Amazon Chime is a fully managed service that runs securely on the AWS cloud to let people meet, chat, and place business phone calls inside and outside their organization. Amazon Chime voice connector is AWS' new SIP service that offers a secure, global calling service with pay-as-you-go pricing and no upfront fees. Ribbon's Session Border Controller Software Edition (SBC SWe) provides Amazon Chime customers security, high availability and interoperability for Voice over IP (VoIP) traffic being sent to and from Amazon Chime voice connector.

How does the Ribbon SBC fit with Amazon Chime Voice Connector?
From a network perspective, connectivity between an enterprise customer and Amazon Chime entails three parts: an IP connection to/from the Enterprise premises to AWS, a session border controller deployed on AWS, and the Amazon Chime voice connector between the SBC and Amazon Chime.

Figure 1 below shows this in a network diagram, where the Ribbon SBC SWe is deployed in the enterprise customer’s AWS Virtual Private Cloud (VPC). This model represents the deployment of Ribbon’s SBC SWe on AWS and successful interoperability testing with Amazon Chime voice connector.
Figure 2 shows that it is also possible that the enterprise has an SBC is deployed on their premises. In this deployment architecture, there are multiple Ribbon enterprise SBCs to choose from, depending upon maximum traffic loads and additional feature functionality. Deploying and configuring a Ribbon enterprise SBC is easy if you do not already have one. Even easier still, will be simple configuration updates to an existing Ribbon SBC to interwork with Amazon Chime voice connector.

Configuring the Ribbon SBC for interoperability with Amazon Chime Voice Connector

Based on interoperability testing between the Ribbon SBC SWe and the Amazon Chime voice connector, there are multiple configuration items which need to be specified to ensure interworking shown in Figures 1 or 2. At a high level the following list needs to be specified:

- AWS security group
- SBC static configuration elements:
  - Profiles
  - Peers
  - Trunk Groups
  - DNS and Routing
- SBC configuration elements specific to each customer:
  - Certificate (to be imported in the system afterwards)
  - Customer Chime FQDN

Summary

Amazon Chime voice connector plus a Ribbon SBC make the perfect solution for a secure, global calling service. Pick your deployment model – on AWS or on the enterprise premises, and Ribbon has a solution for you.