

Setting up an calling system in the cloud using AWS and 3CX

By: Rohit Sah

Create an user for the 3CX to access and attach the policy and setup others details

Add user

1 2 3 4 5

Set user details

You can add multiple users at once with the same access type and permissions. [Learn more](#)

User name* 3cx

[Add another user](#)

Select AWS access type

Select how these users will primarily access AWS. If you choose only programmatic access, it does NOT prevent users from accessing the console using an assumed role. Access keys and autogenerated passwords are provided in the last step. [Learn more](#)

- Select AWS credential type* ☒ **Access key - Programmatic access**
Enables an **access key ID** and **secret access key** for the AWS API, CLI, SDK, and other development tools.
- ☐ **Password - AWS Management Console access**
Enables a **password** that allows users to sign-in to the AWS Management Console.

* Required

[Cancel](#)

[Next: Permissions](#)

Add user

1 2 3 4 5

Set permissions

[Add user to group](#)

[Copy permissions from existing user](#)

[Attach existing policies directly](#)

[Create policy](#)



Filter policies <input type="text" value="ec2full"/>			Showing 1 result
Policy name	Type	Used as	
<input checked="" type="checkbox"/> AmazonEC2FullAccess	AWS managed	None	

Set permissions boundary

[Cancel](#)

[Previous](#)

[Next: Tags](#)

Add user

12345

Review

Review your choices. After you create the user, you can view and download the autogenerated password and access key.

User details

User name

3cx

AWS access type

Programmatic access - with an access key

Permissions boundary

Permissions boundary is not set

Permissions summary

The following policies will be attached to the user shown above.

Type	Name
Managed policy	AmazonEC2FullAccess

Tags

Cancel

Previous

Create user

Now we create a key pair for the 3CX to use to access

Create key pair

Info

Key pair

A key pair, consisting of a private key and a public key, is a set of security credentials that you use to prove your identity when connecting to an instance.

Name

3cxkeypair

The name can include up to 255 ASCII characters. It can't include leading or trailing spaces.

Key pair type

Info

☒ RSA

☐ ED25519

Private key file format

☒ .pem

For use with OpenSSH

☐ .ppk

For use with PuTTY

Tags (Optional)

No tags associated with the resource.

Add tag

You can add 50 more tags.

Cancel

Create key pair

Now go to AWS marketplace and subscribe to Debian 9/Debian 10 robust as we are going to use it as a template

AWS Cost Management

AWS Marketplace

Find, test, buy, and deploy software solutions that run on AWS

AWS Marketplace is a curated digital catalog where customers can find, test, buy, and deploy software solutions that customers need to build and run their businesses.

Get started


See all of your software solutions, view and manage your subscriptions, launch your software, and more.

Manage subscriptions

Pricing and costs

With AWS Marketplace, you can pay only for what you use with various pricing options and receive centralized billing. [Learn more](#)

How it works



AWS Marketplace > Discover products > Search results

Refine results

Categories

- Infrastructure Software (5461)
- DevOps (3950)
- Data Products (3649)
- Business Applications (1872)
- Professional Services (1476)
- Machine Learning (1373)
- Industries (1060)
- IoT (399)

▼ Delivery methods


- ☐ Amazon Machine Image (5464)
- ☐ Data Exchange (3649)
- ☐ SaaS (1517)

Search AWS Marketplace products

Search for any product via AWS Marketplace...

All products (Over 10000 results) showing 1 - 20

Sort By: Relevance



Amazon Linux 2 AMI (HVM), SSD Volume Type (64-bit x86)

By [Amazon Web Services](#) | Ver 2.0.20210813.1

★★★★★ 1 AWS review | 1 external review

Amazon Linux 2 is a supported and maintained Linux image provided by Amazon Web Services for use on Amazon Elastic Compute Cloud (Amazon EC2). It is designed to provide a stable, secure, and high performance execution environment for applications running on Amazon EC2. It also includes packages...

AWS Marketplace

- Manage subscriptions
- Discover products
- Product Support Connection
- Settings

AWS Marketplace > Discover products > Search results

Refine results

Categories

- DevOps (182)
- Infrastructure Software (137)
- Business Applications (7)
- Machine Learning (4)
- Industries (2)

▼ Delivery methods

- ☐ Amazon Machine Image (209)
- ☐ CloudFormation Template (1)

▼ Publisher


- ☐ Supported Images (191)
- ☐ Gridlastic (3)

Search AWS Marketplace products

Search: debian 9

debian 9 (210 results) showing 1 - 20

Sort By: Relevance




Debian GNU/Linux 9 (Stretch)

By [Debian](#) | Ver Debian GNU/Linux 9 LTS 20210623

★★★★★ 7 AWS reviews | 71 external reviews

Debian is a computer operating system composed of software packages released as free and open source software primarily under the GNU General Public License along with other free software licenses. Debian GNU/Linux, which includes the GNU OS tools and Linux kernel, is a popular and influential...

Click **Continue to subscribe**



Debian GNU/Linux 9 (Stretch)

By: [Debian](#) Latest Version: Debian GNU/Linux 9 LTS 20210623

Debian GNU/Linux: The Universal Operating System

Linux/Unix ★★★★★ 7 AWS reviews | 71 external reviews

Free Tier

[Continue to Subscribe](#)

[Save to List](#)

Typical Total Price
\$0.012/hr

Total pricing per instance for services hosted on t2.micro in US East (N. Virginia). [View Details](#)

[Overview](#) [Pricing](#) [Usage](#) [Support](#) [Reviews](#)

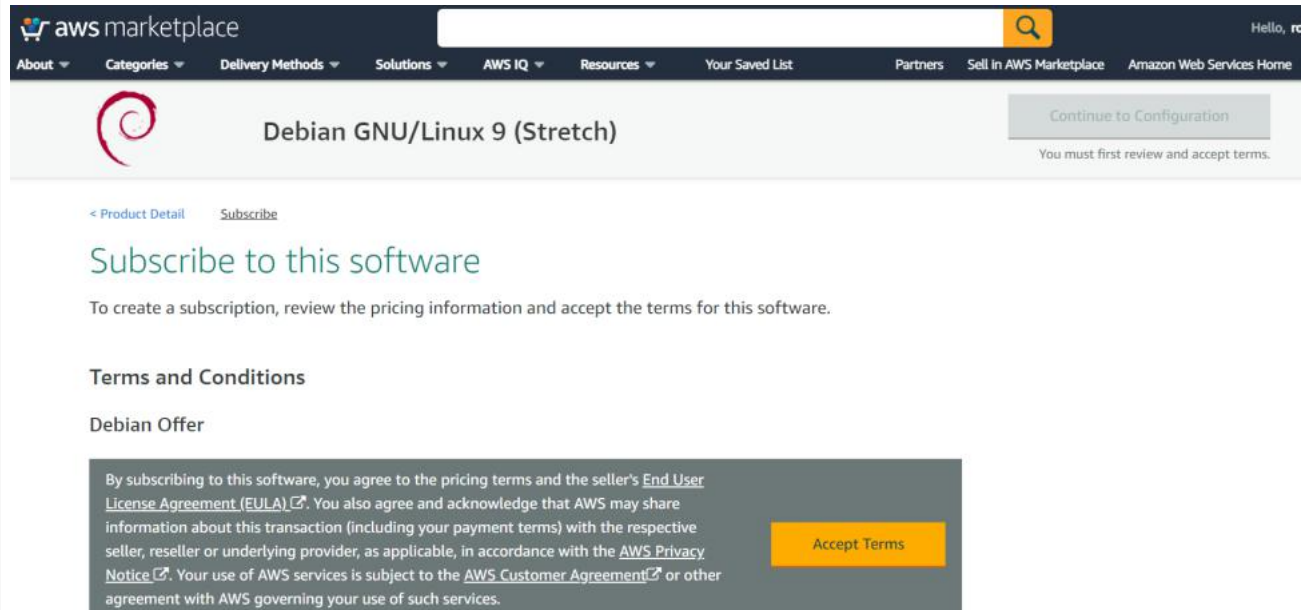
Product Overview

Debian is a computer operating system composed of software packages released as free and open source software primarily under the GNU General Public License along with other free software licenses. Debian GNU/Linux, which includes the GNU OS tools and Linux kernel, is a popular and influential Linux distribution. It is distributed with access to repositories containing thousands of software packages ready for installation and use.

Highlights

- After 26 months of development the Debian project is proud to present its new stable version 9 (code name "Stretch"), which will be supported for the next 5 years.
- Debian 9 is dedicated to the project's founder Ian

Accept all the term to use the template



aws marketplace

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Debian GNU/Linux 9 (Stretch)

Continue to Configuration

You must first review and accept terms.

< Product Detail Subscribe

Subscribe to this software

To create a subscription, review the pricing information and accept the terms for this software.

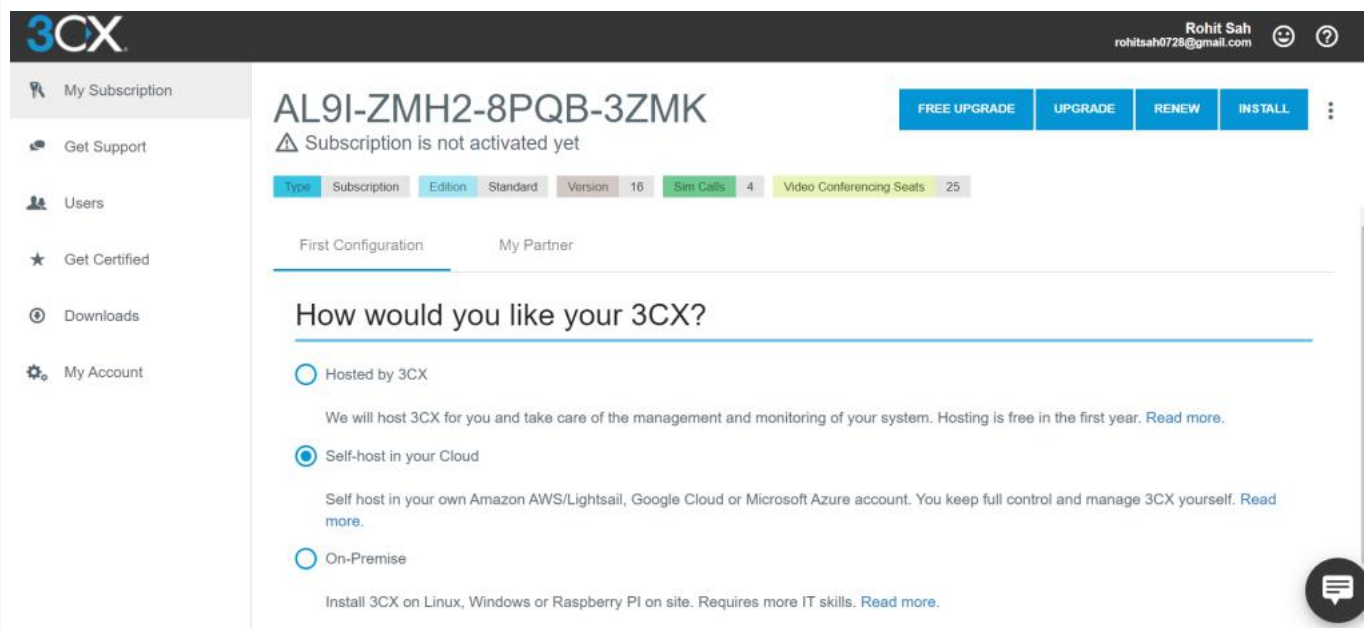
Terms and Conditions

Debian Offer

By subscribing to this software, you agree to the pricing terms and the seller's [End User License Agreement \(EULA\)](#). You also agree and acknowledge that AWS may share information about this transaction (including your payment terms) with the respective seller, reseller or underlying provider, as applicable, in accordance with the [AWS Privacy Notice](#). Your use of AWS services is subject to the [AWS Customer Agreement](#) or other agreement with AWS governing your use of such services.

Accept Terms

Now go to 3CX site for creating a 1 year free account and add the required details as per the phone system that we want



3CX

Rohit Sah
rohitsah0728@gmail.com

My Subscription

Get Support

Users

Get Certified

Downloads

My Account

AL9I-ZMH2-8PQB-3ZMK

Subscription is not activated yet

FREE UPGRADE UPGRADE RENEW INSTALL

Type Subscription Edition Standard Version 16 Sim Calls 4 Video Conferencing Seats 25

First Configuration My Partner

How would you like your 3CX?

☐ Hosted by 3CX

We will host 3CX for you and take care of the management and monitoring of your system. Hosting is free in the first year. [Read more.](#)

☒ Self-host in your Cloud

Self host in your own Amazon AWS/Lightsail, Google Cloud or Microsoft Azure account. You keep full control and manage 3CX yourself. [Read more.](#)

☐ On-Premise

Install 3CX on Linux, Windows or Raspberry PI on site. Requires more IT skills. [Read more.](#)

3CX

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Type

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Edition

Standard

Version

16

Sim Calls

4

Video Conferencing Seats

25

Select your time zone and language. This is important for Call Reporting, Dialling rules, Phone configuration, invites, prompt set and notifications.

Select the Time Zone

Time Zone

(UTC+05:30) Chennai, Kolkata, Mumbai, ...

Select Language

Language

Standard English Prompts Set

BACK

NEXT

3CX

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Edition

Standard

Version

16

Sim Calls

4

Video Conferencing Seats

25

Restor

Time Zone...

3 Exten...

4 3CX d...

5 Provid...

6 Provid...

7 Licens...

8 Install...

3CX is a complete communications system replacement and enables easy, user to user dialog using short extension numbers. Based on the number of users in your company select the number of digits your extension numbers should have. Keep in mind the system requires 30 system Extensions and that this cannot be changed later.

Extension Length

☐ 2 Digits (00-99)

☐ 3 Digits (000-999)

☒ 4 Digits (0000-9999)

☐ 5 Digits (00000-99999)

BACK

NEXT

3CX

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Sim Calls

4

Video Conferencing Seats

25

First Configuration

My Partner

Restor

Time Zone ...

Exten...

4 3CX d...

5 Provid...

6 Provid...

7 License...

8 Install.

Your 3CX has a domain which is used for meeting invites and configuration. Keep it as short as possible.

Suggested Domain:

Suggested Domain:

rohit-sah.3cx.in

CHANGE

BACK

NEXT



Rohit Sah
rohitsah0728@gmail.com



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rohit-sah.3cx.in

⚠ Subscription is not activated yet

Type Subscription Edition Standard Version 16 Sim Calls 4 Video Conferencing Seats 25

First Configuration

My Partner

Restore Time Zone and La... Extension I... Provider Sel... Provider Se... License Agre... Install...

Before selecting a cloud provider you need to setup the cloud provider account correctly. See the list of supported cloud providers and corresponding account setup guides [here](#).

Select Hosting
Provider

Amazon - AWS

[Click here to read the guide how to configure your Amazon - AWS account correctly.](#)

Access Key ID

Access Key ID
AKIA3Y4ZL2R4KQENG5TK



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rohitsah0728@gmail.com



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⚠ Subscription is not activated yet

Type Subscription Edition Standard Version 16 Sim Calls 4 Video Conferencing Seats 25

Restore Time Zone and La... Extension I... Provider Sel... 5 Provider Se... 6 License Agre... 7 Install...

Machine name rohit-sah

Region Asia Pacific (Mumbai) ap south 1

Key pair 3cxkeypair

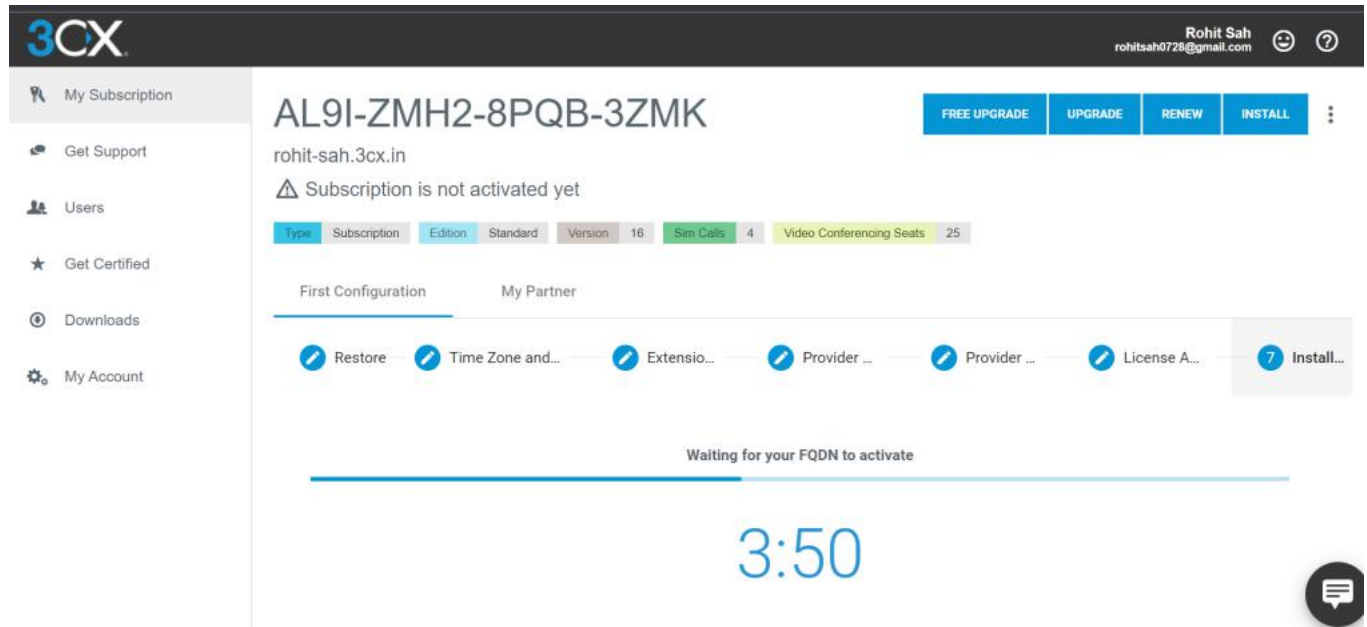
Machine type t2.micro (1 CPU(s), 1024 MB Memory)

BACK

NEXT



Now wait for few minutes for the installation



3CX Rohit Sah rohitsah0728@gmail.com

My Subscription

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rohit-sah.3cx.in

Subscription is not activated yet

FREE UPGRADE UPGRADE RENEW INSTALL

Type Subscription Edition Standard Version 16 Sim Calls 4 Video Conferencing Seats 25

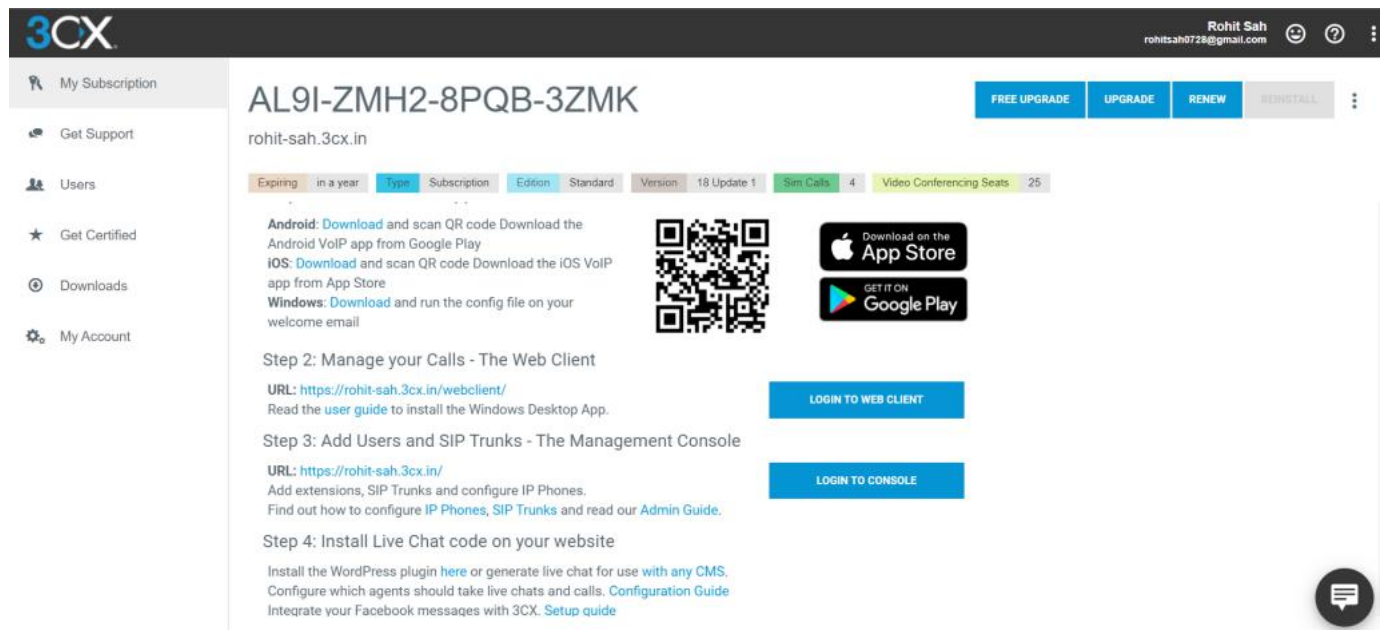
First Configuration My Partner

Restore Time Zone and... Extensio... Provider ... Provider ... License A... 7 Install...

Waiting for your FQDN to activate

3:50

Then click to login to the console and login wit the user credentials that you have received in the registered email



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My Subscription

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FREE UPGRADE UPGRADE RENEW REINSTALL

Expiring in a year Type Subscription Edition Standard Version 18 Update 1 Sim Calls 4 Video Conferencing Seats 25

Android: Download and scan QR code Download the Android VoIP app from Google Play
iOS: Download and scan QR code Download the iOS VoIP app from App Store
Windows: Download and run the config file on your welcome email

QR Code

Download on the App Store
GET IT ON Google Play

Step 2: Manage your Calls - The Web Client
URL: <https://rohit-sah.3cx.in/webclient/>
Read the [user guide](#) to install the Windows Desktop App.

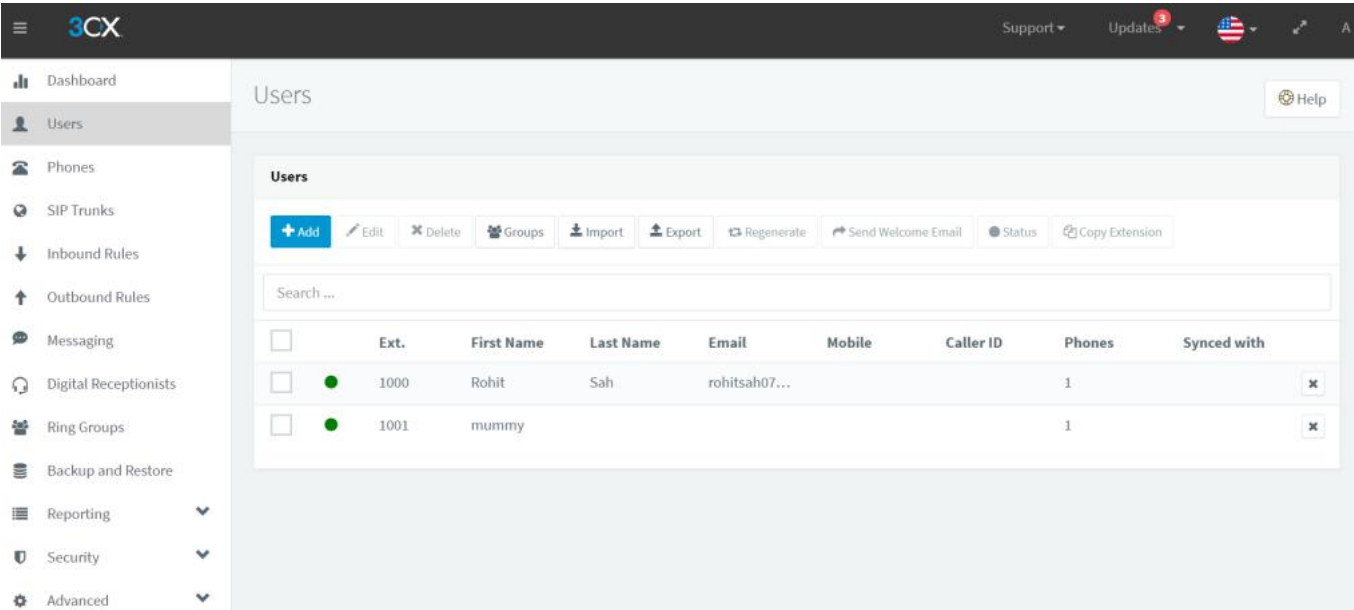
Step 3: Add Users and SIP Trunks - The Management Console
URL: <https://rohit-sah.3cx.in/>
Add extensions, SIP Trunks and configure IP Phones.
Find out how to configure [IP Phones](#), [SIP Trunks](#) and read our [Admin Guide](#).

Step 4: Install Live Chat code on your website
Install the WordPress plugin [here](#) or generate live chat for use with any CMS.
Configure which agents should take live chats and calls. [Configuration Guide](#)
Integrate your Facebook messages with 3CX. [Setup guide](#)

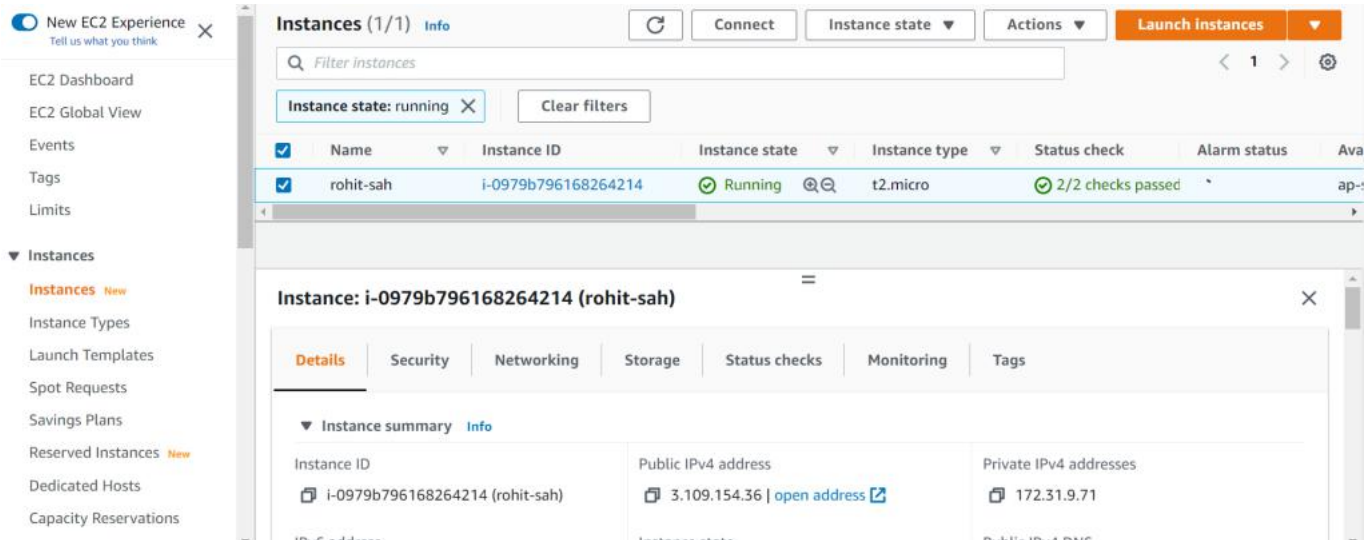
LOGIN TO WEB CLIENT

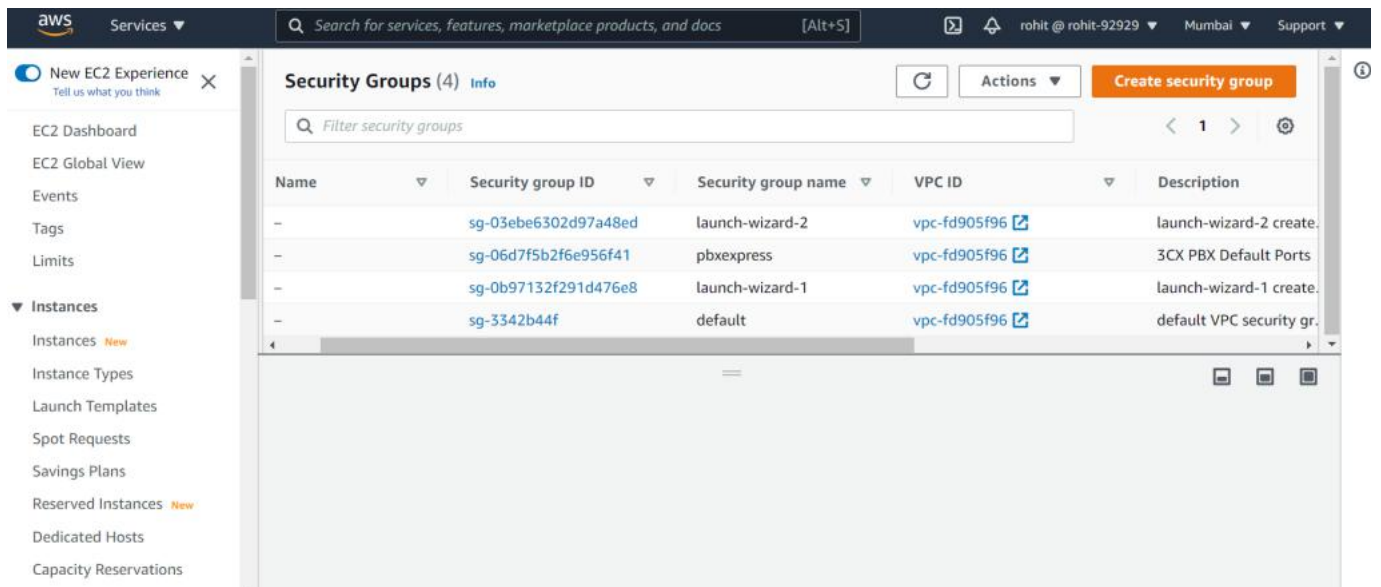
LOGIN TO CONSOLE

When we login we can find the user 1 that is our-self as we have created the account and we got a number of 1000, then we register other users for the phone call system



We can also see that this 3CX system has created an instance that will be running the configuration for our phone call system to work
Also it has created a security group according to the requirements





We can verify the system by dialing through the 3CX app that we have installed in our mobile phone and have scanned the QR code to register the user to the number allotted to them
So now we can make a call from 1000 to 1001 and test the system and can see that it's completely up and running also this system can be used to send voicemails and also for video-calling purposes

