# Voice & Video Integration into Salesforce.com via WebRTC & NUViA

Over the past decade, Salesforce (SFDC) has evolved to become a critical business application in many organizations. Its scope has increased and many senior managers are literally driving their entire business plan based-on the funnels and forecasts maintained in the application. GENBAND has developed a solution to make it easy for SFDC users to receive and make calls inside the SFDC web application. This saves time (less time finding contact information, etc.) and offers integrated activity tracking so managers can correlate how customer engagement activities drive results. Sales personnel can focus on selling rather than wasting cycles on administrivia.

The solution leverages:
- GENBAND SPiDR gateway
- WebRTC to SIP
- GENBAND Experius application platform (running on NUViA, GENBAND's Unified Communications as a Service platform)
- Force.com (Salesforce APIs)

GENBAND has implemented this solution for our own organization. Using a standard NUViA account, GENBAND staff can login to SFDC to place/take calls from the application; activity is logged accordingly. Naturally, it offers a real–world test bed and delivers real benefits to our sales staff. In turn, they can advocate this solution with customers, extoling the benefits they receive themselves.
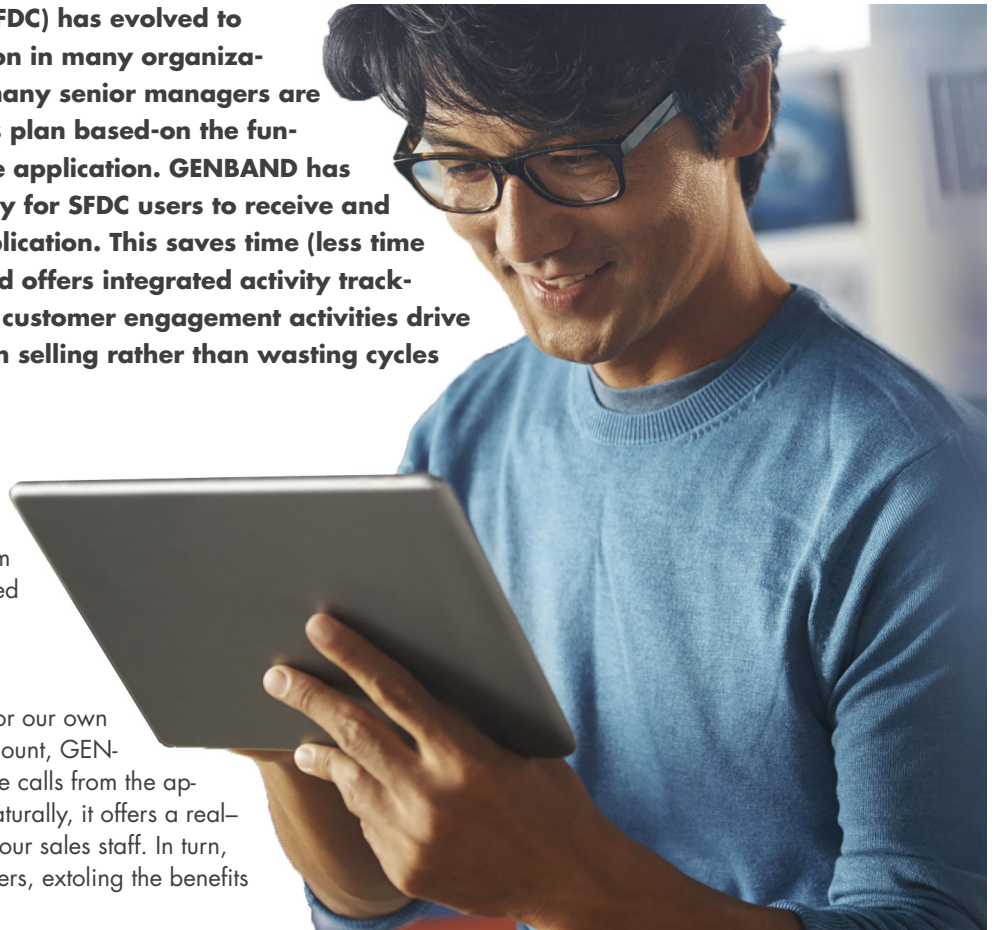
The Problem

To get the full value of any CRM solution, including Salesforce, an enterprise must drive its employees to populate all matters of data that is relevant to the business. This typically includes customer contacts, lead disposition, funnel management, forecast and opportunity disposition. Even with the simplest processes, it's still a fair bit of work and requires everyone to be both timely and methodical. CRM systems are popular simply because history has shown that building this repository of collective knowledge and exposing trends drives results; simply put, CRM works.

Once a business embraces the value of CRM it doesn't take long for users and managers to look for ways to expand the scope so they can correlate even more activity and results. Unfortunately, that means more data entry across more activities – this becomes especially onerous when data is in separate systems and users are expected to take an action in one place and log it in another. Logging emails,

Application Brief

GENBAND

calls, meetings and other details can get cumbersome. Who really wants to send an e-mail and log it and then make a call and log it? Sales staff start to feel like admins not salespeople. Today, CRM solutions have created strong tools to manage e-mail and web interactions; it's easy to send e-mail and have that action appear in the contact's activity log; if the user responds, that gets logged as well. Unfortunately, unlike e-mail, most real time communication, using the office phone system, is completely separate from CRMs, including SFDC. Worse, users that work from home or from the road are not typically even connected to a traditional office phone. In most cases real-time communications have been left out of the process, hampered by complexity and cost.

It's About the Cost, Not the Technology

CRMs have been around since the mid'70s but even a decade ago they were reserved primarily for large organizations simply because they required significant staff to manage them. CRMs were built on big iron with thousands of hours of custom development; small companies could not afford them and big companies could not afford to ever change them. A few organizations built phone to CRM integration using Computer Telephony Integration (CTI) tools like CSTA, TSAPI and TAPI – enabling the CRM to track real-time activities. Unfortunately, these APIs were clumsy and required even more pricey integration work to connect proprietary PBXs. Ultimately, few organizations were willing or able to afford the integration.

Salesforce completely revolutionized the CRM world with a cost effective, browser-based cloud service. Finally, CRM was affordable for both large and small customers; it became simple to deploy and use. Now GENBAND, with WebRTC, is doing the same for real-time integration. Our solution is making it as easy to manage a voice or video call as it is to manage e-mail. What we're offering is not new but the ability to do it easily and cost effectively is new and very compelling.

GENBAND is removing the friction associated with tracking real-time activities (calls, video calls, etc.) by removing the complexity and cost of automating the process. Any user with a web-browser can get access form anywhere– no specific application or specific PBX required; it's only a few hours of integration, not months, and the cost is low. Even if a user is working from home or a hotel room, nothing changes, those calls are logged in the same manner.

GENBAND's integration enables:

- Automatic population of Salesforce activity logs with each real-time event
- One-click outbound calling of Salesforce contacts
- Screen pops of an incoming call from a Salesforce contact
- Unknown incoming callers can be added as a contact with one click
- Solution to invite customers to a video call – each party only needs a browser and a multi-media computer
- Mobility - log into Salesforce from anywhere and start receiving/making calls
- Mac OS X and Windows support – works on a compatible WebRTC browser

Salesforce users can leverage their enterprise identity to get to both SFDC and real time communication services from a single login (or can login separately). Current versions of Chrome, Firefox and Opera support WebRTC capabilities without a plugin. If users prefer Internet Explorer, Safari or another browser that does not support WebRTC, a plug-in is provided the first time the user connects to GENBAND's communication services. Once the plugin is downloaded it is saved and becomes transparent to the user.
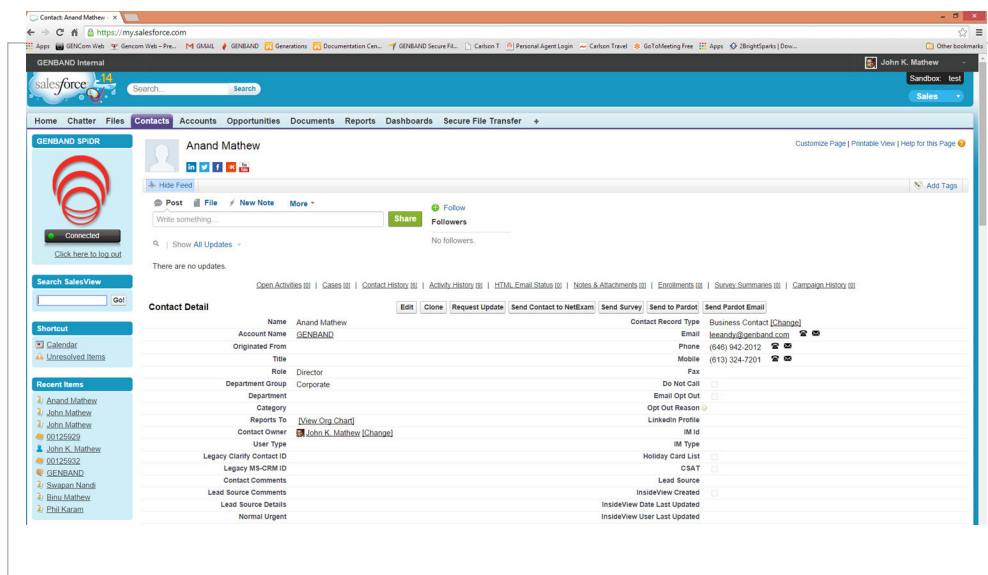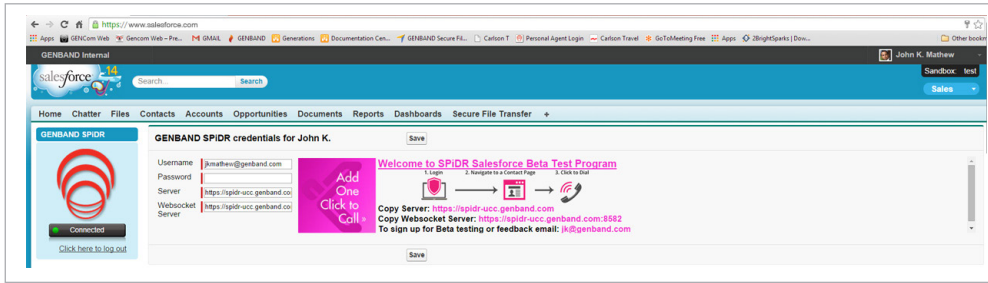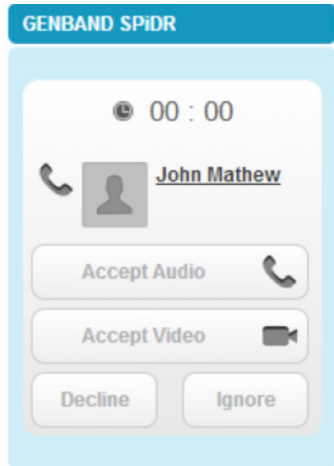

Application Brief

GENBAND™

The Experience

Login

1. Salesforce user logs into portal
2. Portal authenticates user and loads a GENBAND communications widget
3. Once widget is loaded it will authenticate against the GENBAND SPiDR Gateway
   - User enters their credentials as required

Incoming Calls

1. Calls coming into to a NUViA user are anchored in the EX-PERiUS Application Server. EXPERiUS will use simultaneous ringing (SIP Forking) to ring the user's registered endpoints (this could include a desk phone, GENCom client, etc.) including a SPiDR instance.
2. The embedded SFDC client will show an incoming ringing call as well as any other pertinent information about the incoming caller.

3. Once call is answered, the application will use caller-ID to search SFDC for a matching contact.
   - If a contact match is found the user can easily click on the contact to navigate to the contact's full record in SFDC
   - If contact match is not found, an option is provided to add a new contact to Salesforce


Application Brief

GENBAND

4. Once the call has completed the call details are added to the contact's activity log and can be viewed as part of the larger account record.

Outbound Calls

1. Salesforce user navigates to an account or contact page
   - Click-to-connect icons are embedded next to the contact's communication fields (currently either phone calls or video call invite)

2. User clicks on the phone icon (☎) next to the desired contact to initiate a call from the embedded client
3. The called party responds
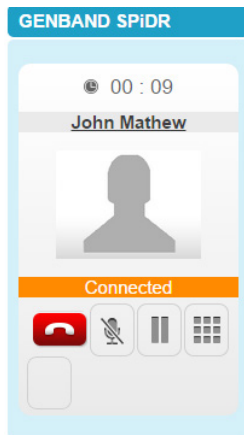
4. Once the call has ended it is added to the contact's activity log, either the attempt (assuming no answer) or the duration of the answered call. Again, this detail becomes part of the larger account record.

Inviting customer to a scheduled video call

1. Salesforce user navigates to an account or contact page
   - Click-to-connect icons are embedded next to the contact's communication fields (currently either phone calls or video call invite)
2. User clicks on the invite icon (✉) next to the desired contact to initiate a video call invite from the embedded client:


3. An invitation dialogue window will pop up asking the user for additional information
   - User verifies the contact's e-mail address
   - User selects a start date & time
   - User selects a stop date & time
4. Invite is sent to the contact with a link to the call for the designated time
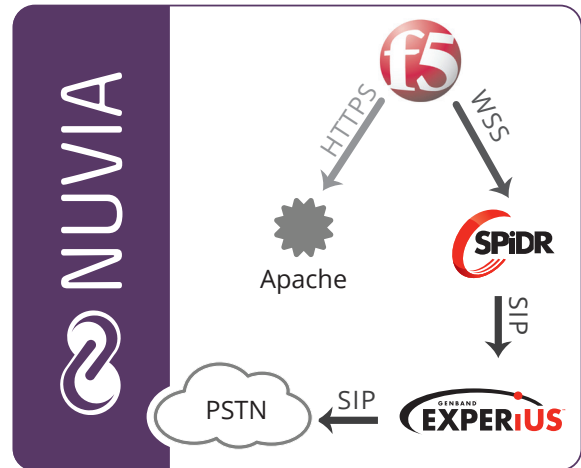

Application Brief

GENBAND™
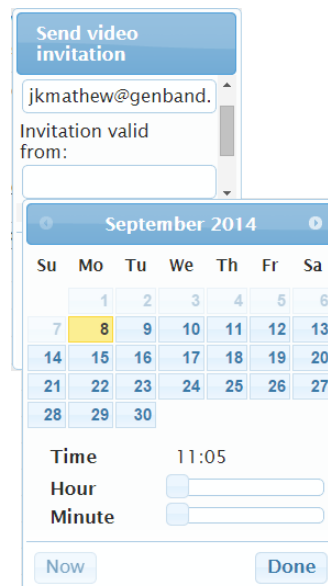
5. At the designated time, the contact simply clicks on the link to dial out from their WebRTC-enabled browser
6. When the contact initiates the call SPiDR receives the request and passes it to the EXPERiUS Application Server in the NUViA cloud. The EXPERiUS sees the call simply as a video enabled incoming call. It will alert all of the user's registered devices and clients, including the embedded SFDC widget.
7. The user can answer the call on any of their devices or clients. Assuming they use the SFDC widget, the incoming call is going to be treated like other incoming calls so it will automatically be matched against the contact's record.
8. Both the meeting invite and the subsequent inbound call will be logged in the contact's activity log.
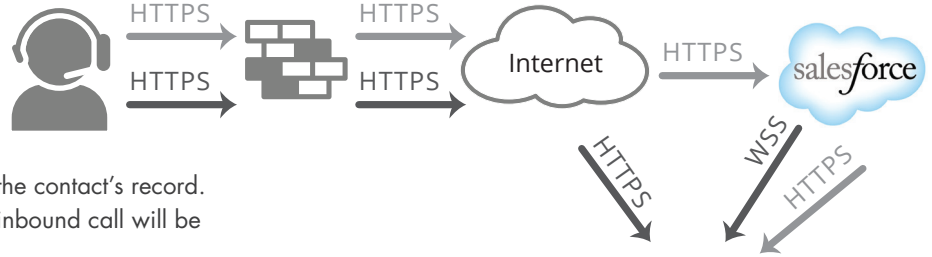
High-Level Architectural Overview

The diagram below attempts to illustrate the key elements of the solution as well as the basic protocols used to initiate calls. The basic Salesforce architecture is not going to change regardless of the enterprise as SFDC is a cloud-based, browser access application. The basic connection is simply HTTPS.

In the diagram below we showing our own deployment with NUViA. This could be served by a Service Provider or Enterprise-based EXPERiUS and SPiDR or potentially SPiDR and a fully qualified 3rd party SIP Application Server.

Application Brief

GENBAND