



FIBERME Communications LLC.

FCM5404 Dial Pattern

- Dial Pattern.
- Inbound routes.
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Overview:

In this document, Dial pattern of FCM5404 will be discussed furtherly to help in understanding the dial pattern symbols and concept to achieve a specific call routing based on the caller or callee number to achieve more advanced call distribution.



Dial Pattern

By understanding dial patterns and the symbols related with it, we use them to achieve a certain dial pattern to make a certain call routing on FCM5404 either inbound or outbound calls.

FCM5404 has some certain signs can be used to make a pattern for inbound and outbound routes, when extensions dial any number from its endpoint, the pattern configured on the outbound route when match the dialed number it will allow the extension to make outbound call through that route.

And vice versa, when a “DID number” or “Caller ID Pattern” in an “Inbound route”, when a call dial into FCM5404 and match the pattern configured for it, it will allow the call to reach its destination.

Dial Pattern symbols: -

In general, there are some symbols used for set a Dial pattern or DID number to set complete call control routing.

Symbol	Description
^	Any pattern must start with it. (optional)
\$	Any pattern must end by it. (optional)
\d	Any single digit from 0 to 9.
{ }	Write number of repetitions which indicate “\d”.
[]	Means range of digit between brackets.
*	Any number of digits.
+	At least one digit or more than one.
	Or.
-	Indicate from to and use in [] brackets.

And here are some examples to declare how to use those symbols: -

(123|124|125)

It means the dialed number must be 123 or 124 or 125 only,

123[4-6]

It means the dialed number must be 4 digits, and it must start with 123 then any number between 4 to 6

Example 1234 or 1235 or 1236

123\d

It means the dialed number must be 4 digits, and it must start with 123, and then any digits between 0 and 9

Example 1234 or 1235 or 1236 or 1237 or 1238 or 1239 or 1230

123\d+

It means the dialed number must be at least 4 digits or more, it must start with 123, and then any digits between 0 and 9

Example 1234, 12300, ..., 123456789, etc.



123\d*

It means the dialed number must be at least 3 digits or more, it must start with 123 only or then any digits between 0 and 9

Example 123, 1234, 12300, ..., 123456789, etc.

123\d{3}

It means the dialed number must be 6 digits, it must start with 123, and then any 3 digits between 0 and 9.

Example 123456, 123745, 123321, ..., 123124, etc.

Inbound Routes:

On FCM5404 web GUI, go to **“Call Control → Inbound Routes”** and delete the existing default route.

<input type="checkbox"/>	Name	DID Pattern	Caller ID Pattern	Priority	Enabled	Enable Time Condition	Destination	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	default	^d*\$		100	Yes	No	6500	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Click on **“Add”** to configure a new route.



Delete Completed: 2

- System Status +
- Extensions/Trunks +
- Call Control +
- Inbound Routes**
- Outbound Routes
- Outbound Restrictions
- AutoClip Routes
- CC Routes
- Time Condition
- FXO Lines Locked
- Call Features +
- Billing +
- FCM Setting +
- System Setting +

Inbound Routes

Add Import Export

Search

Name	DID Pattern	Caller ID Pattern	Priority	Enabled	Enable Time Condition	Destination	
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A new window will appear to fill parameters of that route.

The screenshot shows the 'Inbound Call Routing' configuration page in the FIBERME interface. The page has a sidebar on the left with navigation options like 'System Status', 'Extensions/Trunks', 'Call Control', 'Inbound Routes', 'Outbound Routes', 'Outbound Restrictions', 'AutoClip Routes', 'CC Routes', 'Time Condition', 'FXO Lines Locked', 'Call Features', and 'Billing'. The main content area is titled 'Inbound Call Routing' and contains several configuration fields. A red box highlights the 'Name' field with a red arrow pointing to it. Another red box highlights the 'DID Pattern' and 'Caller ID Pattern' fields. A third red box highlights the 'Destination' dropdown menu with a red arrow pointing to it. A fourth red box highlights the 'Member Trunks' section, which includes an 'Available' list of trunks (fxo3@PPBX, fxo4@PPBX, fxo5@PPBX, fxo6@PPBX) and a 'Selected' list. A red arrow points to the 'Destination' field with the text 'Set the destination for that route.' The 'Save' button is also highlighted with a red box and an arrow. The 'Save' button has the text 'After finish click save.' next to it.

Parameter	Description
Name	Enter a name for that route.
DID Patterns	Set a pattern that will be received by that route.
Caller ID Pattern	Set caller ID for that route.
Distinctive RingTone	Send the INVITE message with the Alert-Info header field to the called extension to let it select different ring tone files based on the Alert-Info header field. By default, it is null.
Enable T.38	Whether to enable the T.38 feature. The default setting is No.
Enable Time Condition	The feature is disabled by default. Once enabled, it is required to set a destination corresponding to this time condition.
Destination	Multiple options available, such as Extensions, IVR Menus, Ring Groups, Conference Rooms, Call Center, etc. By default, it is null and must be filled in. Otherwise, the configuration will fail to be saved
Member Trunks	Select trunks that will be used int that route.
Enabled	Set whether to enable this route.
Priority	Used to adjust the priority of multiple inbound routes. The default value is 100. The smaller the value, the higher the routing priority.
Enable Mobility Extension	If you enable this setting, when the user's mobile number dials into the system, the phone will have the same user permission as the desktop extension. So, the mobile number will be able to connect with the other extension, dial out with the trunk and play voicemail.
Send RingTone	Local: When an incoming call to the trunk is transferred to the extension and



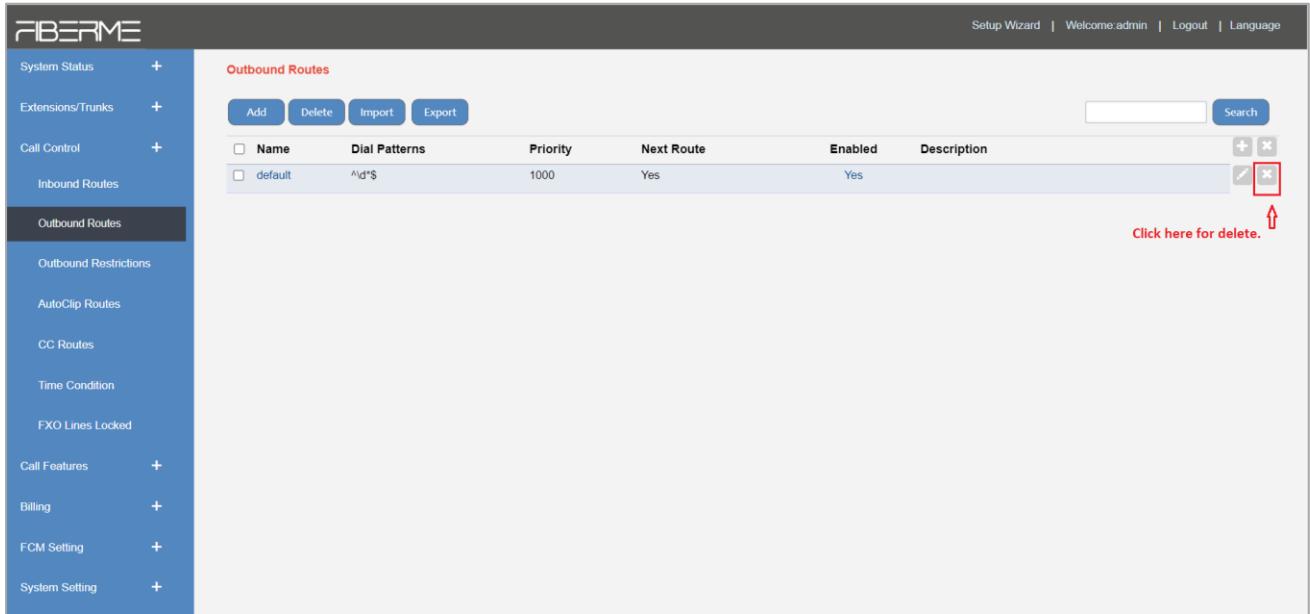
	<p>the extension is ringing, the IPPBX will send the 183 messages well as the ring back tone to the calling party.</p> <p>Remote: When an incoming call to the trunk is transferred to the extension, the IPPBX will transmit the 180/183 message and the ring back tone from the extension transparently to the calling party.</p> <p>The default setting is <i>Remote</i>.</p>
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Set the DID number to a group of consecutive extension numbers. Please fill in the DID number range, select "Destination" as "Extension Range" and fill in the corresponding extension range. For example, DID range: 5503301-5503305, extension range: 1001-1005.

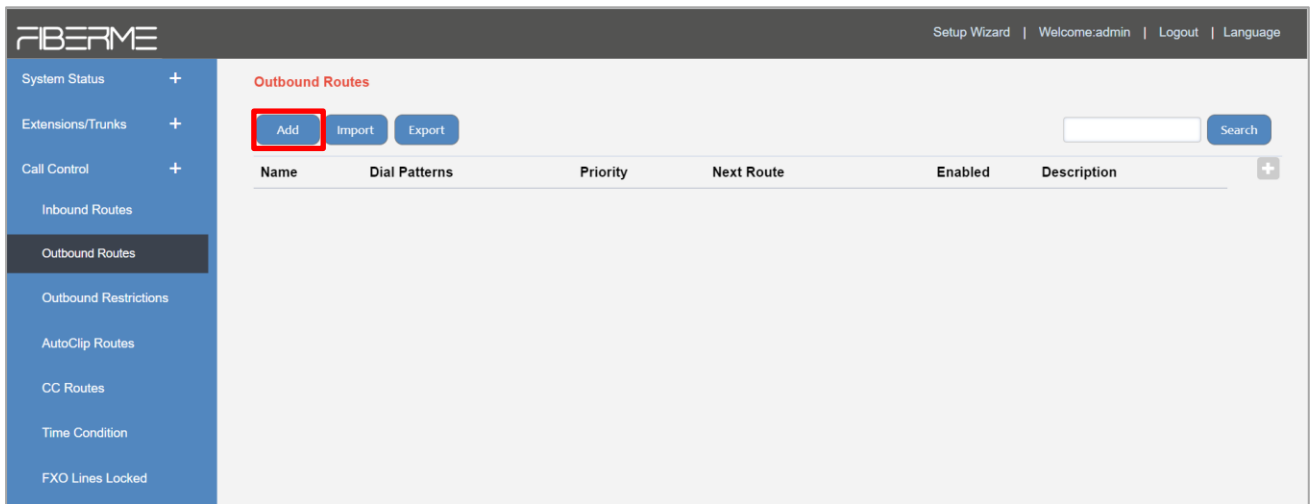


Outbound Routes:

On FCM5404 web GUI, go to “Call Control → Outbound Routes” and delete the existing default route.



Click on “Add” to configure a new route.



A new window will appear to fill parameters of that route.

Parameter	Description
Name	Enter a name for that route.
Patterns	Enter the Dial Pattern that will be matched in that route.
Strip	Enter the number of the stripped digits from the matched dialed number.
Prepend	Enter the prefix that will be added to the beginning of the dialed number.
Suffix	The digits that will be added to the end of the dialed number.
Delay	Delay time before dial calculated by ms.
Member Extensions	Select extensions allowed to use outbound route.
Member Trunks	Select trunks that will be used int that route.
SIP code	Set the route to the next trunk or route when receiving a specific SIP cause code.
Hangup Cause	Set the route to the next trunk or route when receiving a specific hang-up cause, and if the SIP code was set at the same time, the SIP code could not work. By default, it is null.
Next Route	If enabled, when the route is successfully matched and the call is not established normally, the next route will continue to be matched. By default, it is ticked.
Password	Set if you need a password for using this outbound route. The default setting is none. *None: The call goes out directly *Pin List: The gateway will require Password for outgoing calls, and will check the entered PIN with the selected PIN list in Call Features - Pin Numbers. The call will be preceded while the entered PIN matches any in



	<p>the PIN list.</p> <p>*Single Pin: Manually set password. The gateway will require Password for outgoing calls, and the call will be preceded only if the entered PIN is correct.</p>
Rrmomery Hunt	<p>Round robin with memory, remember which trunk was used last time, and then use the next available trunk to call out.</p>
Priority	<p>The smaller the value, the higher the call routing priority</p>
Enabled	<p>Choose to disable or enable that route.</p>
Description	<p>Description of the outbound route. By default, it is null.</p>
Time Condition	<p>Select the time condition to be applied on that route,</p>

