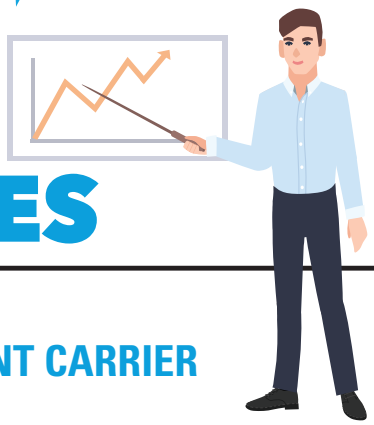
BUILD, BUY OR SKY NETWORKS

CASE STUDIES



CASE STUDY 1:

THE INDEPENDENT CARRIER

OVERVIEW:

Customized solution utilizing Sky Networks' unique flexibility. An independent carrier needed a solution that would provide information to verify that the caller of a particular call was who they represented themselves to be. The solution was to be used to interface with financial institutions to help eliminate fraud.

This solution required multiple unique system requirements. The customer had to decide if they wanted to build a custom solution, buy an overpriced option from "Big Telecom," or implement a unique solution based upon the Sky-Networks platform. They decided to purchase Sky-Networks because of their unique system requirements and reduced start-up and ongoing costs when compared to their other options.

SYSTEM REQUIREMENTS:

1. Ability to process a large volume of calls.
2. Ability to gather data about the call while it was in progress – call progress information, signaling information etc.
3. The ability to pause the call while a query to an external system was sent and received and to then relay that information to an additional external system.
4. Redundancy and resiliency so that the system would achieve 99.999% availability.
5. They also required expertise and guidance in getting through the process of being licensed as a CLEC, selecting and interconnecting with other carriers.

By utilizing existing Sky DANCE technology and their engineering expertise, Sky-Networks was able to build a prototype of the specified solution in a very short period of time to demonstrate its viability, and implement a roll-out plan with the carrier. The final solution is operational across 20 servers in a geographically distributed, redundant system processing millions of calls per day.

The solution was a success! It operated as planned and allowed the carrier to meet their revenue projections. In the end, the customer was later acquired by a large service provider as part of a $3.1B acquisition.

WHAT WAS PROVIDED BY SKY NETWORKS:

1. Sky DANCE core to provide the system switching infrastructure.
2. Sky DANCE SS7 gateways.
3. Sky Networks professional services to customize the system for the purposes of this project.

CASE STUDY 2:

THE SERVICE PROVIDER

OVERVIEW:

Customer was a service provider that has been in the business of providing equipment (phones, modems, etc.) and call center services (for purposes of captioning calls) to the hearing-impaired community for many years. They were planning to migrate from proprietary messaging technologies to a more modern SIP based infrastructure. They needed someone to help rebuild their network using SIP and also to provide the ability to interwork with their existing systems and call centers to provide captioning services for the hearing-impaired community. The customer had to decide if they wanted to build a custom solution, buy an overpriced option from "Big Telecom," or implement a unique solution based upon the Sky-Networks platform. Because of the unique technical requirements and precise budget requirements, the service provider selected the unique solution from Sky-Networks.

SYSTEM REQUIREMENTS:

1. An ability to process a large number of calls – capable of handling more than 100k subscribers.
2. An ability to start small to prove viability and then scale.
3. An ability to provide redundancy and resiliency so the system would achieve 99.999% availability.
4. An ability to interface with their call center.
    a. This involved splitting the audio session so that the call agent can hear both sides of the conversation but cannot be heard – eavesdropping.
5. An ability to handle terminating the call to multiple end devices simultaneously and for any or all of them to be answered.
6. An ability to be able to switch devices mid call and resume where they left off.
7. An ability for endpoint devices to cross network boundaries when mobile including transitioning from Wi-Fi to mobile and the reverse.
8. An ability to mix audio along with captions and direct it at the same endpoint device.
9. A provisioning API to interwork with the customer's CRM system.
10. An architecture which allowed operation as a single unified system
11. An ability to be customized.

WHAT WAS PROVIDED BY SKY NETWORKS:

1. Sky DANCE core to provide the system switching infrastructure.
2. Sky DANCE SS7 gateways.
3. Sky Networks professional services to customize the system for the purposes of this project.

The solution was a success! By utilizing Sky-Networks' technology and expertise, they were able to build a prototype of the system within a very short period to demonstrate the viability of the solution. Currently, the carrier is in the process of transitioning the legacy system to the new SIP based solution. They are now operating in 4 different data centers with both geographic and local redundancy.

SKY NETWORKS PROVIDED SOLUTION COMPONENTS:

1. Sky DANCE core to provide the system switching infrastructure including proxy, SBC, routing and translation services.
2. Sky PBX – to provide endpoint services
3. Sky Phone – Sky Phones core SIP stack/API technology was integrated into their partner's iOS and Android solutions to provide captioning services for iOS and Android devices.
4. Sky API – to interface with the customer's existing CRM system when provisioning customers and to provide the APIs to interface the customer created application to control call processing while in a call.
5. Sky Networks professional services to provide consulting to their engineers and also to help architect and customize the Sky DANCE solution to meet their needs.