A computer screen shot of a diagram

Description automatically generated

**Section 4.1.1 AWS Connect/Cloud InterConnect (Trunk Side)**

Although DNIS information is pulled from DynamoDB, the current 800 Toll-free numbers assigned are either redirected to an assigned TN/DN and/or DID Direct Inward Dial Trunk group or placed in rotational hunt group, and/or FIFO line group.

EDD customer is given option to interconnect to AWS Connect via 3 options:

1. Port existing 10-digit DIDs to assigned DN’s
   1. 30-day processing and porting timeline
   2. LOA Letter of Authorization required
2. BYOC Bring Your Own Carrer
   1. SIP Services (SIP RFC 3261, SIP Connect 2.0 or higher, SIP-I, SIP-T) or use of Legacy TDM services
   2. Carrier or OnPrem vSBC may be required
   3. RCF Remote Call Forward to assigned DN
3. Assign new DN’s by preferred CLEC/ILEC/IXP Service Provider of choice or
   1. Reserve or Claim Toll Free or Amazon DID Connect Number

**Porting Numbers**

Porting a phone number is the process of moving a phone number from one telephony service provider, or carrier or MSO/CATV provider to another. Many businesses and organizations already have an assigned phone number or trunk group that is advertised to their customers, so changing this number would be disruptive.

If you port a phone number from your current carrier to Amazon Connect, you can keep using the same phone number for your contact center. This helps to eliminate the need to update your business contact information**.**

**BYOC Bring Your Own Carrier**

Bring your Own Carrier BYOC is a UC/CC/Collaboration model that allows businesses to choose their own telecommunications carriers to power their Unified Communications as a Service (UCaaS) or Contact Centre as a Service (CCaaS). BYOC can help businesses save money, improve decision-making, and retain customers.

Amazon Connect offers phone number hosting capabilities, but businesses often use multiple telephony providers. In these use case situations, Amazon Connect’s documentation recommends the following configurations:

* Choose which platform handles the initial call, and route calls to the chosen contact center platform ie., IVR/VIVR, AWS Connect etc.
* If an external platform manages call handling, configure it to route calls to an assigned number claimed/assigned in Amazon Connect

**Section 4.1.2 AWS Connect/Interconnect (Line-Side including Omni-Digital Services)**

**A screenshot of a computer

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Traditional VoIP solutions require you to allow both inbound and outbound for specific UDP port ranges and IPs, such as port 80 and 443. These solutions also apply to TCP. In comparison, the network requirements for utilizing CCP the Contact Control Panel with a softphone are less intrusive. You can establish persistent outbound send/receive connections through your web browser. As a result, you don't need to open a client-side port to listen for inbound traffic.

**Port and Protocol Considerations**

Consider the following when implementing your network configuration changes for Amazon Connect:

* You need to allow traffic for all addresses and ranges for the Region in which you created your Amazon Connect instance.
* If you are using a proxy or firewall between the CCP and Amazon Connect, increase the SSL certificate cache timeout to cover the duration of an entire shift for your agents, Do this to avoid connectivity issues with certificate renewals during their scheduled working time. For example, if your agents are scheduled to work 8 hour shifts that include breaks, increase the interval to 8 hours plus time for breaks and lunch.
* When opening ports, Amazon EC2 and Amazon Connect require only the ports for endpoints in the same Region as your instance. CloudFront, however, serves static content from an edge location that has the lowest latency in relation to where your agents are located. IP range allowlists for CloudFront are global and require all IP ranges associated with "service": "CLOUDFRONT" in ip-ranges.json.
* Once ip-ranges.json is updated, the associated AWS service will begin using the updated IP ranges after 30 days. To avoid intermittent connectivity issues when the service begins routing traffic to the new IP ranges, be sure to add the new IP ranges to your allowlist, within 30 days from the time they were added to ip-ranges.json.
* If you are using a custom CCP with the Amazon Connect Streams API, you can create a media-less CCP that does not require opening ports for communication with Amazon Connect, but still requires ports opened for communication with Amazon EC2 and CloudFro