

# EXPERIENCE AVAYA

Moscow



# Мастерская “Experience Portal”

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# Agenda

## The building blocks

- Orchestration Designer
- Pluggable Data Connectors
- Context Store
- Conversation Store

## Use Cases

- Changing the channel – messages in queue
- Conversations – fraud alert and survey
- Preserving contexts – web and mobile
- Mobile application development
  - Presentation
  - Context
  - Integration
- Integration with Breeze
  - Workflows
  - Work assignment

# Platform

## Avaya Aura Experience Portal

- ▶ Software platform for delivering **Omni Channel Automated** customer experience
- ▶ Expanded beyond just a Voice Portal solution

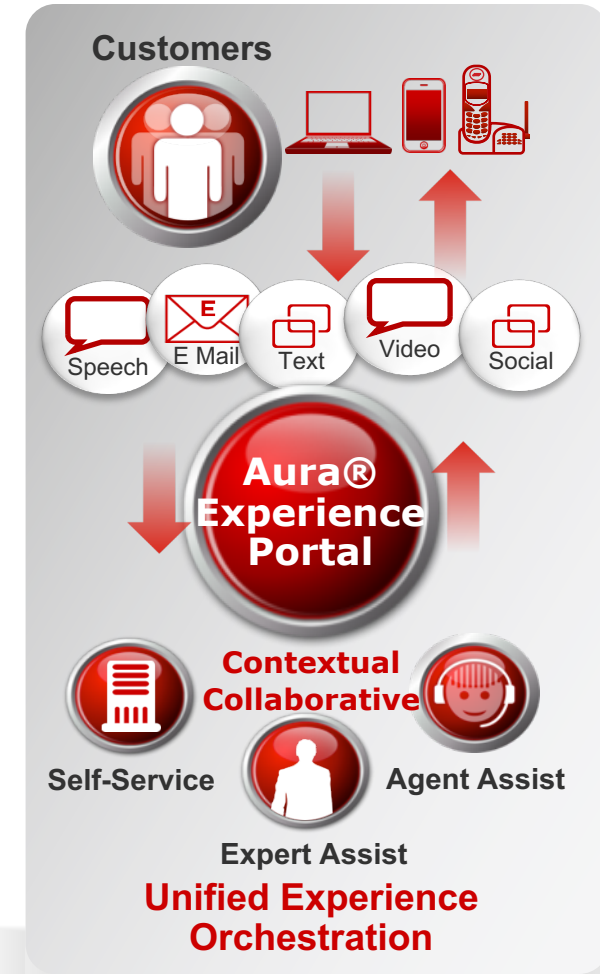
## Orchestration Designer

- ▶ Application Development tool for creating Omni Channel Automated Customer Experience Applications and Dialogs

## Voice Applications

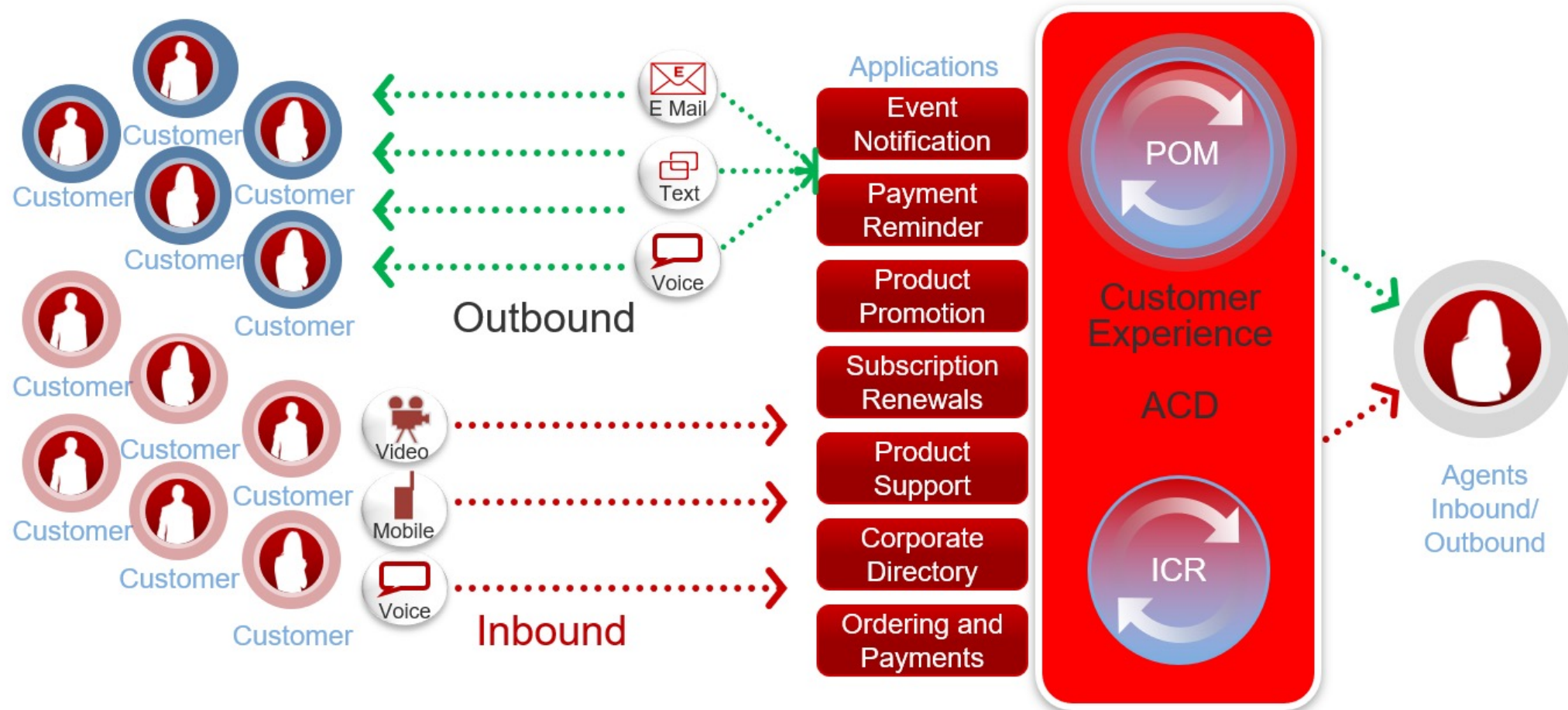
### Managed Applications

Proactive Outreach Manager  
Intelligent Customer Routing  
Business Routing Engine





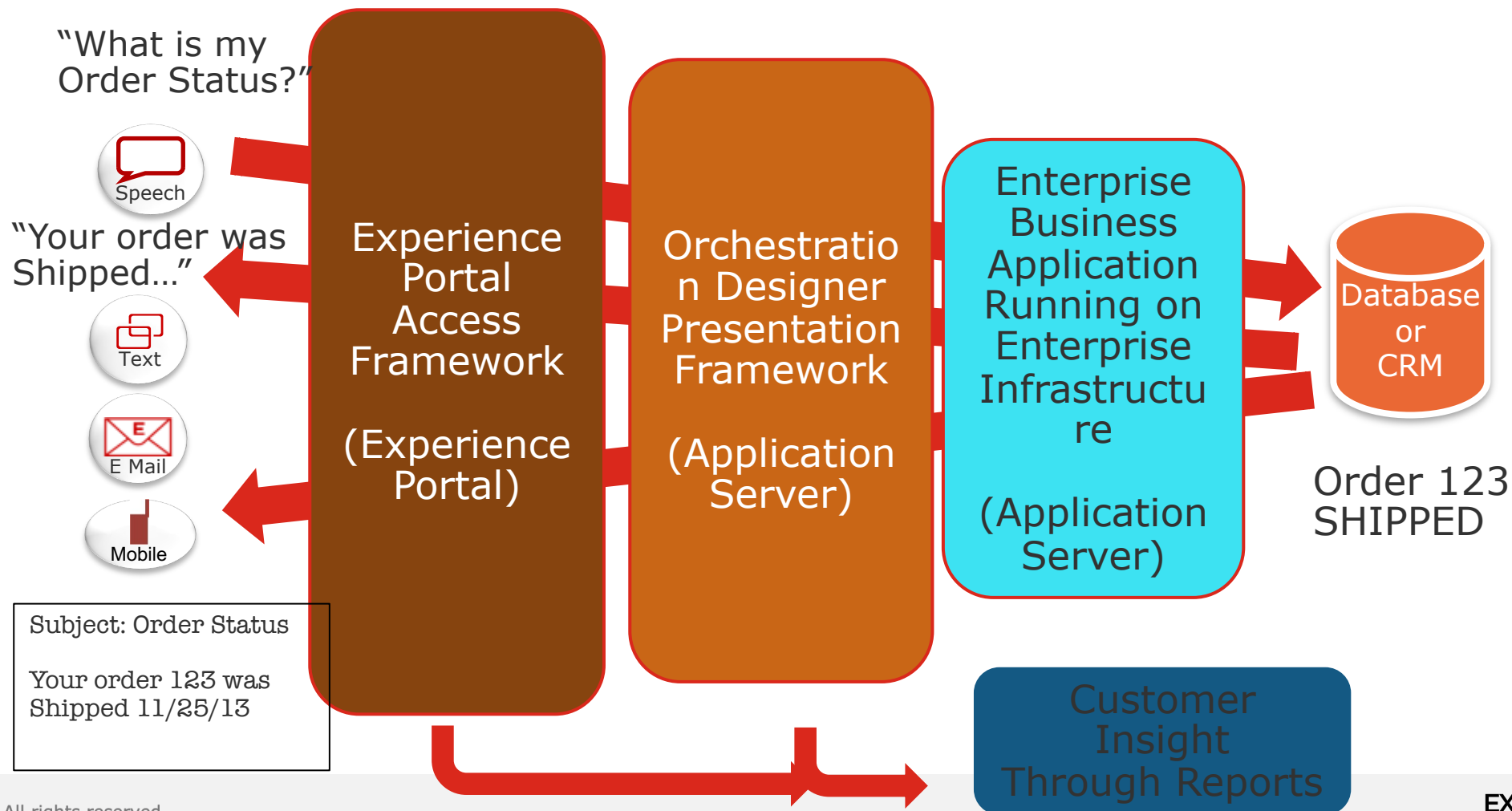
# Omni-Channel Interactions



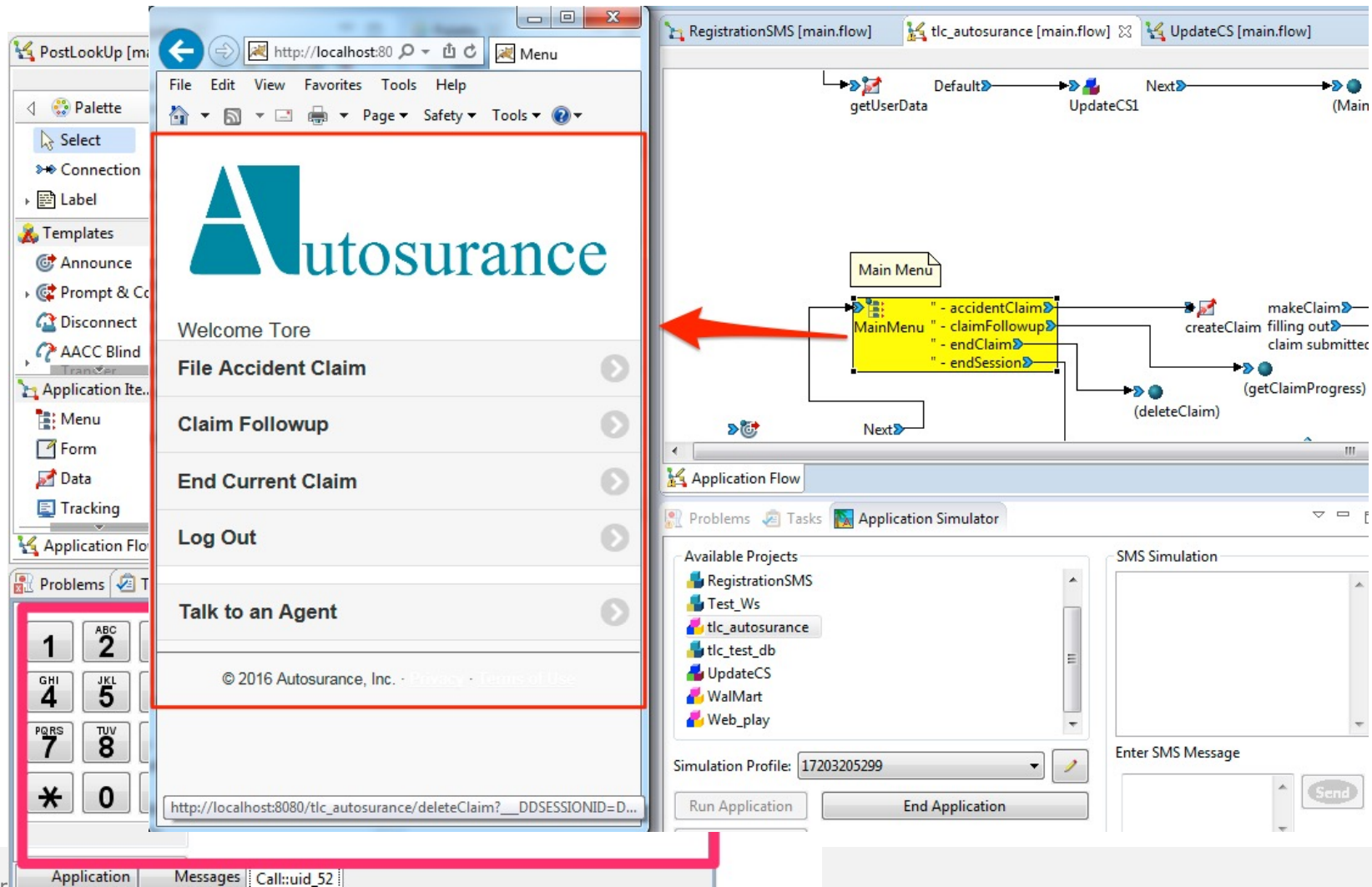
# Orchestration Designer

- Orchestration designer (and AAEP) support omni channel communications.
- Enables dialogs via email, SMS, mobile web in addition to Voice and Video
- Enables changing the communication channel from one to another within a conversation
- Enables Omni-Channel: multiple channel interactions at once
- Enables data and contact center access from these channels
- Enables Communication Enabling of mobile applications

# Multiple presentation layers (voice, email, SMS, Web) One Integration Layer

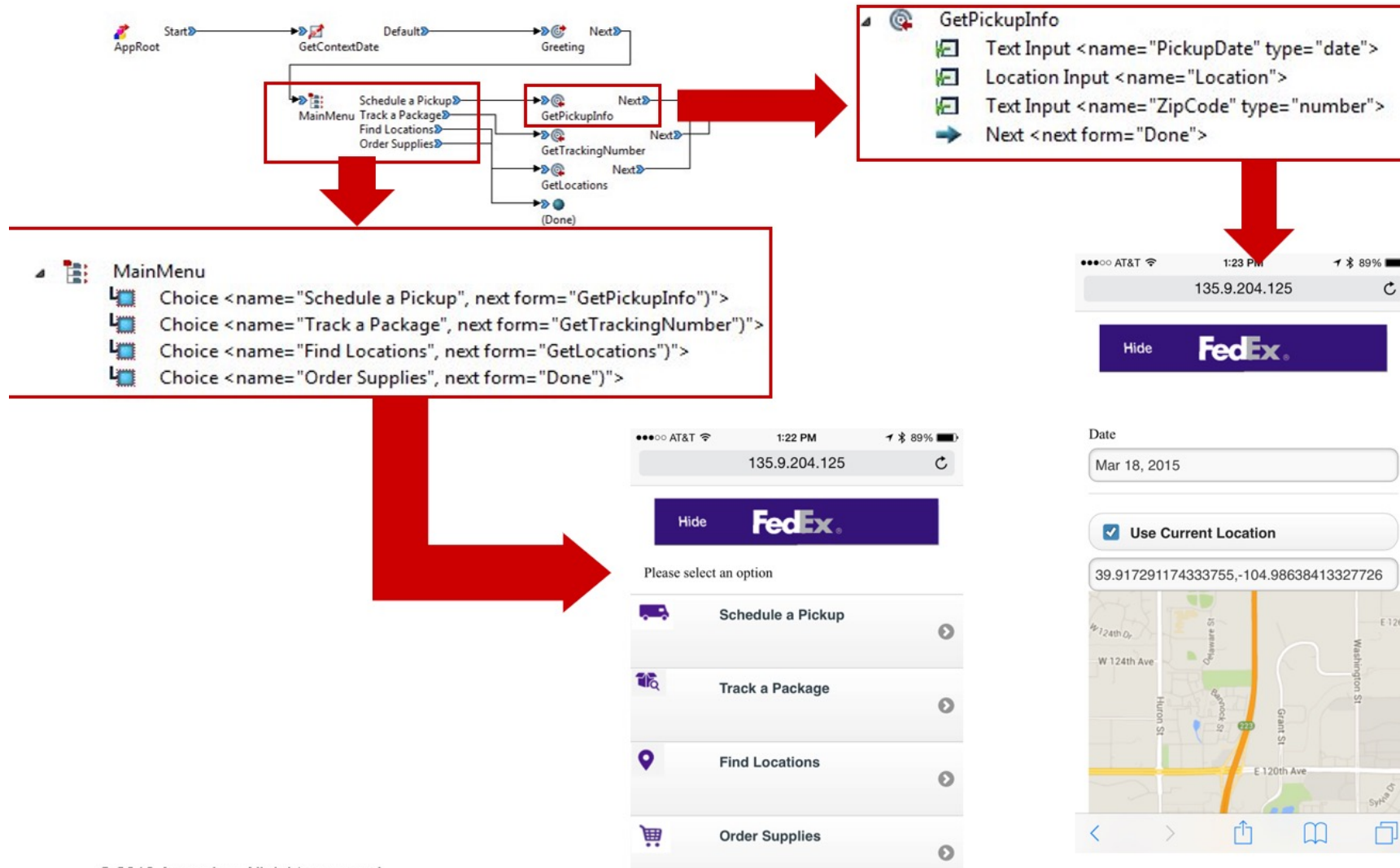


## Multiple presentation layers (Voice, SMS, Email, Web) One Integration Layer





# Rendering Mobile Content in HTML 5



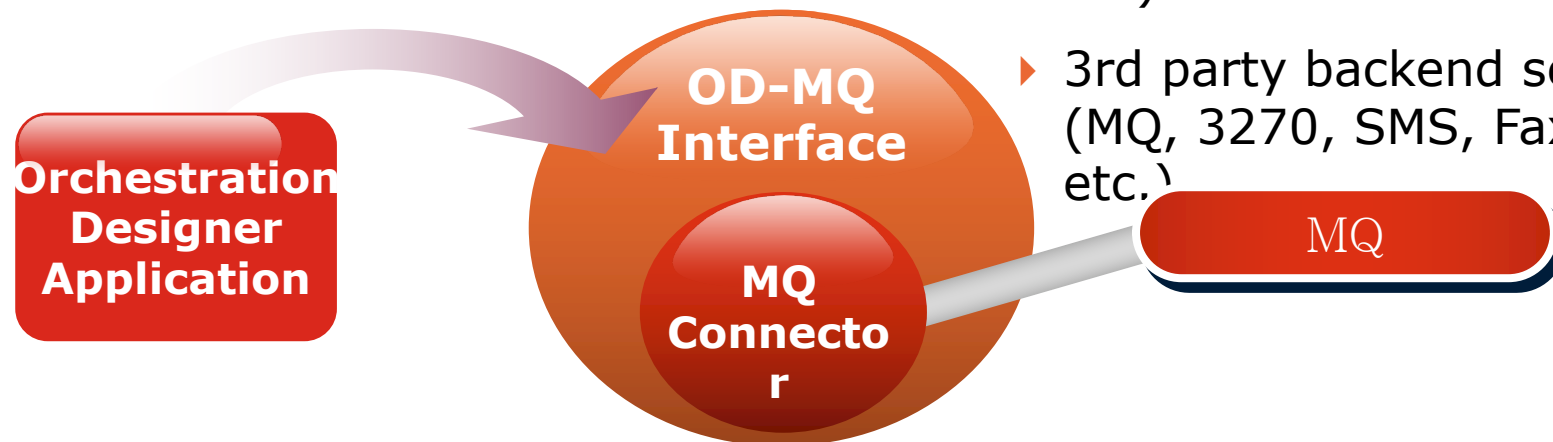
# Orchestration Designer: Pluggable Data Connector Architecture

Simplifies integration for :

- ▶ Packaging complex web services
- ▶ Integrations for systems without web services,
- ▶ 3rd party systems

Examples:

- ▶ Database & Web Services
- ▶ Connectors to Breeze, Avaya IC, AES, POM, ICR, Context Store
- ▶ Connectors to 3rd party CTI or ACDs (i.e. Genesys, Cisco, etc).
- ▶ 3rd party backend services (MQ, 3270, SMS, Fax, Email, etc.)



# Some of the Available Pluggable Data Connectors

- ▶ AACCC Landing Pad Web Service
- ▶ AACCC Treatments
- ▶ Avaya AES
- ▶ Avaya IC

- ▶ Intelligent Customer Routing (ICR)
- ▶ Proactive Outreach Manager (POM)

- ▶ Web Services

- Axis 1.3
- Axis 2

- ▶ Web Services (REST)
- ▶ Database

- ▶ Configurable Application Variables
- ▶ Context Store
- ▶ Workflow/Engagement Developer

- ▶ AAEP Outbound Call
- ▶ Notification (Email, SMS)
- ▶ Conversation Store

# What is Context Store?

- A Breeze Snap-in that provides accurate, reliable and complete event based contextual information to different systems.
- Allows companies to integrate different components with access to all information so that representatives and other resources can provide fast and accurate service for their customers.



# What is Context Store?

- **Avaya Context Store helps create a consistent, personalized omni-channel customer experience**
- **Continuously share information in real-time across teams, systems, process, and touch points**
- **Provides centralized repository for data**
  - **Instant access to data**
  - **Simplified process for data tracking, collecting, sharing data**





# What is Context Store?

Context Store is driven by requirements to:

- Identify the user and their needs, route to the most able or available resource
- Apply consistent self-service or assisted-service to customers
- Support the use of non-voice media



# What is Context Store?

- Context Store can persist information to an External Data Mart and provide customer journey information

**AVAYA** ContextStore

10.129.132.115

3035171421

0

Submit

Touch Points

Touch Point Activity

Call Flow

Settings



All



Web



POM



EP



Agent



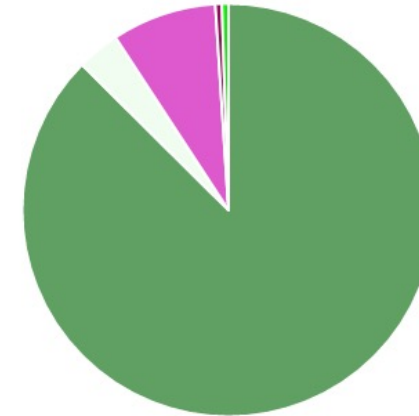
Survey



Mobile

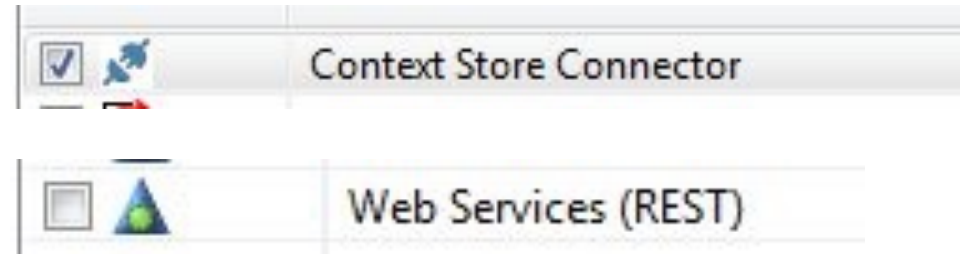
Web

timestamp	Fri May 27 2016 07:43:00 GMT-0600 (Mountain Daylight Time)
tenantId	
operation	Read Context by contextId
groupId	
contextId	3035171421
touchpoint	Web
data	<button>Show / Hide</button>
routingId	0
version	4



# Context Store Access

- Pluggable Data Connector
- Rest Web Services
- Name Value Pairs
- Common Keys to access
- Design pattern:
  - Create context
  - Pass key with records  
    UUI for calls  
    URL parameters for Web
- Distributed in-Memory Data Grid



Context Store Connector Configuration

Rest Service Settings

(Current) Service URL:

Rest Service IP:

☐ Mark to use fake requests and to return simulated values

Advanced Settings: ⌵

☐ http ☒ https

Rest Service Path:

Client side timeout/ms:  ⬆ ⬇ ⬇ ⬆

Context lease time/seconds:  ⬆ ⬇ ⬇ ⬆ ☒ Mark to use server default lease time

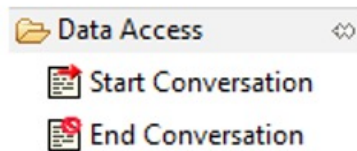
Number of retries:  ⬆ ⬇ ⬇ ⬆

# Conversation Store for Multi-turn Applications

- Provides a simple mechanism to maintain application state between turns of the dialog – creates a session on a session-less channel
- Stores application variables in between SMS interactions.
- Conversations have a timeout or lease.
- Implemented as a Pluggable Data Connector you add to your message application.
- Conversations can span modules
  - SMS and Data only modules.

# Conversation Store Access

Pluggable Data Connector  
Variables to Save/Restore  
Palette Items



Configurable Variable

Conversation Lease (seconds):

**Save** **Apply** **Cancel** **Help**

Conversation Management	
Variable	Field
conversationInfo	survey
conversationInfo	surveyquestion
conversationInfo	surveyresponsetype
conversationInfo	surveyresponse
conversationInfo	surveynextquestion
<div>Add Variable Delete Selected</div>	

Variables in the conversation are saved once a conversation is started and restored each time the application runs until the conversation is ended or times out. Simple, complex, and complex variable fields are supported as well as collections. Variable values are saved as a string, therefore, variables holding an "object" will not be saved or restored.



# DATA Projects



## Data only projects

- No channel attached (ie. No voice, message, etc.)
- Enables creation of re-usable modules that work across all channels
- Useful for creating functionality that is independent of channels or is common for all channels

# USE CASE: CHANGING THE CHANNEL

- **Collecting Information in other channels:**  
“In order to complete your account information, we need your email address”
- **Other channels for faster or automated service:**  
“The estimated wait time is more than 15 minutes – would you like to continue with chat instead?”

# Collect Email Address

- ▶ Collect difficult information to collect (voice) using another channel (SMS)

▶ Voice: “In order to complete your account information we need your email address. Can we send you a text message .....

▶ Voice: “A message has been sent to your smartphone, please reply with your email address. I’ll wait for your reply .....

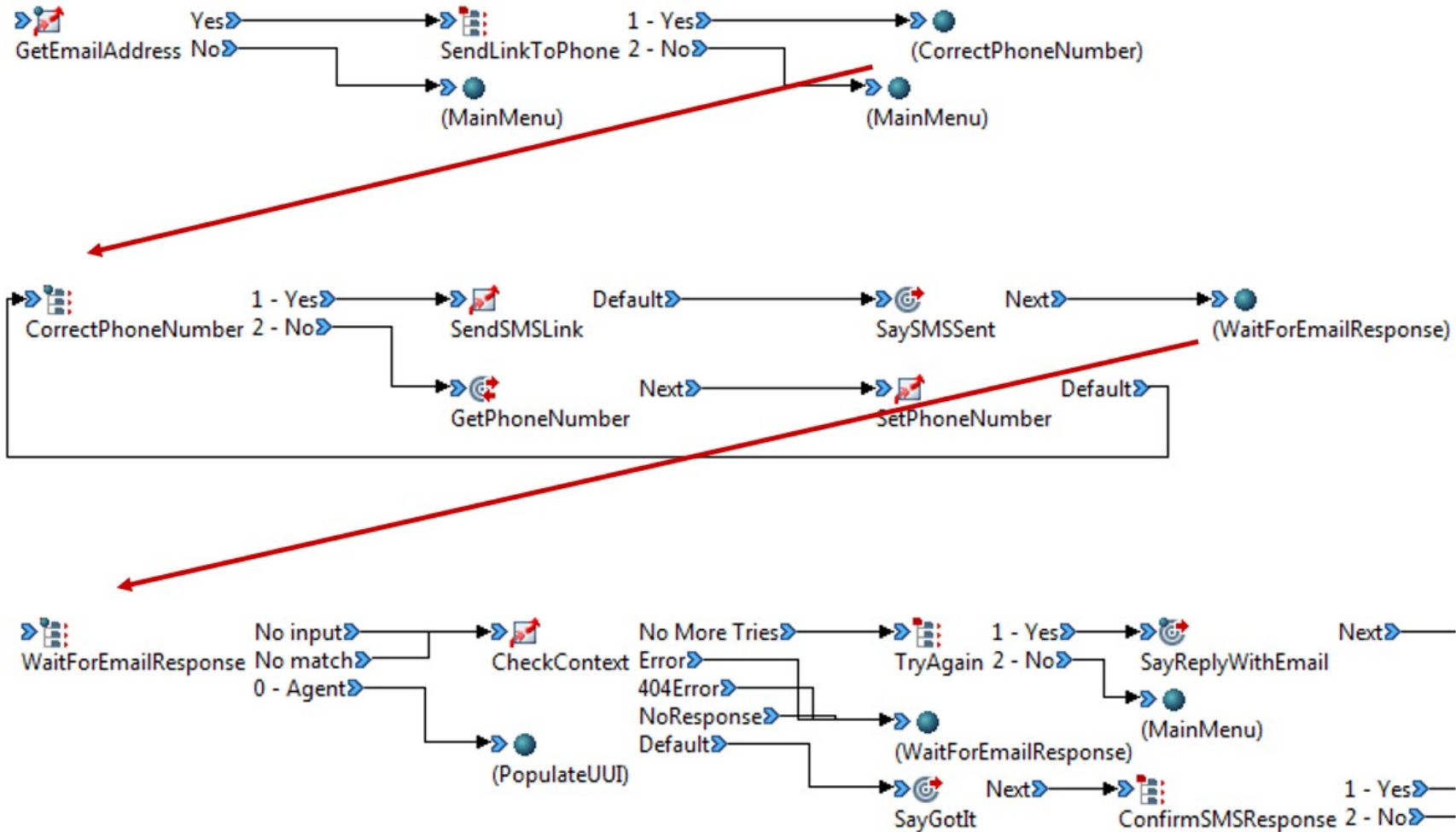
▶ SMS:

Msg from Gelson  
Witte: Please reply  
with your email  
address so we can  
complete your  
account information

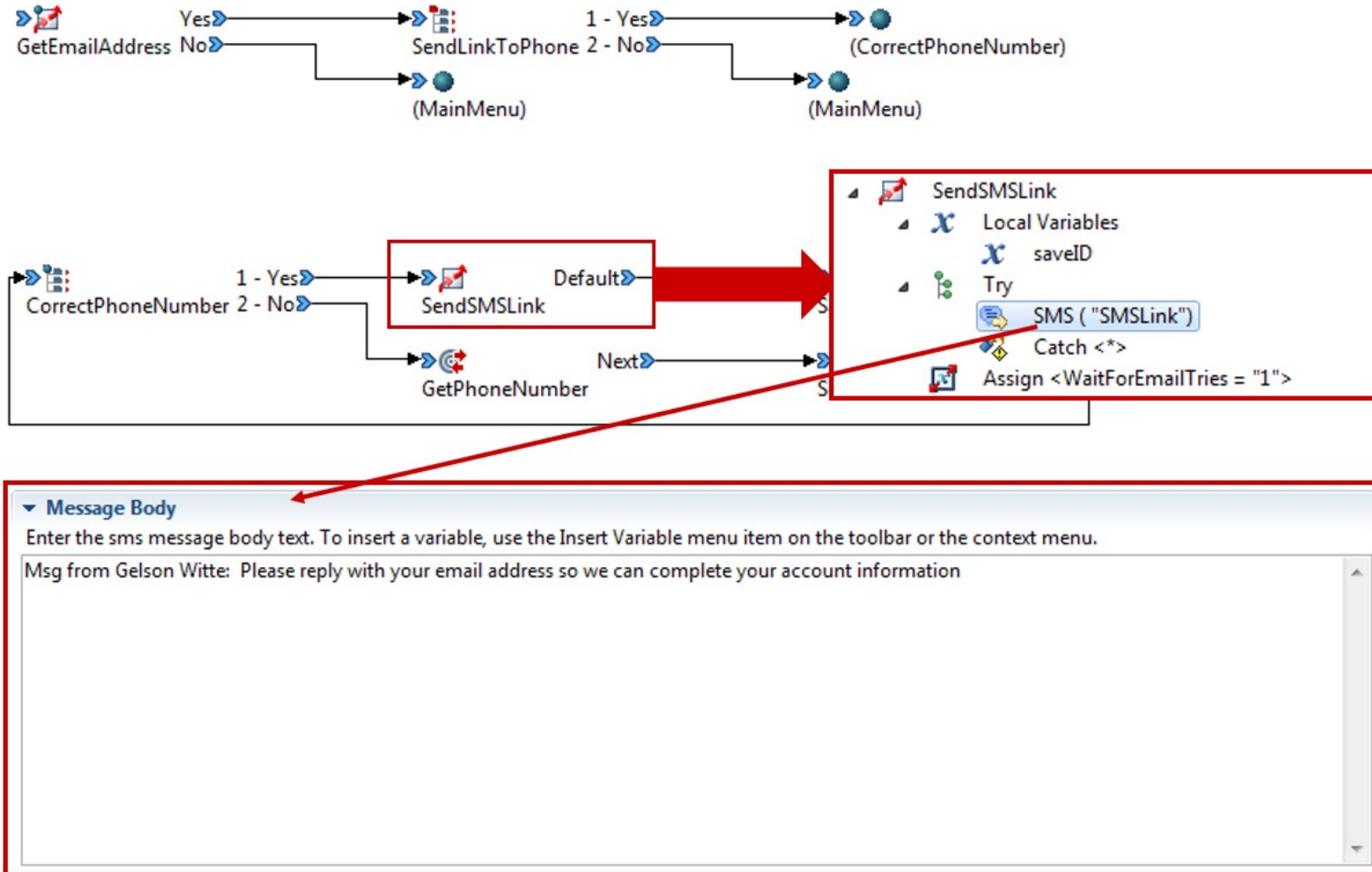
[jhaich@gmail.com](mailto:jhaich@gmail.com)

▶ Voice: “Got it. [jhaich@gmail.com](mailto:jhaich@gmail.com), is that right? .....

# Collecting Email Address on Voice Call

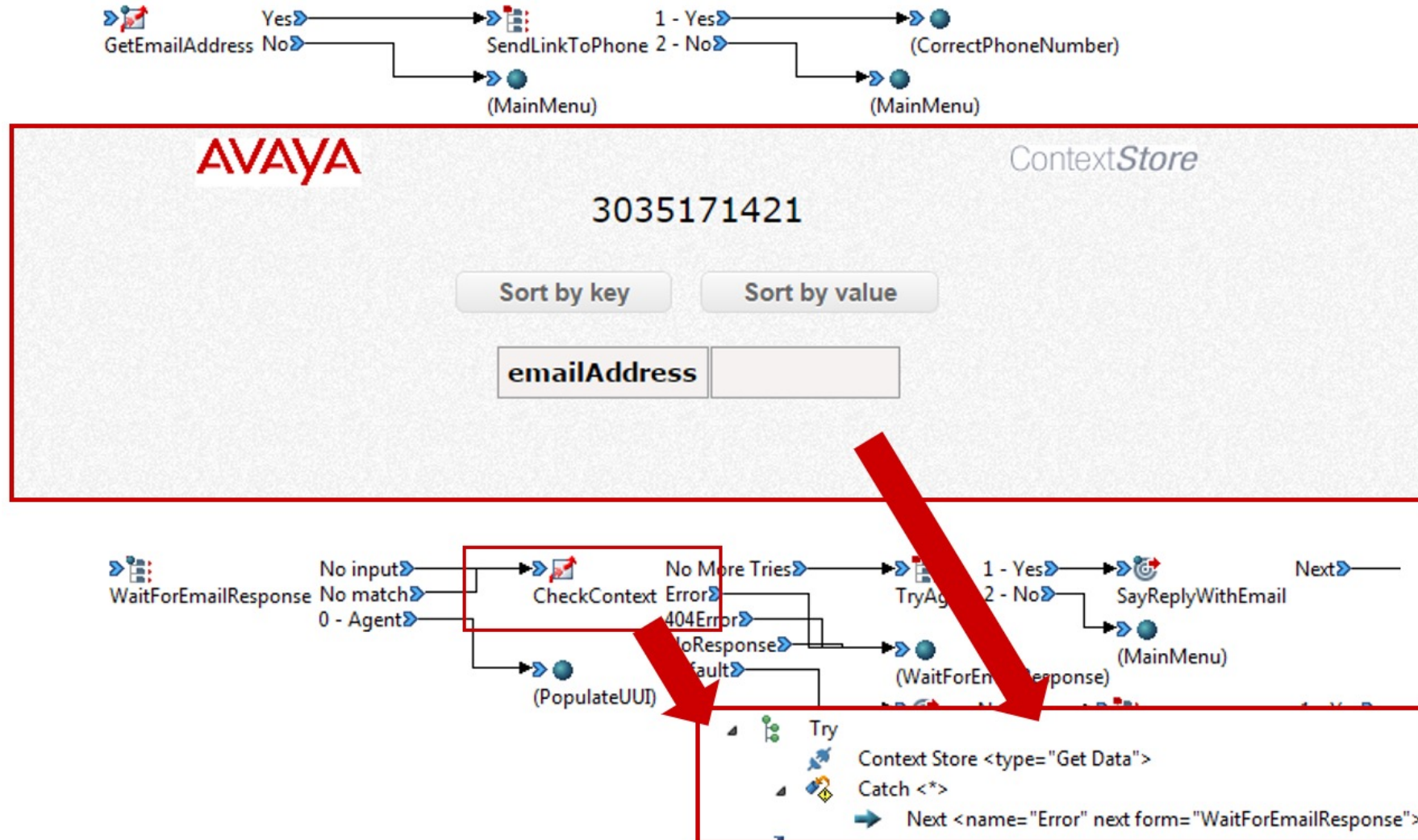


# Notification Connector – Send SMS

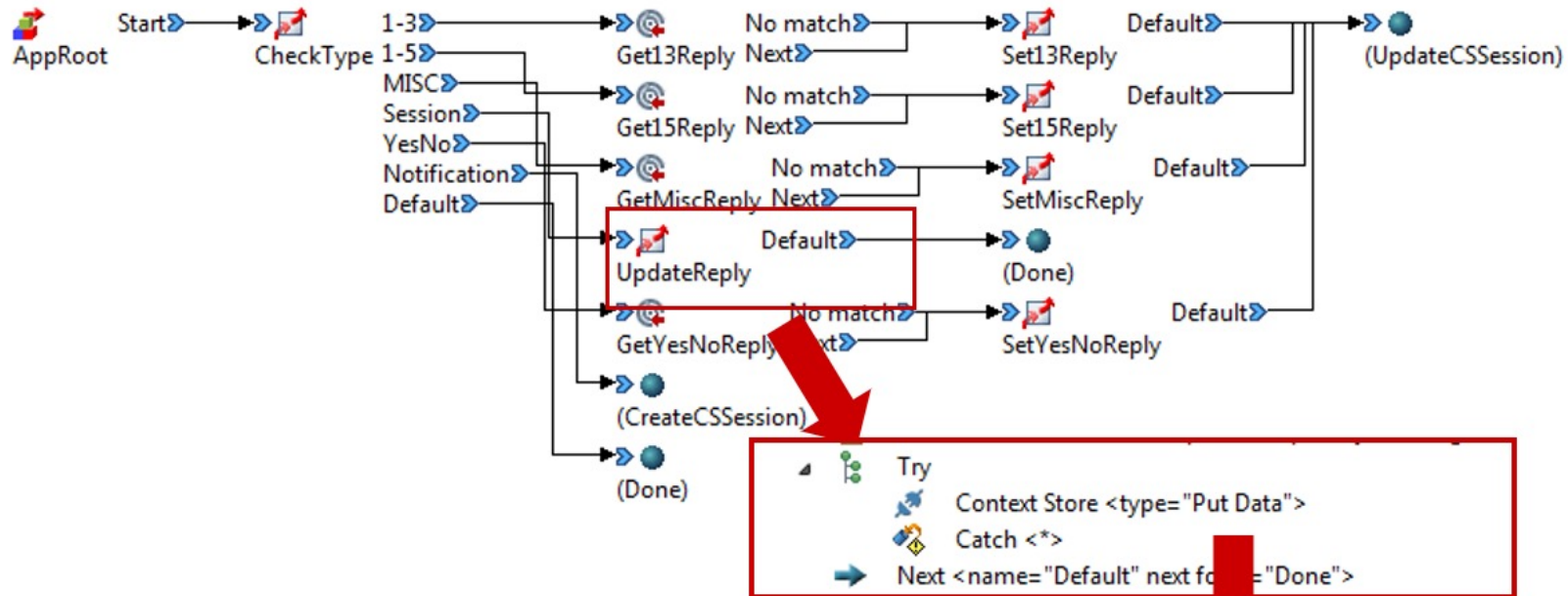




# ContextStore Connector – Get Email Address



# SMS Application – Get SMS Response



The screenshot shows the AVAYA ContextStore interface. It displays the phone number '3035171421' and the email address 'jhaich@avaya.com'. There are buttons for 'Sort by key' and 'Sort by value'. The interface is titled 'ContextStore' and has the AVAYA logo in the top left corner.

# Long Queue Time – Offer Other Options

- If queue time exceeds 15 minutes offer chat instead. Chat agents can handle several contacts at a time typically.

Voice: **“The estimated wait time is more than 15 minutes would you like to continue with chat instead .....**”

Voice: **“A link has been sent to your smartphone, please click on that link to continue.....”**

SMS:

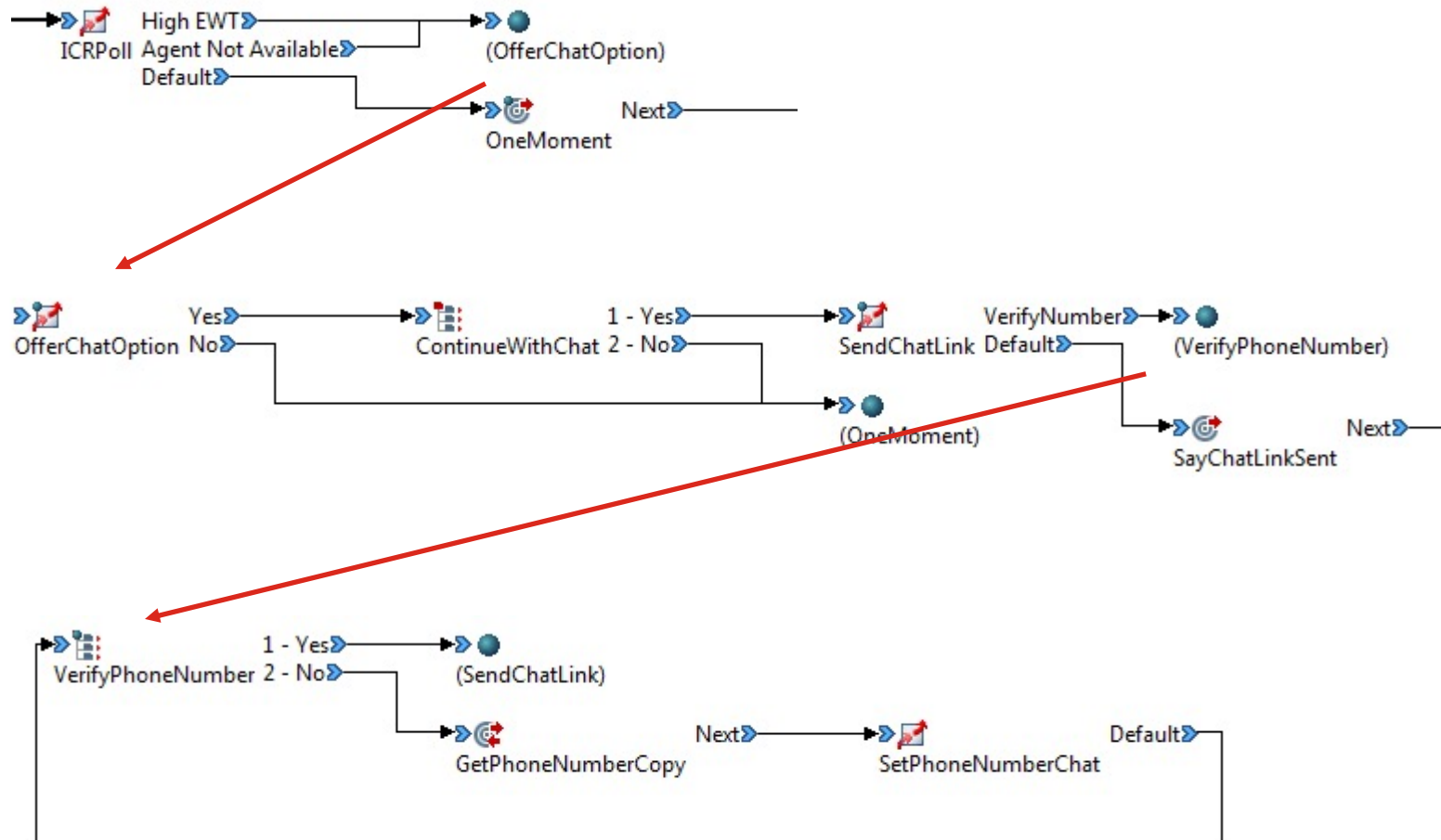
[http://  
abmi.conversive.com/  
genavaya/  
TechChat.html?  
name=Jon&location=  
Mangelsons&amount=  
\\$948.10&reason=fraud  
&ci=3035171421&buh  
andle=jhaich&popup=t  
rue](http://abmi.conversive.com/genavaya/TechChat.html?name=Jon&location=Mangelsons&amount=$948.10&reason=fraud&ci=3035171421&buhandle=jhaich&popup=true)

**Tech Support:** Hi! I'm Virginia, a Virtual Agent designed to answer your questions.

**Tech Support:** Hi Jon, I see you are having a problem with Mangelsons to the amount of \$948.10. Let me bring in a CSR to help you.

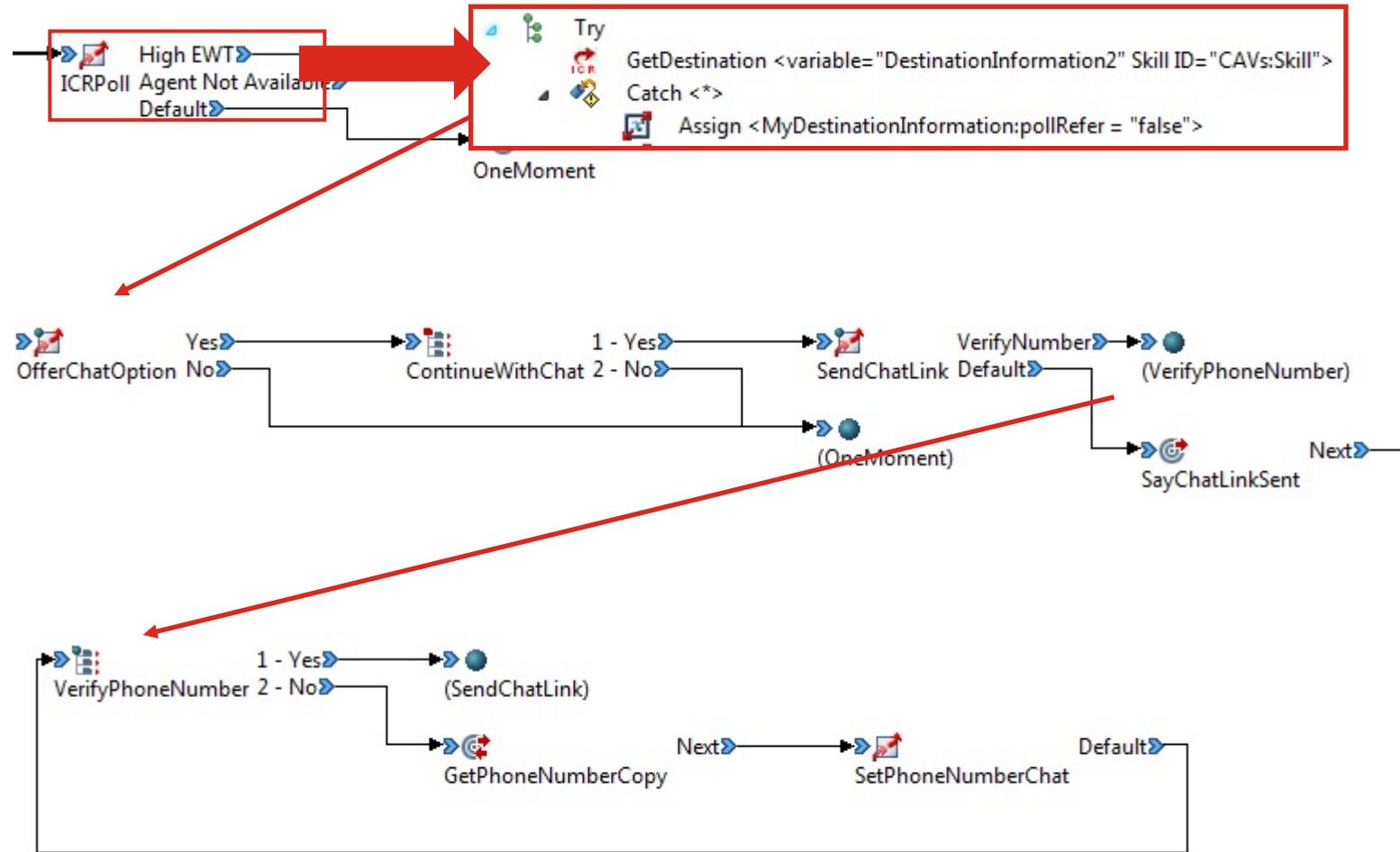
Chat Agent: **“How can I help you?”**

# Long Queue Time – Offer Other Options



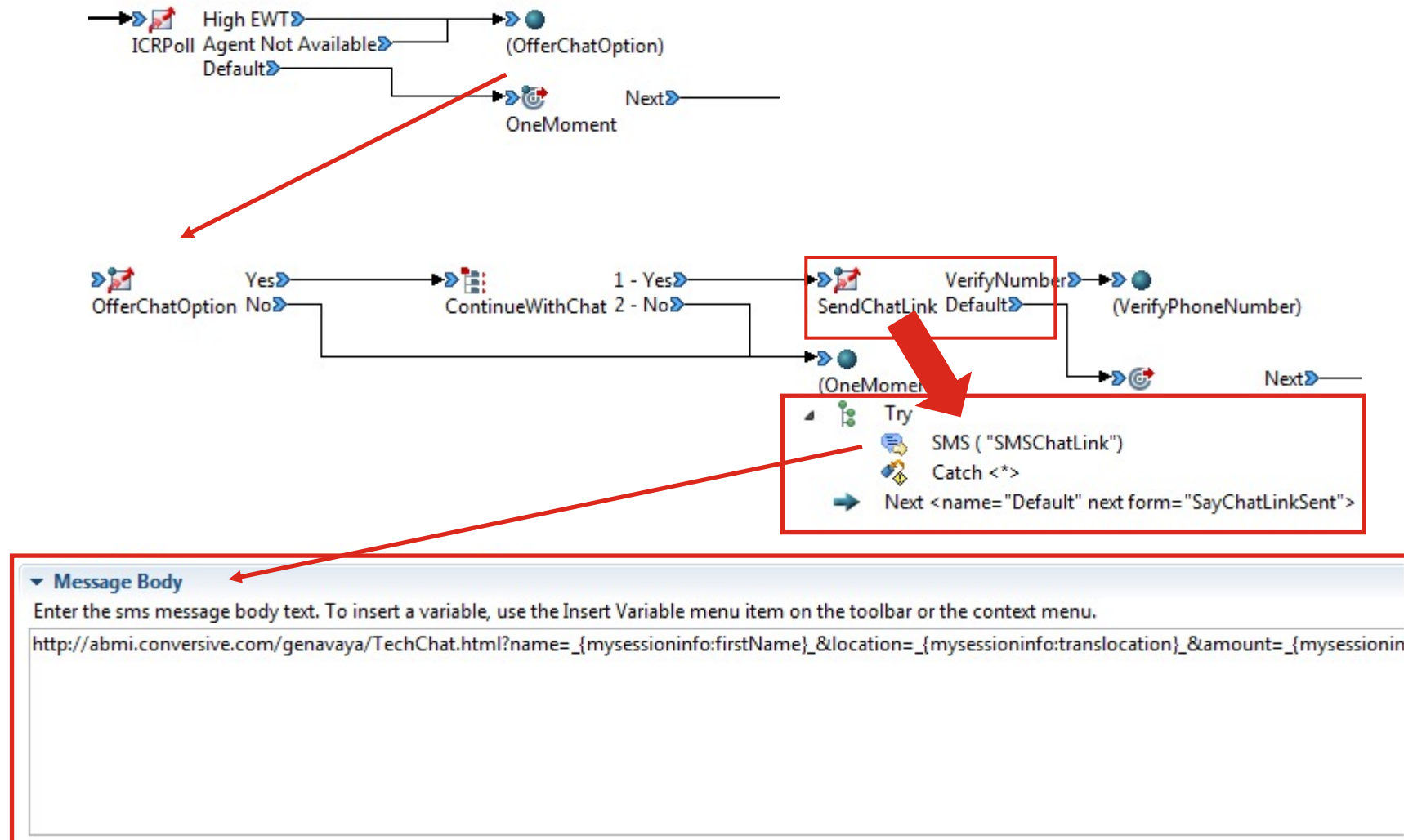


# ICR Connector – Get Estimated Wait Time





# Notification Connector – Send SMS



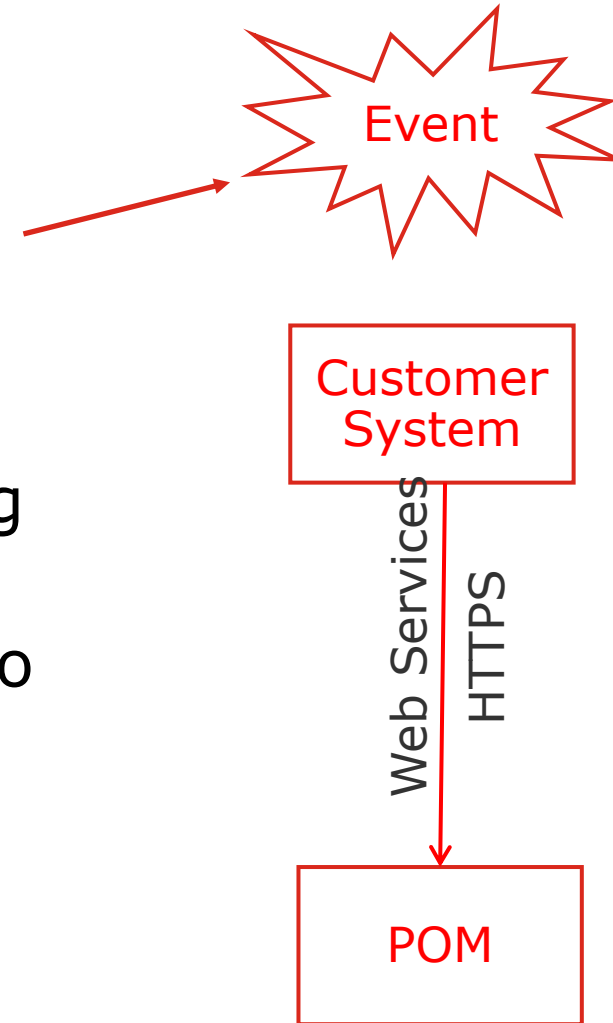
# USE CASE: FRAUD ALERT

## *Multi-channel Alert*

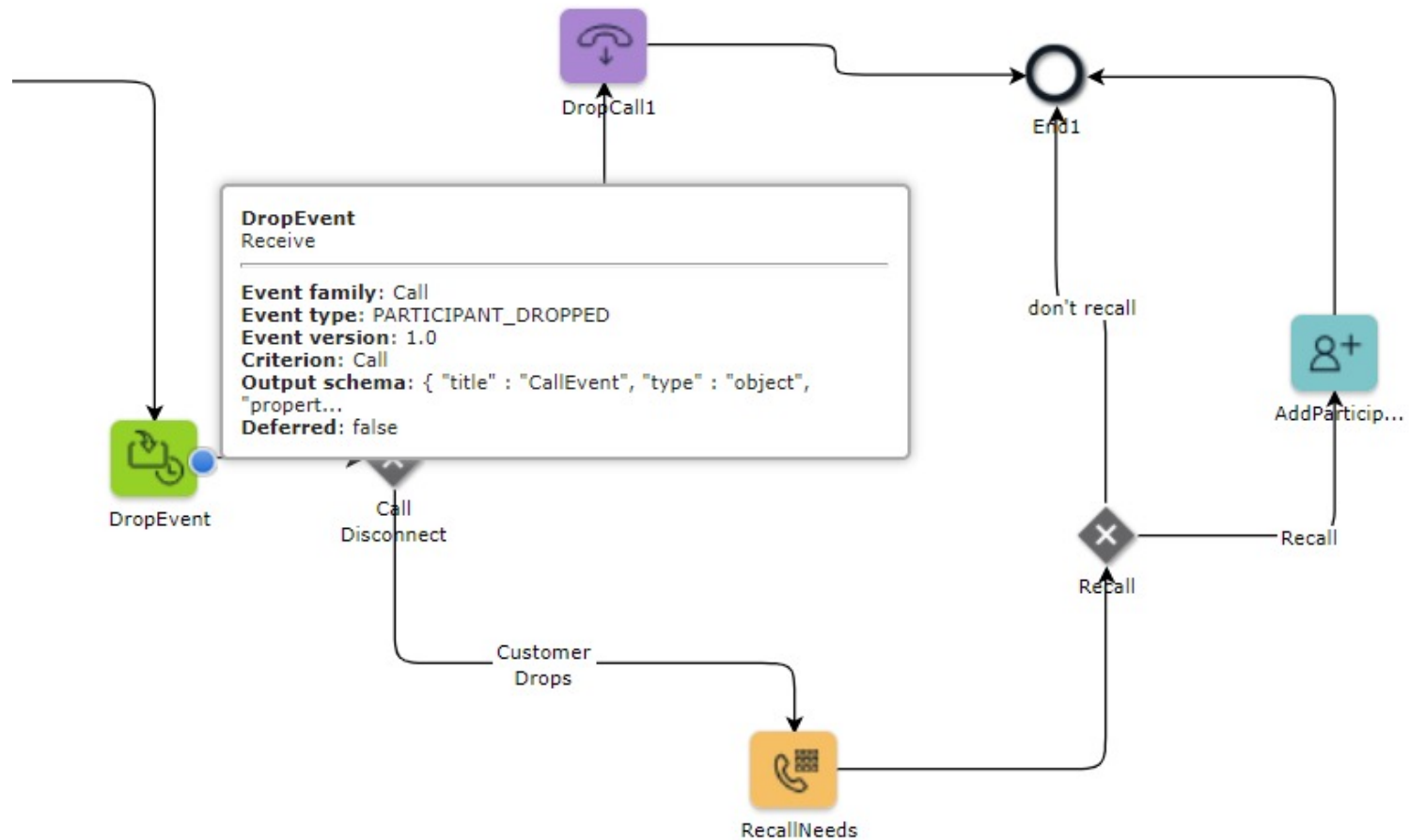
- ❑ Based on an external input – fraud detected - an record is inserted into a POM campaign. The campaign then runs this through a strategy – SMS, Email, Voice
- ❑ This results in a 2-way SMS dialog, voice dialog or email dialog.
- ❑ Based on results, this escalates to Voice.
- ❑ Components of the Solution
  - Context store
  - Proactive Outreach Manager
  - Orchestration Designer
  - Multiple Channels

# Event Driven Notification – POM Web Services

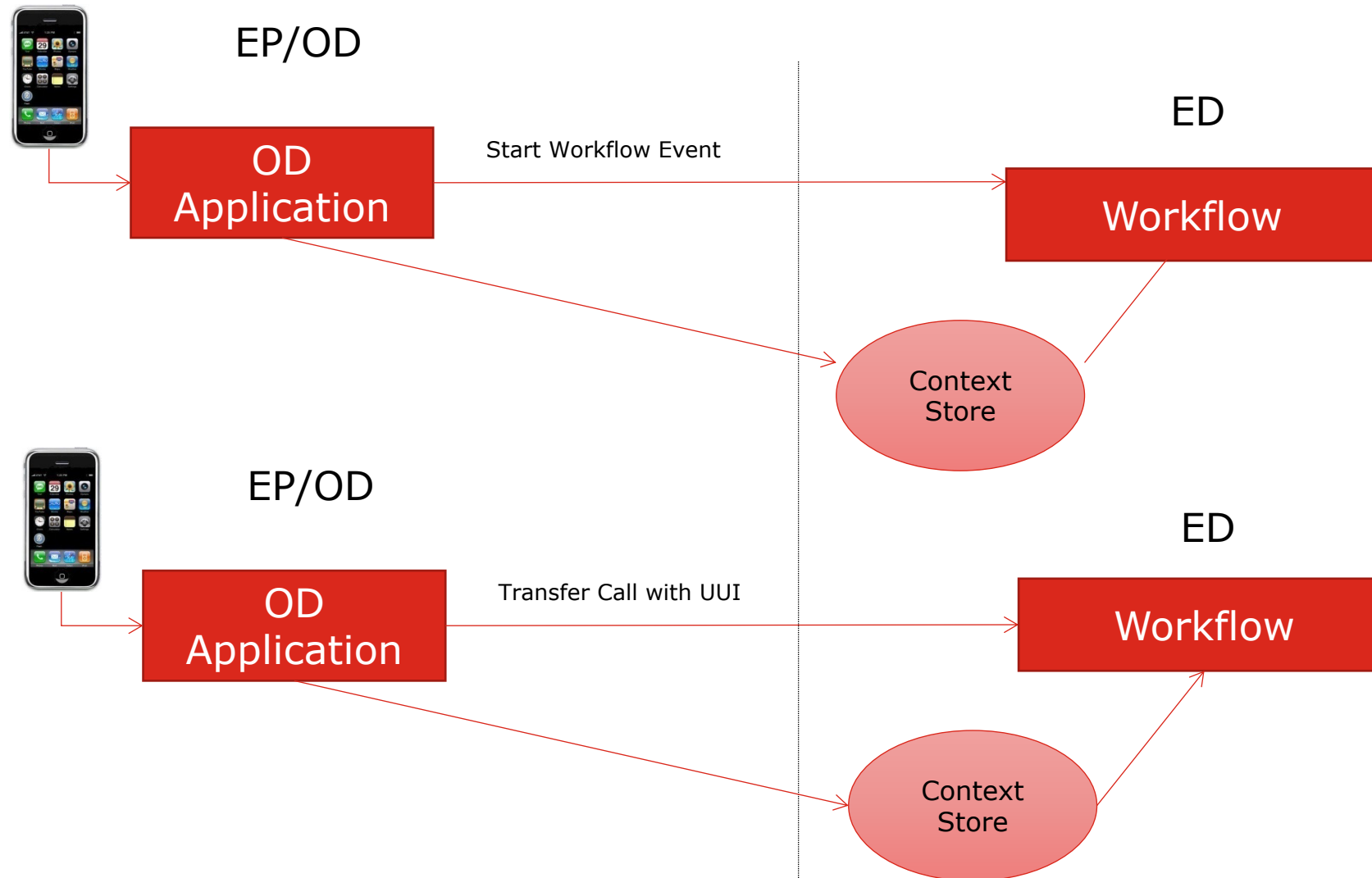
- Infinite Campaign Running in POM
- Customer Fraud Alert System Flags Charge
- Customer System Adds Information to Contact List using POM Web Service
- Customer System Add Contact to Running POM Campaign Using POM Web Service
- POM Campaign Contacts Customer in Preferred Channel



# Integration with *Engagement Designer* - Workflows



# EP/OD First.



# EP/OD First –Start workflow

- Call comes into EP and OD answers the call collects data and decides to start a workflow to continue the transaction
- Context can be passed 2 ways
  - All context is in the event sent to ED/Workflow, OD supports 8 string parameters that can be named as appropriate
  - Context is in the context store and the context id is passed in a single event parameter.



# Workflow PDC

- To support the various integrations the pluggable data connector Workflow (PDC) is available OD.
  - Operations for context store access
  - An operation to start a workflow
  - An operation to send an event to a workflow
  - Automatically adds the avayaContextId to the application
  - At runtime, automatically stores the context id from either UUI or request parameter into the avayaContextId variable.

# Workflow PDC UI

Properties for UC1A\_ODLaunchWFEvent

type filter text

- Resource
  - Builders
    - Java Build Path
    - Java Code Style
    - Java Compiler
    - Java Editor
    - Javadoc Location
    - Orchestration Designer**
    - Project Facets
    - Project References
    - Refactoring History
    - Run/Debug Settings
    - Server
    - Subversion
    - Task Tags
    - Tomcat
    - Validation

**Orchestration Designer**

General | Speech | Languages | Pluggable Connectors | Web Descriptor

Available Connectors

Category: All

Enabled	Name
<input type="checkbox"/>	AVP/AEP Configurable Application Variables
<input type="checkbox"/>	Database
<input type="checkbox"/>	Notification Connector (Email, SMS)
<input type="checkbox"/>	Web Services (Axis 1.4)
<input type="checkbox"/>	Web Services (Axis2)
<input type="checkbox"/>	Web Services (REST)
<input checked="" type="checkbox"/>	Workflow Integration (EDP/ED)

Workflow Integration (EDP/ED) Configuration

☐ Skip mutual authentication for the EDP Platform and Context Store.

**Workflow**

- Get Context Data
- Create Context
- Delete Context
- Delete Context Item
- Set Context Item
- Start Workflow
- Send Event

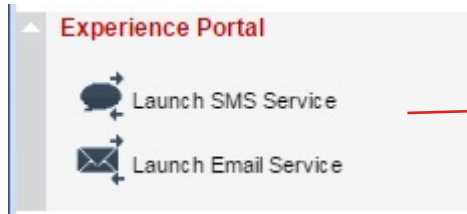
Enable The  
Workflow PDC

Palette Items  
for the  
Workflow PDC

# EP Tasks

- To support the various integrations two tasks have been added to the Engagement Designer Palette under Experience Portal menu group.
  - Launch SMS Service:
    - Task to start an OD SMS application
  - Launch Email Service:
    - Task to start an OD Email application

# EP Tasks UI



Experience Portal Tasks on the Engagement Designer Palette

Experience Portal Task Properties

"From" is the number/address configured on EP. "To" is the user's number or email

**Launch SMS Service properties**

Label:

▼ Properties

Application Name:	<input type="text"/>
From:	<input type="text"/>
To:	<input type="text"/>
Message:	<input type="text"/>
Timeout (seconds):	<input type="text"/>
Application Parameters:	<input type="text"/>
Context ID:	<input type="text"/>

► Repeated Execution

**Input Mapping** **Output Mapping**

**OK** **Cancel**

**Launch Email Service properties**

Label:

▼ Properties

Application Name:	<input type="text"/>
From:	<input type="text"/>
To:	<input type="text"/>
Cc:	<input type="text"/>
Bcc:	<input type="text"/>
Subject:	<input type="text"/>
Body:	<input type="text"/>
Timeout (seconds):	<input type="text"/>
Application Parameters:	<input type="text"/>
Context ID:	<input type="text"/>

► Repeated Execution

**Input Mapping** **Output Mapping**

**OK** **Cancel**

# Conclusion



- Avaya provides a platform for Omni-Channel Interactions
- **Orchestration Designer** provides a framework for managing user dialogs across these channels
- Orchestration Designer provides a mechanism to “change the channel” of communication
- **Context Store** provides a powerful mechanism to collect and propagate context about the contact and interaction
- This solution can “Communication Enable” Mobile applications
- Integration with Breeze enables seamless Self and Assisted solutions