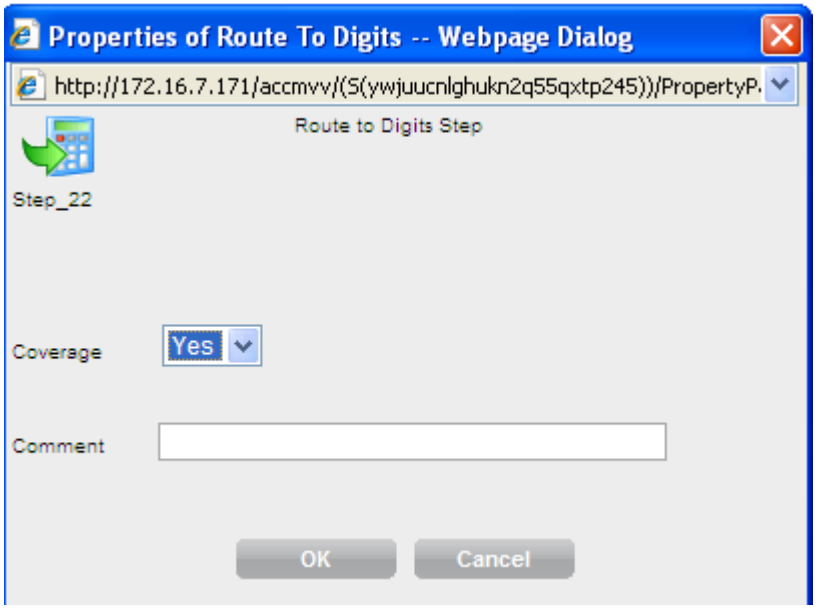
Coverage – *yes / no*

Condition:

Condition	Result
Unconditionally	The call will be routed when it arrives to this step in the vector
Digits	If digits are selected then a comparator can be applied and a threshold must be set.
Interflow-qpos	If Interflow-qpos (queue position) is selected then a comparator can be applied and a threshold must be set.

Route to digits

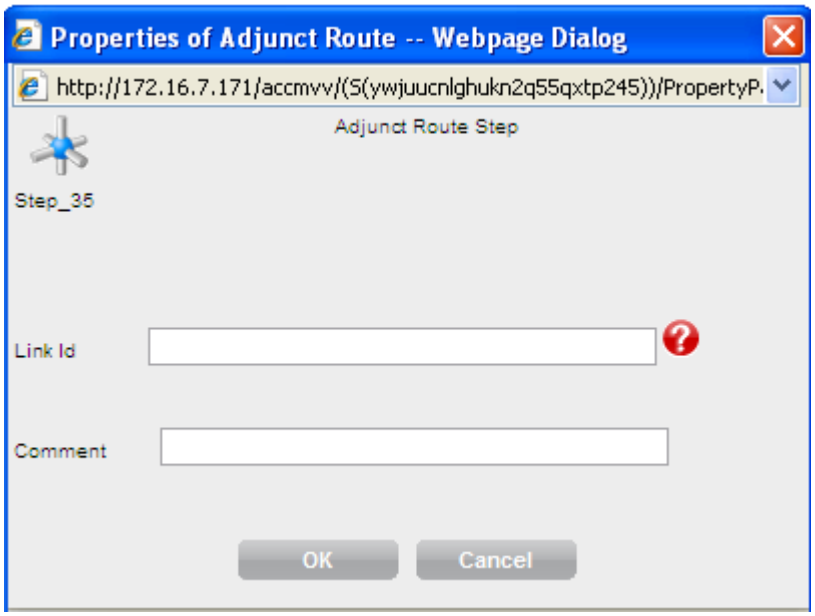
Routes the call directly to another number based upon the digits collected during the call.



Coverage – *yes/no*

Adjunct route

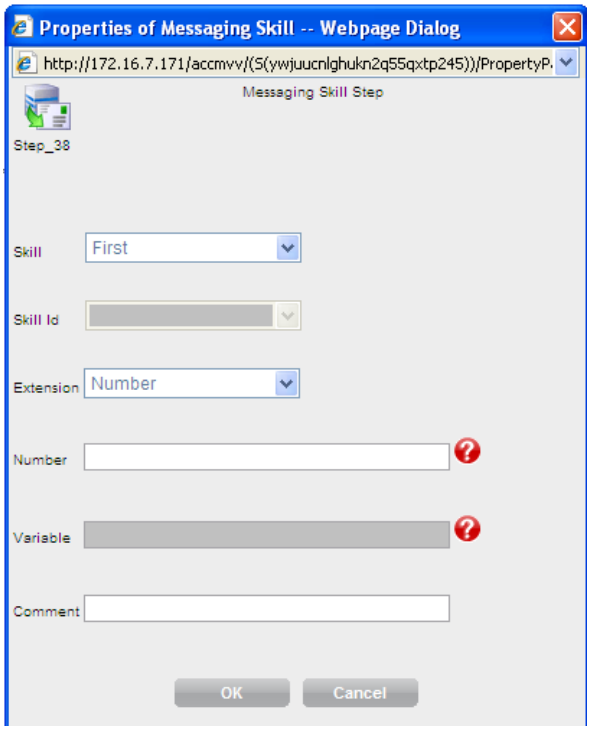
Moves the call to be controlled by an *adjunct route* command within a vector.



Link id – the adjunct route link id

Message skill step

The *messaging split/skill* command allows the caller to leave a message for the specified extension or the active or latest VDN extension (default). It's most typical use is with Intuity AUDIX or AUDIX to allow a VDN to have a "voice mailbox" and be supported by a Message Waiting Indication (MWI).

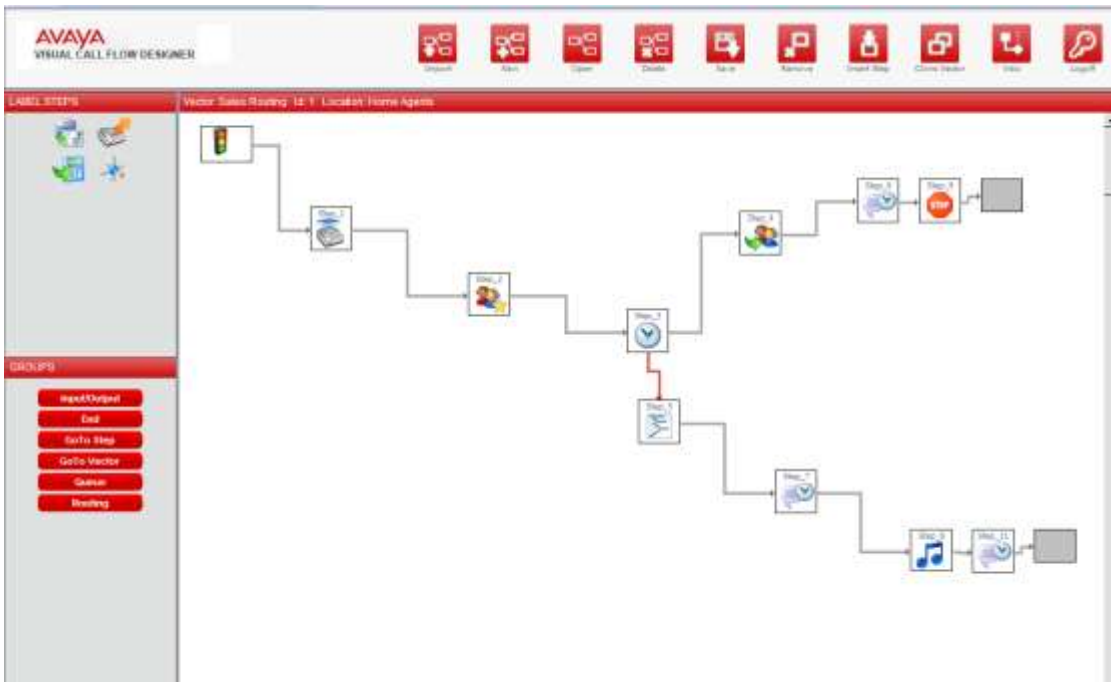


- Select either 1st, 2nd or 3rd skill (VDN skills) or the Skill Id
- If Skill ID is selected then you will have to select from the skill ID list (as defined in AVAYA AURA™ CONTACT CENTER CONTROL MANAGER).
- Extension:

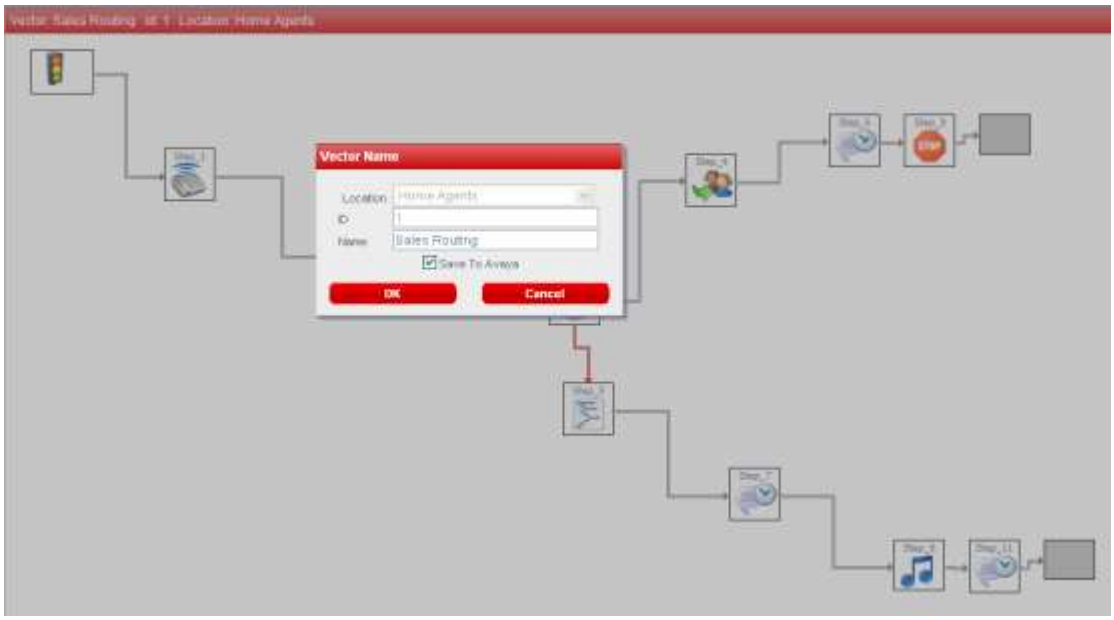
Extension	Required
Number	Enter a valid number with the Communication Manager's dial plan
Active	none

Latest	None
Variable	Enter a valid variable from the Elite software in this CM

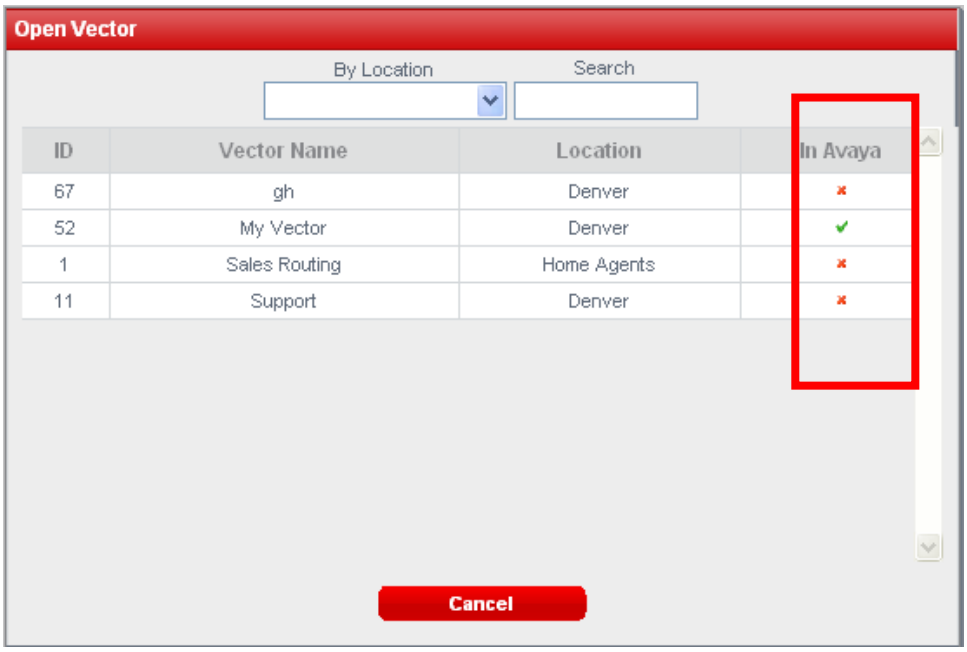
Saving a Vector



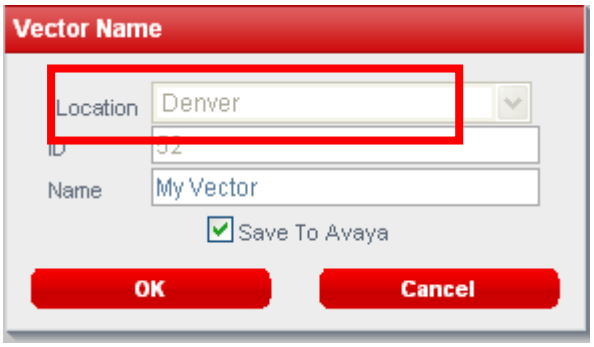
In the "save" operation, the system will save the vector by default to the AVAYA AURA™ CONTACT CENTER CONTROL MANAGER database. In order to save to the AVAYA Environment for execution, the "Save to AVAYA" checkbox will need to be checked. Incomplete or inconsistent vectors will only be saved to the AVAYA AURA™ CONTACT CENTER CONTROL MANAGER database.


Vector Name
Location
ID
Name
Sales Routing
Save To Avaya
OK
Cancel

Also when opening a saved vector, the system will inform which have been saved to AVAYA.



In case you are working in a multi-site enabled environment you will have to remember to select to exactly which location you desire that the vector should be saved to:



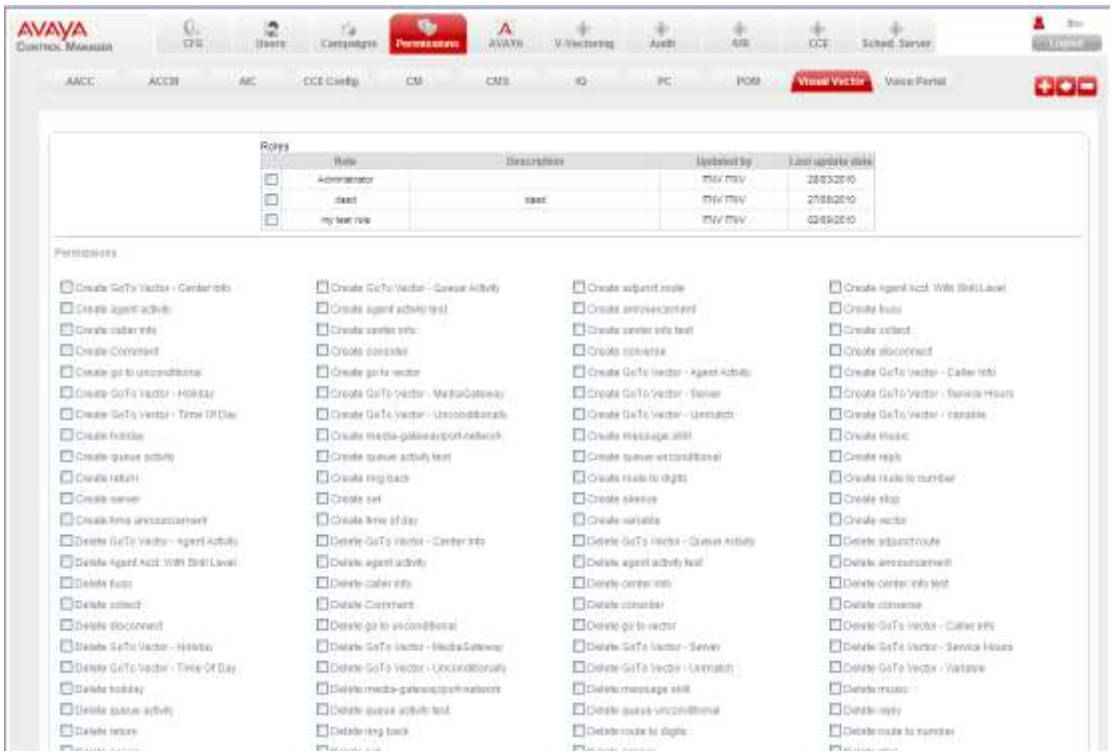
The list of locations available in the visual call flow designer depends on the users permissions in AVAYA AURA™ CONTACT CENTER CONTROL MANAGER Admin (location to view section).

Visual call flow designer permissions

The visual call flow designer permissions are managed from within the AVAYA AURA™ CONTACT CENTER CONTROL MANAGER admin User Interface (UI).

In the permissions section you will be able to build different roles under the "visual vector" application.

Each role can include different types of permissions and each one of the vector steps can be controlled by insert/update/delete permissions.



For more information please refer to the Avaya Contact Center Control Mangaer Admin guide.

Samples

Designing a Vector

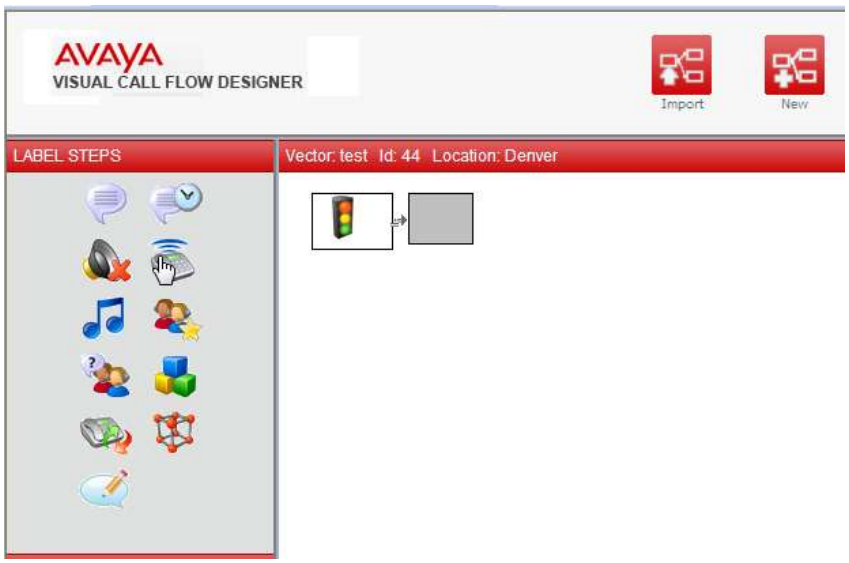
The following scenario will demonstrate how to build a simple vector that performs the following steps:

1. *the caller hears 2-seconds ringback*
2. *a timed announcement is played for 8-seconds*
3. *the call is queued to a skill*
4. *the caller hears music while waiting for the call to be answered by a staffed agent*

step 1: create a new vector – click on the "new" button



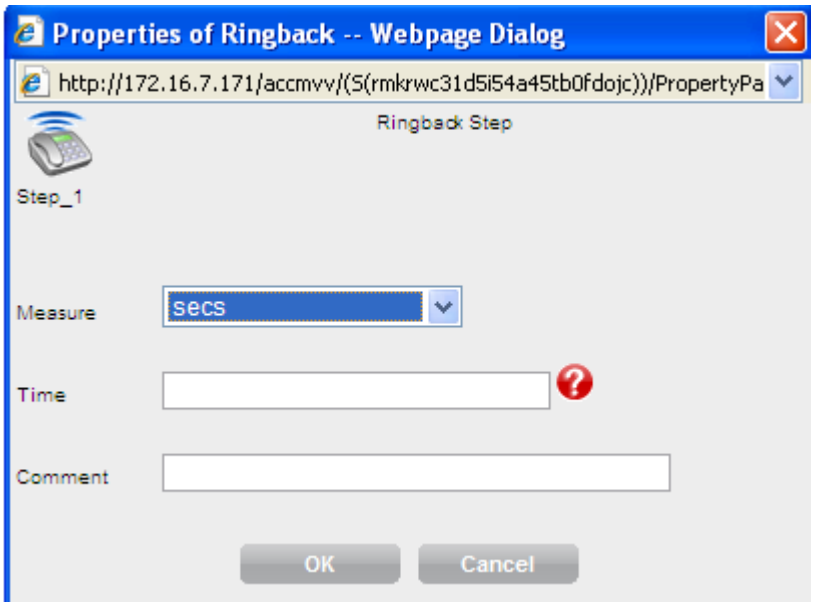
Step 2: Move the mouse to the ringback icon on the left side and drag it into the selected square.



Result:

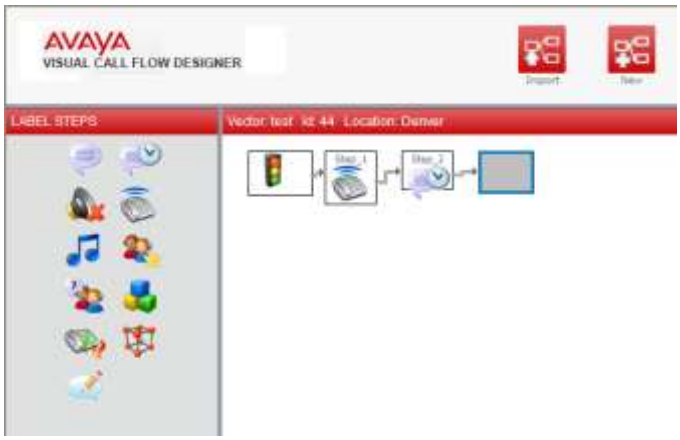


Step 3: Next double-click upon the "step1" icon

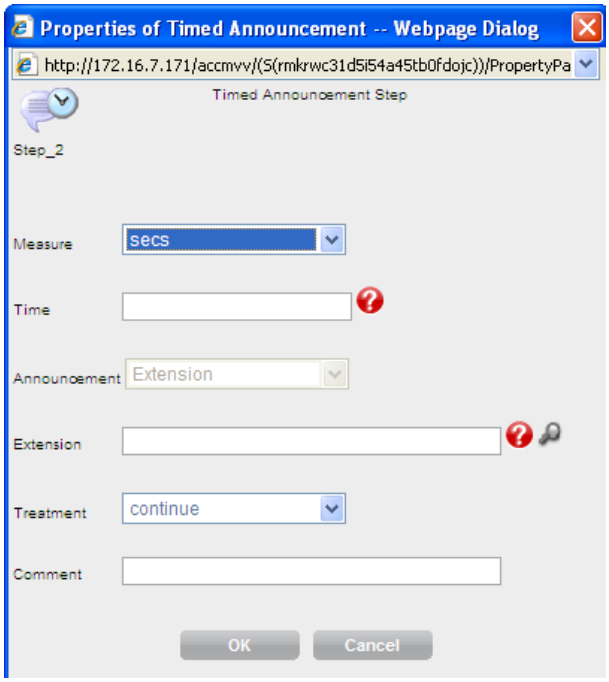


Step 4: enter the value "*2*" in the *seconds* field and next click *ok*.

Step 4: Move the mouse to the *time announcement icon* on the left side and drag it into the selected square.



Step 5: Next, double-click the "step 2" icon



Enter "*8*" in the *seconds* field and the *announcement number* in the "*extension*" field. Select "*continue*" in the treatment and click ok.

Note: In some version of Microsoft Internet Explorer you might need to click on the F11 button after login process has complotted in order to be able to see the entire User Interface (UI). Some tabs and options may be hidden due to screen resolution.

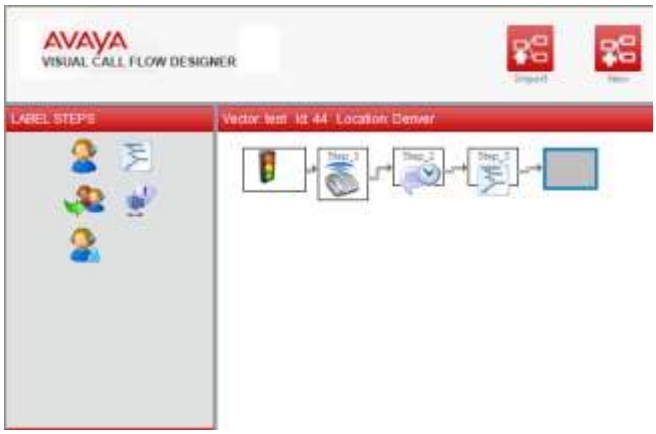
Step 6: Next, click on the "*queue*" group



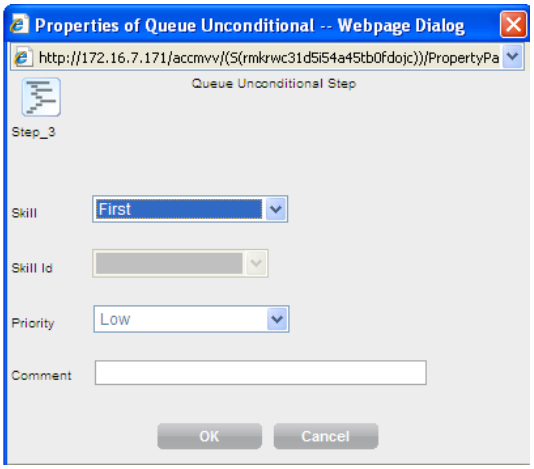
The vector step section is updated with new step types:



Step 7: Move the mouse to the *queue unconditionally* icon on the left side and drag it into the selected square.



Step 8: Double-click the "step 3" icon and select the Skill you want the call to be queued to



Click on save

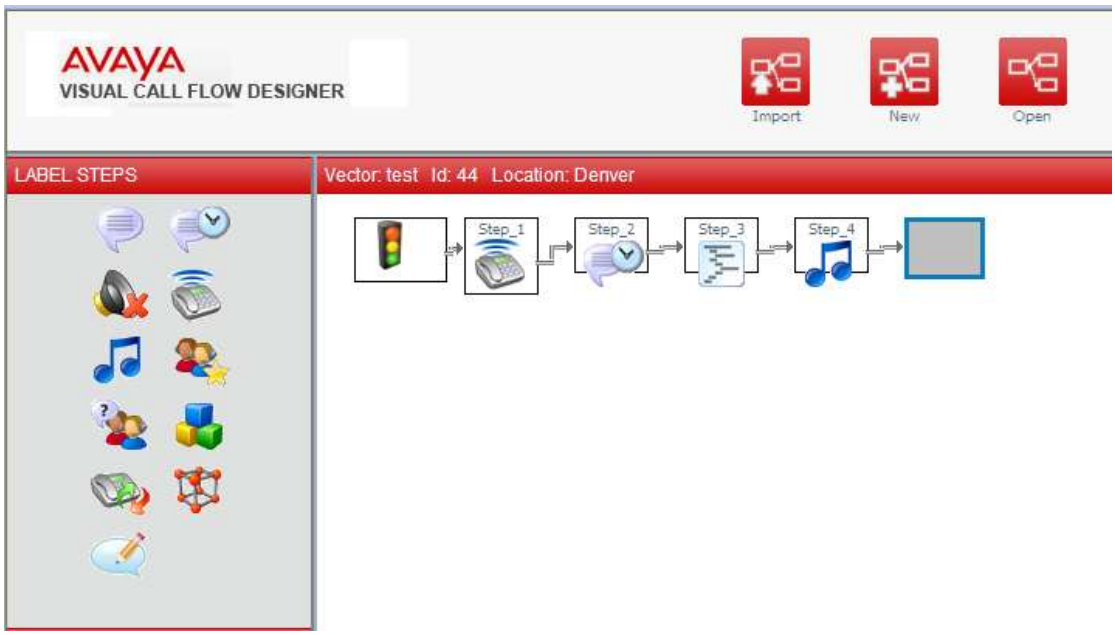
Step 9: Next, click on the "input" group



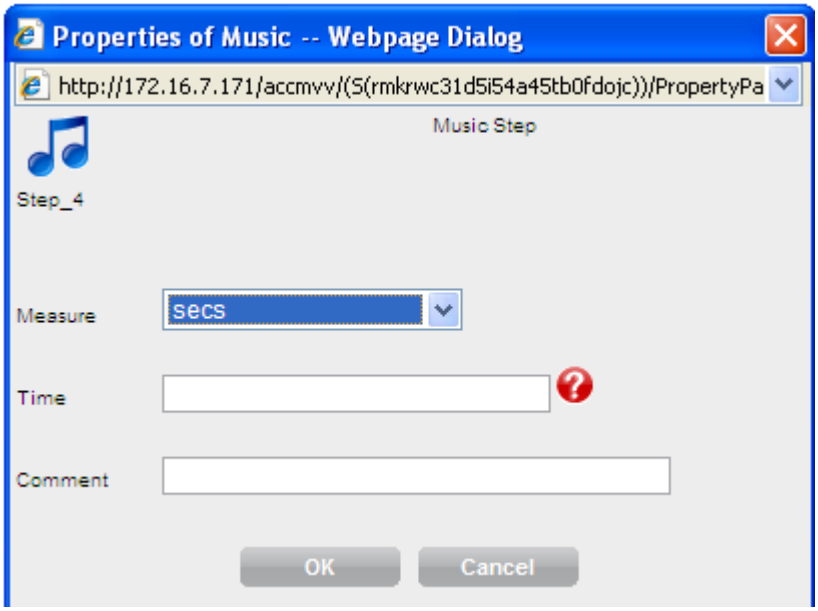
The vector step section is updated with new step types:



Step 10: Move the mouse to the *Music* icon on the left side and drag it into the selected square.



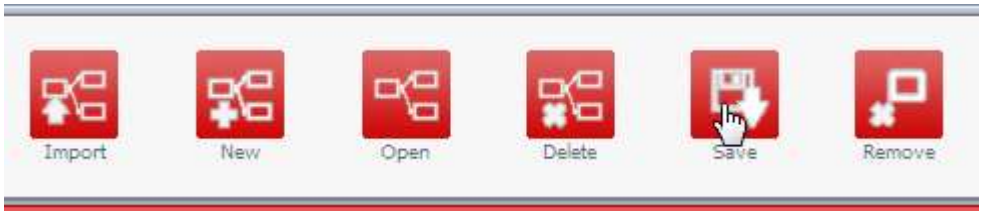
Step 11: double-click the "step 4" icon



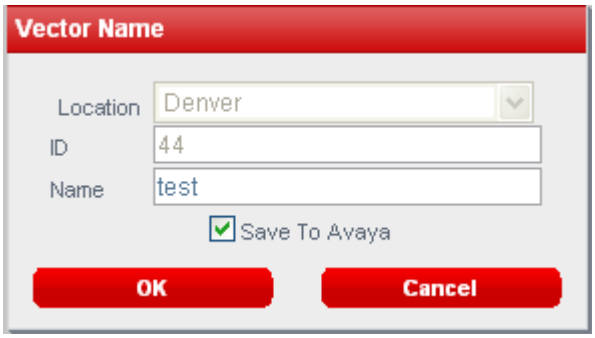
Enter the time, in seconds, that you want the customer to wait while they hear music.

Click ok.

Step 12: Now we need to save the vector. Go to the top bar and click on save

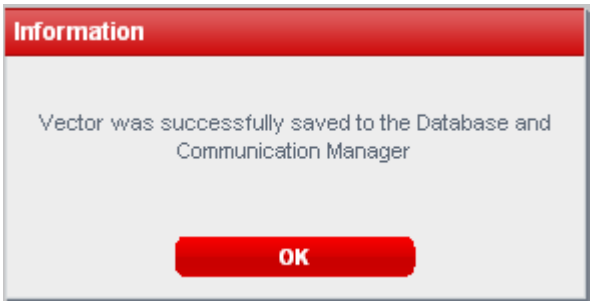


Step 13: Enter a vector number and a vector name and do not forget if you are working in a multi-site environment, select the appropriate location.



Select the "save to Avaya" option in case you want the vector to be saved into the CM (by default it is saved to the AVAYA AURA™ CONTACT CENTER CONTROL MANAGER Database).

Finish: The vector is saved successfully



Importing Existing Vectors

AVAYA AURA™ CONTACT CENTER CONTROL MANAGER supports vector importing.

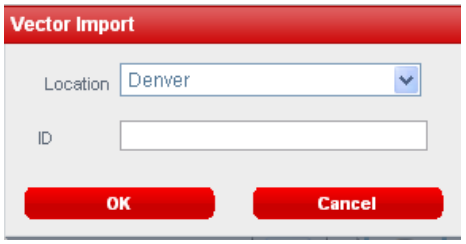
By default, the existing Communication Manager vectors are not imported in the AVAYA AURA™ CONTACT CENTER CONTROL MANAGER Visual Call Flow Designer.

In order to import a Vector you will have to perform the following steps:

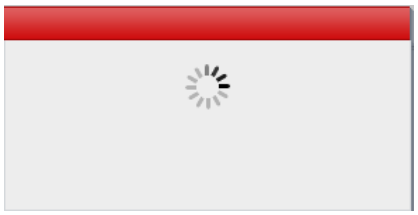
1. Click on the Import Vector Button



2. Select the Location and the Vector Number to import



3. The Vector will be imported (this process can take between several seconds and up to two (2) minutes, depending on the vector structure and size)

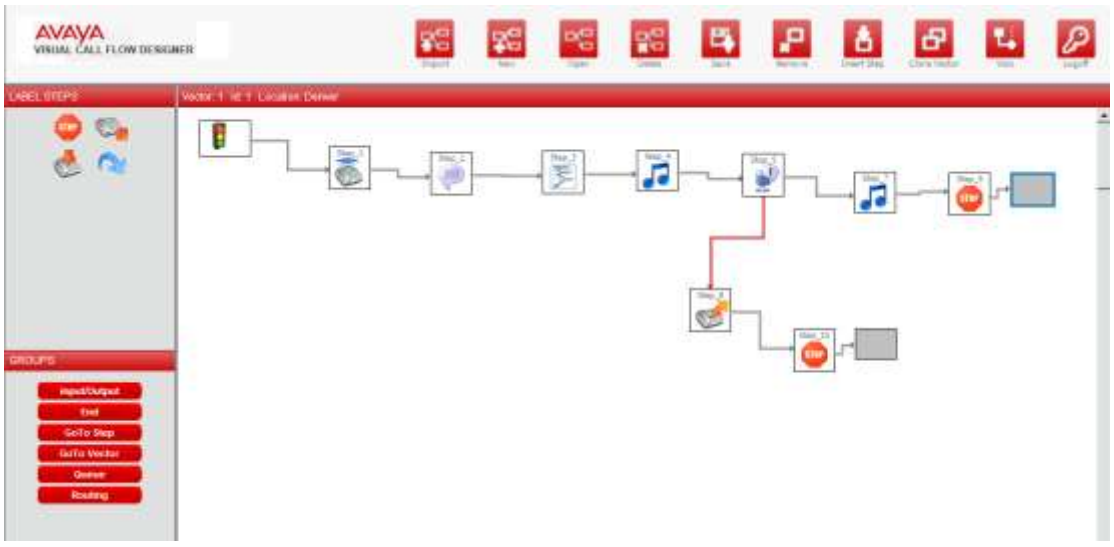


Example

The following screenshots show an example of an imported vector from the Avaya Communication Manager to the Visual Call Flow designer.

```
display vector 1                                          Page   1 of   6
                                CALL VECTOR

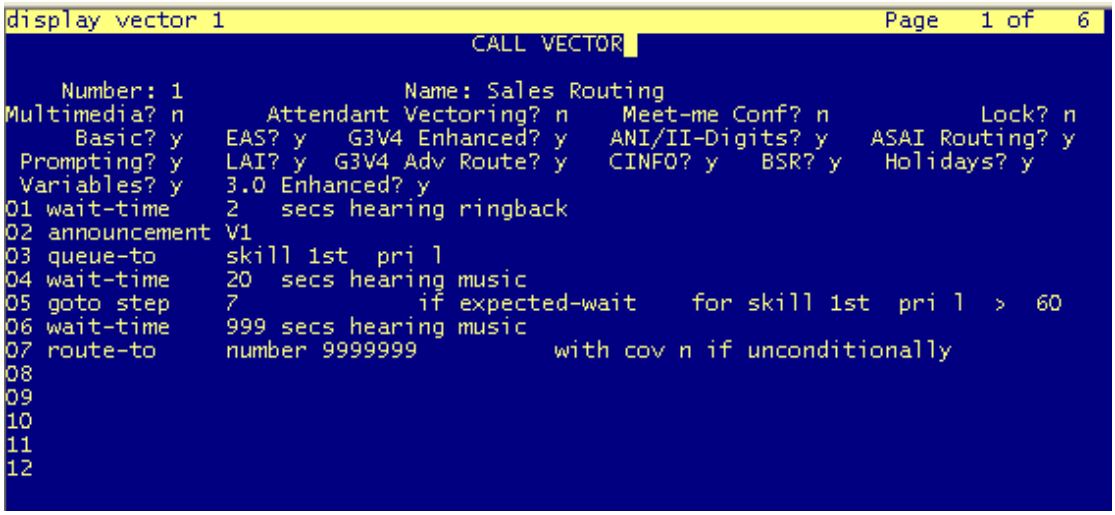
    Number: 1                   Name: 1
Multimedia? n      Attendant Vectoring? n    Meet-me Conf? n           Lock? n
     Basic? y    EAS? y    G3V4 Enhanced? y   ANI/II-Digits? y   ASAI Routing? y
 Prompting? y    LAI? y   G3V4 Adv Route? y   CINFO? y    BSR? y    Holidays? y
 Variables? y    3.0 Enhanced? y
01 wait-time     2    secs hearing ringback
02 announcement  V1
03 queue-to      skill 1st  pri l
04 wait-time     20   secs hearing music
05 goto step     10              if expected-wait    for skill 1st  pri l  >  60
06 check         skill 1st  pri l if unconditionally
07 wait-time     999 secs hearing music
08
09
10 route-to      number 9999999          with cov n if unconditionally
11
12
```



The import process of the visual call flow designer tool might add automatically to your vector the "Stop" Command. This is done in order to make sure that you call flow logic remains as designed after the importing process.

You can disable this option through the System Parameter option under the CFG (Configuration) tab.

When the imported vector will be saved back to your communication manager his original visual structure might change, for example: empty vector steps will be removed. The call flow logic will remain the same.



Important note: In the event that you are using vectors with more then 30 steps each for call processing we urge you to test the vector importing/saving process before actually using it in a production environment. The recommended steps are:

1. Import a Vector
2. Click on the Clone button and save the cloned vector to a new vector that is not used currently
3. Save the cloned vector to your Communication Manger
4. Compare the call flow **logic** of the existing vector and the new cloned vector (the visual structure of the original vector and the new vector might be different, but the call flow logic should remain the same)

Exporting Vectors to Visio

AVAYA AURA™ CONTACT CENTER CONTROL MANAGER Call Flow Designer provides you the ability to export vector to Microsoft Visio documents.

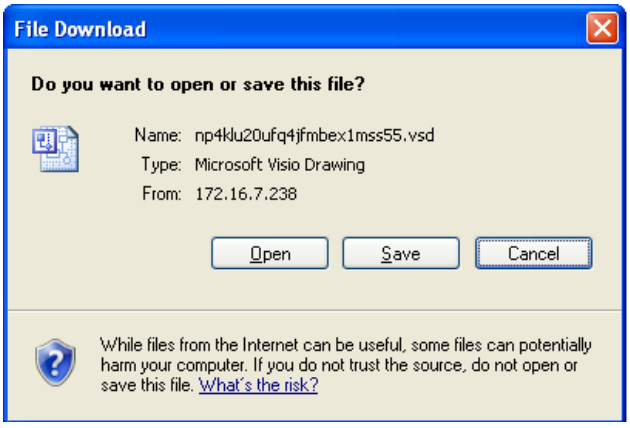
Vector exporting to Vision requires an installation of Microsoft Visio on the AVAYA AURA™ CONTACT CENTER CONTROL MANAGER Server.

In order to export a Vector to Microsoft Visio you will need to perform the following steps:

1. Open the Vector in the Visual Call Flow Designer
2. Click on the "Visio" button



3. A Visio document will be generated and the following screen will pop up (if you are using a pop-up blocker then please make sure you disable it when you are using the Visual Call Flow Designer)



4. You can either save the Visio file to your machine or open the file

Vector Validation

Overview

Avaya Contact Center Control Manager includes vector validation capabilities.

The vector validation is done by a service that is installed as part of the visual call flow designer application.

The ACCCM Vector Auditing Service is running on the ACCCM server provides all the validation capabilities.

Before running the vector validation process make sure the service is up and running.

Validation Vectors

Single Vector Validation

1. Open an existing vector in the Visual Call Flow Designer Tool
2. Click on the Validate button



3. The following screen will appear

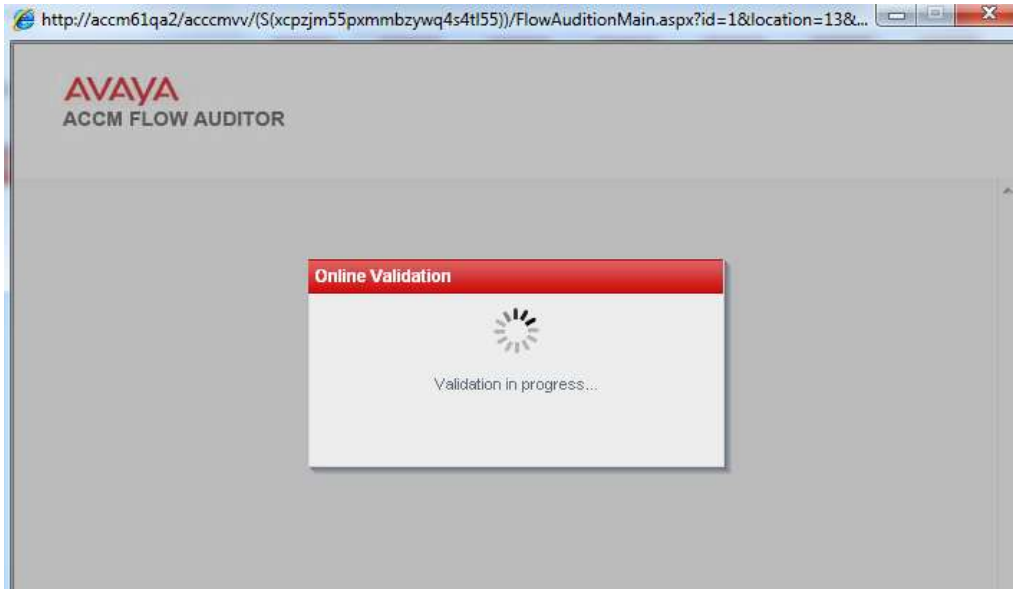


Field	Description
Validate in CM	If you choose this option then the vector will be validate with the data that you have in your Communication Manager
Validate in Database	If you choose this option then the vector will be validate with the data that you have in your ACCCM databases
Online validation	The system will validate the vector online and you will be presented with the results in the next screen after the system will finish the validation process

Offline validation	The offline validation will run the validation in an offline mode and you will be able to access the results from the "validation results" option in this screen
Bulk Validation	The bulk validation allows you to validate more than one vector at once. Select this option if you would like to validate several vectors. Bulk validation is only available in offline mode
Validation result	The validation results allows you to view the history of all the validations that you performed including any offline validations that you requested.

Online Validation

When running an online validation the following screen will appear:



Wait until the validation process will finish and the result screen will appear.



In case there are any validation issues realted to the vector the system will display them in the folloowing table:

Field	Description
Vector Number	The number of the vector that was validated
Vector name	The name of the vector that was validated
Step	The step number that has a validation issue
Step type	The type of stpe
Avaya type	The specific step part that has a validation issue.

Current value	The value that didn't pass the valdiation
Issue	A description of the validation issue

At the bottom part of the validation screen there are three buttons:

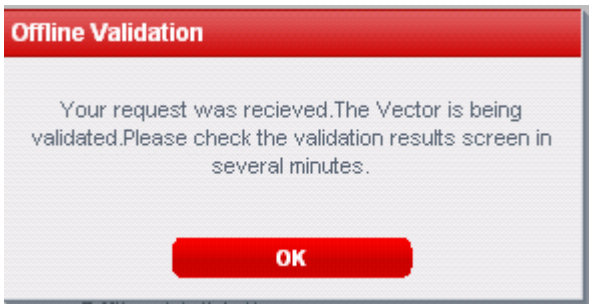
Back – Goes back to the previous screen

Export – Exports the validation results to a CSV file

Close – Closes the validation screen

Offline Validation

When running an offline validation the following screen will appear:



The validation request is sent to the validation queue and will be processed offline by the ACCCM system.

You can then view the results Validation result screen.

Bulk Validation

Bulk validation allows you to validate several vector in a single operation.

The following screen appears when selecting the Bulk validation:

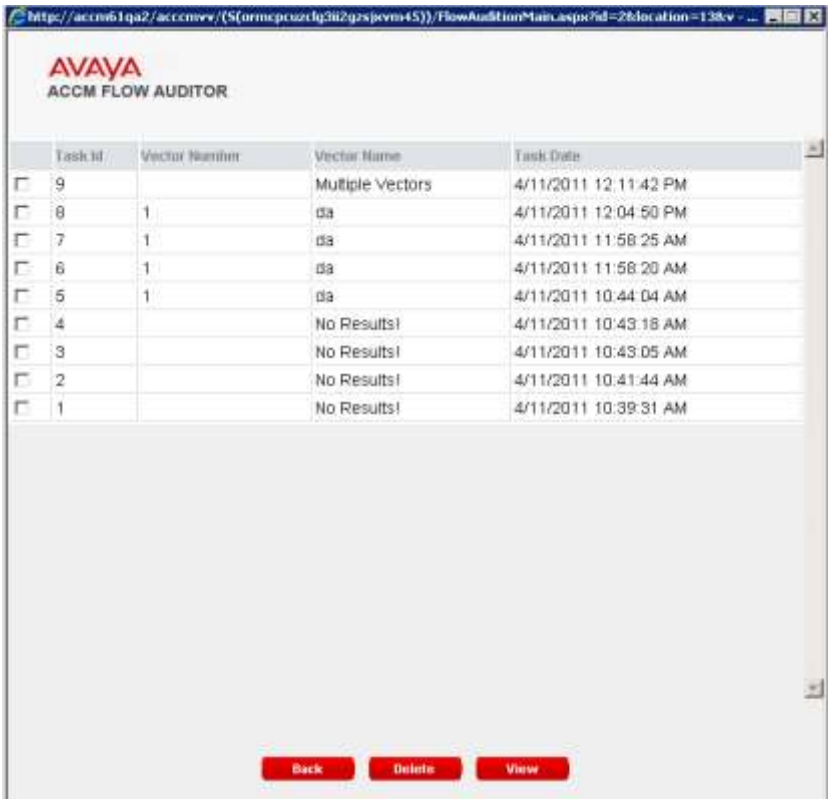


A list of all the vectors appears on the screen. You can search for vectors based on name or location. In orer to select a vector for validation, select the checkbox next to each vector name and click on the validate button.

All bulk validations are done offline and you can view the result in the Validation result screen.

Validation Results

The validation result screen shows all the validations that were done within the Visual Call Flow Designer (both online and offline).



Field	Description
Task id	The internal Task id of every validation request
Vector number	The validated vector number
Vector name	The vector name
Task date	The date of the scheduled task

Select the checkbox next to the task you want to review and click on the "view" button.

The result screen will appear on the screen.

Validation Types

There are two different validation methods that can be used within ACCCM.

Validate in CM

CM based validation will validate the Vector in the Communication Manager. That means that every vector step will be checked in the CM and every other entity that is part of the Vector (announcement, variable, skill and etc) will also be validated directly in the CM.

This validation type is slower, but provides the most "real time" result due to the fact that it does not depend on the Synchronizer process.

Validate in Database

Database validation will validate the Vector in the ACCCM Database. That means that every vector step will be checked in the ACCCM Database and every other entity that is part of the Vector (announcement, variable, skill and etc) will also be validated also with its equivalent object in ACCCM.

This validation type is faster, but depends on the synchronizer activity.

For example: If a Skill was deleted directly in the CM (through ASA) and a database validation was performed before the synchronizer synced the data from the CM to the ACCCM database, you might get less accurate results in your validation process.

Vector Versions

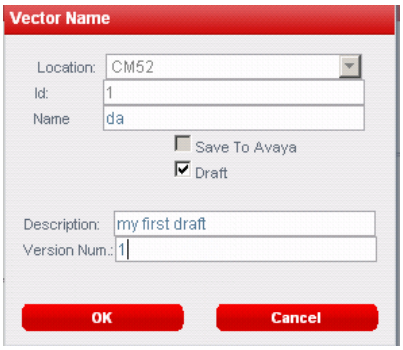
ACCCM Visual call flow designer allows managing versions for vectors within the visual call flow designer.

The Visual Call Flow designer tool allows you to save unlimited number of versions for a single vector. **Vector versions are only saved into the ACCCM database**.

Saving Vector Versions

In order to save a version of a vector, you will need to perform the following steps:

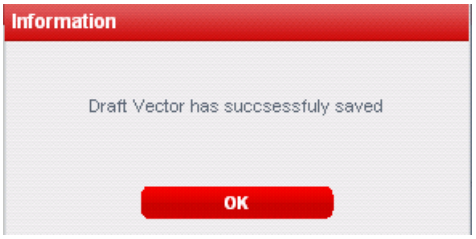
1. Click on the Save Vector Button
2. Select the "Draft" checkbox



3. Two new fields will appear on the screen:

Field	Description
Description	Free text description of the vector version
Version num	The version number of the vector. Any number between 1-9999

4. Click on the save button



5. The version will be saved to the ACCCM Database

Saving a Draft as a Production Vector

In order to save a draft of a vector as a production vector, you will need to perform the following steps:

1. Click on the Open vector button



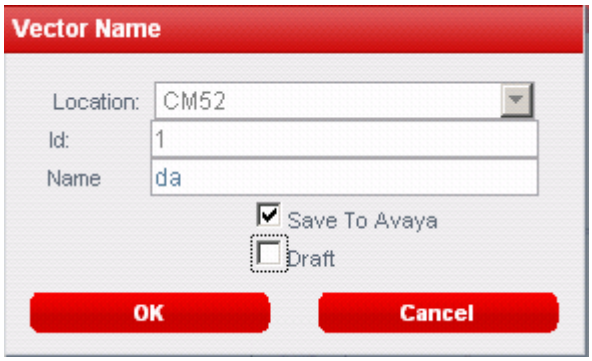
2. Find you vector version, make sure that the search criteria is set to "Show Drafts"



3. Select the draft and open it
4. Click on the save vector button



5. Uncheck the draft option and set select the "Save to avaya"



6. Click ok

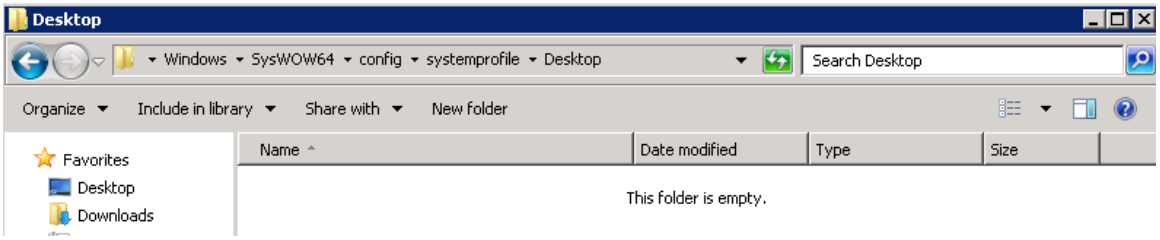
The vector will be saved to your Communication Manager.

Enabling Visio Export

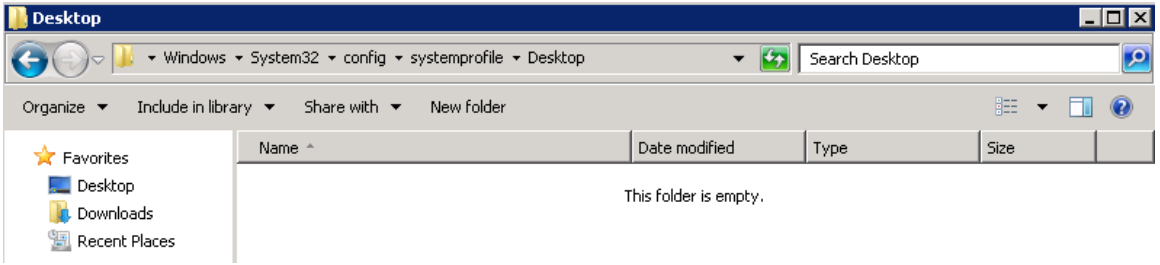
Windows 2008 Configuration

1. Create the following folder on the ACCCM Server:

    - C:\Windows\SysWOW64\config\systemprofile\Desktop



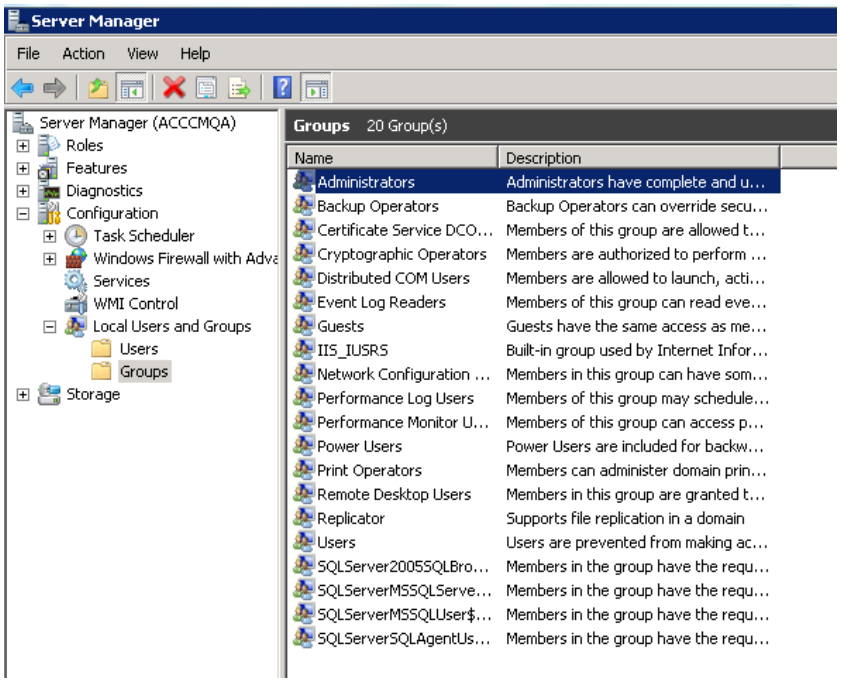
    - C:\Windows\System32\config\systemprofile\Desktop



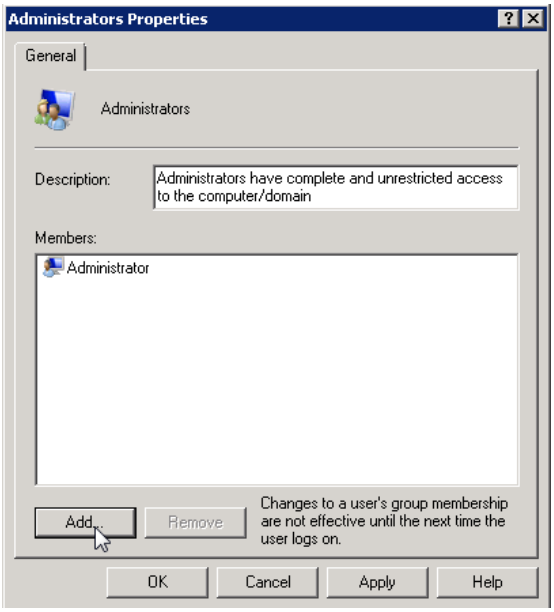
2. Open the Server Manager



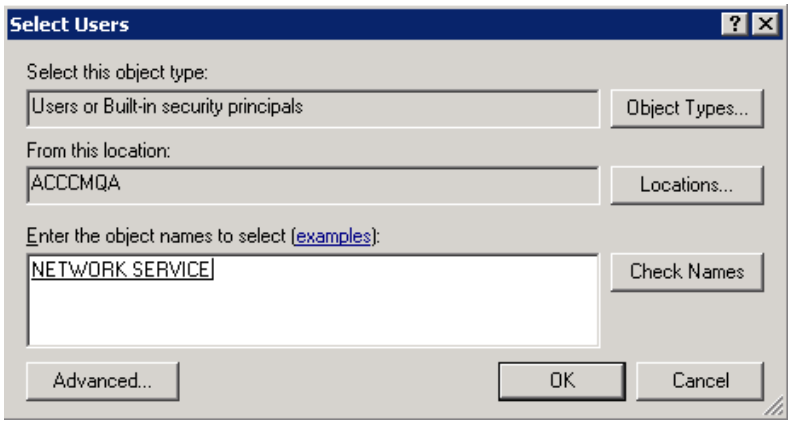
3. Navigate to group management and double click the administrators group



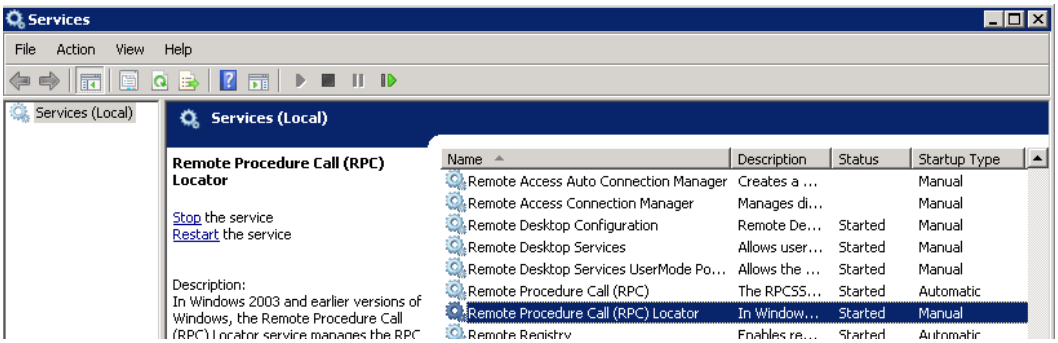
4. Click on the Add button



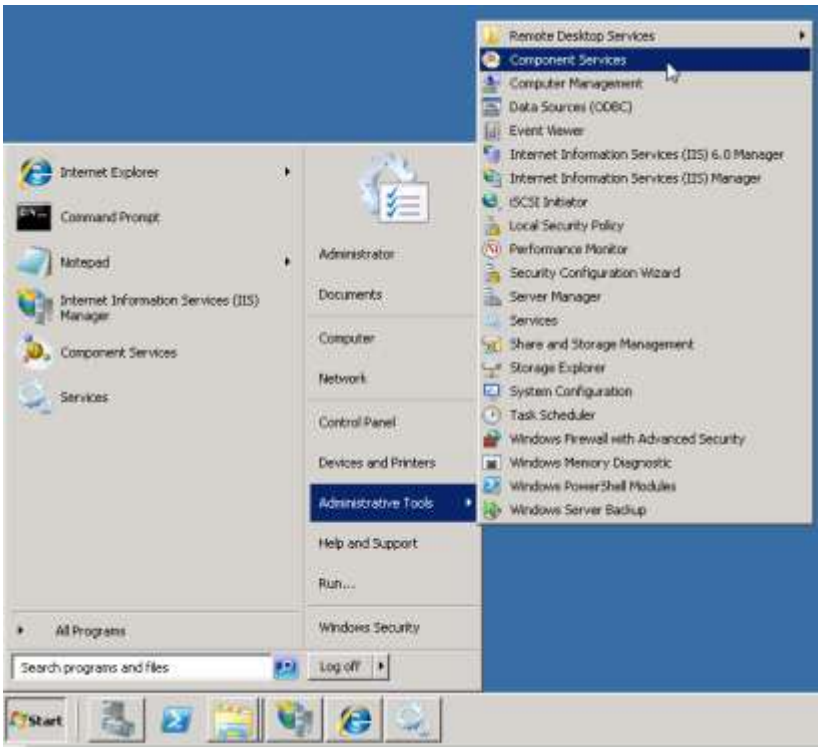
5. Add the NETWORK SERVICE user to the administrator group and click "Ok"



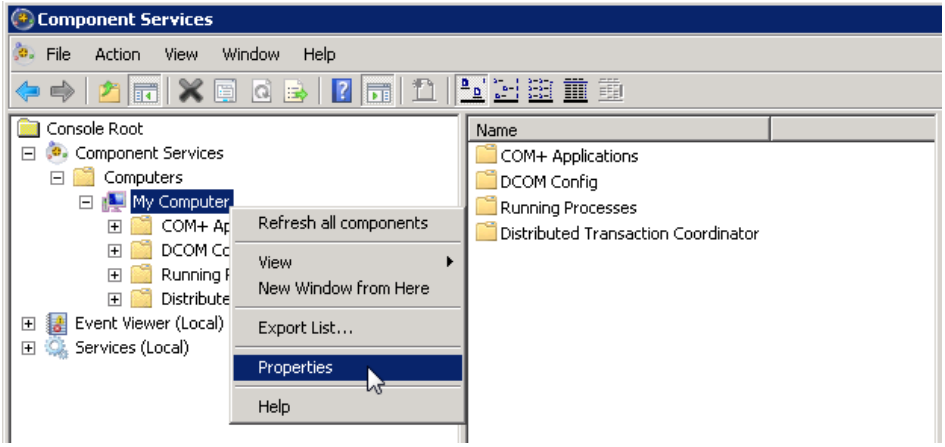
6. Click Ok again and close the administrator group.
7. Open Windows Service administration and start the RPC Locator Service



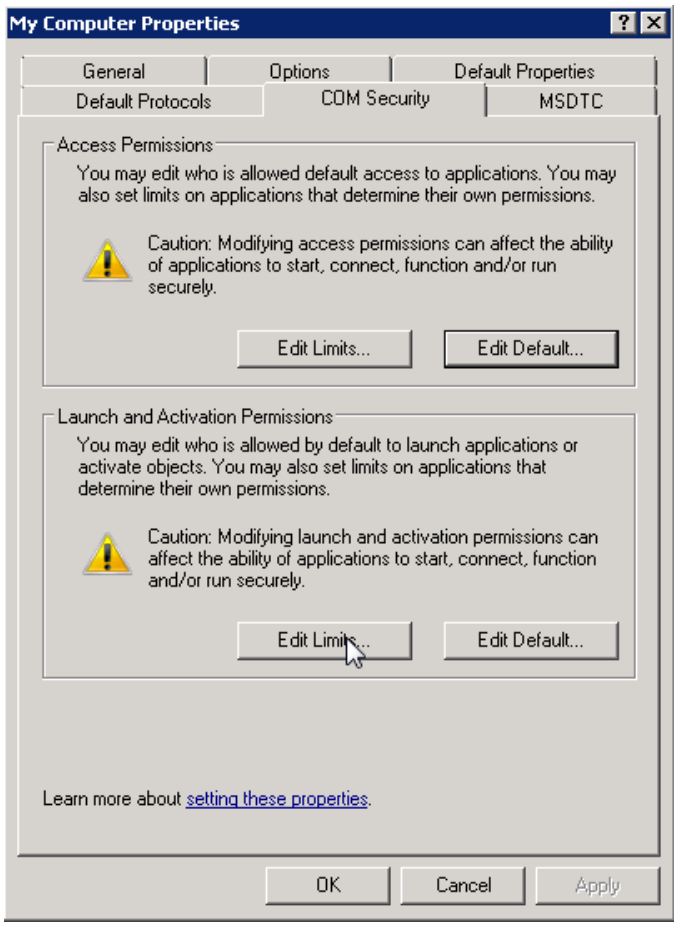
8. Open the "Component Services" Administration



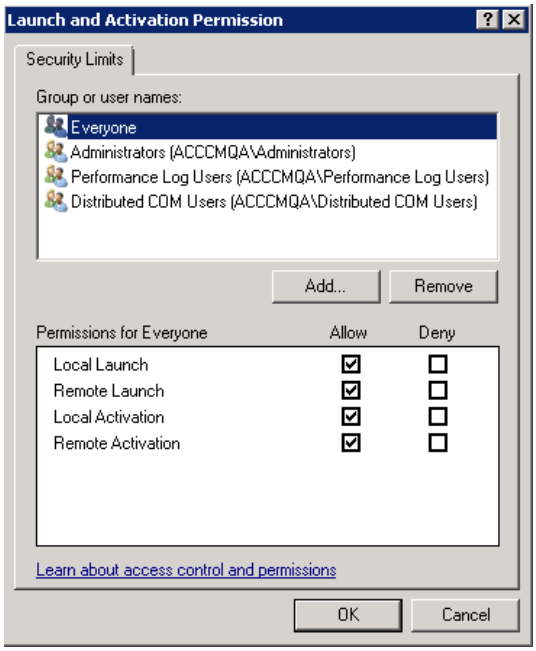
9. Right click "My Computer" and click on Properties



10. Click on the "COM Security" tab and click on the "Edit LIMITS" button under the "Launch and Activation Permissions"



11. Add everyone to the permissiom with full permissoins as seen in the image below



12. Click "Ok" twice and close the screen