Tutorial 2: Creating a Call Flow for a Line Group

Planning the Call Flow

Each call flow is made up of one or more call handling actions. Each action ends with at least one result, depending on the circumstances surrounding the call. For example, during Acme Widgets’ open hours (Monday - Friday 9:00 to 5:00), they might direct calls to different departments using a Menu action to ask the caller to press a key. During their closed hours, a Message action plays a “Sorry, we’re closed.” message. In this case, the call destination is decided by the time of day as programmed in the Schedule action.

This is a good basic setup, but what happens when an unusual circumstance occurs? What if there is a record snowfall and the company cannot open on Monday? According to the Schedule action, on Mondays all calls should follow the "ON hours" flow. We need to provide an Override action that we can enable temporarily to introduce a special call flow for those unusual circumstances (for example, we can play a Message: "Thank you for calling Acme. Due to severe weather conditions, our offices are temporarily closed."). When the business is open again, we only need to disable the override to return to our regular call processing.
Now that we have a good basic call flow, we can add details for the On hours **Menu** to “Press 1 for Sales or press 2 for Accounting”. A “Sales” selection transfers to the Sales Desk. If the Sales Desk is busy or not answering, the call is transferred to Bob’s phone and then to Bob’s personal call flow. Likewise, an “Accounting” selection transfers to the Accounting Office and then to Doug’s personal call flow, if necessary.

We can also add menu options for accessing the Company Directory and for callers to enter an extension number directly.

This diagram illustrates the completed call flow plan for Acme Widgets. It handles ON and OFF hours. It takes care of unusual circumstances like severe weather, and it provides a menu for callers to reach the company directory, a selected extension, or a department.
Programming the Call Flow

1. Log in to the NuPoint UM Web Console. Click **Call Director** and then click **Call Flow**.

2. Select the **Line Group** call flow and enter the Line Group **number**. The Call Director interface is displayed:
Lesson 1: Programming an Override

An override changes the everyday call flow to handle unusual circumstances such as emergency closures due to extreme weather conditions.

To define an Override:

1. In the Actions window, beside **New Call**, click **Message Center**.
2. In the New Actions list, select **Override** to assign the Override action.

Check the call flow diagram and note that when the Override is **Enabled** (that is, when Acme Widgets is operating under unusual circumstances), they want to play a message that tells callers the company is closed due to severe weather.

3. In the Results area for the Override, click the **Message Center** action beside **Enabled**.
4. In the New Actions list, click **Message**. To distinguish this message from other messages in the call flow, give it a unique **name** and include the Action ID for ease of maintenance. (For example "Emergency Msg - ID 002"). Don’t worry about recording the message right now – you can record all messages after the call flow is set up.

<table>
<thead>
<tr>
<th>Message Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name: Emergency Msg</td>
</tr>
<tr>
<td>Delay: 0</td>
</tr>
<tr>
<td>Suppress Hangup Prompt:</td>
</tr>
<tr>
<td>Action Id: 002</td>
</tr>
<tr>
<td>Message: Recording</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Results for Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>Result</td>
</tr>
<tr>
<td>Done</td>
</tr>
</tbody>
</table>

5. Click **Save**. The call flow window looks like this:

![Call Flow Window](image)

**Tip**: To activate an Override, the System Administrator can enable it remotely from any touch-tone phone:

- dial the NuPoint Unified Messaging access number
- enter the mailbox number followed by the * key
- enter the passcode
- follow the prompts to enable/disable Overrides. If you have multiple Overrides in a call flow, you’ll need to know the Action ID.
Lesson 2: Programming a Schedule

Now you will program the actions required when the Override is Disabled (that is, when the company is operating under normal circumstances).

1. In the call flow display window, click Override to display the Actions window.

2. In the Results area for the Override, click the Message Center action beside Disabled

3. In the New Actions list, select Schedule. Now you need to tell Call Director which hours are “On” and “Off”. (Tip: Think of “On hours” as “On Duty” hours.)

4. In the Schedule properties window, click Weekly Schedule and select the “On” hours:

5. Click Add. The programmed weekly schedule is displayed:

6. Click OK. A Call Director warning reminds you to save the Schedule (and the call flow) from the Call Flow window.
7. In the Call Flow window, click **Save**. The Weekly Schedule button changes color to indicate that a schedule is programmed.

Now that the schedule is set up, we need to define the actions to take during On-hours and Off-hours.

**To define the Off-hours actions:**

8. In the call flow display window, the **Schedule** action should still be highlighted. If not, click it.

9. Click the **Message Center** action beside **Off hours**, to open the Actions menu.

10. In the Actions menu, select **Message**. Enter a unique **name** for the Message (example “Closed Message – ID 004”). Don't worry about recording the message right now – you can record all messages after the call flow is set up.

11. Click **Save**.

In this example, the call flow hangs up after playing the “Sorry, we're closed” message. You could also program other actions (like a transfer to voice mail) by clicking the **Hang up** action.

That completes the Off-hours programming. Now we’ll program the On-hours actions.

**To define the On-hours actions:**

12. In the call flow display window, click **Schedule**.

13. Click the **Message Center** link beside **On-hours** to open the Actions menu.
14. In the Actions menu, select **Message**.

15. Enter a unique **name** for the Message (for example “Welcome Msg – ID 005”)

![Message Properties](image)

Don't worry about recording the message right now – you can record all messages when the call flow is complete.

16. Click **Save** to save the call flow.

17. Your call flow display window should look like this:

![Call Flow Display](image)
Lesson 3 – Programming a Menu

When the Welcome message has finished playing, Acme wants to present callers with a menu from which they can access one of the following:

- The Sales Desk
- The Accounting Office
- The Company Directory
- An employee’s 4-digit extension number

To program the menu:

1. In the Results area for the Welcome message, click the Hang up link beside Done.

2. In the Actions menu, select Menu. The Menu results screen is displayed:

   According to the call flow plan, we need to program the 1 key to make a Supervised Transfer to the Sales Desk (extension 1200).

   **Note:** Ensure that you have set up the required programming for Supervised Transfers to work properly. See “About Supervised Transfers” earlier in this module.

3. Click the Retry link beside Menu option 1 and select the Supervised Transfer action. The Properties window opens:

   4. In the Name field, modify the name as a reminder for where the call is being transferred. (For example, “Supervised Transfer to Sales”.)

   5. In the Transfer To: list, select Specified Extension and enter the Extension number to which you want to transfer. (1200 in this example).
We programmed a Supervised Transfer so that we can redirect the call to Bob’s extension (1222) if the Sales Desk is busy or not answering. Now we need to configure this action.

6. In the Results area for Supervised Transfer, click the Message Center action beside Busy.

7. In the Actions list, select Blind Transfer. (We want unanswered calls to ring Bob’s phone and then, if necessary, follow his personal call flow.)

8. Enter a descriptive name for the transfer (“Blind Transfer to Bob’s Ext”).

9. Select Specified Extension and enter Bob’s extension number (1222).

10. In the Call Flow window, click Supervised Transfer to Sales to re-open the results area.

11. In the Results area for Supervised Transfer, click the Message Center action beside No Answer and program it as a transfer to Bob’s extension also. You can re-use the Existing Action “Blind Transfer to Bob’s Ext”.

12. In the Call Flow window, click Save to save your programming.
Now you need to program **Menu** option 2 to make a Supervised Transfer to the Accounting Office. The programming steps are the same as the Supervised Transfer to Sales. Here’s a recap:

- In the call flow display window, click **Menu** to open the Results area.
- Click the **Retry** link beside Menu option 2 and select **Supervised Transfer**.
- Name the transfer ("Supervised Transfer to Accounting") and specify an extension (in this example, Ext 1201)
- Program the Busy and No Answer results of the Supervised Transfer as **Blind Transfers** to Doug’s phone (in this example, Ext 1233). Don’t forget that once you program the action Blind Transfer to Doug’s extension, you can re-use it.
- In the Call flow window, click **Save**.

Your call flow should look like this:
Lesson 4: Providing a Company Directory Menu Option

Checking the call flow plan, we see that Menu option 7 should send callers to the Company Directory.

1. In the Call Flow window, click Menu.
2. In the Results area beside menu item 7, click the Retry link and select the Dial-by-Name action.

Tip: We recommend that you use a menu digit that is not used as the start digit for any of your extension numbers.

3. In the Actions window, Call Director automatically programs the transfer. (If a matching extension is found for the entered digits, a Blind Transfer is performed. If no match is found, the caller is transferred to the Attendant.)

Notes:
- For the Dial-By-Name action to work, the NuPoint UM dialing plan for the line group associated with Call Director must have the letter ‘A’ somewhere in it. The ‘A’ triggers the prompt to spell the name. (For example, a dialing plan of 4,4,4,4,4,4,A,4,4 uses the ‘7’ key as the Dial by Name access digit.)
- To be identified by Dial-by-Name, the FCOS assigned to a user’s mailbox must contain feature bit 092.
Lesson 5: Providing the “Dial by Extension” Menu Option

To program the option for callers to enter an extension number and be transferred:

1. In the call flow display window, click **Menu**.

2. In the properties window, in the **Maximum DTMF length** field, type 4 (or the number of digits that comprise your extensions).

   **Note**: This step is essential for proper Multi-key operation!

3. In the Actions window, scroll down to Multi-key and click **Hang up** to display the actions menu.

4. In the actions menu, select **Blind Transfer** and give it a **name** (example: Blind Transfer to Dialed Ext).

5. In the **Transfer To:** list, select **Gathered Digits** and then click **Save**.
Here is the completed call flow for Acme Widgets:

6. Record messages/greetings and test the flow as described in Tutorial 1. Here are the messages required for this tutorial:

<table>
<thead>
<tr>
<th>ID</th>
<th>Element</th>
<th>Status</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>004</td>
<td>Emergency Msg - ID 002</td>
<td>Not Recorded</td>
<td>Record Import</td>
</tr>
<tr>
<td>006</td>
<td>Closed Message - ID 004</td>
<td>Not Recorded</td>
<td>Record Import</td>
</tr>
<tr>
<td>007</td>
<td>Welcome Message - ID 005</td>
<td>Not Recorded</td>
<td>Record Import</td>
</tr>
<tr>
<td>008</td>
<td>Menu</td>
<td>Not Recorded</td>
<td>Record Import</td>
</tr>
</tbody>
</table>