

Grandstream Networks, Inc.

WhatsApp Trunk Configuration Guide



WhatsApp Trunk Configuration Guide

OVERVIEW

This guide explains how to connect a WhatsApp Business phone number to a UCM using a WhatsApp Trunk, allowing the UCM to receive incoming WhatsApp voice calls.

With a WhatsApp Trunk configured on the UCM:

- Customers can **call the business through WhatsApp**.
- Incoming WhatsApp calls are received by the **UCM through the WhatsApp Trunk**.
- Incoming calls can be **routed to the configured UCM destination** through an Inbound Route.

To complete the configuration:

1. **Configure the WhatsApp application and phone number on Meta**, and obtain the required **Phone Number, Phone Number ID, and Access Token**.
2. **Configure the WhatsApp Trunk on the UCM** using the information obtained from Meta.
3. **Configure an Inbound Route** for the WhatsApp Trunk and select the required destination.

Once the Inbound Route is configured, the WhatsApp Trunk is ready to receive and route incoming WhatsApp calls.



WhatsApp Trunk Configuration on UCM63xx

By completing the steps in this guide, you will have a **WhatsApp Business number connected to the UCM and configured for WhatsApp voice calling**, with incoming calls routed to the desired UCM destination.

A valid RemoteConnect plan is required to use WhatsApp Trunks on the UCM. Before starting the configuration, ensure that the UCM has an active RemoteConnect plan. Without an active plan, the WhatsApp Trunk cannot be used.

PREREQUISITES

WhatsApp Business & Meta Requirements

- A phone number to be used with the WhatsApp Business API.
 - The number must not be registered to any existing WhatsApp account (personal or business app).
 - Ability to receive SMS/voice OTP for number verification.
 - A Meta Business Portfolio with administrative access.
 - A Meta Developer account registered at <https://developers.facebook.com>
-
- If your phone number is currently in use, it must be unregistered before proceeding. For more information, please refer to: <https://faq.whatsapp.com/>
 - Meta provides a test phone number, which allows sending free messages for up to 90 days. Using a production number is subject to Meta's messaging limits and pricing.
 - It is recommended to use a test phone number for initial Quickstart verification.

UCM & Network Requirements

- A UCM6300/A Series or CloudUCM running a compatible firmware version (see [SUPPORTED DEVICES](#) section).
 - The UCM must be publicly reachable via HTTPS with a valid CA-signed TLS/SSL certificate.
-
- Self-signed certificates are not supported by the WhatsApp webhook service.
 - It is recommended to use the UCM RemoteConnect address (e.g., <https://xxxx.a.gdms.cloud>) to ensure compliance with Meta webhook requirements.

QUICK CONFIGURATION REFERENCE

Step	Action	Key Requirement
1	Prepare Meta information	Meta application, WhatsApp phone number, Phone Number ID, and Access Token
2	Go to Extensions / Trunks -> WhatsApp Trunk	Create a new WhatsApp Trunk
3	Enter the trunk parameters	Trunk Name, Phone Number, Phone Number ID, and Token
4	Save the WhatsApp Trunk	Graph API validation must succeed
5	Go to Extensions / Trunks -> Inbound Routes	Select the corresponding WhatsApp Trunk
6	Click Add	Create the inbound rule
7	Configure the rule	Enter the Inbound Rule Name
8	Select Default Destination	Select the required call destination
9	Save the inbound rule	WhatsApp Trunk configuration is complete

WHATSAPP CLOUD API SETUP (META SIDE)

This section covers all the Meta-side configuration required before the UCM can be set up. Complete all steps in this section first. By the end, you will have your **Phone Number ID** and a **permanent access token** ready to paste into the UCM portal.

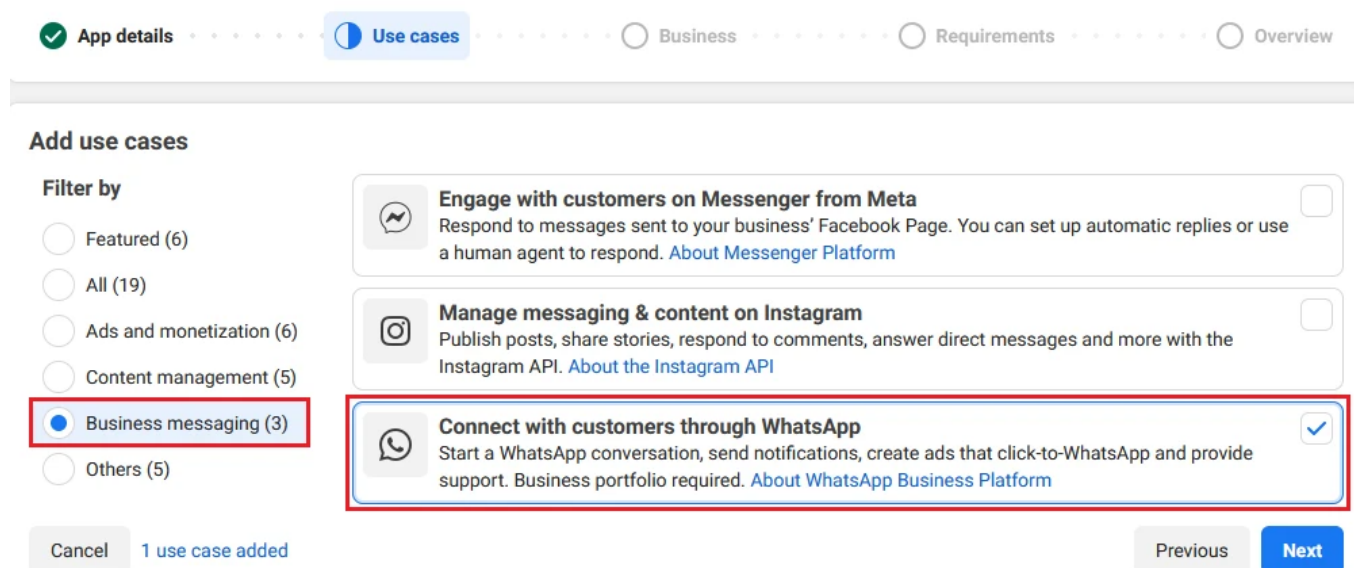
Create Meta App and Configure WhatsApp

1. Open **Meta for Developers** and sign in (If you don't have a Meta developer account, complete the registration process).
2. Click **Create App**.



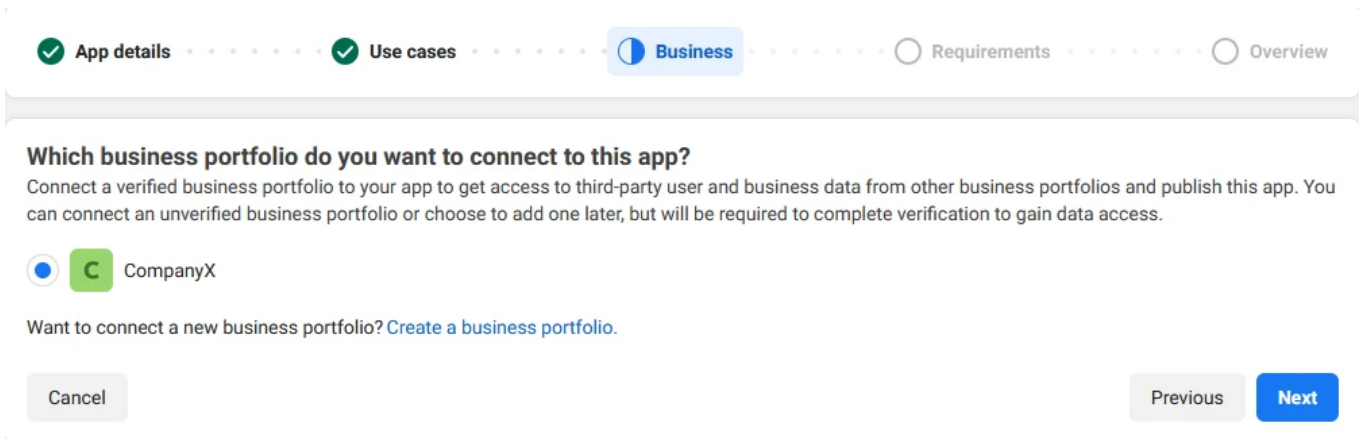
Meta for Developers App Dashboard

3. Choose a name for your app.
4. Under the Business messaging app category, choose the **Connect with customers through WhatsApp** use case.



Add Use Cases Screen During App Creation

4. Select an existing Meta Business Portfolio or follow the prompts to create a new one, then complete app creation.



Progress bar: App details (checked) • Use cases (checked) • **Business** (selected) • Requirements • Overview

Which business portfolio do you want to connect to this app?

Connect a verified business portfolio to your app to get access to third-party user and business data from other business portfolios and publish this app. You can connect an unverified business portfolio or choose to add one later, but will be required to complete verification to gain data access.

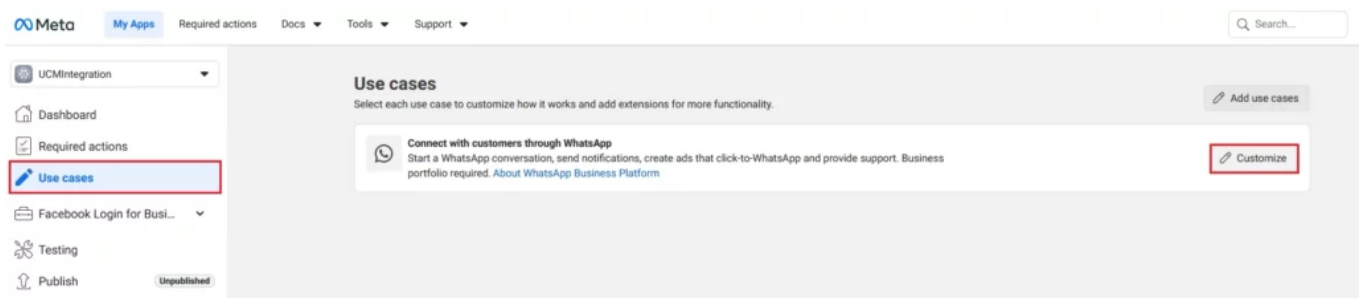
☐  CompanyX

Want to connect a new business portfolio? [Create a business portfolio.](#)

Buttons: Cancel, Previous, Next

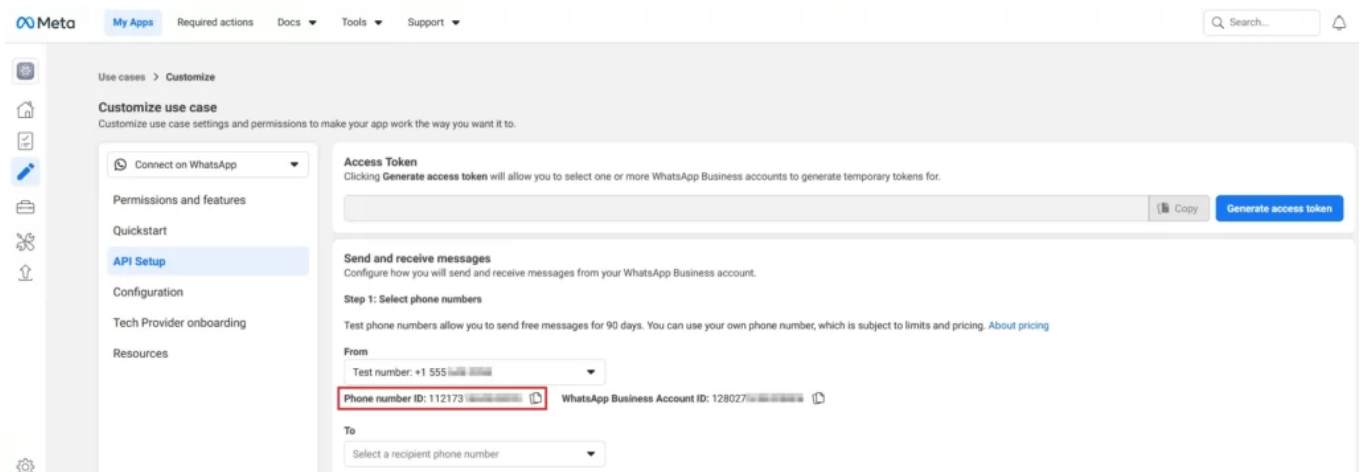
Business Portfolio Selection

- In the left sidebar, click **Use Cases** (pencil icon), then click **Customize** under the Connect with customers through WhatsApp use case.



Meta App Use Cases Sidebar

- In the **Quickstart/API Setup** section, locate and copy the **Phone Number ID** displayed for the test number (or your own number if already added). Save this value as it will be required during UCM configuration.



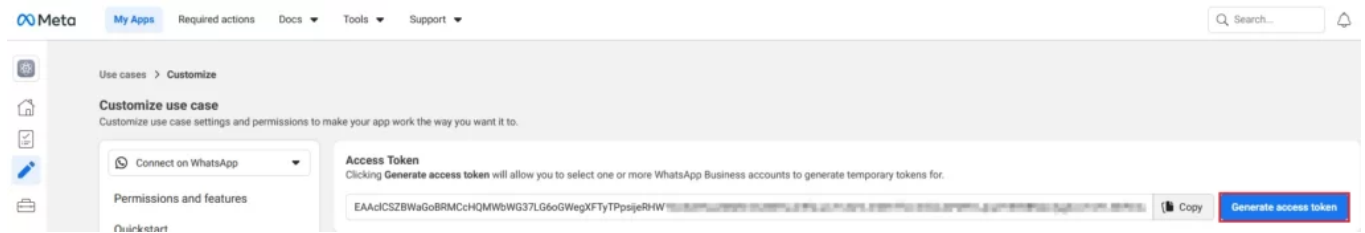
API Setup Page showing Phone Number ID

The API Setup page also displays a temporary access token. This token can be used for the integration, but it expires within 24 hours and is intended for initial testing only. It is recommended to use a permanent token, which will be generated in Step 4.

Send a Test Message (Optional)

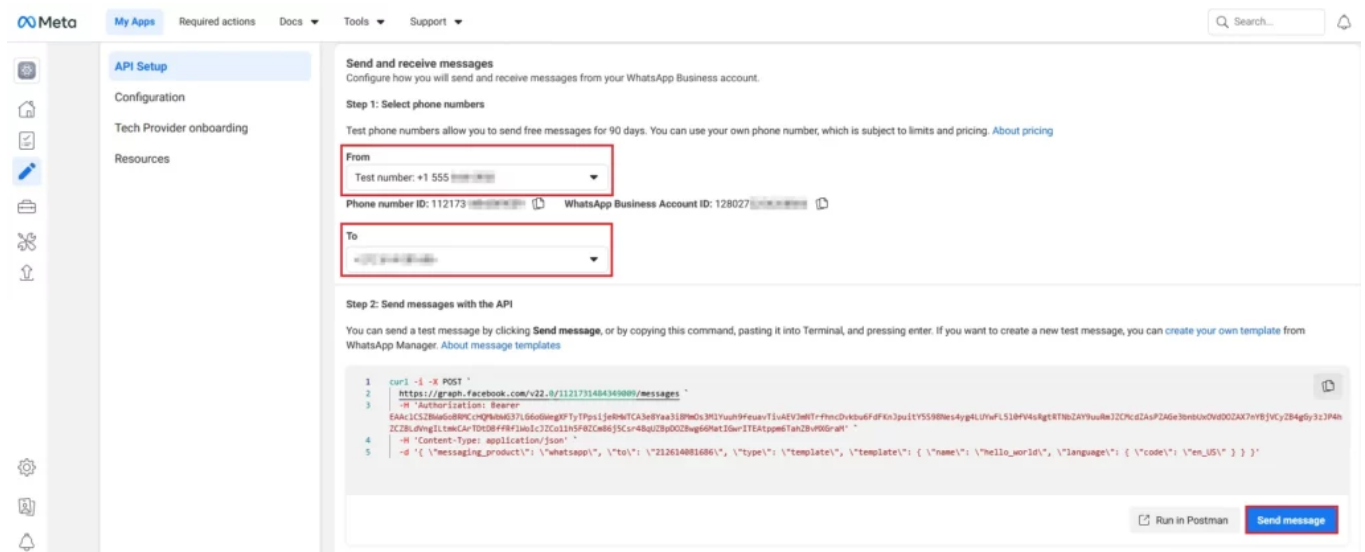
Before proceeding to production configuration, it is recommended to verify that your Meta app is correctly connected to the WhatsApp Cloud API by sending a test message.

1. On the API Setup page, generate a temporary access token.



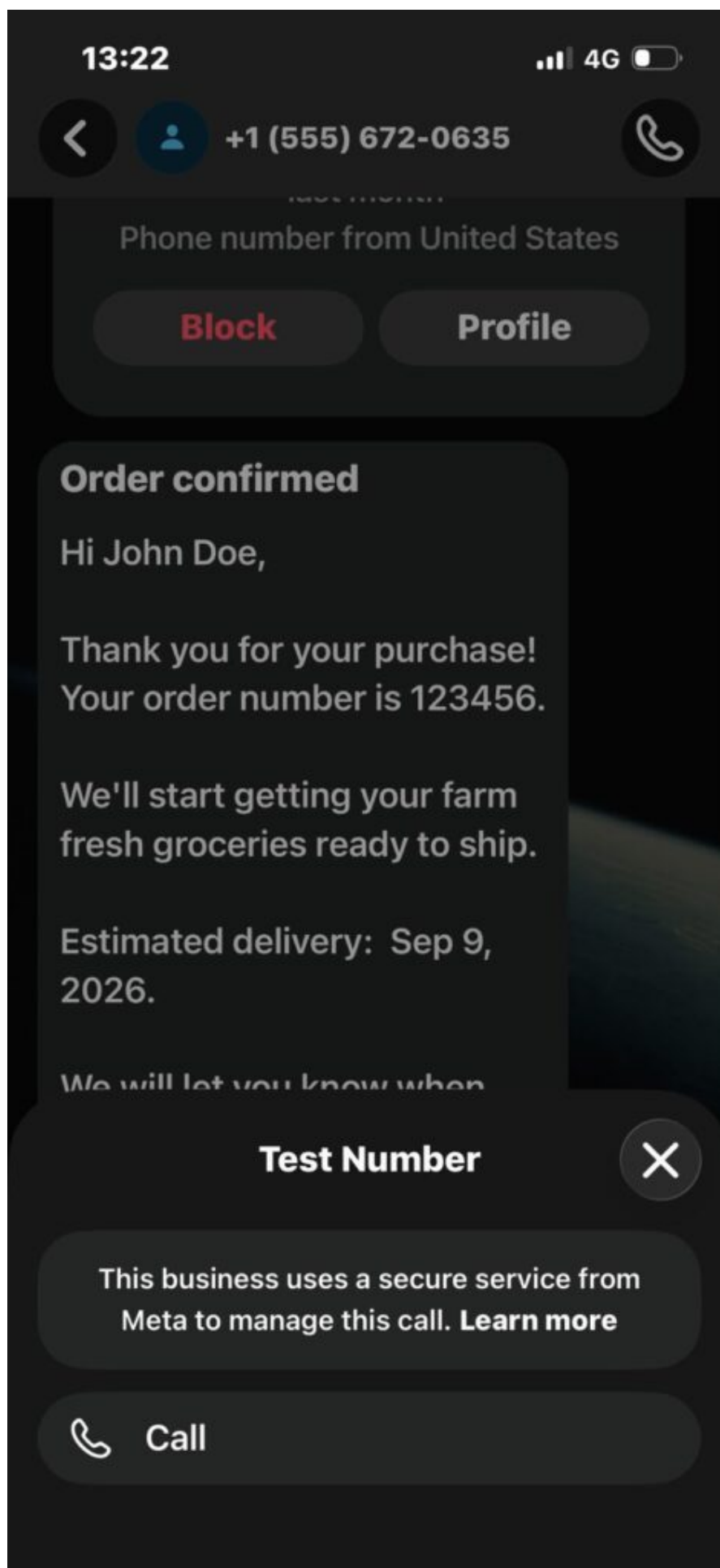
Generating a Temporary Access Token

2. Ensure the test phone number is selected in the From field.
3. In the To field, click Manage phone number list and add a personal WhatsApp number to receive the test message. Up to 5 recipient numbers can be added during testing.
4. Click **Send message**. Meta will send a preconfigured hello_world template message to the selected number.



Send and Receive Messages Section

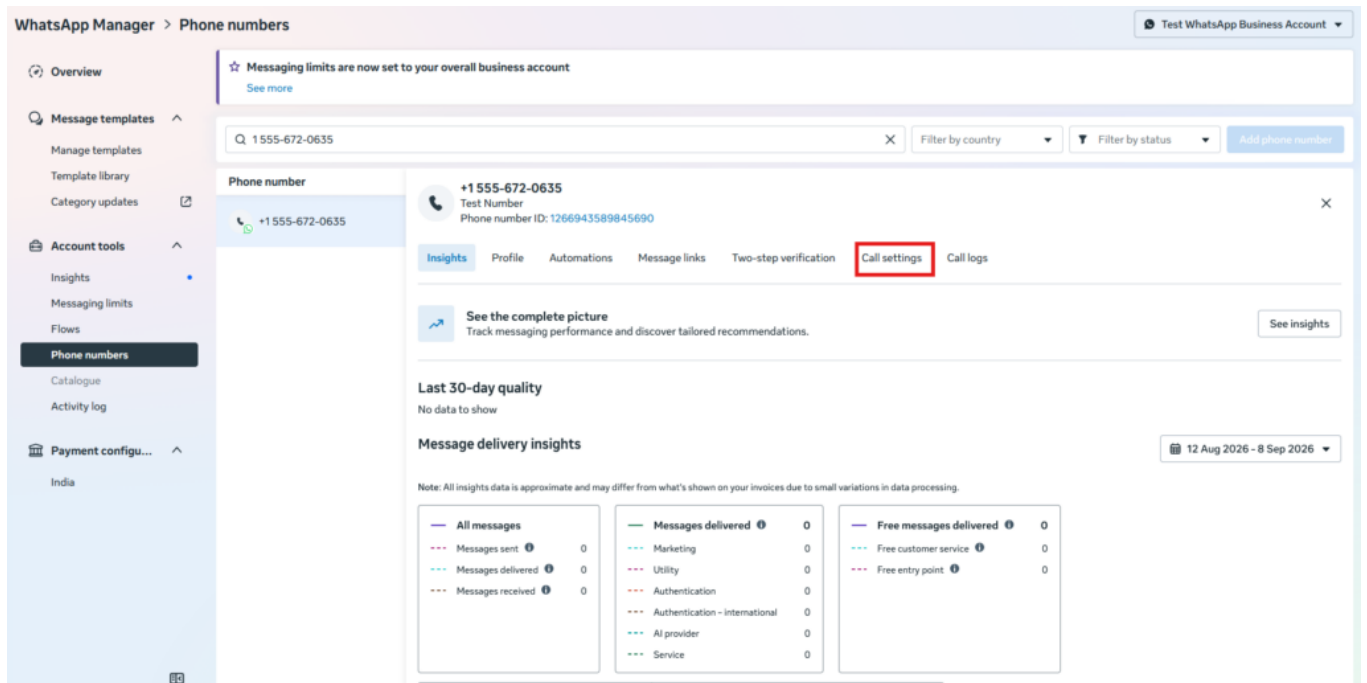
5. Confirm the message is received on the target device.



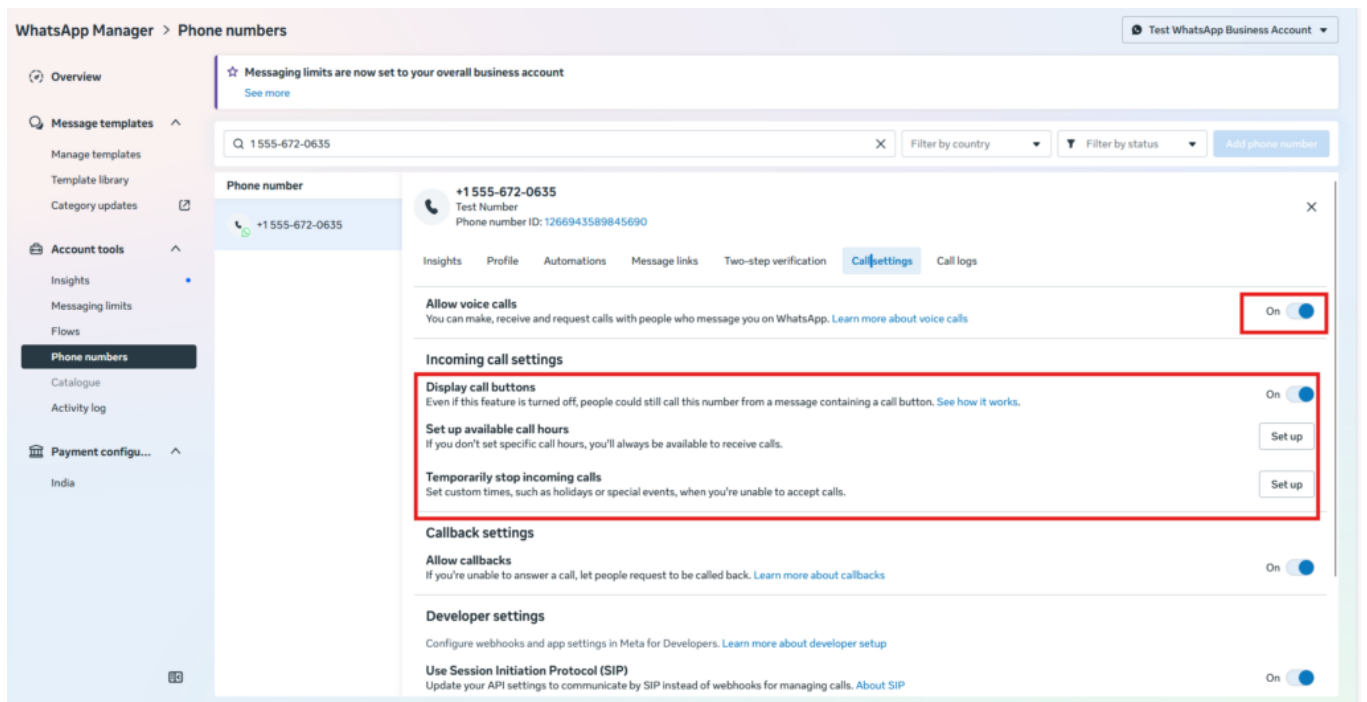
Test Message Received on Device

Test messages sent using the Meta-provided test number are free of charge and do not require a payment method. Sending messages from a production phone number is subject to Meta's conversation-based pricing.

6. To enable WhatsApp voice calling through the UCM WhatsApp Trunk, enable calling for the configured WhatsApp Business phone number in Meta. Go to **WhatsApp Manager -> Phone Numbers**, select the WhatsApp Business number, and open **Call settings**.



7. Enable **Allow voice calls**, then enable **Use Session Initiation Protocol (SIP)** under Developer settings to configure the SIP trunk.



Allow voice calls

Set up your connection to use SIP communication ✕

You can find this information on your partner's website

SIP server

SIP port
Leave this field as is to use the default port.

App ID
This field cannot be edited once saved.

Request URI user parameters Add new

Name	Value

Cancel Save

Developer settings

Configure webhooks and app settings in Meta for Developers. [Learn more about developer setup](#)

SIP Credentials Set Up

Add a Production Phone Number (Optional)

Skip this step if you wish to use the Meta-provided test number for this integration, or if your production number is already added and visible in the Form drop-down on the API Setup page.

If you need to register a new production phone number:

1. On the API Setup page, click **Add phone number** under the From field.

Meta My Apps Required actions Docs Tools Support

API Setup

Configuration

Tech Provider onboarding

Resources

Send and receive messages
Configure how you will send and receive messages from your WhatsApp Business account.

Step 1: Select phone numbers
Test phone numbers allow you to send free messages for 90 days. You can use your own phone number, which is subject to limits and pricing. [About pricing](#)

From

Test number: +1 555

☐ Test Number
+1 555

☐ Business Account ID: 12802

+ Add phone number

Adding a Production Phone Number

2. Enter your business display name and business category, then click Next.

Add phone number

☒ Business information

☐ WA Business Profile

☐ Add number

☐ Verify number

Fill in your business information

Select an existing or create a new business portfolio to add your phone number. Your audience will not see this information on your WhatsApp profile.

Business name

CompanyX8/100

Business website or profile page

https://companyx.com/✓

Country

United States of America▼

+ Add Address (optional)

Back

Next

Business Information Form

3. Enter the phone number, select a verification method (SMS or Voice Call), and click Next.

Add phone number

☒ Business information

☒ WA Business Profile

☐ Add number

☐ Verify number

Create a WhatsApp Business profile

This profile will show information about your business to people on WhatsApp. You can edit this information anytime by going to **Business assets** in Meta Business Suite **Settings** and selecting this WhatsApp account.

WhatsApp Business display name

Your display name should match your business name and adhere to WhatsApp Business display name guidelines. [Learn more about display name guidelines](#)

CompanyX

Timezone ⓘ

(GMT+01:00) Africa/Casablanca▼

Category

Shopping and Retail▼

Business description · Optional

Tell people about your business0/512

Back

Next

WhatsApp Business Profile Setup

4. Enter the verification code received and complete the process.

Add phone number

- ✓ Business information
- ✓ WA Business Profile
- Add number**
- Verify number

Add your WhatsApp phone number

Choose how you want to be identified when sending messages. [About existing numbers](#)

Phone number

US +1

(512) 665-9564

You'll receive a code to verify this number.

Choose how you would like to verify your number

If you are using a landline number, choose phone call.

☒ Text message
 ☐ Phone call

Back

Next

Verify Production Number

- Once added, the number will appear in the From drop-down. Select it and copy the associated Phone Number ID.

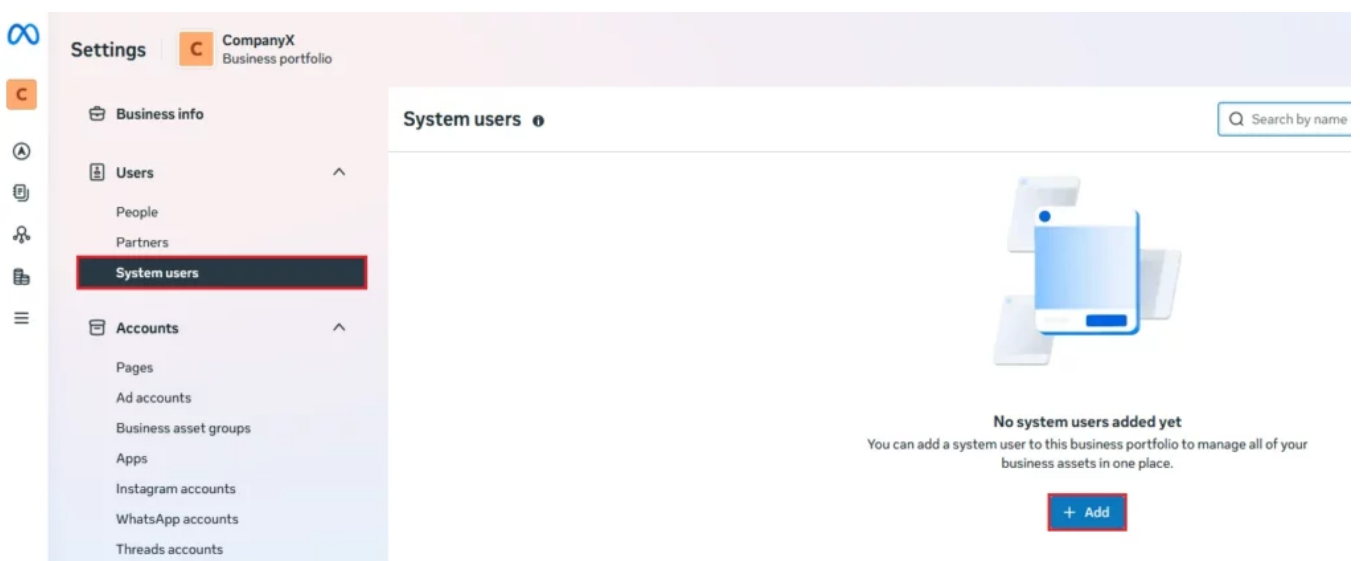
A phone number registered with the WhatsApp Business API cannot simultaneously be used in the WhatsApp Business mobile app. If the number is currently bound to a personal or business WhatsApp account, it must be unregistered before proceeding.

Generate a Permanent Access Token

This step creates a non-expiring System User token that will be used for all ongoing UCM to WhatsApp communication.

Create a System User

- Open Meta Business Settings.
- In the left sidebar, navigate to **Users->System Users** and click Add.



System Users Page in Meta Business Settings

- Enter a name for the system user (e.g., UCM-WhatsApp), set the role to **Admin**, and click **Create System User**.

Create system user

×

Enter a name for the system user you want to create below:

System user name

wa_trunk

System user role
CompanyX will be the owner of this system user.

Admin

Cancel

Create system user

Create System User Dialog

Assign Assets to the System User

1. With the new system user selected, click **Assign Assets**.

System users

Search by name or ID

Name

Wave
ID: 61574330978634

Wave
ID: 61574330978634
Admin access

Generate token

Revoke tokens

Assigned assets

Installed apps



No assets assigned
You can assign assets, like Facebook Pages and Instagram accounts, to Wave.

Assign assets

Assign Assets to the System User

2. Under the Apps tab, select your Meta app and enable **Full Control->Manage app**. Click Save Changes.

Select assets and assign permissions

Select asset type

Apps1

Pixels

Offline event sets

WhatsApp accounts

Datasets

Select assets

Search by name or ID

☒ Select all

☒ UCMIntegration

Assign permissions

Partial access

☐ Develop app
Can change app settings, test the app and view analytics.

☐ View insights
Can view app analytics.

☐ Test app
Can test the app.

Full control

☒ Manage app
Can manage roles, change app settings, test the app and view analytics.

1 asset selected

Cancel

Assign assets

Assigning App Permissions to the System User

- Under the WhatsApp Accounts tab, select your WhatsApp Business Account(s) and enable **Full Control->Manage WhatsApp Business Accounts**. Click Save Changes.

Select assets and assign permissions

Select asset type

Apps1

Pixels

Offline event sets

WhatsApp accounts2

Datasets

Select assets

Search by name or ID

☒ Select all

☒ CompanyX

☒ Test WhatsApp Business Account

Assign permissions

☐ Message templates (view only)
View and use message templates.

☐ Message templates (view and manage)
Create, edit and delete message templates.

☐ Phone numbers (view only)
View phone numbers and profiles.

☐ Phone numbers (view and manage)
Add and delete the phone numbers. Manage their names, profiles, registrations and settings.

☐ Manage phone numbers and message templates
Create message templates, add phone numbers, access metrics and send messages to customers.

☐ Messages
Send and respond to messages as the WhatsApp account.

Full control

☒ Everything
Manage all settings, assign users, view payment information and send messages.

3 assets selected

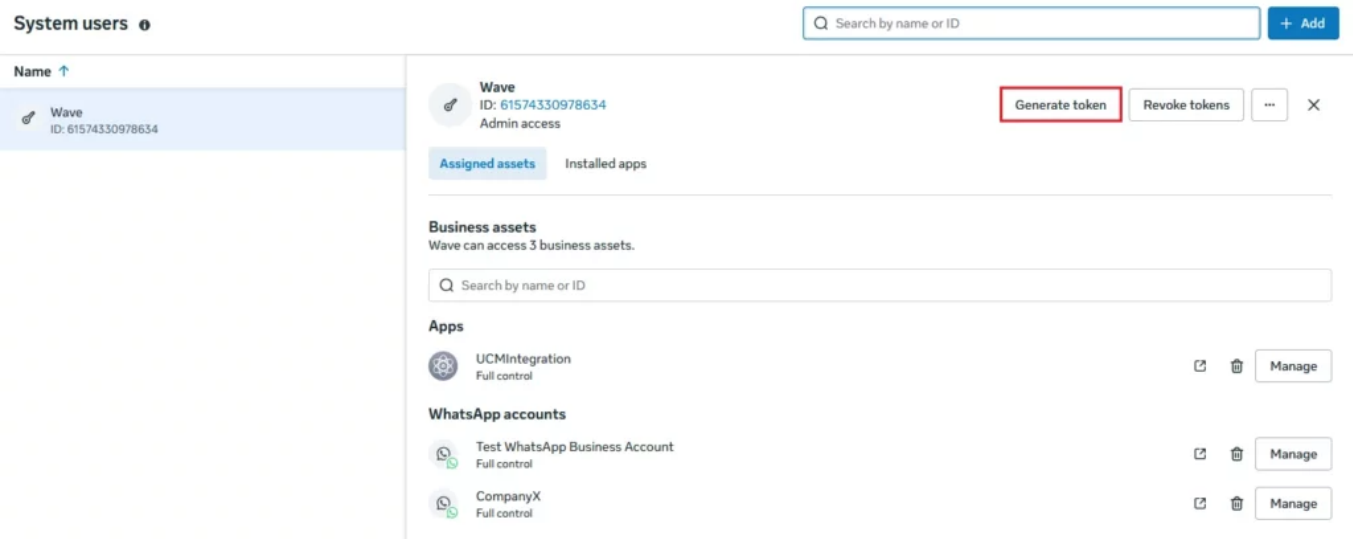
Cancel

Assign assets

Assigning WhatsApp Account Permissions to the System User

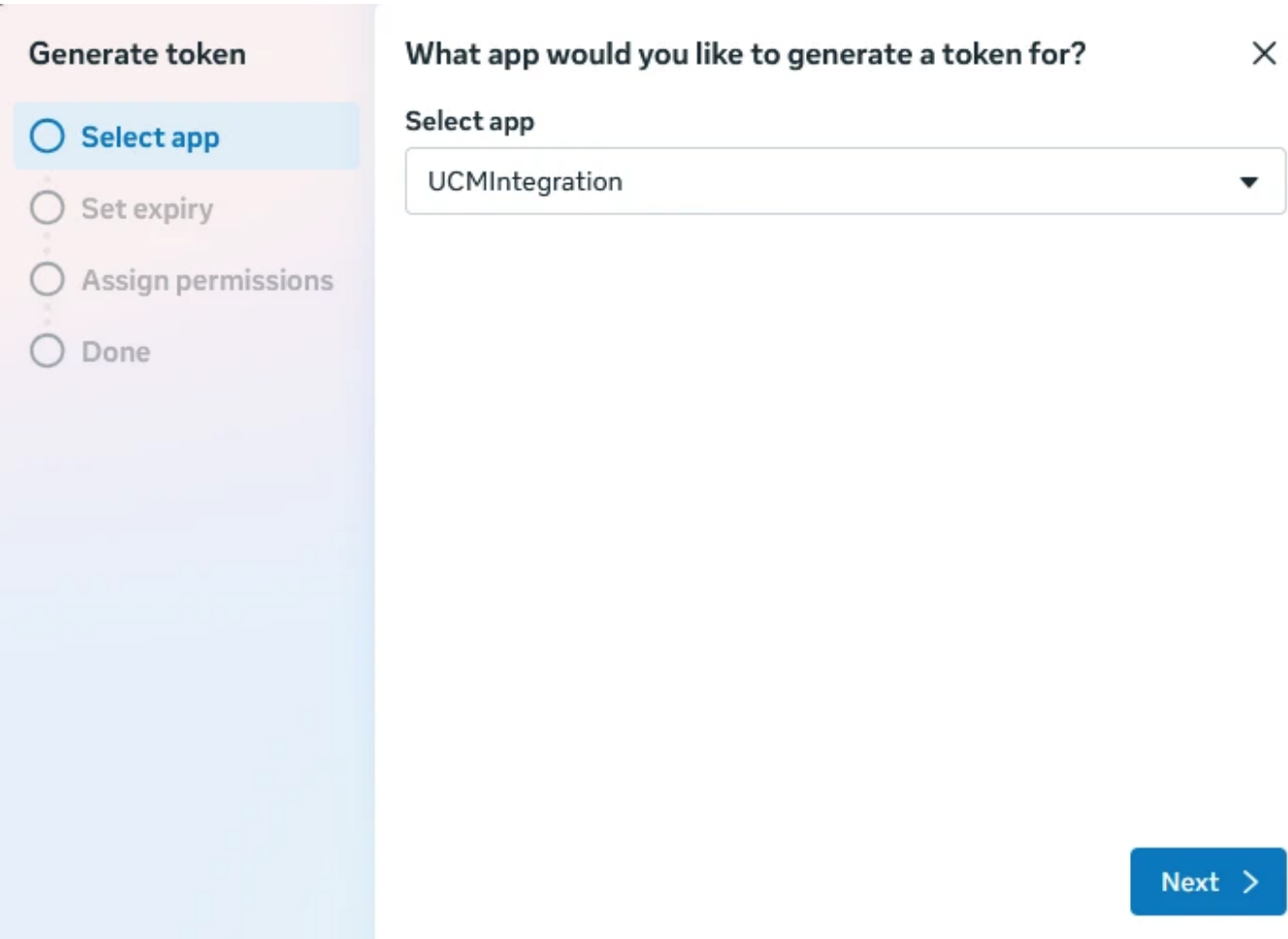
Generate the Token

1. On the System Users page, select the system user you created and click **Generate token**.



Generate Token Button on System Users Page

2. In the pop-up, select your app from the drop-down list.



Select App for Token Generation

3. Select a token expiration; we recommend 60 days.

Generate token

☒ Select app

☐ Set expiry

☐ Assign permissions

☐ Done

When should the token expire?

Token expiry

Choose when this token will expire. [Learn about token expiry and refresh.](#)

☒ 60 days (recommended)

☐ Never

< Previous

Next >

Set Token Expiry

4. Enable the following permissions:

Generate token

✓ Select app

✓ Set expiry

○ Assign permissions

○ Done

What permissions will be granted to the app?

✕

ⓘ If the permission(s) you're looking for are not available, an app admin may need to customize or add a use case to this app.
[About use cases](#)

Select permissions

5 options selected

Q |

✓ business_management

✓ manage_app_solution

✓ whatsapp_business_manage_events

✓ whatsapp_business_management

✓ whatsapp_business_messaging

By clicking "Generate Token", you agree to install the selected app for system user wa_trunk.

< Previous

Generate token

Assign Token Permissions

5. Click **Generate Token**.
6. Copy the token displayed and store it in a secure location. This token will not be shown again and remains valid indefinitely until explicitly revoked.

Generate token

- ✓ Select app
- ✓ Set expiry
- ✓ Assign permissions
- Done

Token created

Your token has been created and can now be used.

Token

EAAcICSZBWaGoBRB4AYHSo1axsNpMKXmHevNXBXrV6

Copy

Done

Created Permanent Token

Anyone with access to this token can send and receive messages and calls on behalf of your WhatsApp Business Account.

UCM CONFIGURATION

Configuration Overview

The WhatsApp Trunk configuration follows this sequence:

- Obtain the required WhatsApp information from the Meta application.**

Before configuring the trunk, obtain the following information from the Meta WhatsApp Business account:

 - **Phone Number** - the WhatsApp Business phone number to be used with the UCM.
 - **Phone Number ID** - the unique ID assigned to the WhatsApp phone number by Meta.
 - **Permanent Access Token** - the token generated for the WhatsApp Business account through a **System User** in Meta Business Settings.
- Create a WhatsApp Trunk on the UCM.**

Go to **Extensions/Trunks -> WhatsApp Trunk** and click **Add**.
- Enter the WhatsApp information.**

Enter the **Phone Number**, **Phone Number ID**, and **Permanent Access Token** obtained from Meta into their corresponding fields. Configure the **Trunk Name** and any optional settings such as **Auto Record**.

4. **Save the WhatsApp Trunk.**
Click **Save** to create the trunk.
5. **Allow the UCM to validate the configuration.**
During the save operation, the UCM communicates with the **Meta Graph API** to verify the provided information and bind the SIP service. If the information is invalid, the UCM will return an error, and the trunk will not be saved.
6. **Configure an Inbound Route for the WhatsApp Trunk.**
Go to **Extensions/Trunks -> Inbound Routes**, select the corresponding WhatsApp Trunk, and click **Add**.
7. **Select the required Default Destination.**
Configure the inbound rule and choose where incoming WhatsApp calls should be sent, such as an **Extension, IVR, Ring Group, Queue, or other supported destination**.
8. **Save the Inbound Route.**
Click **Save**. The WhatsApp Trunk configuration is then complete.

Configure the WhatsApp Trunk

Access the WhatsApp Trunk Configuration Page

Log in to the UCM Web UI and navigate to:

Extensions / Trunks -> WhatsApp Trunk

Click **Add** to create a new WhatsApp Trunk.

The **New WhatsApp Trunk** configuration page will be displayed.

The screenshot shows the 'New WhatsApp Trunk' configuration page in the UCM6308 Web UI. The left sidebar contains navigation links: System Status, Extensions / Trunks, Extensions, Extension Group, Analog Trunk, VoIP Trunk, WebRTC Trunk, WhatsApp Trunk (highlighted), SLA Work Station, and Outbound Routes. The main content area is titled 'WhatsApp Trunk > New WhatsApp Trunk'. It contains the following fields and options:

- Trunk Name**: A text input field with a note: '2 - 64 characters, supports letters, numbers, Chinese characters, and special characters: ' ' " ' = & \$ | < > ; , .
- Disable This Trunk**: A checkbox with a help icon.
- Auto Recording**: A checkbox with a help icon.
- Phone Number**: A text input field with a note: '1 - 64 characters, supports letters, numbers and special characters: + # - . \$ &.
- Phone Number ID**: A text input field with a note: '1 - 64 characters, supports letters, numbers and special characters: +.
- Token**: A text input field with a note: '1 - 256 characters, supports letters, numbers and special characters: + + . #.

At the bottom, there is a link: 'For more information about WhatsApp Trunk configuration, see [WhatsApp Trunk Configuration Manual](#).' and two buttons: 'Cancel' and 'Save'.

Configure the WhatsApp Trunk Parameters

Configure the parameters according to the following table.

Parameter	Requirement	Description
Trunk Name	Required	Enter a name for the WhatsApp Trunk. The trunk name is mandatory and must not be the same as an existing VoIP Trunk name.
Disable This Trunk	Optional	Enable this option to disable the WhatsApp Trunk while retaining its configuration. Calls cannot be made through a disabled trunk.
Auto Record	Optional	Enable this option to automatically record calls made through the WhatsApp Trunk.
Phone Number	Required	Enter the WhatsApp phone number obtained from the Meta application.

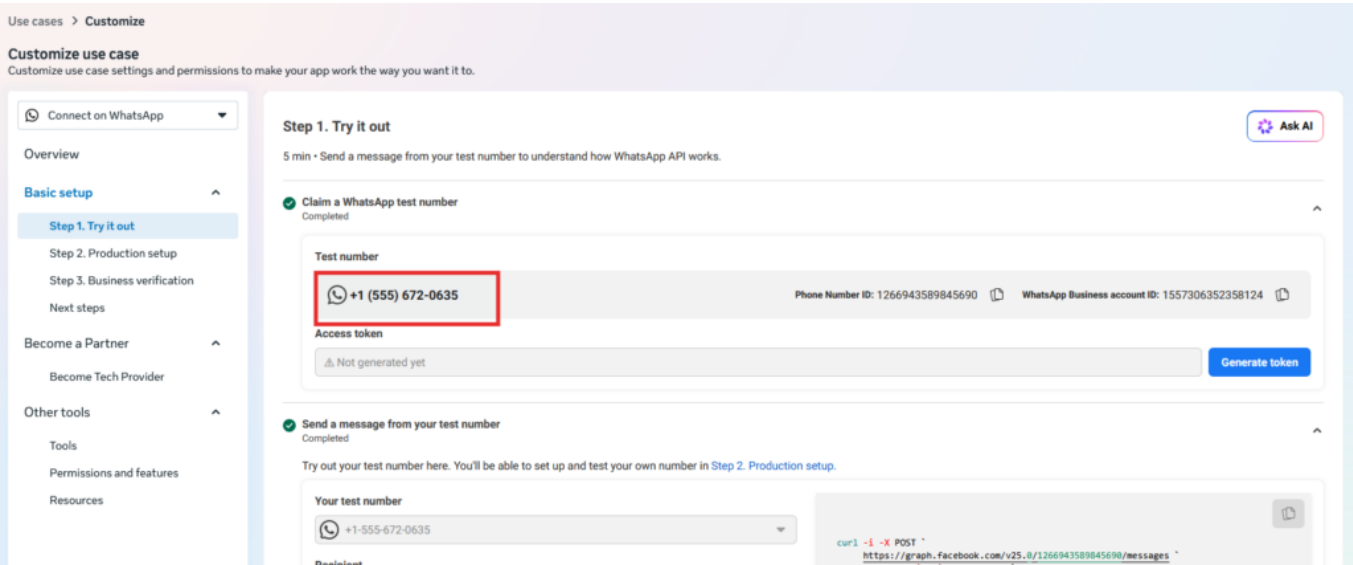
Phone Number ID	Required	Enter the Phone Number ID obtained from the Meta application.
Token	Required	Enter the Access Token obtained from the Meta application.

The **Phone Number**, **Phone Number ID**, and **Token** are information obtained from the Meta application.

Phone Number

The **Phone Number** field corresponds to the WhatsApp phone number obtained from the Meta application. Enter the WhatsApp phone number associated with the WhatsApp Business account that will be used with the trunk.

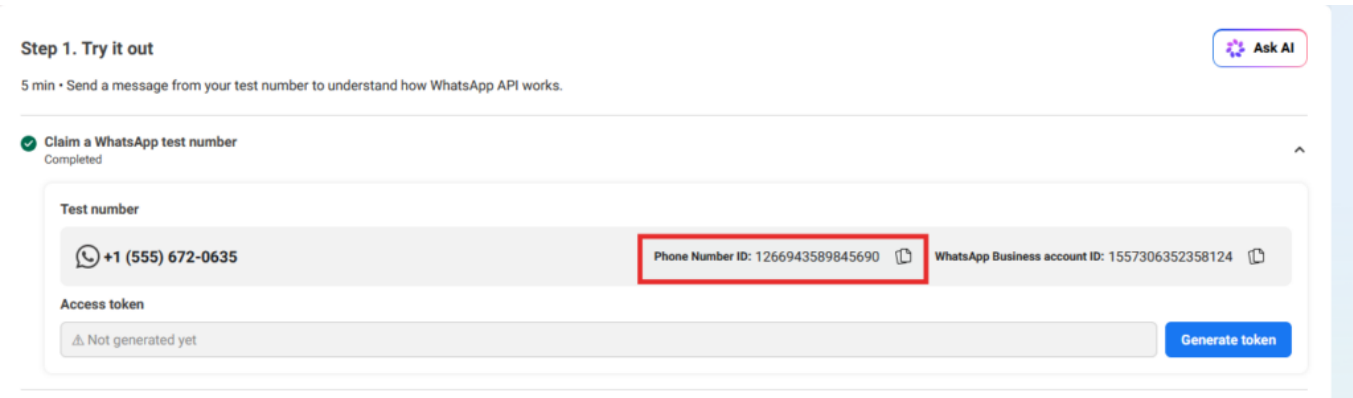
Important: The phone number must correspond to the WhatsApp phone number configured in the Meta application.



Phone Number

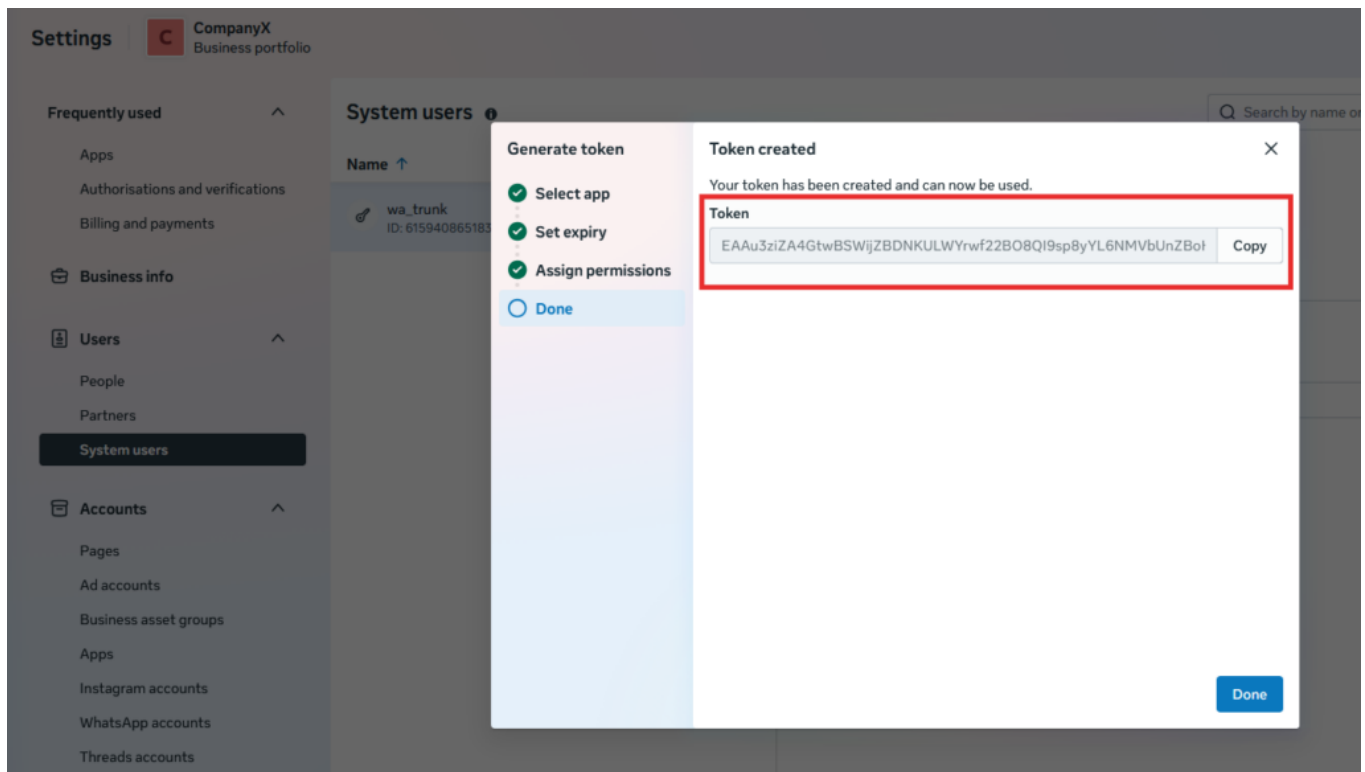
Phone Number ID

The **Phone Number ID** field corresponds to the **Phone Number ID** obtained from the Meta application. Enter the Phone Number ID associated with the WhatsApp phone number.



Token

The **Token** field corresponds to the Permanent Access **Token** obtained from the Meta application. Enter the permanent Access Token generated from Meta Business Settings -> Users -> System Users for the WhatsApp Business account.



Saving and Validating the WhatsApp Trunk

After entering the required information, save the WhatsApp Trunk configuration.

During the save operation, the UCM communicates with the **Graph API** to query the required information and bind the SIP service.

The save operation therefore also performs validation of the configured information.

- If the information is correct:

If the information provided to the UCM is correct and the Graph API operation succeeds, the WhatsApp Trunk configuration can be saved successfully.

WhatsApp Trunk

Trunk Name	Trunk Status	Phone Number	Options
whatsapp_123	Available	15556720635	

Total: 1 < 1 > 10 / page

If the information is correct

- If the information is incorrect

If the configured information is incorrect, the Graph API interface returns a failure.

In this situation:

- The WhatsApp Trunk configuration cannot be saved.
- The UCM returns an error message.

Therefore, if the configuration cannot be saved, verify the WhatsApp information entered in the trunk configuration, particularly the following:

- Phone Number

- Phone Number ID
- Access Token

WhatsApp Trunk

👑 To use WhatsApp trunks, please check the [RemoteConnect](#) plan or contact the equipment agent to purchase/upgrade the plan.

Trunk Name	Trunk Status	Phone Number	Options
whatsapp_123	Invalid	15556720635	  

Total 1 < 1 > 10 / page

If the information is incorrect

Configure the WhatsApp Trunk Inbound Route

After configuring the WhatsApp Trunk, configure its **Inbound Route**.

The inbound route determines where incoming WhatsApp calls should be delivered.

Inbound Route Limitation

Because inbound call matching is closely associated with the WhatsApp Trunk's phone number:

Each WhatsApp Trunk can have only one Inbound Route.

This is an important configuration limitation when deploying multiple WhatsApp Trunks on the same UCM.

Access the Inbound Route Configuration Page

Navigate to:

Extensions / Trunks -> Inbound Routes

In the upper-right corner of the page, select the corresponding **WhatsApp Trunk**.

Then click **Add**.

The **New Inbound Rule** page will be displayed.

Inbound Routes

Add

Delete

Blacklist

Set Global Inbound Mode

Third-party Database Lookup

Import

Export

Filter

WhatsApp Trunk - 123

☐	Inbound Rule Name	Inbound Number Matching Mode	Primary Number Matching Mode	Inbound Mode	Inbound Mode Feature Code	Time Condition	Time	Destination	Options
--------------------------	-------------------	------------------------------	------------------------------	--------------	---------------------------	----------------	------	-------------	---------

Or click the highlighted icon below, and it will automatically redirect you to the inbound route page for the specific selected WhatsApp trunk :

WhatsApp Trunk

Add			
Trunk Name	Trunk Status	Phone Number	Options
whatsapp_123	Available	15556720635	Edit Delete

Total: 1 [<](#) [1](#) [>](#) 10 / page

Configure the Inbound Rule

On the **New Inbound Rule** page:

Step 1 - Enter the Inbound Rule Name

Enter a name for the inbound rule.

The rule name should identify the purpose of the inbound rule and distinguish it from other inbound rules where applicable.

Step 2 - Select the Default Destination

Select the required **Default Destination**.

The available destination types provide different ways to handle incoming calls. Select the destination according to the customer's requirements.

Step 3 - Save the Rule

After configuring the inbound rule name and Default Destination, save the configuration.

The screenshot shows the 'New Inbound Rule' configuration page in the UCM6308 interface. The left sidebar contains a navigation menu with options like System Status, Extensions / Trunks, and Inbound Routes. The main content area is divided into sections: General, Call Settings, Caller ID Display Settings, and Inbound Mode. The 'General' section includes a dropdown for 'Trunk' (set to 'WhatsApp Trunk - 123') and a text field for 'Inbound Rule Name'. The 'Call Settings' section includes dropdowns for 'Special Ring Tone' and 'Distinctive Ring' (both set to 'None'), and checkboxes for 'Auto Recording' and 'Play Holiday Prompt'. The 'Caller ID Display Settings' section includes a checkbox for 'Append Trunk Name to Caller ID'. The 'Inbound Mode' section includes a checkbox for 'Multiple Inbound Mode' and a dropdown for 'Default Destination' (set to 'Default Mode').

Default Destination

The **Default Destination** provides multiple destination choices and that the available choices are generally consistent with those used for VoIP Trunk inbound-route configuration.

The exact destination should be selected according to the customer's call-handling requirements.

The source screenshot illustrates the following destination options:

- **Extension**
- **Conference**
- **Language Prompt**
- **Language Mailbox**
- **IVR**
- **Ring Group**
- **Queue**
- **Fax/Extension**

Inbound Routes > Create New Inbound Rule

Inbound Mode

Inbound Multi-Mode 

☐

Default Mode

• Default Destination 

Time Condition

Add

Time Condition

- Extension
- Multimedia Meeting
- Voicemail
- Voicemail Group
- IVR
- Ring Group
- Queues
- Paging/Intercom Group

Month

Day

Destination

Options



When configuring the inbound route, select the **Default Destination** according to how the customer wants incoming WhatsApp calls to be handled.

For example, the destination can be configured to send the call toward an appropriate UCM call-handling destination such as an extension, IVR, ring group, or queue.

Complete the Configuration

After the WhatsApp Trunk and its Inbound Route have been configured, the WhatsApp Trunk configuration process is complete.

The final configuration consists of:

1. A WhatsApp Trunk configured on the UCM.
2. The WhatsApp phone number associated with the trunk.
3. The corresponding Phone Number ID.
4. The corresponding Access Token.
5. The required trunk status configuration.
6. Auto Recording enabled or disabled according to requirements.
7. One Inbound Route associated with the WhatsApp Trunk.
8. A Default Destination configured for incoming WhatsApp calls.

After configuring the inbound route, the entire WhatsApp Trunk configuration process is completed.

SUPPORTED DEVICES

The WhatsApp Trunk configuration described in this guide is supported on the following Grandstream

devices:

Models	Firmware Required
UCM630x Series	1.0.35.4+
UCM630xA Series	1.0.35.4+
