



## Dialed Number Plan

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### About Dialed Number Plan

The Dialed Number Plan allows you to manage and track agent-initiated calls.

The Dialed Number Plan applies only to calls initiated by the agent on their soft phone and *not* on their hard phone. Calls made on the hard phone are not subject to the permission, interpretation, translation, posting routing, and so on, specified in the Dialed Number Plan.

### Dialed Number Plan Explained

The Dialed Number Plan consists of a number of entries intended to accommodate the different types of calls agents might make. Each entry contains a wildcard string that is used to match a number that an agent might dial. Each digit of the string is processed until a matching dial plan entry is found. When found, the selected trunk group or resource is used to complete the call.

Each entry contains additional information indicating how to handle the calls matching that wildcard string.

For example, dialing a 9 to receive an outside line on a PBX or ACD is specified in the dial plan. All patterns that reference network trunks might begin with a “9” digit. Subsequent digits might be “1” for long distance patterns, “0” for operator assisted or international calls, “2” through “9” to specify an area code. The dial plan allows a customer to have multiple phone carrier trunks terminated at the PBX or ACD for different outbound call types. A customer might choose MCI as the long distance carrier while AT&T is the international carrier, and Bell Atlantic is the local carrier. The dial plan configuration is used to determine which carrier to use based on the patterns defined within the dial plan.



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**Note** Do not confuse the Dialed Number Plan Bulk Insert tool with the Dialed Number Bulk Insert tool.

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You use the Dialed Number Plan to:

- Ensure agent-initiated calls are routed by a Unified ICM routing script
- Set up basic dialing substitutions

## Dialed Number Plan and Routing of Agent Calls

The most common and powerful use of the Dialed Number Plan is to ensure that agent-initiated calls are routed through the system software. In this case, you must specify that you want to request a PostRoute for the call and specify a dialed number associated with a routing script designed to handle the type of agent call.

Use this method of configuring the Dialed Number Plan for:

- Agent-to-agent transfers
- Agent-to-agent calling
- Agent-initiated outbound calls

## Dialed Number Plan and Basic Dialing Substitutions

You can also use the Dialed Number Plan to specify basic dialing substitutions. In this scenario, you identify a wildcard pattern to match the number dialed by an agent. However, you do not request a Post Route and the call is *not* matched to a Dialed Number, and thus not routed by the system software. Instead, you enter the string you want to be dialed in the Dial String field. That string is used to place the agent's call.

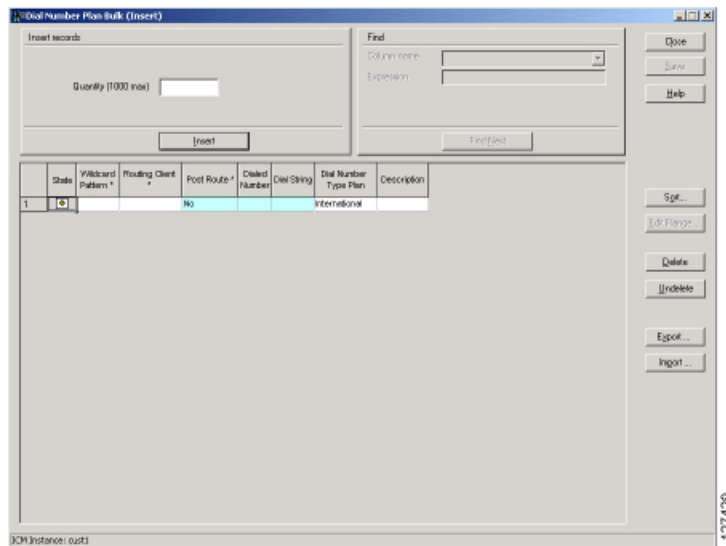
Using the Dialed Number Plan in this way is most useful for setting up such things as:

- Speed dial
- Using alphanumeric characters to dial from a soft phone

## Dialed Number Plan Values

Each field on the Dialed Number Plan dialog box is defined in the Configuration Manager online help. This section provides additional information about these fields and how you can use them to set up agent dialing for your contact center.

The window below illustrates a Dialed Number Plan entry that specifies Unified ICM routing for the agent call.



## Wildcard Pattern

The wildcard pattern you enter can contain letters, digits, and number signs (#). It can also include the following wildcard characters.

Character	Description
?	Represents any single alphanumeric character.
!	Represents any string of character and can appear only at the end of a pattern.

## Routing Client

The Routing Client field lets you specify the routing client for the agent call. In Unified CCE configurations, set this field to identify the Unified CM PG.

## Post Route

Use the Post Route field to specify whether this type of agent call will be sent to a routing script. If you set Post Route to **Yes**, you must also enter a Dialed Number that is associated with a routing script designed to handle the type of agent call.

## Dialed Number

Use the Dialed Number field if you have set the Post Route field to **Yes**, indicating that you want a Unified ICM routing script to handle this agent call.

## Dial String

Use the Dial String field only when you set the Post Route field to **No**, indicating that you want to use this entry for dialing substitutions. This field cannot be used when PostRoute is selected to send the call to a Unified ICM routing script.

The Dial String field can contain wildcard characters used to translate the dialed number string provided by the agent to the dial string that will be delivered to the switching platform. The following table describes the wildcard characters that might appear in the DialString field.

Wildcard Character	Description
!	Matches any group of characters
?	Matches any single character
X or x	Excludes the character in the agent supplied dialed number string at the position identified from the offset as defined from the beginning of the DialedNumberPlan DialString field

The following table provides examples of the translation of a DialedNumber string specified by an agent to a resultant DialString as defined by the DialString entry of the matching DialedNumberPlan entry.

Agent Dialed Number	DialedNumber Plan Dial String	Dial string result	Description
5133	6100	6100	Direct substitution.
5133	6X???	6133	Partial replacement.
5133	!	5133	Complete Copy.
5133	9275!	92755133	Prefix Addition.
5133	62XX??	6233	First 2 char substitution.
5133	????	5133	Complete Copy.
5133	?XXX000	5000	Retain first character; substitute the remaining characters.
2755100	????200	2755200	Replace last three characters.
2755100	!220	2755100220	Suffix addition.

## Dial String Configuration for Speed Dialing

You can configure Static Dial String translations to provide speed dial capabilities. Here, you enter the abbreviated string an agent dials in the wildcard pattern. You enter the actual target number in the Dial String of the entry.

When a dialed number (provided by an agent) matches the wildcard pattern of the Dialed Number Plan entry, the Dial String configured entry is sent in place of the agent supplied Dialed Number string.

The following table provides an example of a speed dial configuration.

Agent Dialed Number	Wildcard Pattern	Dial String	Result
133	1??	919782755!	919782755133

## Dial String Configuration for Alphanumeric Substitutions

You can use the Dialed Number Plan to allow agents to specify an alphanumeric string when dialing. For instance, an agent might dial **SALES** when calling the sales department rather than a numeric value that might be harder to remember.

To configure an alphanumeric substitution, configure the alphanumeric dial string as the wildcard pattern and the target number as the Dial String of the DialedNumberPlan entry. When a dialed number provided by an agent matches the wildcard pattern of the Dialed Number Plan entry, the configured Dial String is sent in place of the agent supplied string.

You can combine wildcard characters with this feature to allow Alpha prefixes to be added to numbers to identify the location of the number. Examples are shown the following table.

Agent Dialed Number	DialedNumberPlan Dial String	Resultant Dial String
SALES	919782755100	919782755100
BOS5133	9782755133	9782755133
FL14Office1433	5133	5133

## Dial Number Type Plan

The Dial Number Type Plan lets you specify the type of call that will be placed.

Dialed Number Plan	Description
International	Allows agents to place calls classified as international calls.
National	Allows agents to place calls classified as national long distance calls.
Local	Allows agents to place calls classified as national local calls.
Operator Assisted	Allows agents to place calls classified as operator assisted calls.
PBX	Allows agents to place calls to agents on the same peripheral.

The options for this field map exactly with the options on the agent desk settings list window. The system software checks the agent desk settings for the agent placing the outbound call. agent desk settings define which types of calls agents are permitted to make. If the agent desk settings for an agent prevent them from placing a particular type of call (for instance, international), the call is not placed.

# Dialed Number Plan Configuration

## Use Dialed Number Plan to Ensure Routing of Agent Calls

Follow these steps to configure a Dialed Number Plan entry to route an agent call through the system software.

### Procedure

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- Step 1** Create a routing script to handle each type of agent-initiated call using the Script Editor.
- This step ensures agent-initiated calls are routed appropriately by the system software.
- The script can target agent, services, or skill groups using Unified ICM script nodes. When a target is chosen, the associated label is sent back to the requesting peripheral. The label value is substituted for the dial string specified by the agent and sent to the switching platform to place the outbound call.
- Step 2** Select **ICM Configuration Manager > Tools > List Tools > Call Type List**.
- Allows you to set up the call type and associate it with the dialed number to target to routing scripts.
- Note** You can also use a pre-existing call type and script.
- Step 3** Select **ICM Configuration Manager > Tools > Bulk Configuration > Insert > Dialed Number Plan Bulk Insert** and insert an entry in the Dialed Number Plan dialog.
- Using the fields in this window, make sure to:
- Indicate the appropriate wildcard character.
  - Set the Post Route text box to **Yes**.
  - Select a valid Dialed Number associated with the routing script used to route the agent call.
  - Set the Dial Number Type Plan to indicate the type of call.
- This step matches the agent's dialed string to a Dialed Number. This ensures the agent's call will be routed by a Unified ICM routing script.
- Step 4** Select **ICM Configuration Manager > Tools > List Tools > Agent Desk Settings List** and ensure that Agent Desk Settings are set to identify the types of calls agents can place.
- Ensures that agents are allowed to or restricted from placing different types of outbound calls.
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## Use Dialed Number Plan to Set Up Basic Dialing Substitutions

Follow these steps to configure a Dialed Number Plan entry to do basic dialing substitutions:

## Procedure

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**Step 1** Insert an entry in the Dialed Number Plan dialog box by selecting **ICM Configuration Manager > Tools > Bulk Configuration > Insert > Dialed Number Plan Bulk Insert**.

Using the fields in this window, make sure to:

- Indicate the appropriate wildcard character.
- Set the PostRoute field to **No**.
- Identify a valid Dial String used to place the call.
- Set the Dial Number Type Plan to indicate the type of call.

Matches the agent's dialed string to the Dial String indicated in the entry. This Dial String is used to place the call (the call will not be routed by the system software).

**Step 2** Ensure agent desk settings are set to identify the types of calls agents can place by selecting **ICM Configuration Manager > Tools > List Tools > Agent Desk Settings List**.

Ensures that agents make only the types of outbound calls they are permitted to make.

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For more information about Unified ICM Routing Scripts, see *Scripting and Media Routing Guide for Cisco Unified ICM/Contact Center Enterprise*

### Related Topics

[Agent Desk Settings Configuration](#)

