



Amazon Connect

Contact Center In The Clouds

By: Mik Galon

About Me

Happy Wife Happy Life!



Senior Full Stack Developer



Agenda

- **What is Amazon Connect**
- **Basic Concepts**
- **Demos**
 - **Outbound**
 - **Inbound**
 - **Integration**
- **Advance**

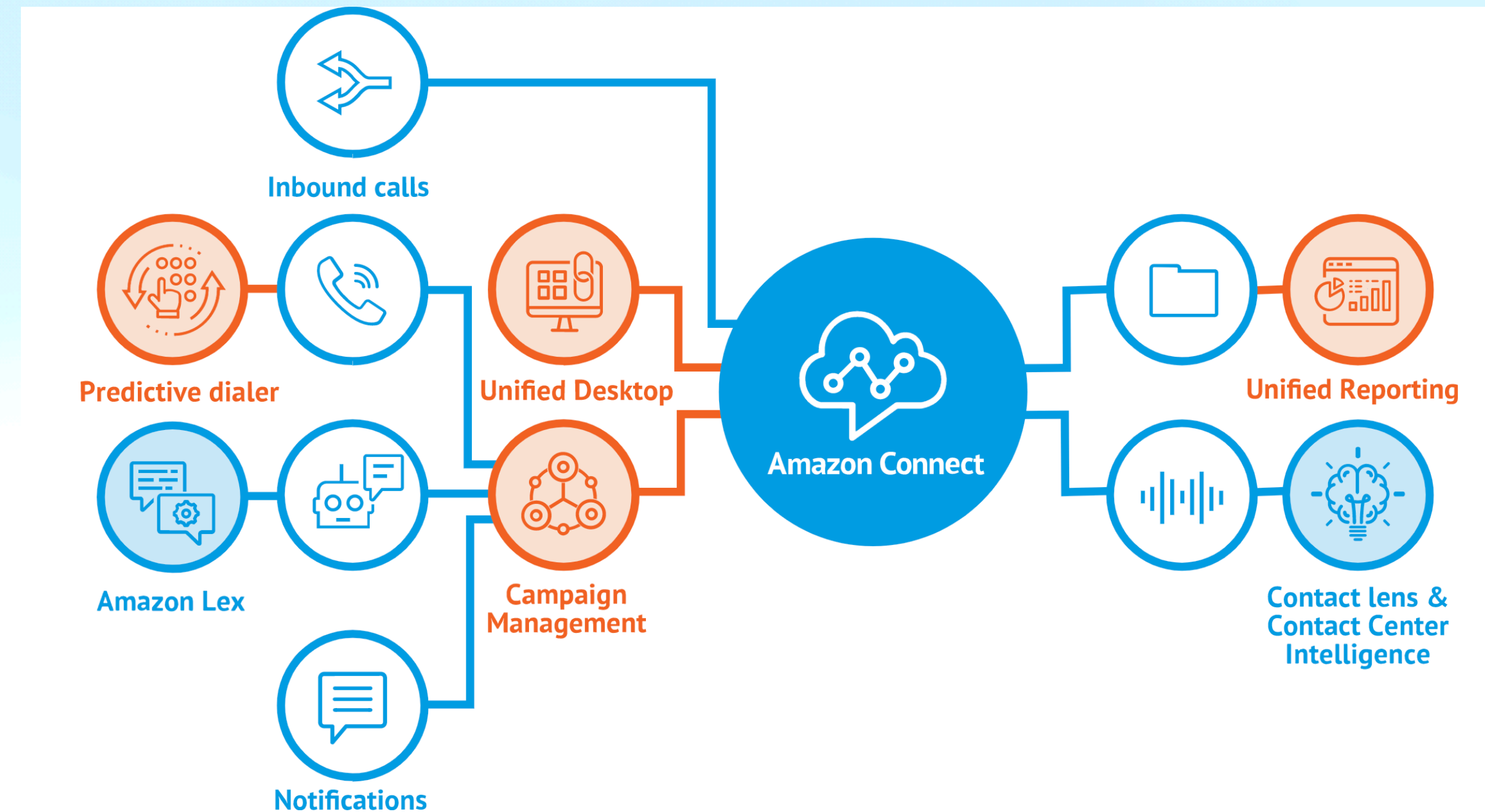


What is Amazon Connect?

Essential equipment to start a Call center



- Software to maintain call records
- Voice Over Internet Protocol (VOIP)
- Predictive dialers
- Automatic Call Distributor (ACD)
- Workforce Management Tools
- After call survey tools

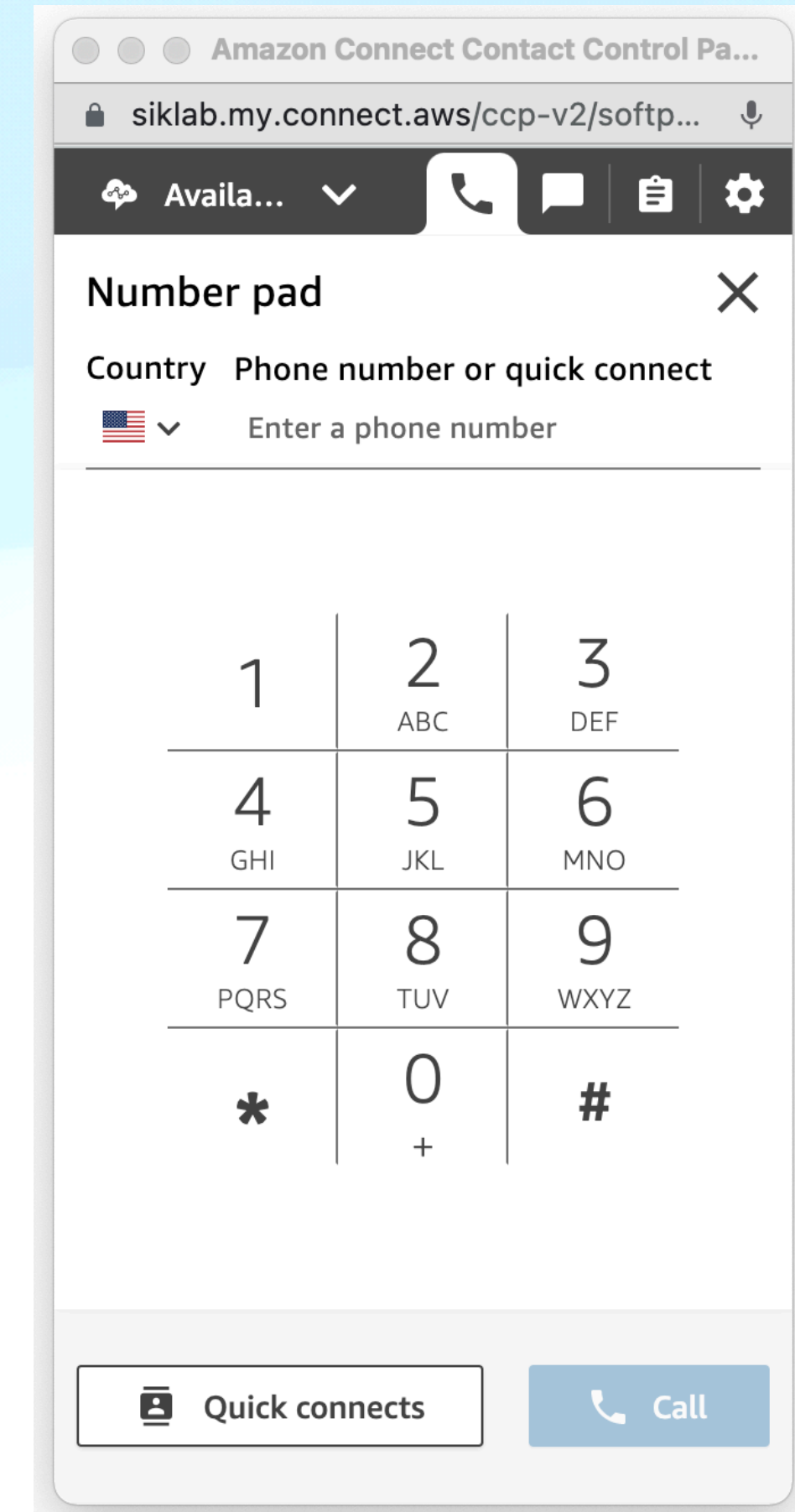
VS



About Amazon Connect



- Omnichannel cloud contact center.
- Started 2017.
- !Regions. US, Africa, Asia Pacific, Canada and Europe.
- Supports several language. English, French, etc.
- Supported browsers  
- No direct Cloudformation.



Pricing

- **Voice service charges**

- Inbound voice usage – per minute.
- Outbound voice usage – per minute.

- **Telephony charges**

- Direct Inward Dial (DID).
- Toll Free.

- **Free Tier**

- 90 minutes per month
- Direct Inward Dial (DID) number
- 30 minutes per month of inbound DID calls
- 30 minutes per month of outbound calls
- For US Regions
 - One US toll-free number



Basic Concepts

Concepts: Telephony

- Toll-free numbers. 1-800-XXXX
- Direct-in-dial (DID) numbers. +1 206
- Porting numbers.



Concepts: Routing profiles



Agents

Routing Profile

- Channels: Voice, Chat, Task
- Queues
 - Queue 1: Voice, Chat
 - Queue 2: Chat
 - Queue 3: Task

Amazon Connect

Routing profile > Edit Basic Routing Profile

Edit Basic Routing Profile

Routing profile details

Name	Description
Basic Routing Profile	A simple routing profile.
Required	Required
21 / 127	25 / 250

Settings

Set channels and concurrency
Specifies which channels that agents use in the CCP. Even if all channels are selected, agents have access to only one channel at a time for inbound contacts. [Learn more](#)

Select a channel (Required)

- Voice
- Chat

Maximum chats per agent (Maximum of 10)
1
Required

- Task

Maximum tasks per agent (Maximum of 10)
1
Required

Queues

Toggle these settings on and off to manage all queues that have been added to this profile - more information on copy. [Learn more](#)

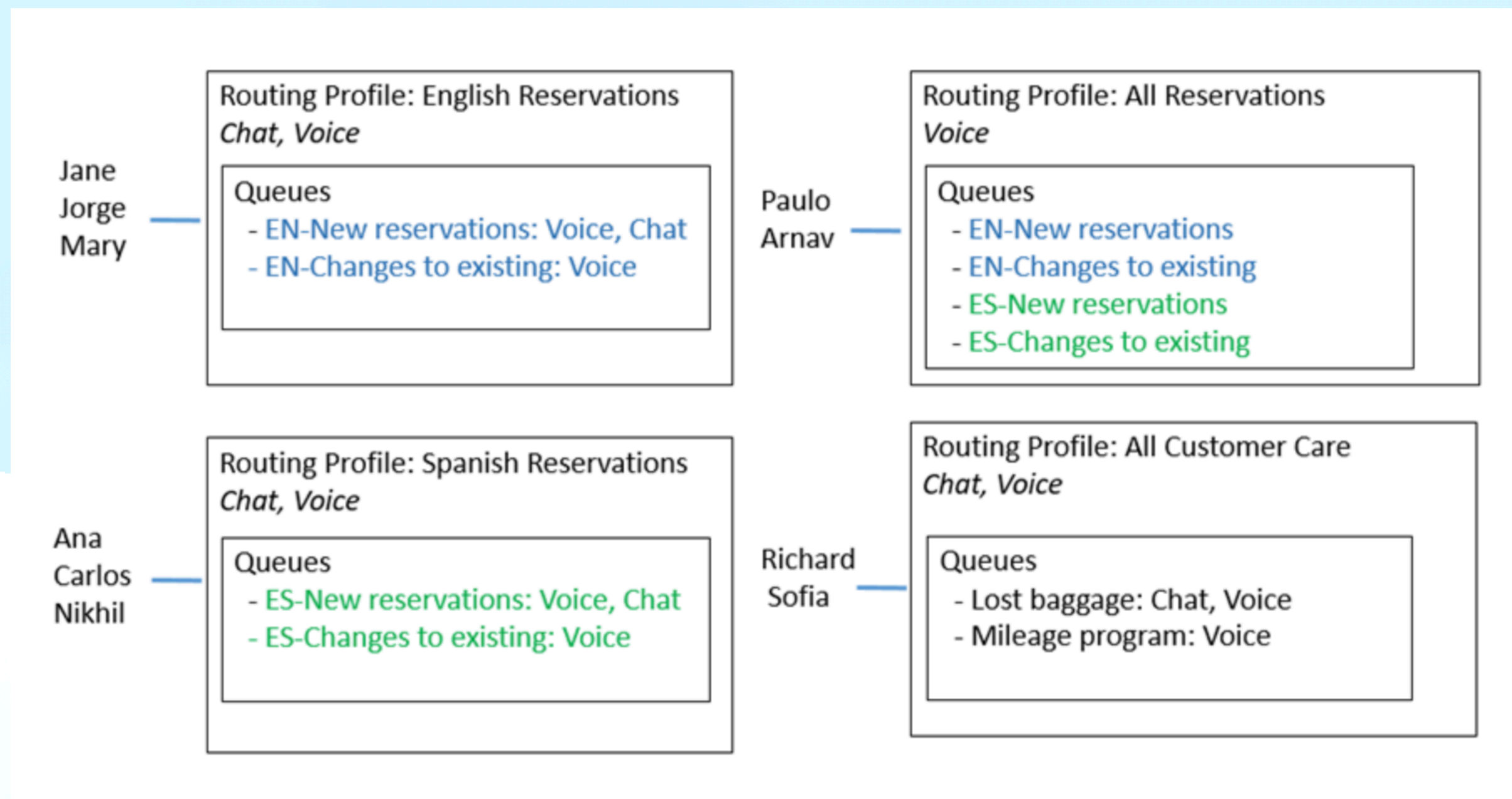
Name	Channels	Priority
<input type="checkbox"/> BasicQueue	<input checked="" type="checkbox"/> Voice <input checked="" type="checkbox"/> Chat <input checked="" type="checkbox"/> Task	1

Default outbound queue

Choose a queue to be associated with outbound calls placed by the agents.

Search for outbound queues
BasicQueue

Concepts: Queues



The screenshot shows the Amazon Connect 'Edit BasicQueue' interface. The page title is 'Edit BasicQueue'. The 'Queue Details' section includes:

- Name:** BasicQueue (Required, 10 / 127)
- Description:** A simple, basic voice queue. (28 / 250)

The 'Hours of operation' section includes:

- Search hours of operation:** Basic Hours (Required)
- [Show additional queue information](#)

The 'Settings' section includes:

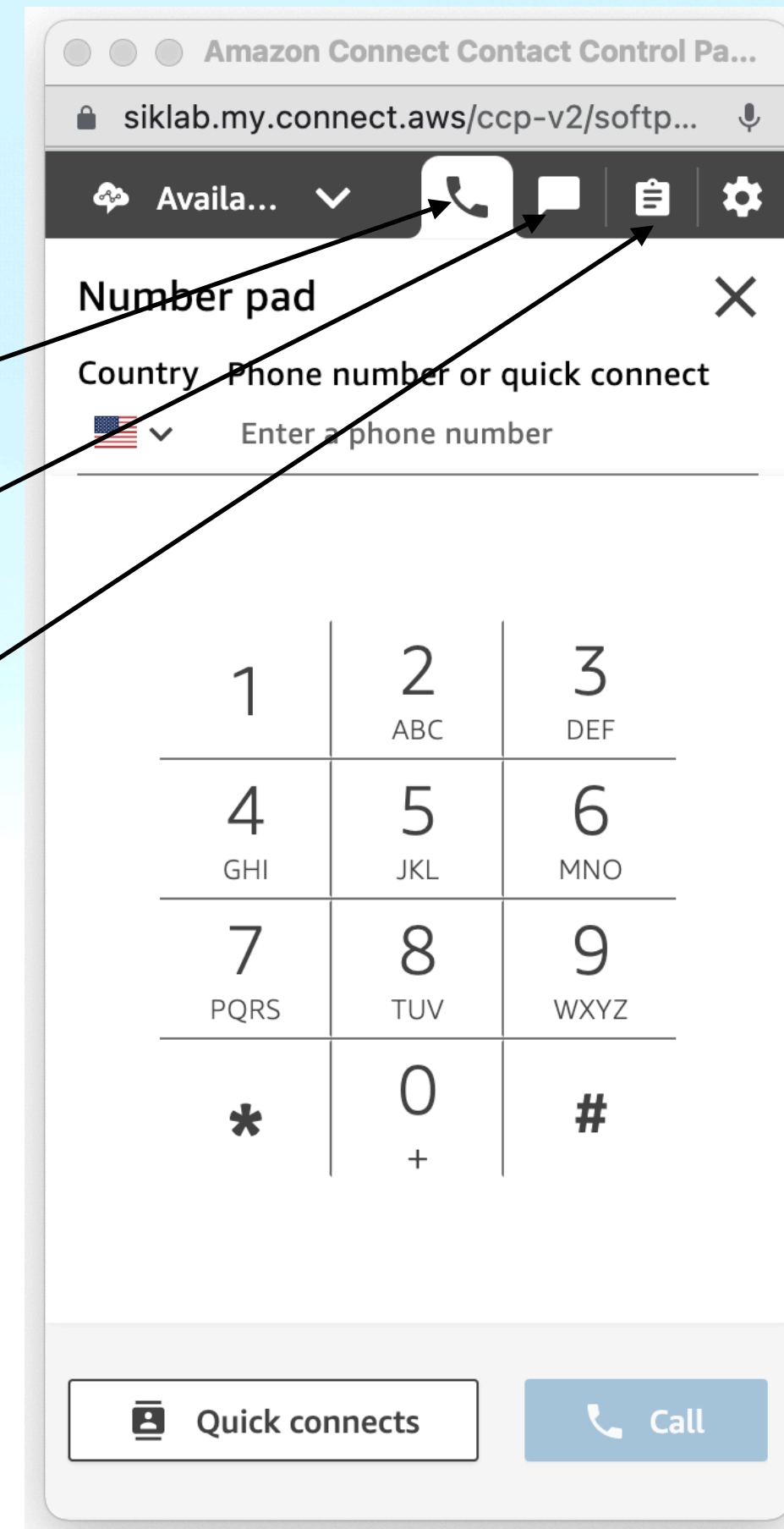
- Outbound caller configuration:** Set the default caller ID name that will display to customers. [Learn more.](#)
- Default caller ID name:** Callback ID name (0 / 255)
- Outbound caller ID number:** Search for phone numbers: +1 833-986-2195
- Outbound whisper flow:** Search for contact flow: Default outbound

The 'Quick connects' section includes:

- Search for quick connects:** (Search bar)

Concepts: Channels

- Voice
- Chat
- Tasks

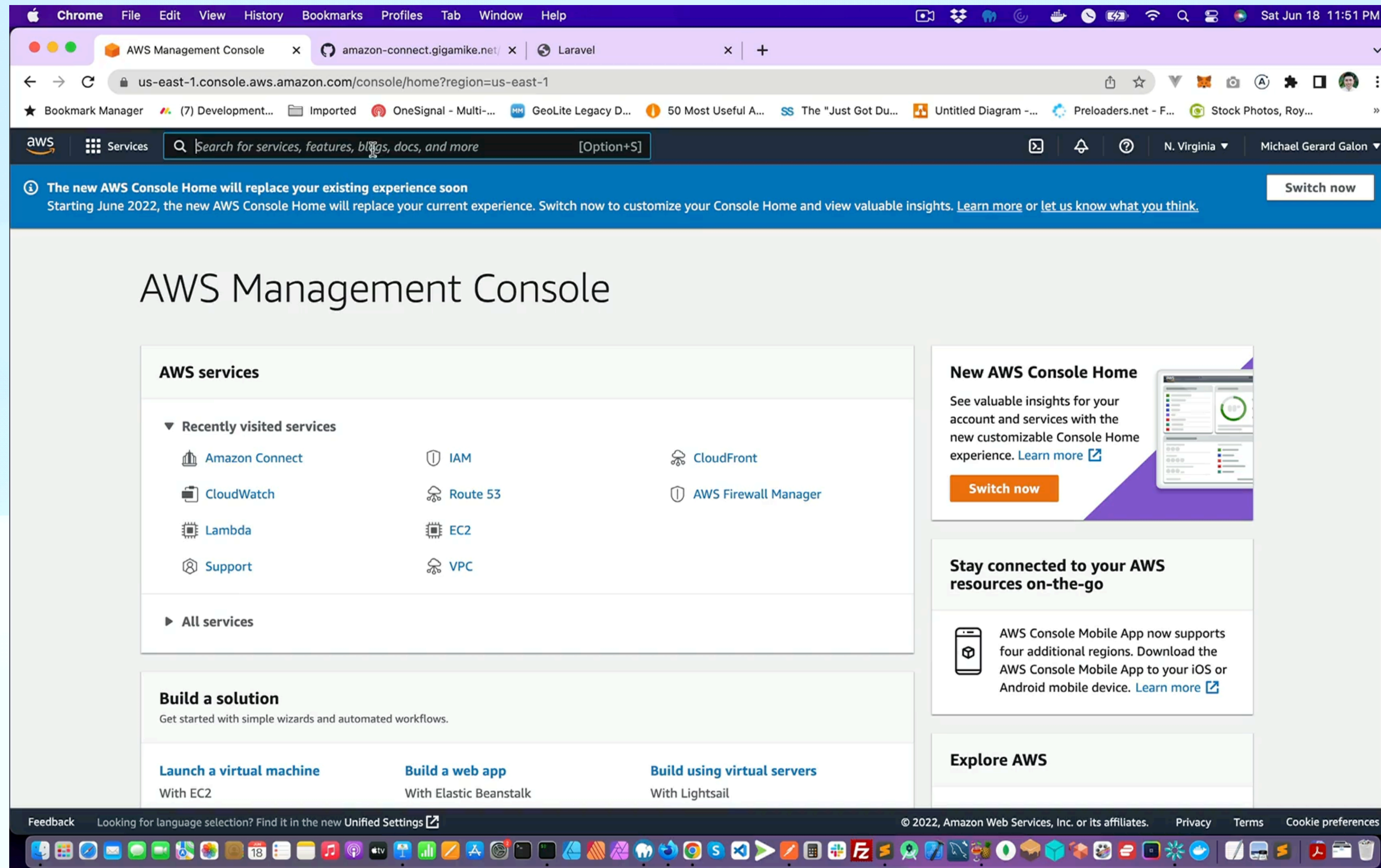


Concepts: Contact Flows

The screenshot displays the Amazon Connect console interface for a contact flow. At the top, the header shows the Amazon Connect logo, the user email 'gigamike@gigamike.net', and language settings. A notification banner at the top states: 'Start using Amazon Connect public APIs instead of running any client-side scripts for automation. These will break as we make updates to the design.' Below this, the flow is titled 'Default outbound' with a 'Latest: Published' dropdown and 'Publish' and 'Save' buttons. The main workspace is a grid-based 'Flow designer' containing four 'Flow blocks' connected in sequence: 1. 'Entry point' (Start) block, 2. 'Set recording and analytics behavior' block (Enable: None, Success), 3. 'Play prompt' block (Text: This call is not being r..., Okay), and 4. 'End flow / Resume' block (Termination event). A left-hand sidebar contains a 'Show additional flow information' dropdown and several menu categories: Interact, Set, Branch, Integrate, and Terminate / Transfer. A 'Flow blocks' label is placed below the first three blocks, and a 'Flow designer' label is placed in the bottom right of the grid area. A 'Termination event' label is also present near the final block.

Demo!

Demo (Instance)



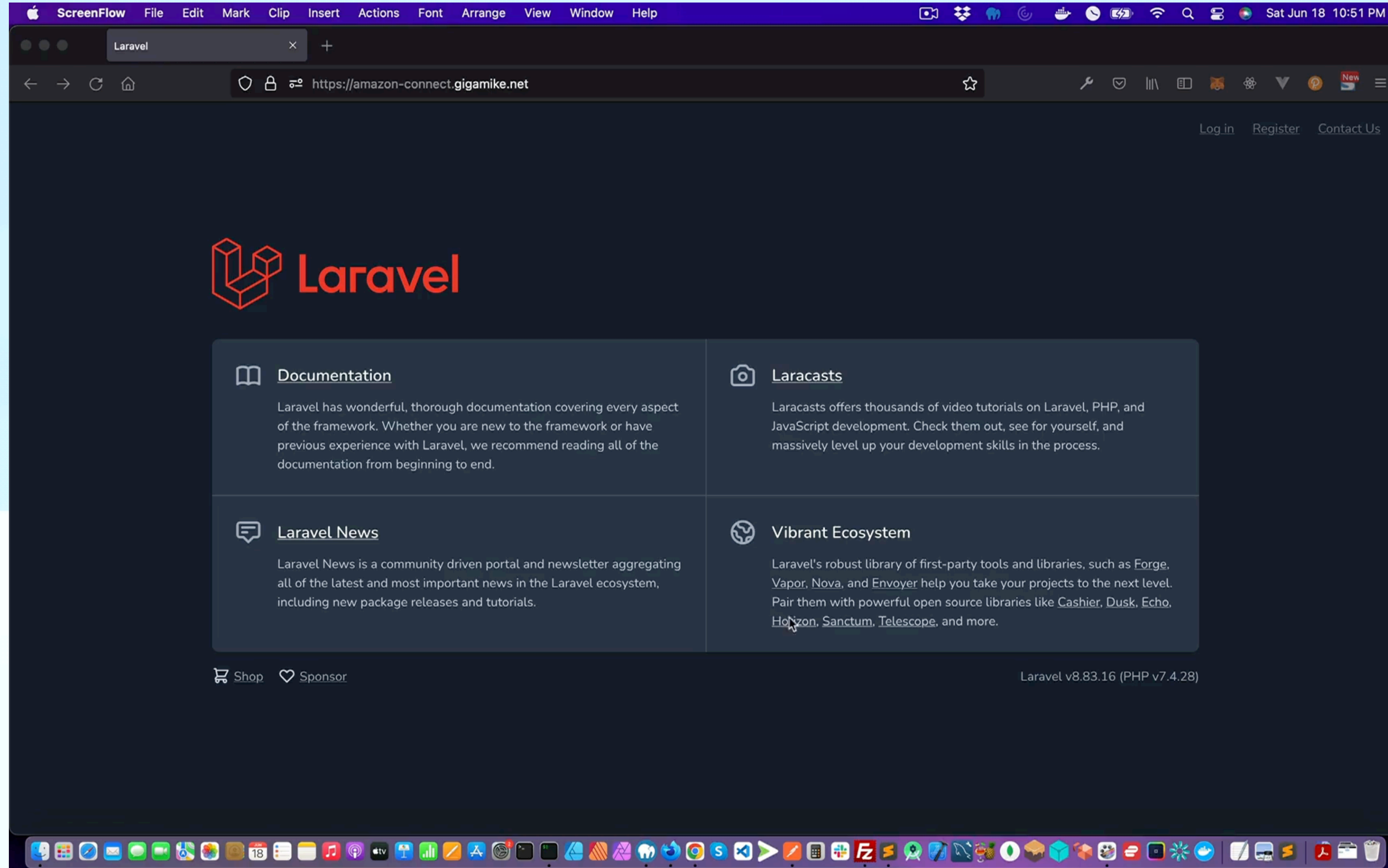
<https://github.com/gigamike/amazon-connect.gigamike.net>



Demo: Custom Integration

- Approved Origins - <https://amazon-connect.gigamike.net/>
- Amazon Connect Streams - <https://github.com/amazon-connect/amazon-connect-streams>
- AWS SDK  
- IAM USER
- Lambda 
- Web Application (CRM - javascript)

Demo: Create User



<https://github.com/gigamike/amazon-connect.gigamike.net>



CreateUser

PUT /users/**InstanceId** HTTP/1.1
Content-type: application/json

```
{
  "DirectoryUserId": "string",
  "HierarchyGroupId": "string",
  "IdentityInfo": {
    "Email": "string",
    "FirstName": "string",
    "LastName": "string"
  },
  "Password": "string",
  "PhoneConfig": {
    "AfterContactWorkTimeLimit": number,
    "AutoAccept": boolean,
    "DeskPhoneNumber": "string",
    "PhoneType": "string"
  },
  "RoutingProfileId": "string",
  "SecurityProfileIds": [ "string" ],
  "Tags": {
    "string" : "string"
  },
  "Username": "string"
}
```

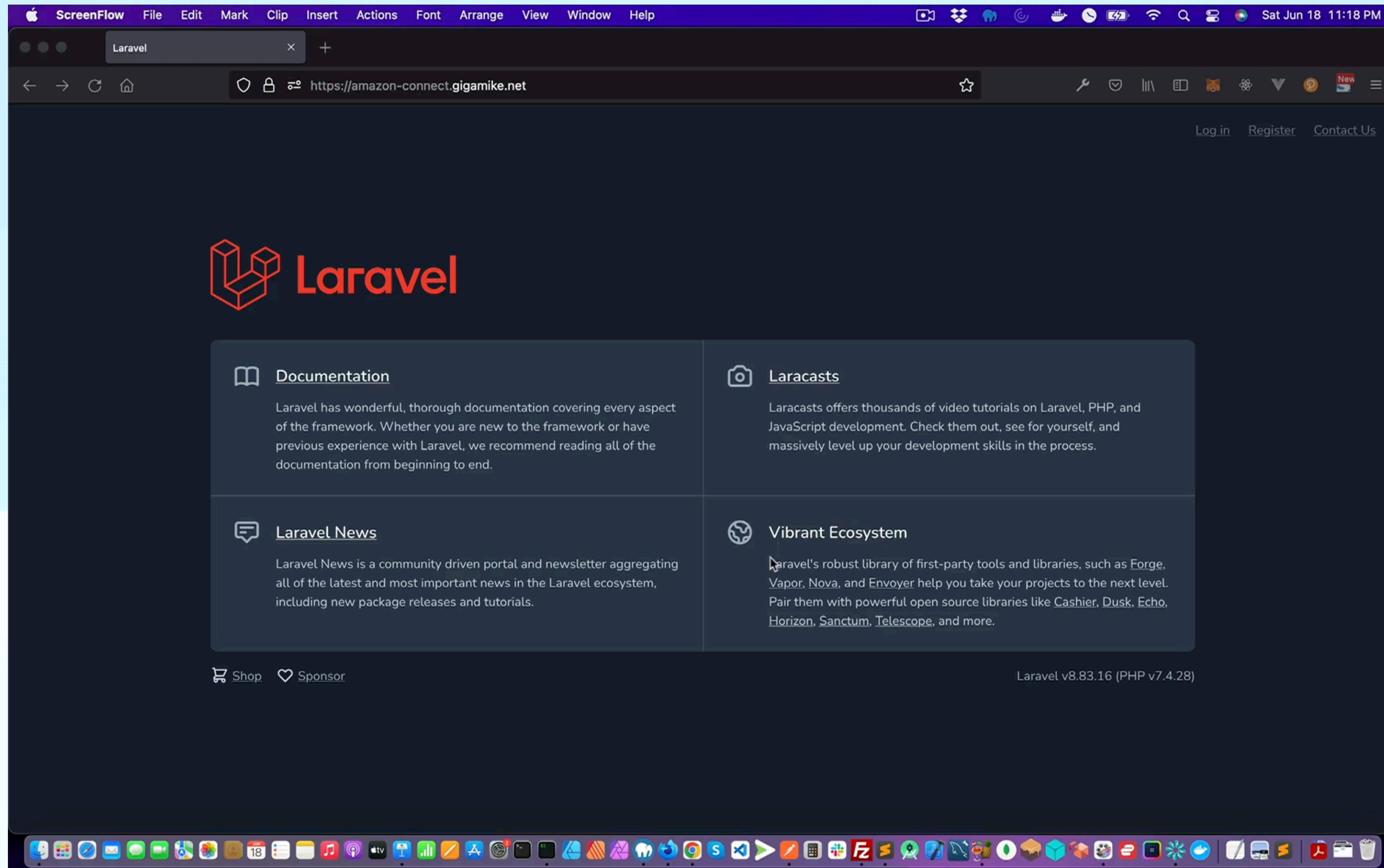
```
<?php
$result = $client->createUser([
  'IdentityInfo' => [
    'Email' => $request['email'],
    'FirstName' => $firstName,
    'LastName' => $lastName,
  ],
  'InstanceId' => env('AWS_AMAZON_CONNECT_INSTANCE_ID', null), // REQUIRED
  'Password' => $request['password'], // At least 8 characters with an uppercase letter, a lowercase letter, and a number.
  'PhoneConfig' => [// REQUIRED
    'PhoneType' => 'SOFT_PHONE', // REQUIRED
  ],
  'RoutingProfileId' => env('AWS_AMAZON_CONNECT_ROUTING_PROFILE_ID', null), // REQUIRED
  'SecurityProfileIds' => [env('AWS_AMAZON_CONNECT_SECURITY_PROFILE_ID', null)], // REQUIRED
  'Username' => $request['email'], // REQUIRED // Use up to 64 characters, a-z, A-Z, 0-9, _ - . @
]);
```

Amazon Connect Stream Agent

```
agent.onStateChange(function(agentStateChange) {
    stateChange(agentStateChange.oldState, agentStateChange.newState);
});

function stateChange(oldState, newState) {
    $.ajax({
        headers: {
            'X-CSRF-TOKEN': $('meta[name="csrf-token"]').attr('content')
        },
        url: "{{ url('ajaxAgentUpdateCurrentStatus') }}",
        type: 'POST',
        dataType: 'json',
        data: {
            newState: newState
        }
    });
}
```

Demo: Inbound Call



<https://github.com/gigamike/amazon-connect.gigamike.net>



Demo: Inbound Call

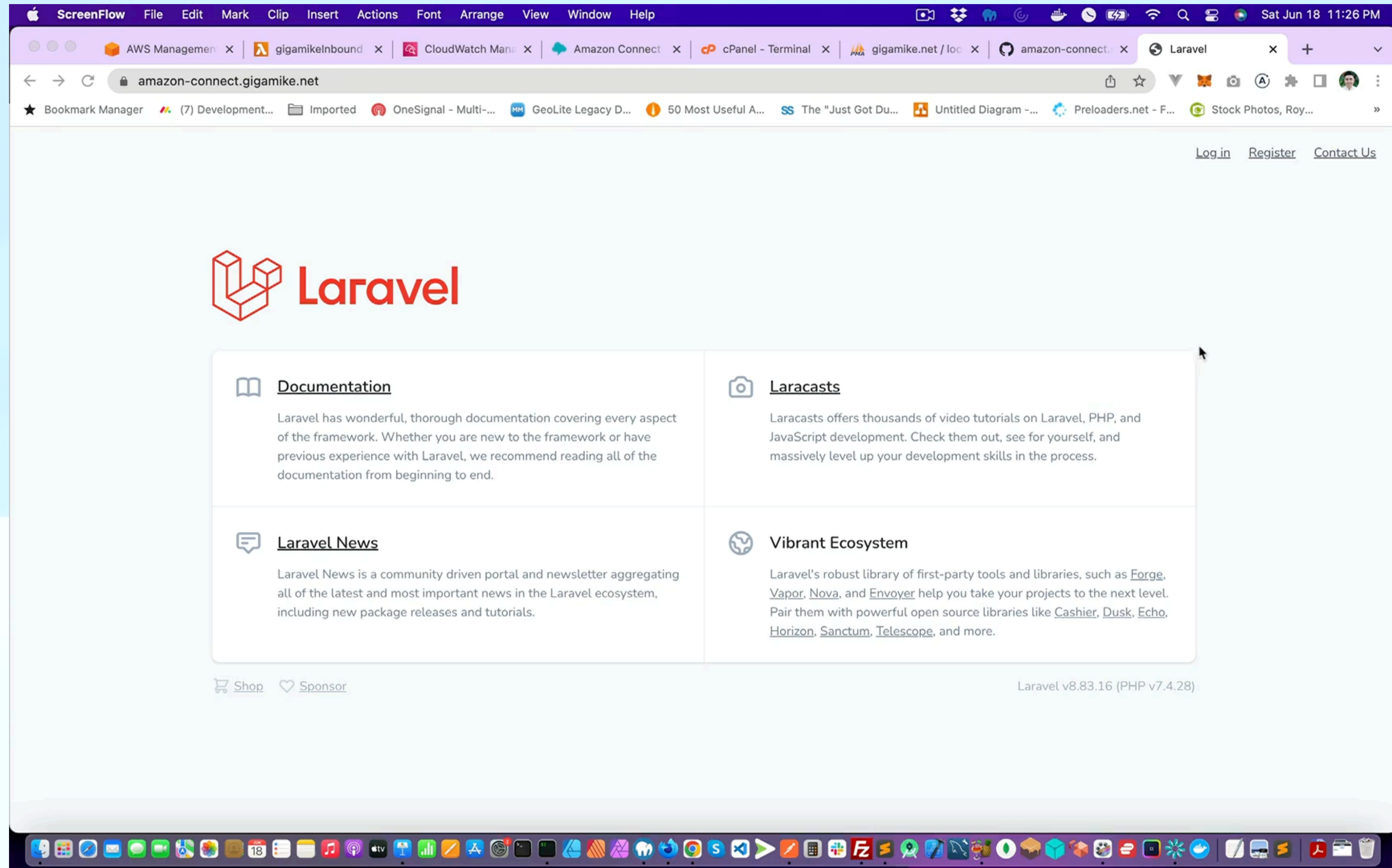
Contact Flow

<https://siklab.my.connect.aws/contact-flows/edit?id=arn:aws:connect:us-east-1:768801405021:instance/73bf490c-3e77-48f8-8f7e-1c341c5dbe00/contact-flow/9637af3e-4bce-41d2-b126-2e1d0c16e295>

Amazon Connect Stream

<https://github.com/amazon-connect/amazon-connect-streams/blob/master/Documentation.md#contact-api>

Demo: Click To Call



The screenshot shows a web browser window displaying the Laravel website. The browser's address bar shows the URL `amazon-connect.gigamike.net`. The page features the Laravel logo at the top left and navigation links for [Log in](#), [Register](#), and [Contact Us](#) at the top right. The main content area is divided into four sections: **Documentation**, **Laracasts**, **Laravel News**, and **Vibrant Ecosystem**. At the bottom left, there are links for [Shop](#) and [Sponsor](#). At the bottom right, the version information `Laravel v8.83.16 (PHP v7.4.28)` is displayed. The browser's taskbar at the bottom shows various application icons, and the system tray on the right indicates the date and time as Saturday, June 18, 11:26 PM.


ScreenFlow File Edit Mark Clip Insert Actions Font Arrange View Window Help


AWS Management x gigamikeInbound x CloudWatch Mana x Amazon Connect x cPanel - Terminal x gigamike.net / loc x amazon-connect x Laravel x

amazon-connect.gigamike.net


Bookmark Manager (7) Development... Imported OneSignal - Multi-... GeoLite Legacy D... 50 Most Useful A... The "Just Got Du... Untitled Diagram -... Preloaders.net - F... Stock Photos, Roy...

[Log in](#) [Register](#) [Contact Us](#)


 **Laravel**

 **Documentation**


Laravel has wonderful, thorough documentation covering every aspect of the framework. Whether you are new to the framework or have previous experience with Laravel, we recommend reading all of the documentation from beginning to end.

 **Laracasts**



Laracasts offers thousands of video tutorials on Laravel, PHP, and JavaScript development. Check them out, see for yourself, and massively level up your development skills in the process.

 **Laravel News**

Laravel News is a community driven portal and newsletter aggregating all of the latest and most important news in the Laravel ecosystem, including new package releases and tutorials.

 **Vibrant Ecosystem**

Laravel's robust library of first-party tools and libraries, such as [Forge](#), [Vapor](#), [Nova](#), and [Envoyer](#) help you take your projects to the next level. Pair them with powerful open source libraries like [Cashier](#), [Dusk](#), [Echo](#), [Horizon](#), [Sanctum](#), [Telescope](#), and more.

 [Shop](#)  [Sponsor](#)

Laravel v8.83.16 (PHP v7.4.28)

StartOutboundVoiceContact API

PUT /contact/outbound-voice HTTP/1.1
Content-type: application/json

```
{  
  "AnswerMachineDetectionConfig": {  
    "AwaitAnswerMachinePrompt": boolean,  
    "EnableAnswerMachineDetection": boolean  
  },  
  "Attributes": {  
    "string": "string"  
  },  
  "CampaignId": "string",  
  "ClientToken": "string",  
  "ContactFlowId": "string",  
  "DestinationPhoneNumber": "string",  
  "InstanceId": "string",  
  "QueueId": "string",  
  "SourcePhoneNumber": "string",  
  "TrafficType": "string"  
}
```

```
<?php  
$result = $client->startOutboundVoiceContact([  
  'ContactFlowId' => env('AWS_AMAZON_CONNECT_CONTACTFLOW_ID', null), // REQUIRED  
  'DestinationPhoneNumber' => $request['phone'], // REQUIRED  
  'InstanceId' => env('AWS_AMAZON_CONNECT_INSTANCE_ID', null), // REQUIRED  
  'QueueId' => env('AWS_AMAZON_CONNECT_QUEUE_ID', null),  
]);
```

Advance

- Contact Events - INITIATED, CONNECTED_TO_SYSTEM, QUEUED, CONNECTED_TO_AGENT, and DISCONNECTED
- Contact Trace Records - Agent, ContactDetails, QueueInfo, RecordingInfo, RoutingProfile, etc.
- Contact Lens - Analytics
- Pre-built integrations - Salesforce, Zendesk
- High volume outbound communication



amazon Transcribe

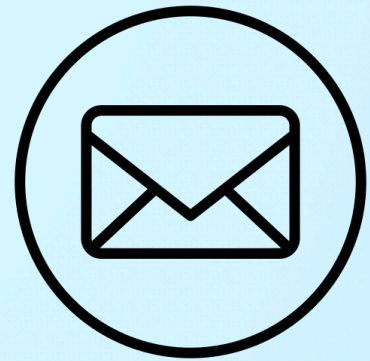


Amazon Machine Learning



amazon PINPOINT

Questions ?



gigamike@gigamike.net



<https://www.facebook.com/gigamikenet>



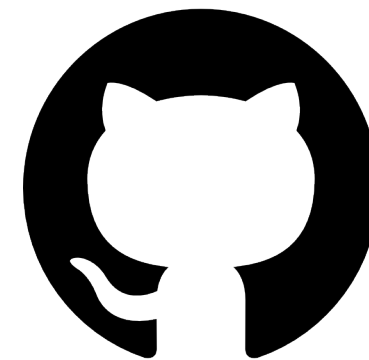
<https://gigamike.net>



<https://www.linkedin.com/in/gigamike/>



<https://alexachamp.com>



<https://github.com/gigamike>

<https://github.com/gigamike/amazon-connect.gigamike.net>



We Are Hiring!

gigamike@gigamike.net

- Software Engineer
- UI/UX Designer
- QA Tester
- .Net Developer
- Programmer
- Full-stack Devops Engineer
- Automation Tester
- Windows Application Developer
- macOS Application Developer
- Database/ETL Developer
- Full Stack Developer - C# .Net
- Senior .Net Developer
- SEO Specialist
- Data Entry Specialist with Salesforce Management Background
- Desktop Engineer
- Mobile Applications Developer (IOS)
- Solution Architect
- Machine Learning Engineer
- SharePoint/O365 Developer
- E-Commerce Operations Specialist
- Customer Support Engineer
- Desktop Software Developer (Windows)
- Mobile Applications Developer (Android)
- Backend Developer
- Embedded Technology - C++
- Senior Project Engineer
- Full Stack Java Developer
- NetSuite Developer
- MS Dynamics Developer - .Net
- Shopify Developer

Thank You!