



Intelligent Decision Dimensions

Smart Assistant in Corporate Environment

SAP Partner: Skybuffer

SAP Add-on: Intelligent Decision Dimensions (official SAP certified add-on name from Skybuffer)

Package: Action Cards, Conversational Actions (SAP Conversational AI Platform Pack)

Version: 3.2



About Skybuffer

Skybuffer One Pager



Facts and Certificates

Year of Incorporation: 2013

Countries: Belarus, Poland,
Norway, India, USA



Certificate

SAP INTEGRATION CERTIFICATION

SAP SE hereby confirms that the ABAP interface software for the product

Intelligent Decision Dimensions
Add-on for SAP ERP, version 3.1

of the company

SKYBUFFER LLC

has been certified for integration with SAP NetWeaver 7.50 via the
SAP integration scenario ABAP add-on Deployment for SAP ERP 6.0 EhP8.

This certificate confirms the technical and syntactical consistency of the Add-On in
accordance with SAP certification procedures.
SAP only certifies successful integration of the product with SAP solutions. Vendor is
responsible for the product itself and its error-free operation.

The certification test is documented in report no. 12257
and expires June 8, 2021.

Vendor Hardware: PC x86-64
Vendor Operating System: SUSE Linux Enterprise Server 11
SAP Test System: SAP NetWeaver 7.50

This configuration meets the requirements for deploying Intelligent Decision
Dimensions Add-on for SAP ERP, version 3.1 on the SAP NetWeaver platform.

Certified Functions:

Assign Software Component with a registered Namespace
Package Add-On using SAP Add-On Assembly Kit (AAK)
Deploy using SAP Add-On Installation Tool (SAINT)
Integrate with SAP Enterprise Resource Planning
Technical De-Installation Test
SAP Solution Manager Ready functionality

Moscow, June 8, 2018

Rustem Rymkulov, SAP Labs CIS

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All other names are registered or unregistered trademarks of the individual firms.
<http://www.sap.com/loc>



SAP® Certified
Powered by SAP NetWeaver®

SAP Forces: 30 experts

SAP Partnership: PE Sell, PE
Service, PE Build (Software
Development)



Certificate of Qualification

SAP® Qualified
Partner-Packaged Solution

SAP hereby confirms that the packaged solution from
Skybuffer LLC

named

Conversational Actions

that addresses the specific SAP Leonardo – Conversational AI business needs of companies in Belarus,
has been reviewed and qualified as an SAP-qualified partner-packaged solution for SAP Leonardo®.

This solution is deployed based on a predefined scope, leveraging the use of pre-configuration, accelerators,
methodologies, and tailored partner services to help customers run simple and realize a rapid time-to-value
with reduced risk and a predictable outcome.

Date issued: December 13, 2019

Qualification Expiration Date: December 13, 2021

Steffen Burger
Senior Vice President
Global Partner Organization
Partner Enablement

Robert Vetter
Senior Vice President
Digital Core, Platform & Technology
and SME Solutions

SAP SE
represented by the Executive Board: Christian Klein (Co-CEO), Jennifer Morgan (Co-CEO), Adeline Fox-Martin, Michael Kleinmeier, Bill McDermott, Luka Mucic, Jürgen Müller, Stefan
Ries and Thomas Saueressig
Chairman of the Supervisory Board: Hanso Plattner, Commercial Register: Mersheim HRB 718915
Deutsche Bank AG, Heidelberg (B.L. 672 700/00) assurance: 9812000, SWIFT: BSKF3333, IBAN: DE 25 1203 0010 0000 0000 00
Tax-ID: 32467/02215, Vsk-ID: DE 143454214

SAP Certified Partner Centre
of Expertise

ISO 9001:2015 (TÜV)
ISO 27001:2013 (TÜV)



Partner Center of Expertise

SAP® Certified
Partner Center of Expertise

This certificate confirms that

Skybuffer LLC

supports its customers in accordance with SAP's current standards for a Partner Center of
Expertise.

This audit has been performed on 23rd April 2019.
The certification is valid until 31st July 2021.

Axel Timm
Program Director
SAP Digital Business Services

Charandeep Singh Puri
PCOE Auditor
Partner Service Delivery



What Skybuffer Offers

Turnkey solution that can be integrated into any backend system, any channel of communication. Speaks the user's language

Intelligent Decision Dimensions

Connected AI Content **embedded** into SAP or Any Other Digital Core

“”

When it comes to communicating with a system, **Cognitive Experience** is believed to be a competitive necessity and basic expectation for **Connected Enterprise**. Intelligent in hundreds of business scenarios, knowledgeable in dozens of lines of business, voice-enabled, speaking any language, pluggable into any channel and offered ready-to-be-used – Intelligent Decision Dimensions developed by Skybuffer is more than an AI solution, it is a transformation-based service that handles the organization's challenges and extends employees' and business partners' capabilities.

Challenge

Humanize, extend and facilitate IT landscape accessibility for business partners, customers and employees from any edge, in any language, via digital and even voice-enabled communication channels allowing seamless targeted on-demand human guidance step in and out the conversation flow

Solution

Skybuffer's unique methodology of cognitive skills development made it possible to combine in the unified AI mindset 400+ business scenarios covering all SAP lines of business, embedded into any number of backend systems, executing cognitive actions 24/7/365 autonomously with ability to seamlessly engage human expertise in hybrid communication mode and release the steering back to cognitive automation as soon as human expert decision is taken. The solution understands corporate guidelines, makes real-time smart recommendations, predicts workflow actions, and executes Intelligent Enterprise operations

Outcome

Cognitive automation brings together **business partners, customers and employees**. User-centric experience based on SAP Conversational AI real-time recommendations and predicted outcomes, instantly executes actions in the backend system combined with complex decisions made by human experts involved on demand to reinforce cognitive skills

100+

Languages supported in the cognitive automation interface without additional training

200+

Working hours spared each month for each 500 Cognitive Interfaces users

25%

Increase of Cognitive Interfaces usage by Employees, Partners and Customers

Intelligent Decision Dimensions

Use Case Details



Cognitive automation empowers **employees, customers and business partners** to access Intelligent Enterprise data from any edge in any language communicating via their preferred channel using text or voice messages.

All 400+ business use cases form unified cognitive set of services on SAP Conversational AI platform:



Employees' cognitive services simplify management of absence and time sheets, control procurement and travel management processes, allow requesting paystubs and other information via corporate messenger solution or using Microsoft Teams, WhatsApp, Viber, Amazon Alexa, Google Assistant and other popular communication channels



Customers' cognitive services simplify support activities with easy access to the Intelligent Enterprise, increase customers' satisfaction and loyalty, autonomously orchestrate their needs, preferences and make them an offer they can't refuse



Business partners' cognitive services ensure partners' access to Intelligent Enterprise information shift internal employees' work focus from communicative to value-adding activities



Intelligent Decision Dimensions

Features and Benefits

Platform Developed by Developers for Business

The only platform created “by developers for business” and not “by developers for developers” which completely removes the barrier between the system users and the implementation team

SAP Conversational AI allows business users to create skill prototypes quickly and without mandatory programming knowledge. This significantly decreases both time and costs of productive skills development

Innovations in Natural Language Processing

World-class technology for natural language processing offers the best methods for dialogues with humans

Quick Start and Low Total Cost of Ownership

Quick start (from 5 days) for SAP ERP due to availability of ready-to-be-used AI content and integrational ABAP classes.

Solid, integrated into any number of systems, omnichannel, multilingual solution out of the box

Low and transparent total cost of ownership (TCO)

Additional Development by Skybuffer Increase Solution Productivity

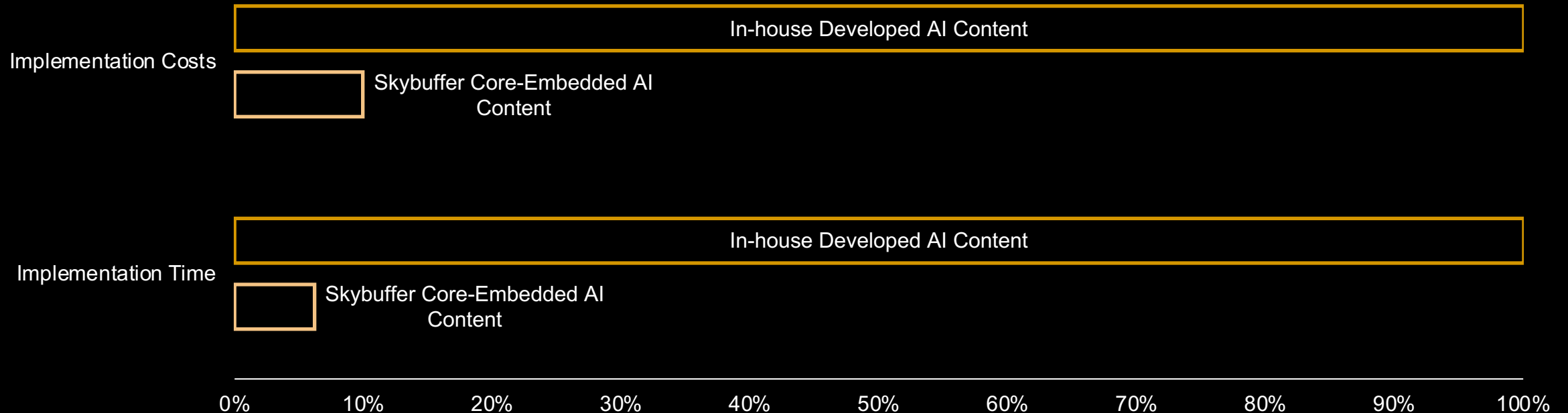
Test tool automation for virtual assistant skills testing based on SAP Solution Manager Test Suite

Omnichannel support center allowing hybrid dialogues with customer in **bot-user-operator-user-bot** mode based on SAP Solution Manager ITSM



Core-Embedded SAP ERP AI Content

Drastically Decreased Costs and Time for Customers Having Skybuffer Solution Implemented



16x faster deployment, 10x fewer costs

Skybuffer AI Content for SAP ERP – Because Simplicity Matters

Note: Costs and delivery terms are cited with the estimation provided by The Enterprise Bot Manager: <https://enterprisebotmanager.com/what-do-chatbots-cost/>

Which SAP Lines of Business are Covered

Skills Overview with Links to Skybuffer Central Online Public Library

Intelligent Decision Dimensions Package Skills – I

Procurement

- Transfer material stock between storage locations and plants
- Smart analysis of material requirements based on flexible criteria
- Registration of purchase requisition
- Display report on current purchase requisitions
- Convert purchase requisition to purchase order
- Post goods receipt
- Request vendor's contact information
- Smart reports on material purchasing contracts with flexible filtering
- Overview of procurement document items

... and more [Procurement](#) skills on our web

Supplier Relationship

- Supplier return orders creation
- Overview of generated supplier return orders
- Add comment from vendor regarding the return as attachment to return document
- Review open purchase orders for supplier
- Overview of open tenders (requests for quotation) of company relevant for supplier
- Check status of quotation
- Check payment status of vendor invoice

... and more [Supplier Relationships Management](#) skills on our web

Intelligent Decision Dimensions Package Skills – II

Sales

- Report on materials stock available for sale in storage locations and at the plant
- Evaluation of history of relations with the customer: checking the current credit limit
- Create sales request
- Register sales order without and/or with reference to sales request document
- Register delivery documents based on sales order
- Overview of customer's open items
- Display customer's contact information

... and more [Sales Management](#) skills on our web

Transportation

- Overview of transport registered
- Search for nearest transport check-in point
- Registration of arrival and departure time of transport
- Shipment planning: overview of list of shipment documents for responsible person
- Create shipping document
- Registration of visitors' check-ins and check-outs
- Review of list of visitors

... and more [Transportation Management](#) skills on our web

Intelligent Decision Dimensions Package Skills – III

Finance

- Display current general ledger account balance
- Supplier's current debt analysis:
 - Get overdue amount for vendor invoices
 - Overdue amount that is locked for payment
 - Analyze blocking reason
 - Overdue amount that is free for payment
- Check vendor's account status
- Get vendor's open items list
- Get exchange rates
- Create and/or update tax code
- Transfer money between customers' accounts

... and more [Financial Management](#) skills on our web

Controlling

- Display data for cost centers (activity allocation)
- Budget allocation for internal order or cost center
- Budget allocation to cost center exceeding
- Internal order release
- Process internal orders: assign responsible person, release, set internal order status as technically completed

... and more [Controlling](#) skills on our web

Intelligent Decision Dimensions Package Skills – IV

Human Capital Management

- Absence types and quotas details
- Create leave request: annual leave, sick leave with or without certificate, educational leave, half-day leave and other types of absences
- Create travel request
- Team absence statistics
- Report working time
- Employees turnover
- Get list of business events
- Book attendance for business event

... and more [Human Capital Management](#) skills on our web

Solution Manager and User Management

- Report incident in the ITSM system
- New user ID creation request
- Reset user password
- Unlock user ID
- Assign authorization role to user with flexible configuration in accordance with company security policy
- Chat user authentication process via email or SMS, or automatic validation via identity provider

... and more [User Management](#) skills on our web

Intelligent Decision Dimensions Package Skills – V

Corporate Portfolio and Projects

- Project creation
- Project cost and budget planning
- Updating project budget
- Updating planned cost
- Project structure definition
- Create project work breakdown structure
- Project status management
- Project task management
- Initiate project, as well as the structural parts of the project and individual tasks within the framework of the structural plan
- Project completion and individual task management

... and more [Project Management](#) skills on our web

Enterprise Assets Management

- Register plant maintenance order
- Release plant maintenance order
- PM orders list for responsible user
- PM orders details and list of operations
- PM orders list without responsible person assigned
- Assign responsible person to PM order
- Report PM order operation progress
- PM order completion confirmation and reporting working hours

... and more [Enterprise Assets Management](#) skills on our web

Demo

<https://www.skybuffer.com/demo-portal/>

User Management

Human Capital Management

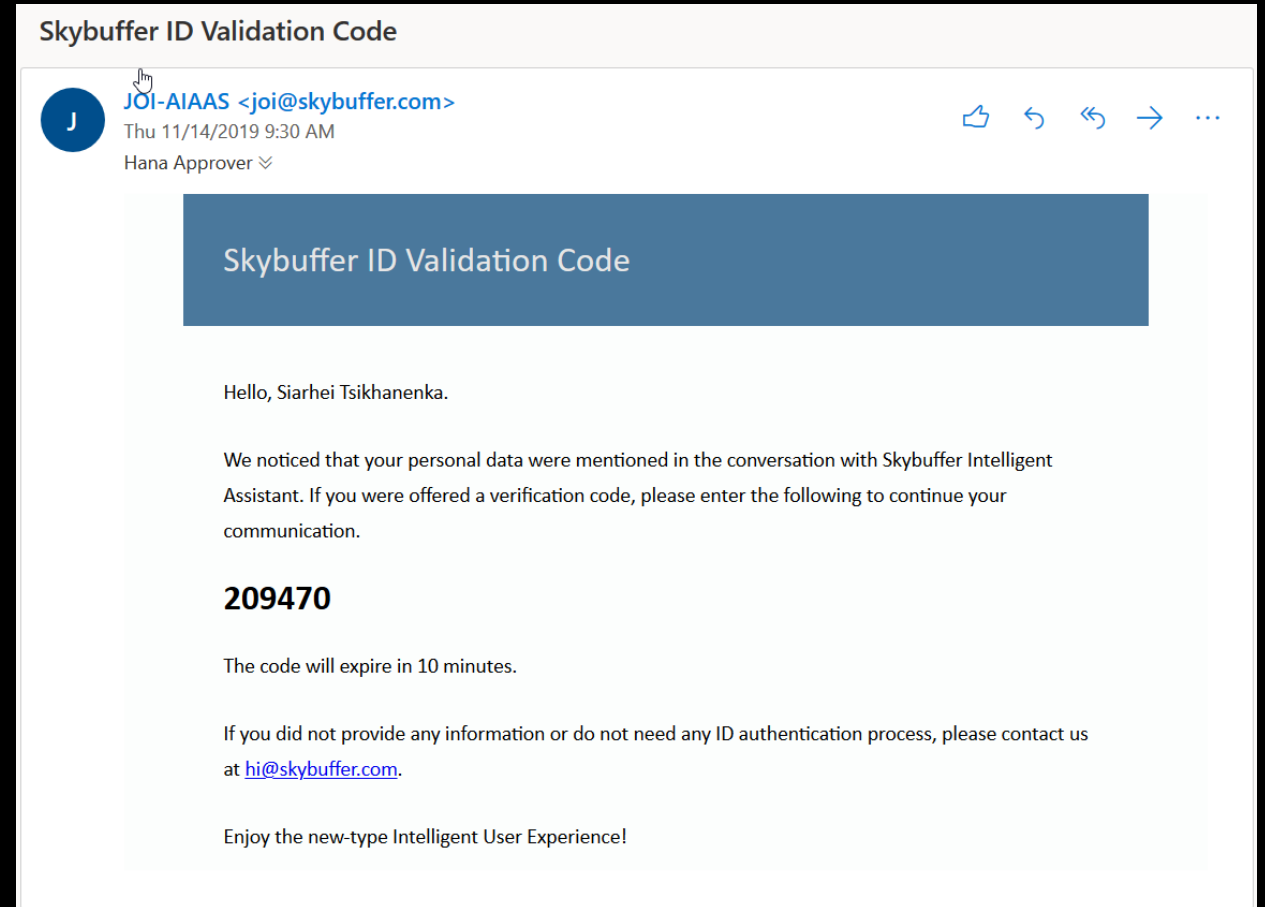
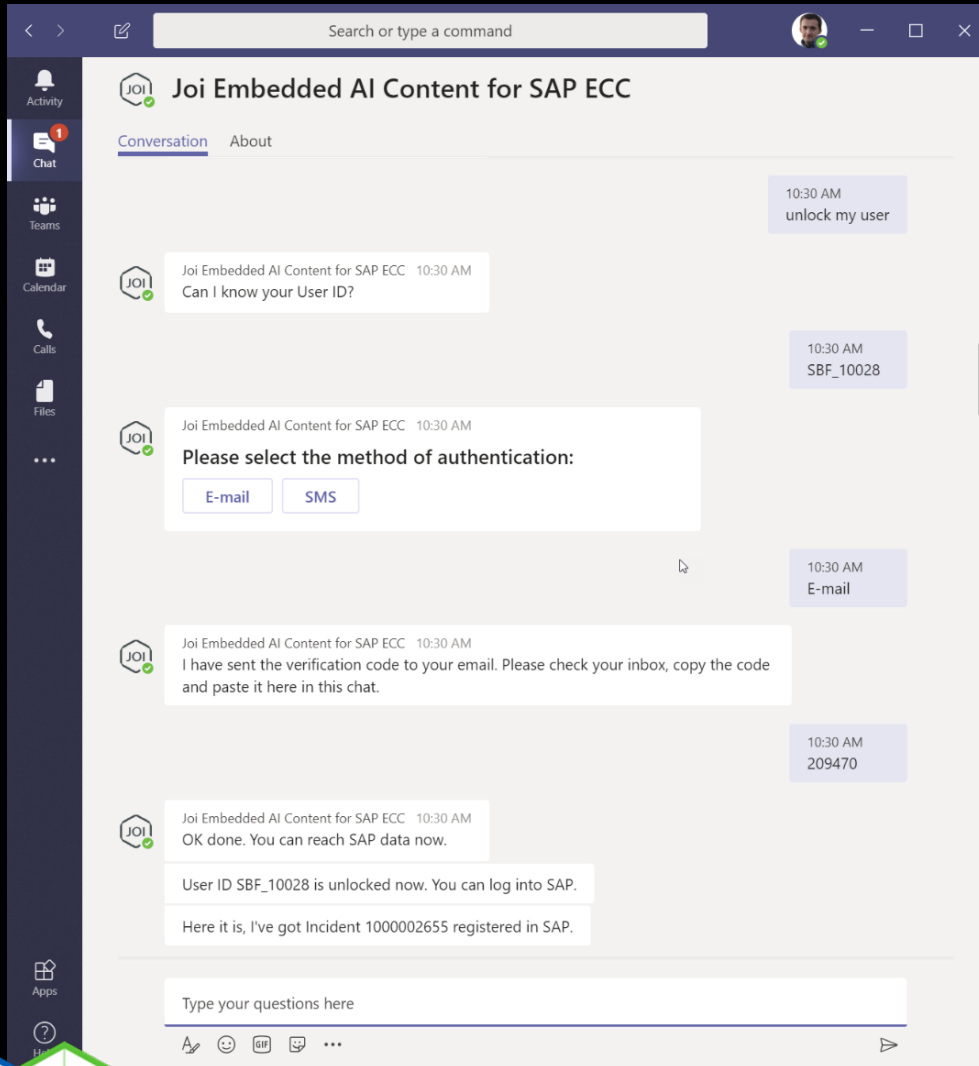
Smart Purchasing

Retail



User Management AI Content

Unlock SAP User (Microsoft Teams)



User Management AI Content

SAP Role Request (Microsoft Teams)

Search or type a command

Joi Embedded AI Content fo

Conversation About

10:52 AM
how can I request SAP role?

Joi Embedded AI Content for SAP ECC 10:52 AM
What's your SAP User ID, please?

10:52 AM
SBF_10028

Joi Embedded AI Content for SAP ECC 10:52 AM
Please select the method of authentication:
E-mail SMS

10:52 AM
E-mail

Joi Embedded AI Content for SAP ECC 10:52 AM
I am emailing you a security code now. Please check your inbox, copy the code and paste it here in this chat.

10:52 AM
646858

Joi Embedded AI Content for SAP ECC 10:52 AM
All set. Your ID is valid.

Type your questions here

Search or type a command

Joi Embedded AI Content fo

Conversation About

Will you please specify the role description?

10:53 AM
traveler

Joi Embedded AI Content for SAP ECC 10:53 AM
I have found more than 2 roles. Could you provide more details for the search?

10:53 AM
no, show them all

Joi Embedded AI Content for SAP ECC 10:53 AM
I have found the following available roles. Please, copy and paste the role ID that you need.

/SKYBFR/RTE1_GLOB_TRAVELER Traveler :: His/Her Expense Reports Only

/SKYBFR/RTE2_LINKS Skybuffer Travel and Expenses Solution Links

10:53 AM
/SKYBFR/RTE1_GLOB_TRAVELER

Joi Embedded AI Content for SAP ECC 10:53 AM
SAP Role /SKYBFR/RTE1_GLOB_TRAVELER has already been assigned until 02.10.2020

Type your questions here

User Edit Goto Information Environment System Help

Display Users

User SBF_10028
Changed By S.TSIRKHANENK 06.11.2019 10:07:29 Status Saved

Documentation Address Logon Data SNC Defaults Parameters Roles Profiles Groups Personalization Lic. Da

Reference User PASS_TEMP1

Role Assignments

Status	Role	Ty	Start Date	Change End Date	Short Role Description
	/SKYBFR/RTE1_GLOB_TRAVELER		03.10.2019	02.10.2020	Traveler :: His/Her Expense Reports Only

Human Capital Management

Create Leave Request (Microsoft Teams)

The screenshot shows a Microsoft Teams chat window. The title bar at the top says 'Search or type a command'. The left sidebar contains icons for Activity, Chat, Teams, Calendar, Calls, Files, and Apps. The chat is with 'Joi Embedded AI Content for SAP ECC'. The conversation history shows several messages:

- 12:34 PM: i am sick today
- 12:34 PM: Any confirming medical certificate, please?
- 12:34 PM: i will visit a doctor to get it
- 12:34 PM: Is it going to be only one day?
- 12:34 PM: yes, today
- 12:34 PM: Will you please add a comment to be attached to your leave request? "No comment" is enough if you have nothing to add.
- 12:38 PM: I have a fever and I would like to be off today. I will plan to visit a doctor
- 12:38 PM: I am confirming that a leave request for 14.11.2019 is successfully created.

The bottom of the chat window has a text input field with the placeholder 'Type your questions here' and a send button.

The screenshot shows the SAP 'My Leave Requests' interface. The top bar has the SAP logo and the title 'My Leave Requests'. Below the bar, there is a search bar and a list of leave requests. The list has two entries:

Leave Request	Days	Status
Illness with Certificate 01.01.2020 - 01.06.2020	102 days	Informed
Illness with Certificate 14.11.2019	1 Day	Informed

Below the list, there is a detailed view of the selected leave request (14.11.2019). It shows the date 'Thursday, November 14, 2019' and the status 'Informed'. There are two icons: a calendar icon with a '1' and an information icon. Below the icons, there is a text box with the comment: 'I have a fever and I would like to be off today. I will plan to visit a doctor' and the timestamp '14.11.2019, 13:38:17'. At the bottom right, there are two buttons: 'Change' and 'Withdraw'.

Supply Chain Management

Smart Procurement (SAP Fiori) - I

The screenshot shows the SAP Fiori Home page. The top navigation bar includes the SAP logo, a 'Home' dropdown, a search bar labeled 'Search In: Apps', and user profile icons. Below the navigation bar, there are three tabs: 'Employee (HCM)', 'Skybuffer Travel and Expenses Solution Links', and 'Procurement'. The main content area is a grid of tiles. The 'Employee (HCM)' tab is active, showing tiles for 'My Leave Requests', 'My Paystubs', 'My Team Calendar', 'Employee Lookup', 'My Profile', 'My Personal Data', 'My Bank Data', 'My Family Members', and 'My Communication Data'. A 'Joi (Innovative Portal)' chat window is open in the foreground, displaying a welcome message from Joi, a greeting from 'hi', and a response from 'Joi' saying 'Hello, Siarhei. How can I help you?'. There is a 'create a shopping cart' button and an 'Ask Joi' input field at the bottom of the chat window.

SAP Home ▾ Search In: Apps

Employee (HCM) Skybuffer Travel and Expenses Solution Links Procurement

My Leave Requests
Manage my leave re...

My Paystubs
View my paystubs

My Team Calendar
View my team

Employee Lookup
Search for employees

My Profile
View my profile

My Personal Data
Manage my personal...

My Bank Data
Manage my bank data

My Family Members
Manage my family m...

My Communication Data
Manage my commun...

Joi (Innovative Portal)

Welcome to the Test Environment of new-type Cognitive Enterprise. I am Joi, your intelligent guide in communicating with SAP digital core. I can help you in nearly all imaginable business scenarios, find or deliver data in the system. What would you like me to do?

hi

Joi Hello, Siarhei. How can I help you?

create a shopping cart

Ask Joi →

This screenshot shows a continuation of the 'Joi (Innovative Portal)' chat window. It displays search results for materials matching a description. The results are listed in a table-like format with columns for material number, price, and description. Each result has a 'Select' button. The chat window also shows a 'hi' message and a 'Joi' response. At the bottom, there is an 'Ask Joi' input field.

Joi (Innovative Portal)

A4

Here are the Materials that match your description. Please select the Material you need.

227 (20,00 EUR)	A4 Paper Xerox 003R97411	Select
229 (15,00 EUR)	A4 Paper NAVIGATOR Colour	Select
230 (5,00 EUR)	Paper A4 SvetoCopy	Select

Ask Joi →

Supply Chain Management

Smart Procurement (SAP Fiori) - II

 Joi (Innovative Portal) 

227 

As far as I can see, A4 is quite costly. Are you sure it is what you really want to buy?

I checked the purchase requisitions history. 77,78 % of all requisitions for A4 used material: 230. The use of other materials may lead to rejection of the requisition. Would you like to use material 230?

What is the quantity?

 Ask Joi 

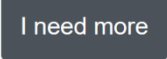
 Joi (Innovative Portal) 

10 PC 

At the moment, delivery of material 227 to your department is expected according to the following documents:

PR 10000171 Quantity: 10 PC
Delivery date: 14.11.2019

Are you sure that we should create a new requisition?

Done. The purchase requisition is 10000182

 Ask Joi 

 Purchase Requisition  Edit  Environment  System  Help

Change Purchase Req. 10000182

Document Overview On      Personal Setting

 Purchase Requisition 

 10000182 ☐ Source Determination

Header

                          <

Retail

Online Ordering

 SAP-Embedded AI 

 **Joi**
Welcome to the new-type Cognitive Enterprise Experience. I am your intelligent guide in communicating with SAP digital core. I can help you in nearly all imaginable business scenarios, find or deliver data in the system. What would you like me to do?

23:00

I need a new bag

23:01

 Any brand preference?

Stuart Weitzman

23:01

 What type of bag are you thinking of?

CROSSBODY

23:01

 Which collection would you like to see?

  Ask Joi 

 SAP-Embedded AI 

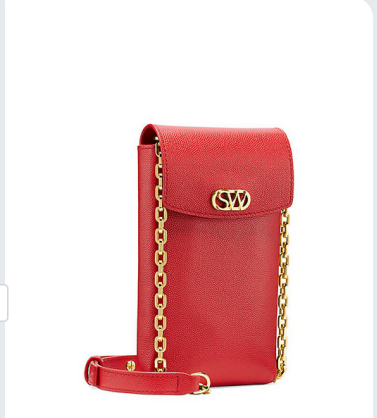
2020 CAMPAIGN

23:01

 **Joi**
Here's what i have found for bag by Stuart Weitzman:

23:01

 **Joi**



In Stock

Price: 175 €

  Ask Joi 

 SAP-Embedded AI 

MARAH CROSSBODY BAG

23:01

 **Joi**
What is the quantity, please?

23:01

1

23:01

 **Joi**
What's your telephone number, please?

23:01

+4790069983

23:01

 **Joi**
Let me make sure. You are Siarhei Tsikhanenka, aren't you?

23:02

+

23:02

  Ask Joi 

 SAP-Embedded AI 

 **Joi**
Pleased to meet you, Siarhei.

23:02

 **Joi**
I am sending you an SMS. Please check your messages and enter the verification code here in this chat.

23:02

199819

23:02

 **Joi**
All set, your ID is proved valid.

23:02

 **Joi**
You can pay the bill using the order number.

23:02

 **Joi**
Sales order 136 is successfully registered.

23:02

  Ask Joi 

WhatsApp Communication Channel

Execute business scenarios directly in WhatsApp both texting or voice-talking to the digital assistant

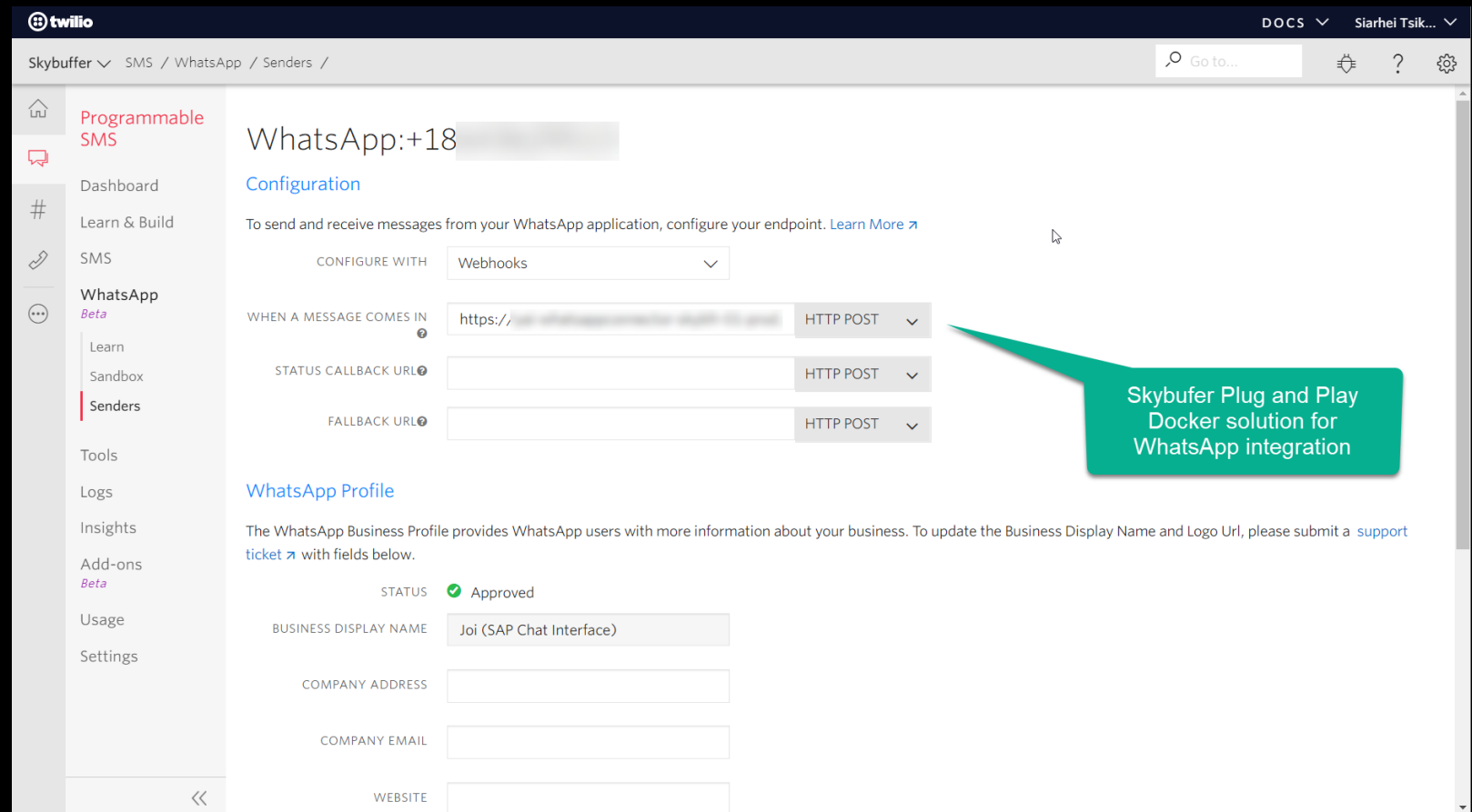
Twilio WhatsApp API Provider

Skybuffer WhatsApp Bot Connector – Plug-and-Play Docker Solution

Skybuffer provides WhatsApp Docker connector for Twilio platform (leader among WhatsApp API providers).

Docker solution works as a plug and play connector between WhatsApp APIs and SAP Conversational AI.

No custom development is required, this functionality is supported as part of the product.



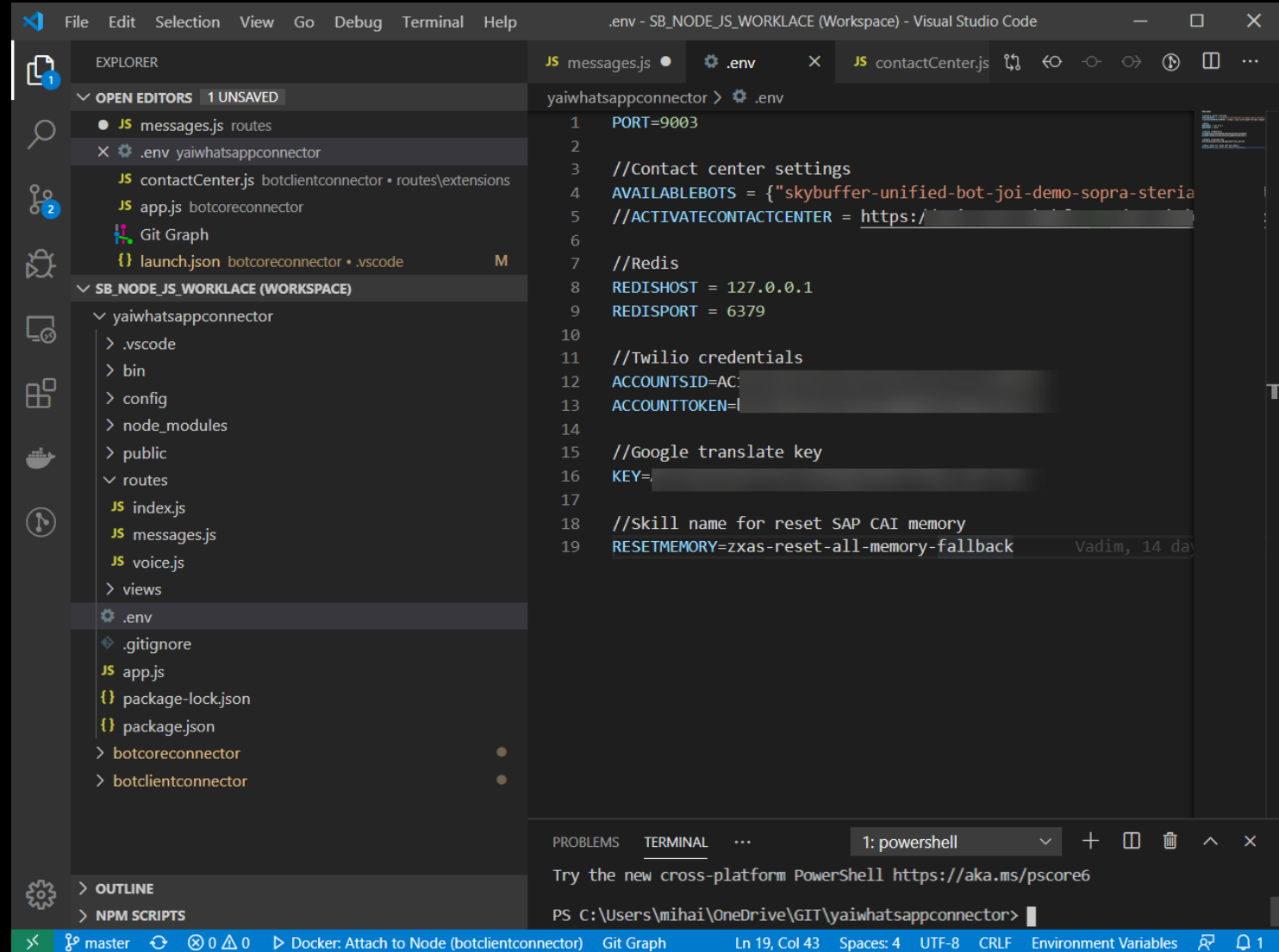
The screenshot shows the Twilio WhatsApp Senders configuration page. The left sidebar contains navigation links: Dashboard, Learn & Build, SMS, WhatsApp Beta, Learn, Sandbox, Senders, Tools, Logs, Insights, Add-ons Beta, Usage, and Settings. The main content area is titled 'WhatsApp:+18' and 'Configuration'. It includes a 'CONFIGURE WITH' dropdown set to 'Webhooks', and three fields for 'WHEN A MESSAGE COMES IN', 'STATUS CALLBACK URL', and 'FALLBACK URL', each with a default value of 'https://' and a dropdown set to 'HTTP POST'. Below this is the 'WhatsApp Profile' section, which includes a 'STATUS' field set to 'Approved', a 'BUSINESS DISPLAY NAME' field set to 'Joi (SAP Chat Interface)', and empty fields for 'COMPANY ADDRESS', 'COMPANY EMAIL', and 'WEBSITE'. A green callout bubble points to the configuration fields with the text: 'Skybufer Plug and Play Docker solution for WhatsApp integration'.

Skybuffer WhatsApp Bot Connector

All You Need is to Define Environment Variable

Skybuffer WhatsApp bot connector is a universal solution that is packed as a docker.

Once you've enabled WhatsApp bot connector docker in your company's demilitarized network, all it takes is to define environment variables to get it connected to a particular bot.



The screenshot shows the Visual Studio Code interface with the following details:

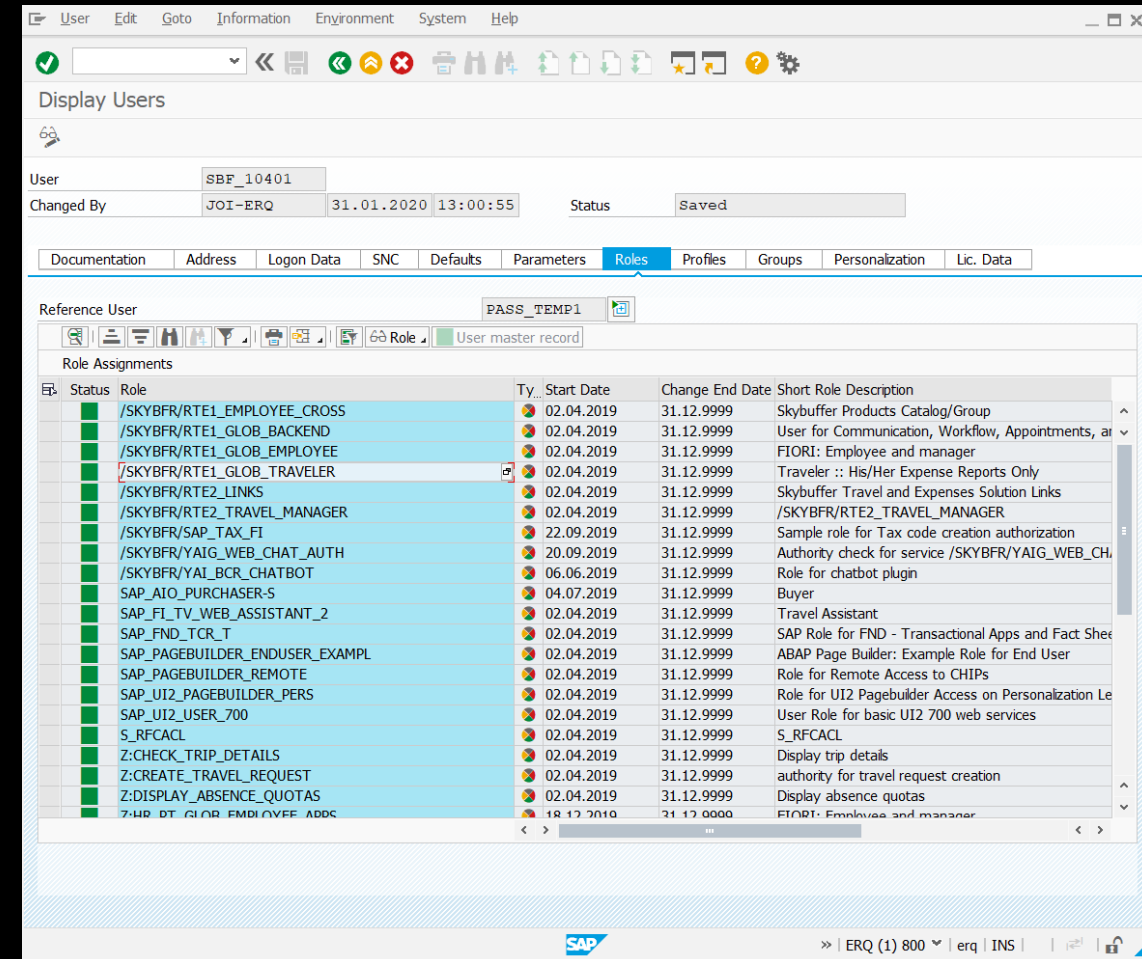
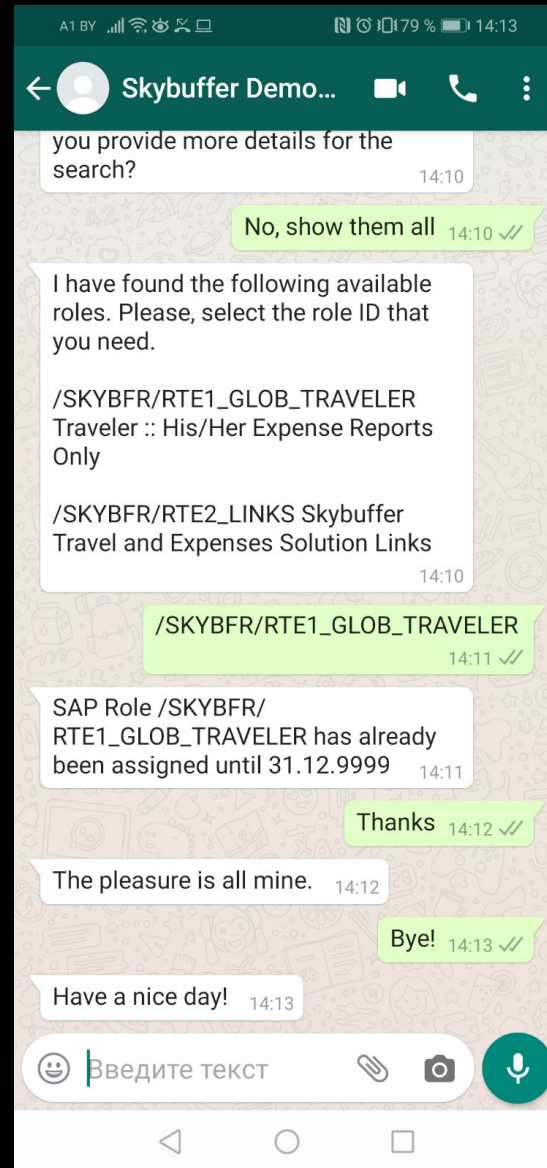
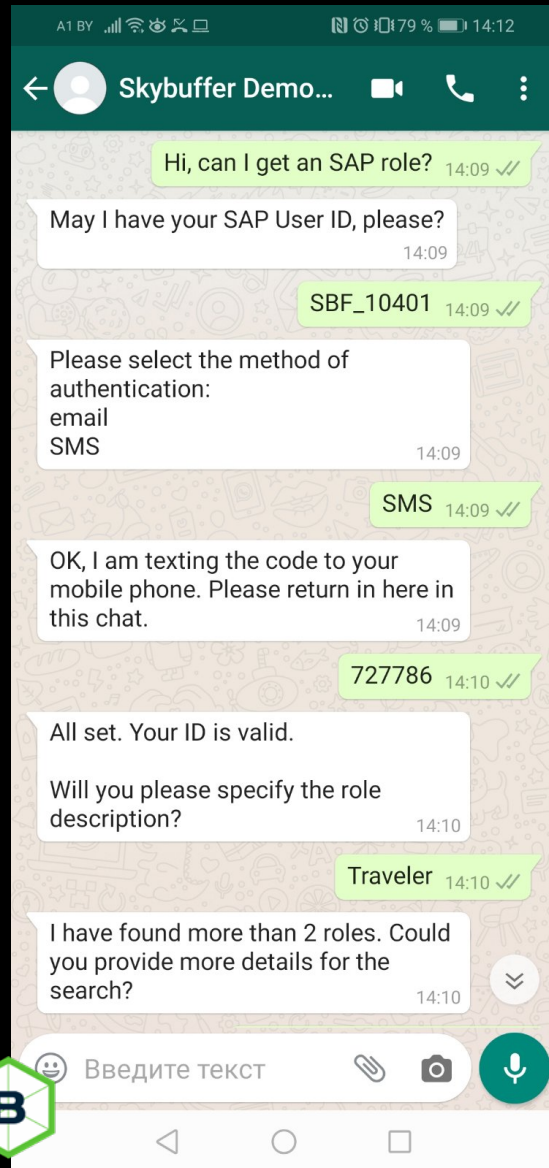
- Explorer:** Shows the project structure for 'yaiwhatsappconnector'. The '.env' file is selected under the 'routes' directory.
- Editor:** Displays the content of the '.env' file, which includes the following configuration:

```
1 PORT=9003
2
3 //Contact center settings
4 AVAILABLEBOTS = {"skybuffer-unified-bot-joi-demo-sopra-steria
5 //ACTIVATECONTACTCENTER = https:/
6
7 //Redis
8 REDISHOST = 127.0.0.1
9 REDISPORT = 6379
10
11 //Twilio credentials
12 ACCOUNTSID=AC:
13 ACCOUNTTOKEN=I
14
15 //Google translate key
16 KEY=
17
18 //Skill name for reset SAP CAI memory
19 RESETMEMORY=zxas-reset-all-memory-fallback
```

The bottom status bar indicates the current file is 'messages.js' and the workspace is 'SB_NODE_JS_WORKSPACE (Workspace)'.

User Management AI Content

SAP Role Request (Mobile WhatsApp)



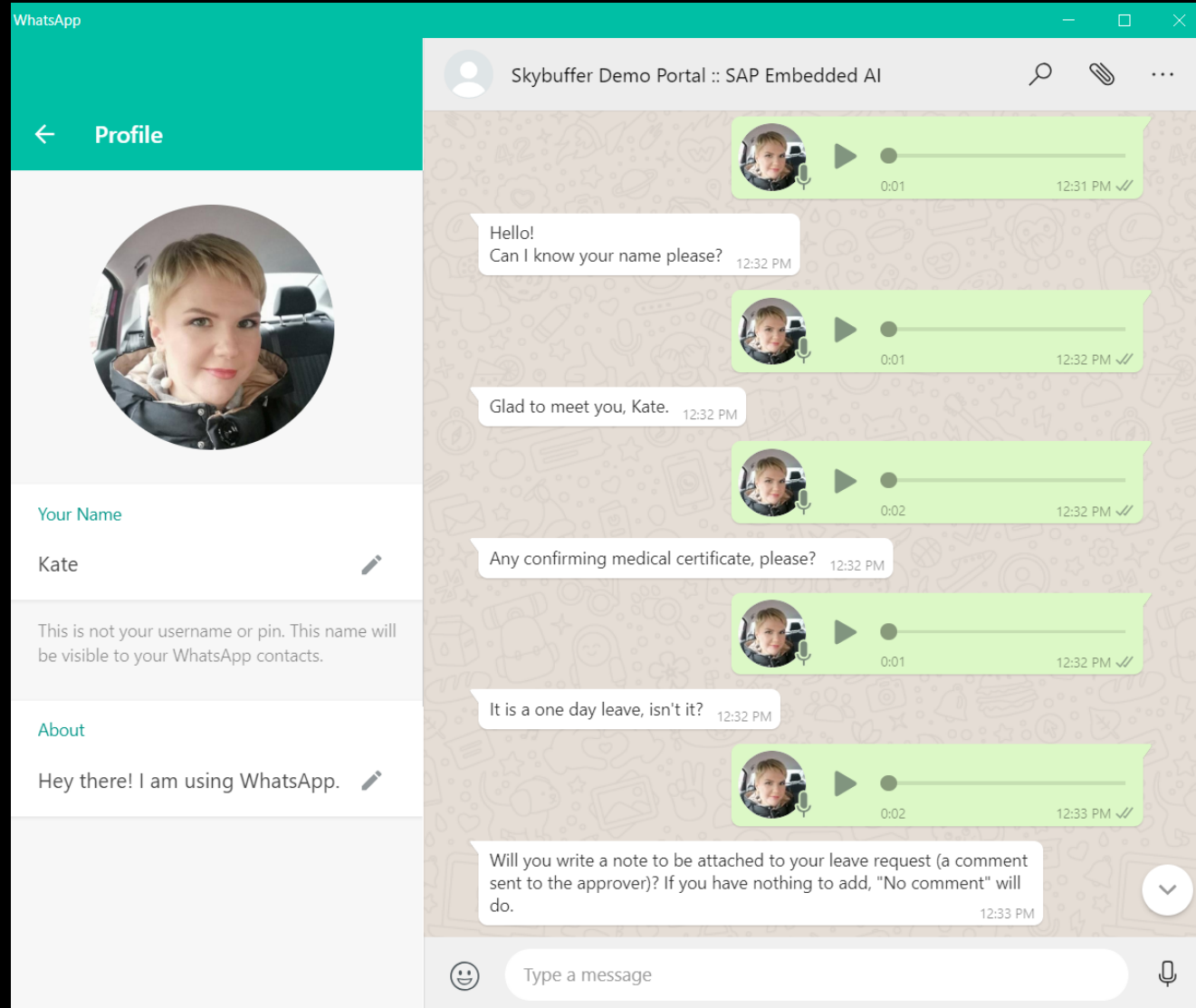
Skybuffer WhatsApp Bot Connector

Google Speech-to-Text API is Embedded for Voice Conversations

Skybuffer WhatsApp bot connector has an embedded functionality to call Google Speech-to-Text APIs.

This feature allows your users to send voice messages to your digital assistant in WhatsApp channel.

Google Speech-to-Text language detection is used to distinguish user's voice message language from the set of 4 defined languages.



Advantages of Customizing according to Customer's Needs

Basic skills package significantly reduces customizing development time.

Out-of-the-box solution speaks the user's language without any additional training.

Intelligent Decision Dimensions Business Set of Skills

Skybuffer SAP Conversational AI Content Package is fully presented on our website.

400+ skillsets in dozens of SAP lines of business available in any language - try our easy and effective search for the skills your Intelligent Enterprise needs and get your own Intelligent Experience at Skybuffer's weekly-refreshed Innovative Technologies Demo Portal.



INTELLIGENT DECISION
DIMENSIONS

WHAT IS
CONVERSATIONAL ACTIONS
AND WHY

BANKING

USER MANAGEMENT

CROSS APPLICATIONS

HUMAN CAPITAL
MANAGEMENT

FINANCE

CONTROLLING

ORDER TO CASH

SUPPLY CHAIN
MANAGEMENT

SUPPLIER RELATIONSHIP
MANAGEMENT

ENTERPRISE ASSETS
MANAGEMENT

ENTERPRISE PORTFOLIO
AND PROJECT
MANAGEMENT

TRANSPORTATION
MANAGEMENT

SOLUTION MANAGER

PRICING

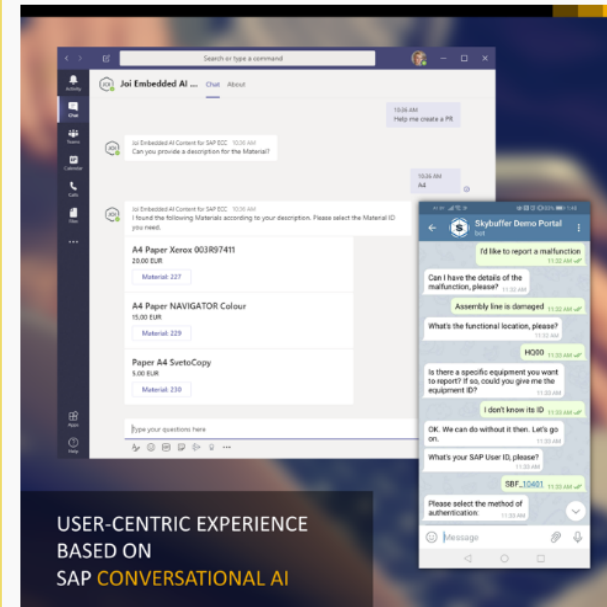
TRY IT ONLINE!

CONVERSATIONAL ACTIONS. GENERAL BENEFITS OF INTELLIGENT ASSISTANT OFFERED AS SINGLE UNIQUE MINDSET

HOME / INTELLIGENT DECISION DIMENSIONS / CONVERSATIONAL ACTIONS. GENERAL BENEFITS OF INTELLIGENT ASSISTANT OFFERED AS SINGLE UNIQUE MINDSET

Search site

TRANSFORMING IT LANDSCAPE INTO COGNITIVE ENTERPRISE



USER-CENTRIC EXPERIENCE
BASED ON
SAP CONVERSATIONAL AI

OUTCOME

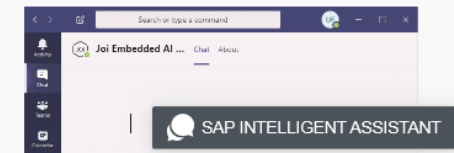
Cognitive automation empowers **employees, customers and business partners** to access Intelligent Enterprise data from any edge in any language communicating via their preferred channel using text or voice messages. User-centric experience based on SAP Conversational AI real-time

CHALLENGE

Humanize, extend and facilitate IT landscape accessibility for business partners, customers and employees from any edge, in any language, via digital and even voice-enabled communication channels allowing seamless targeted on-demand human guidance step in and out the conversation flow

SOLUTION

Skybuffer's unique methodology of cognitive skills development made it possible to combine in the unified AI mindset 400+ business scenarios covering all SAP lines of business, embedded into any number of backend systems, executing cognitive actions 24/7/365 autonomously with ability to seamlessly engage human expertise in hybrid communication mode and release the steering back to cognitive automation as soon as human expert decision is taken. The solution understands corporate guidelines, makes real-time smart recommendations, predicts workflow actions, and executes Intelligent Enterprise operations



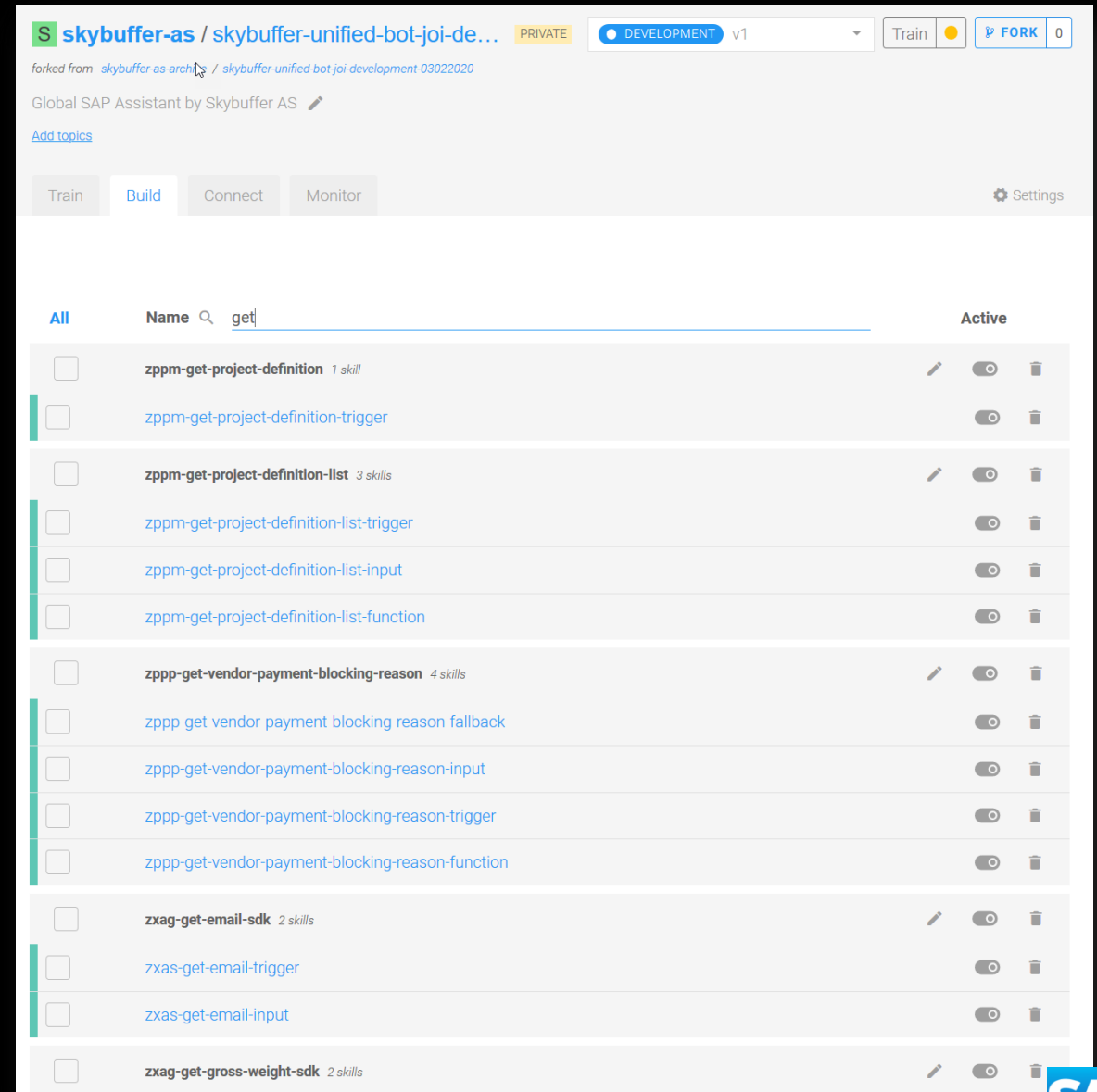
Intelligent Decision Dimensions

Foundation Set of Skills

The major part of Skybuffer's Intelligent Decision Dimensions solution is a foundation set of skills developed on SAP Conversational AI platform.

Currently this package consists of 70+ groups of GET and GET LIST skills that are used across all business scenarios for banking and general ERP AI Content provided by Skybuffer.

Foundation set of skills is also good to be used to facilitate and speed up custom AI content development process and at the same time to reduce the risk of getting overlapping situations in the business skills.

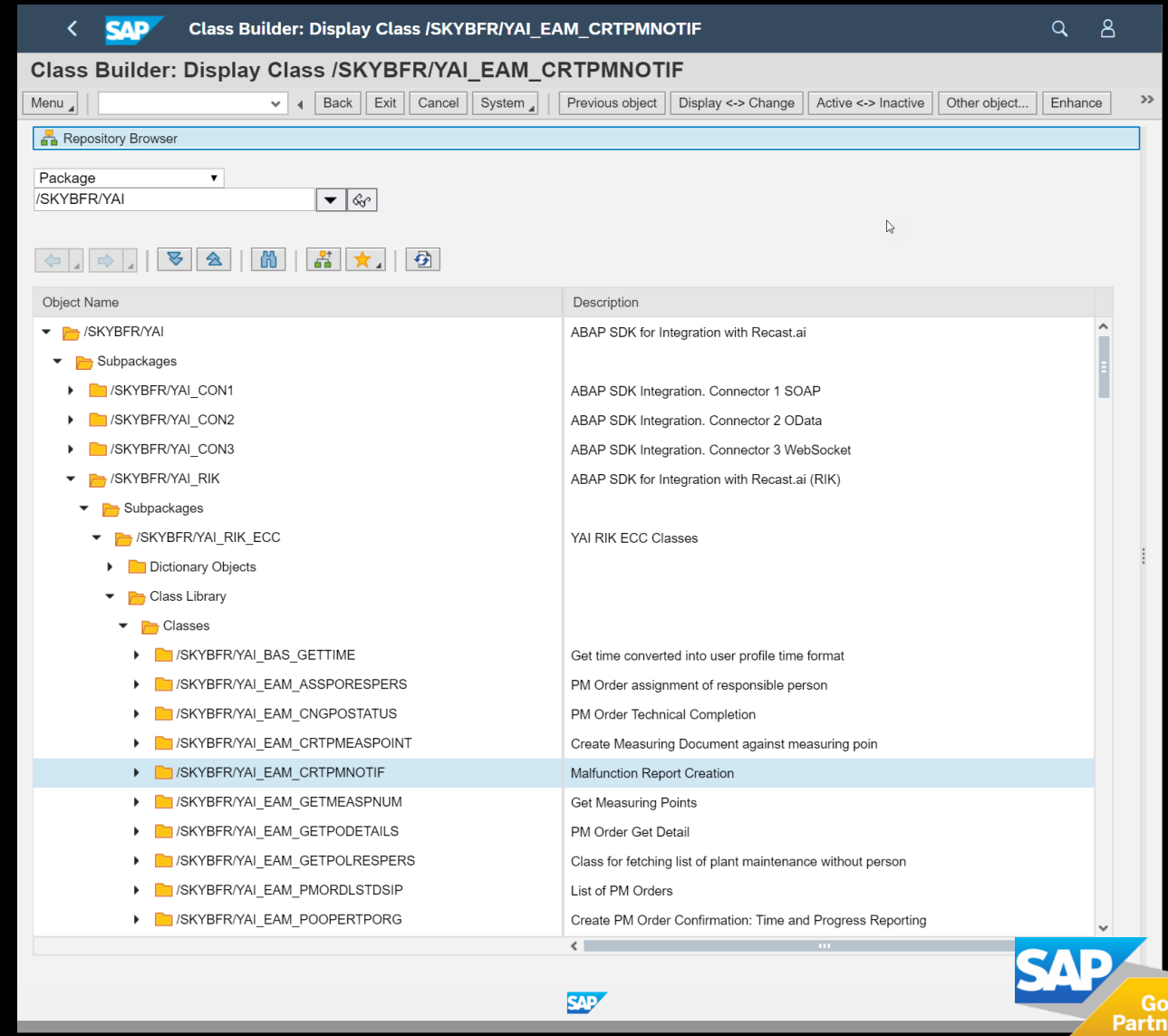


Intelligent Decision Dimensions

SAP NetWeaver Framework (OData, WSDL or WebSocket)

Secure data flow between SAP Conversational AI part of SAP Cloud Platform and SAP NetWeaver On Premise systems (ECC, S4HANA, CRM and etc.) guaranteed via deployment of Skybuffer SAP certified add-on of Intelligent Decision Dimensions. ABAP Framework for SAP Conversational AI consists of:

- Connectivity layer (OData, WSDL or WebSocket)
- Rapid implementation ABAP classes for SAP Objects
- SAP Authorization check concept
- Implementation methodology from Skybuffer allowing cost-efficient integrated skills development



What SAP Expertise Do I Need for Conversational AI Implementation?

Conversational Actions deal with bi-directional SAP Conversational AI data flow integration from SAP Cloud into SAP On Premise system and provide **synchronous** elaborate user experience for business users to get their work quickly and efficiently done in SAP system.

The main functional blocks of Intelligent Decision Dimensions are:

ABAP SDK (SAP NetWeaver On Premise) for SAP Cloud Platform (SAP Conversational AI)

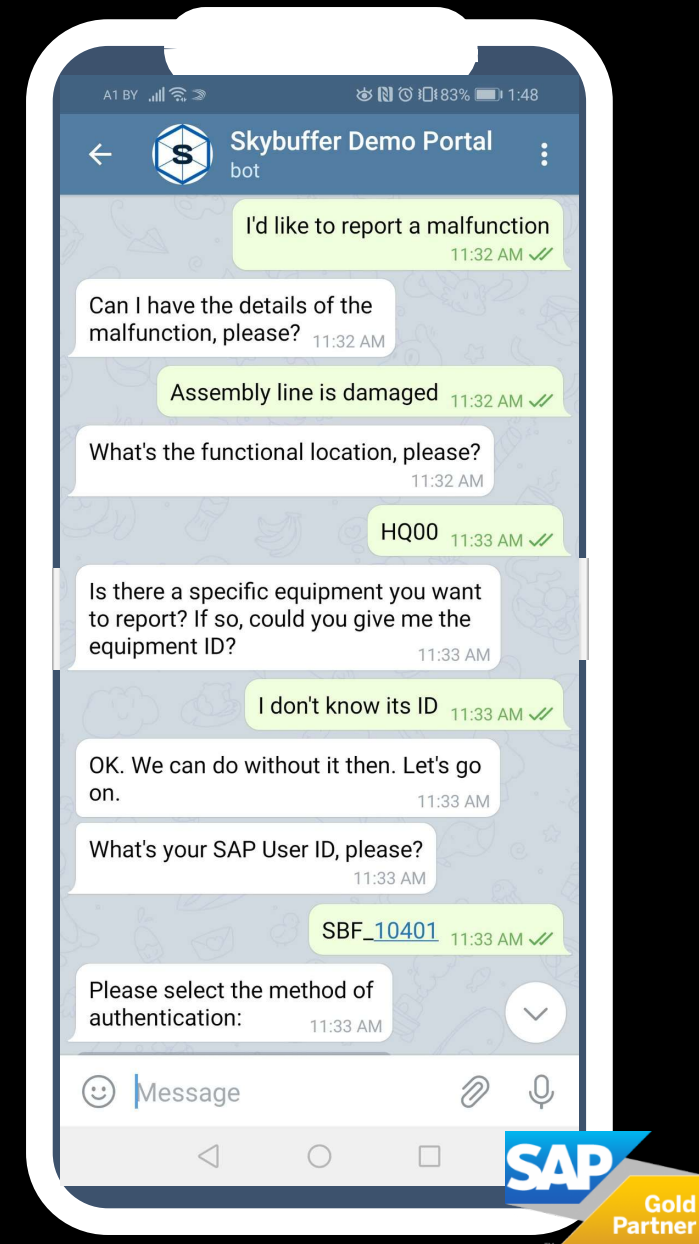
Central unified OData service (SAP NetWeaver On Premise) to manage intelligent dialogues via ABAP SDK

ABAP Authorization Control classes (SAP NetWeaver On Premise) to check business user authorization per each business scenario (Skill execution)

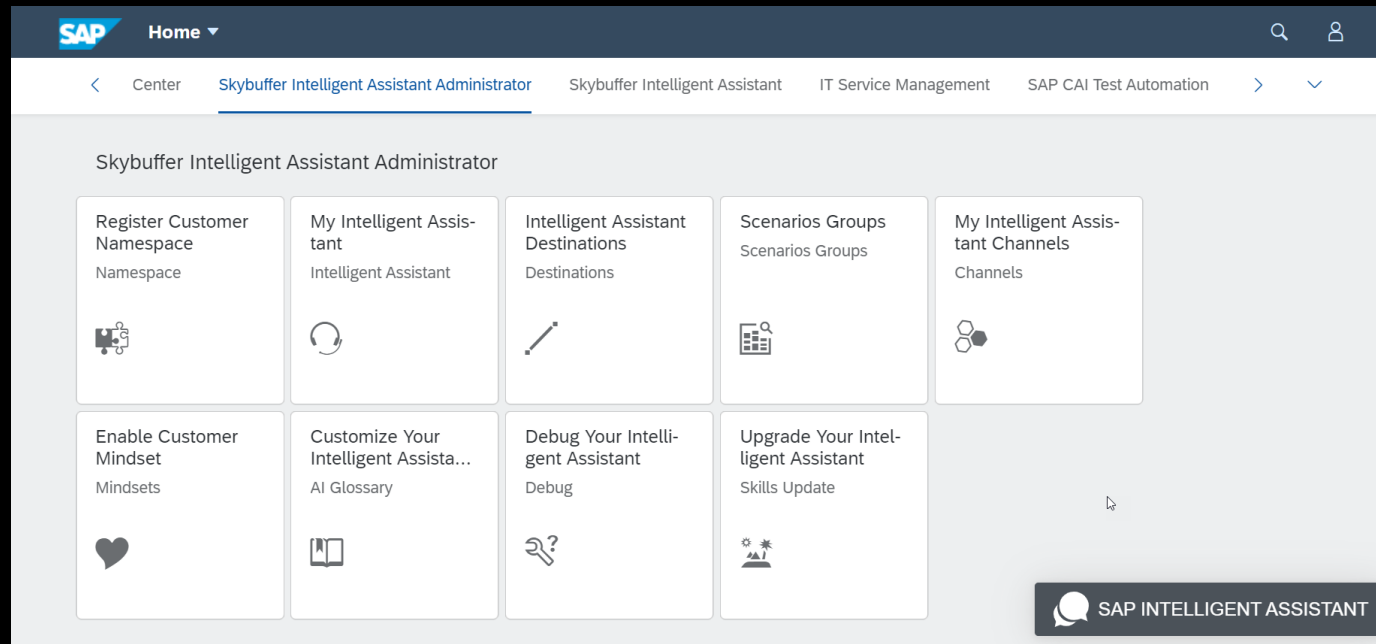
ABAP Execution classes (SAP NetWeaver On Premise) to run transaction in SAP system and create a respond back to the communication channel (chat-based or voice-enabled communication)

Email-based user authentication (SAP NetWeaver On Premise and SAP Cloud Foundry) for anonymous communication channels (e.g. web) or for possibility to activate two-steps user authentication in the intelligent conversation

SMS-based user authentication (SAP NetWeaver On Premise and SAP Cloud Foundry) for anonymous communication channels (e.g. Alexa self-service point, or web) or for possibility to activate two-steps authentication in the intelligent conversation



SAP Conversational AI Platform Extension via SAP Fiori Applications from Skybuffer



- Flexible adaptation of logic via extension or redefinition
- Multi-channel support of extension by individual enablement in each channel
- Controlled upgrade of standard delivered package with no impact on Customer development

Voice-Enabled Intelligent Assistant

Provided by Skybuffer synchronous AI-rich conversational experience for SAP On-Premise systems allows not only chatting to SAP systems via the intelligent assistant but also TALK to SAP like humans do.

Skybuffer developed an integration interface between SAP Conversational AI platform and Google Assistant or Amazon Alexa. This interface has an enhanced number of features that cannot be found in standard SAP CAI integration with Google Assistant or Amazon Alexa and without which it is impossible to imagine any natural way of voice-enabled communication:

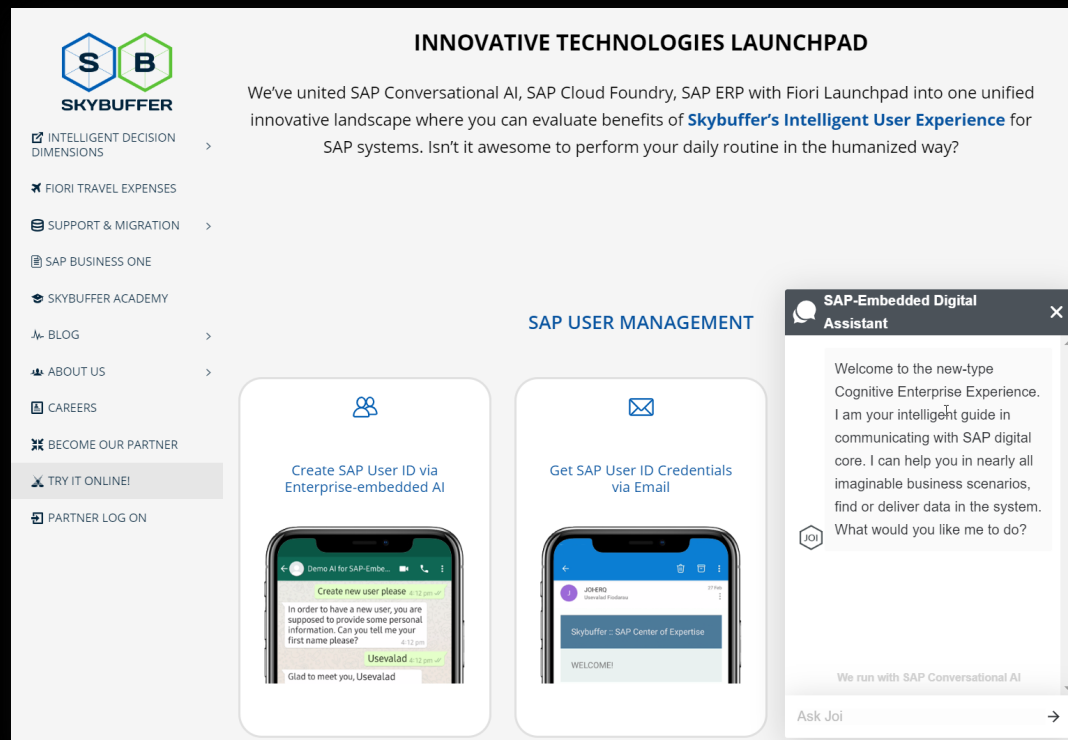
- The business user is not limited to 8 seconds to provide a reply in Alexa channel. Skybuffer Alexa integration interface allows you to set any number of seconds (up to 98) for Alexa to wait for the user's input.
- In case the business user is interrupted for whatever reason, it is possible to return to the same conversation and get exactly the same reply from Google Assistant / Alexa that had been given by him/her before the user dropped the conversation. This conversation-keeping time can be configured via Skybuffer Fiori apps set for Conversational Interface maintenance and vary from 0 to 600 seconds.
- It is also made possible to tune the channel to keep the conversation for the Echo Dot account number, making it available for all the devices that the business user has access to via Google Assistant or Alexa app.



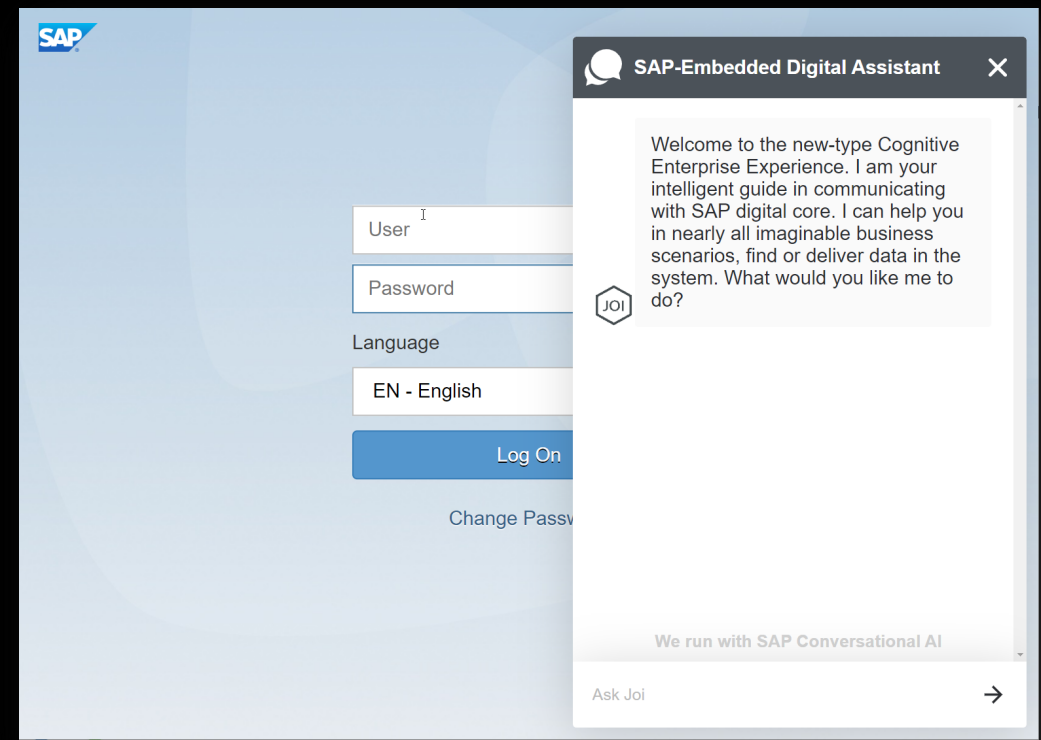
Skybuffer Innovative Technologies Demo Portal

Try some generic business scenarios with a real time connection to SAP On Premise system from our **Innovative Technologies Portal** (simply request SAP user ID creation via **Conversational Actions** application and continue chatting to SAP digital core)

[Skybuffer Innovative Technologies Demo Portal \(Web Link\)](#)



The screenshot shows the 'INNOVATIVE TECHNOLOGIES LAUNCHPAD' with a sidebar menu on the left containing links like 'INTELLIGENT DECISION DIMENSIONS', 'FIORI TRAVEL EXPENSES', 'SUPPORT & MIGRATION', 'SAP BUSINESS ONE', 'SKYBUFFER ACADEMY', 'BLOG', 'ABOUT US', 'CAREERS', 'BECOME OUR PARTNER', 'TRY IT ONLINE!', and 'PARTNER LOG ON'. The main content area features a description of the unified SAP landscape and a 'SAP USER MANAGEMENT' section with two cards: 'Create SAP User ID via Enterprise-embedded AI' and 'Get SAP User ID Credentials via Email'. A 'SAP-Embedded Digital Assistant' chat window is open on the right, displaying a welcome message and a conversation log.



This screenshot shows the 'SAP-Embedded Digital Assistant' interface. It includes a login form with fields for 'User', 'Password', and 'Language' (set to 'EN - English'), along with 'Log On' and 'Change Password' buttons. A chat window on the right displays a welcome message from 'Joi' and a conversation log. The bottom of the chat window has an 'Ask Joi' input field and a send button.

Integration into Communication Channels and Customer Support Channels

Speak to the intelligent assistant in any channel, with a chance to be seamlessly put through to the contact center operator

Connecting to Any Internet Resource in One Click

Your customers and business partners are bound to highly appreciate the integration and navigation skills of an intelligent assistant placed on your corporate website.

SAP Conversational AI platform makes such an integration possible in just a couple of minutes by using the web chat technology, which is an integral part of SAP commodity.

Data transfer in this channel fully complies with all corporate security requirements.

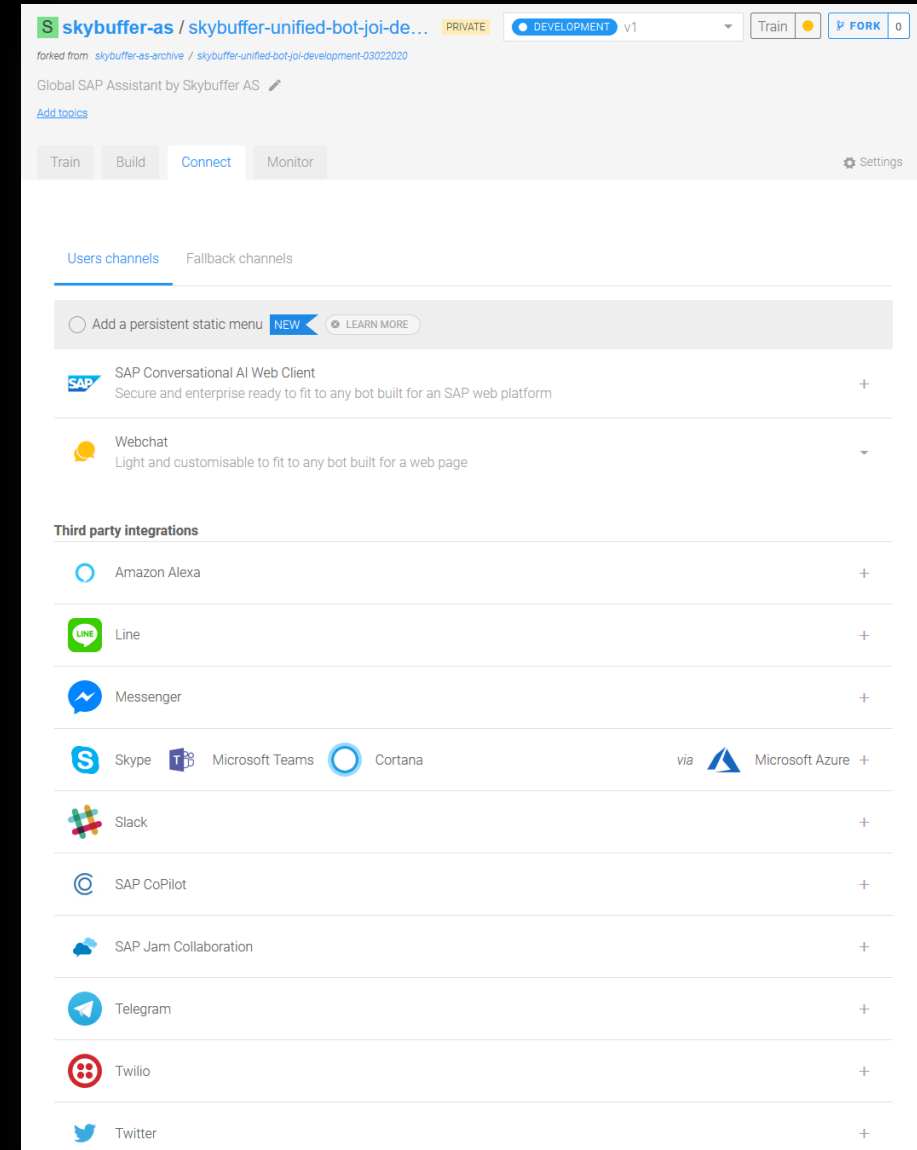
The screenshot displays the Skybuffer website's 'INNOVATIVE TECHNOLOGIES LAUNCHPAD'. The left sidebar contains a navigation menu with the following items: INTELLIGENT DECISION DIMENSIONS, FIORI TRAVEL EXPENSES, SUPPORT & MIGRATION, SAP BUSINESS ONE, SKYBUFFER ACADEMY, BLOG, ABOUT US, CAREERS, BECOME OUR PARTNER, TRY IT ONLINE! (highlighted), and PARTNER LOG ON. The main content area features a header with the Skybuffer logo and the title 'INNOVATIVE TECHNOLOGIES LAUNCHPAD'. Below the header, a text block states: 'We've united SAP Conversational AI, SAP Cloud Foundry, SAP ERP with Fiori Launchpad into one unified innovative landscape where you can evaluate benefits of [Skybuffer's Intelligent User Experience](#) awesome to perform your daily r...'. A chat window titled 'SAP-Embedded Digital Assistant' is overlaid on the right, featuring a welcome message from 'Joi' and a text input field labeled 'Ask Joi'. The chat window also includes a 'JOI' icon and a 'We run with SAP Conversational AI' banner. At the bottom of the page, there are two cards: 'Create SAP User ID via Enterprise-embedded AI' and 'Get SAP U... Credential... Email...'. The Skybuffer logo is visible in the bottom left corner, and the SAP Gold Partner logo is in the bottom right corner.

Connection to Any Third-Party Messaging Application

SAP Conversational AI platform allows one-click integration into numerous commonly used messaging applications. These include:

- Telegram
- WhatsApp
- Microsoft Teams
- Facebook Messenger
- Skype for Business
- Skype
- Google Assistant

and many more



Intelligent Interactive Hybrid Chats (based on SAP Solution Manager)

Standard features of omnichannel contact center with functionality to correct/adjust and enhance communication between client and virtual assistant

Operator's Interactive Workplace

Conversational Dashboard

The operator's workspace makes it possible to simultaneously monitor the progress of about 16 dialogues with customers.

The dialogues where the AI successfully processes the scenarios are highlighted green. If the virtual assistant fails to understand or meet the request, such a dialogue is immediately highlighted red, and the operator has 15 seconds (customizable) to step in before the AI sends its fallback phrase. We can see the number of seconds passed after the request was received and the number of seconds left.

The screenshot displays the 'Hybrid Chats Operator Workplace' interface. At the top, there's a header with the SAP logo, a search bar, and status controls (My Status: Active, Active, Archived). Below the header is a grid of 16 chat dialogues, each with a client name, a progress bar, and a status indicator (green for success, red for failure). The dialogues are as follows:

Client	Progress	Status
Felix	31%	Green
Wanda	15%	Green
Unknown Client	3%	Green
Boris	32%	Green
Lizzy	32%	Green
Unknown Client	0%	Green
Marceline	49%	Green
Veronika	57%	Green
A.CWIK	23%	Green
Jennifer	1%	Green
Unknown Client	0%	Green
Tamal Datta	45%	Green
Usevalad Fiodarau	36%	Green
A.CWIK	12%	Green
Anne Jones	8%	Green

Operator's Interactive Workplace

MPT Indicator on Conversational Dashboard

MPT – maximum processing time of the dialogue by AI assistant.

The colored icon in the top right-hand corner indicates the MPT percentage of the user's request:

■ - valid MPT

▲ - attention needed

✗ - MPT exceeded

The screenshot displays the SAP Hybrid Chats Operator Workplace interface. At the top, there's a header with the SAP logo, the title 'Hybrid Chats Operator Workplace', and a search bar. Below the header, a grid of chat conversations is shown. Each chat card includes the operator's name, the client's message, the AI assistant's response, and the operator's status. A colored icon in the top right corner of each card indicates the MPT percentage: green for valid, yellow for attention needed, and red for MPT exceeded. Callout boxes highlight these indicators: 'Attention needed' for a yellow triangle, 'Valid MPT' for a green square, and 'MPT exceeded the permissible value' for a red square with a cross.

Operator	Client Message	Joi Message	Operator Status	MPT Percentage	Indicator
Kai	Client: Do a flip...	Joi: I'm afraid I can't help with that. ...	Operator: Unassigned	73%	Yellow Triangle
Olivia	Client: No...	Joi: Sorry, but without the data I am as...	Operator: Unassigned	28%	Green Square
Sindy	Client: I need a loan	Joi: We offer a great variety of credits...	Operator: Unassigned	55%	Green Square
Peter Quinn	Client: No, thanks	Joi: Pleased to have been useful for you...	Operator: Unassigned	52%	Green Square
Clodia Mendoza	Client: Show me card balance	Joi: Could you give me your telephone nu...	Operator: Unassigned	62%	Yellow Triangle
Unknown	Client: Show me ATM near me	Joi: Our offices and ATMs can be found h...	Operator: Unassigned	17%	Green Square
Gavin	Client: Show me my card balance...	Joi: Can you please tell me your telepho...	Operator: Unassigned	62%	Yellow Triangle
Kyra	Client: I want to transfer money to my f...	Joi: Could you give me your telephone nu...	Operator: Unassigned	25%	Green Square
Jacob Stefanovski	Client: Can you change my contact data?...	Joi: Could you give me your telephone nu...	Operator: Unassigned	42%	Green Square
Nolan Garther	Client: Lock my card!	Joi: Could you give me your telephone nu...	Operator: Unassigned	39%	Green Square
Dean Farrow	Client: Thanks!	Joi: The pleasure is all mine. ...	Operator: Unassigned	50%	Green Square
Julian	Client: Show me my card account balance,...	Joi: Could you give me your telephone nu...	Operator: Unassigned	22%	Green Square
Ian Myers	Client: Show me my card account balance,...	Joi: Could you give me your telephone nu...	Operator: Unassigned	21%	Green Square
Mark	Client: Show me weather forecast for tod...	Joi: Looks cloudy. How can I Help you?...	Operator: Aliaksandr Shap...	183%	Red Square with Cross
David	Client: David	Joi: Glad to meet you, David. ...	Operator: Unassigned	64%	Yellow Triangle
Lucy	Client: No	Joi: As far as I can see you are unwilli...	Operator: Unassigned	58%	Green Square
Chris	Client: +148 5989522	Joi: I tried to find the customer by the...	Operator: Unassigned	100%	Green Square

Operator's Interactive Workplace

Operator joins conversation with low confidence of AI reply

Contact Center configuration allows defining a certain number of seconds within which the operator can join low-confidence conversations and cancel the virtual assistant's reply.

The action is logged in the conversation history.

Operator is automatically assigned to this dialogue as its processor and has 2 options:

- Reply directly to the user
- Send message to the digital assistant to trigger the necessary predefined scenario

The screenshot displays the SAP Hybrid Chats Operator Workplace interface. The top navigation bar includes the SAP logo, the title "Hybrid Chats Operator Workplace", and filters for "Conversations: All" and "Confidence: Any". The "My Status" dropdown is set to "Active".

The left sidebar shows a list of conversations. The selected conversation is with "John Malkovich", showing a client message "Am I a rich guy?", a bot response "I'm afraid I can't help with that. ...", and an operator response "Aliaksandr Shap...".

The main chat area shows the conversation history:

- User: Hello
- Bot: Hello! May I know your name please? (JOI)
- User: John Malkovich
- Bot: Nice to meet you, John Malkovich. (JOI)
- User: Am I a rich guy?

System notifications are displayed in the chat area:

- Aliaksandr Shapel joined the conversation.
- Aliaksandr Shapel is assigned to the conversation

The operator's response is visible in a text box:

Operator: Aliaksandr Shapel canceled message from bot: I'm afraid I can't help with that.
I can assist you to:
Order new card for me, please.
Show me my card account balance, please.
Transfer money to another customer's account.
... and also help you to
Change some data in contact details for me.

The bottom of the chat area has buttons for "Reply in Chat", "Message to AI", and "Make Internal Note", along with a text input field "Your message..." and a send button.

The right-hand details panel shows the following information:

- General Information**
 - Conversation ID: ildlf7oyz6htsr1v8g0nsqq7ul6baw8fb03bdfdm
 - Log ID: 1000007937
 - Owner: John Malkovich
 - Operator: Aliaksandr Shapel
 - Email: No Data
 - Status: In Process
 - Priority: 3: Medium
- Category**
 - Channel: Webchat
 - Line of Business: No Data
 - Category 1: No Data
 - Category 2: No Data
 - Category 3: No Data
- Dates**
 - Created On: 3/23/2020, 11:09:45
 - First Response By: 3/23/2020, 11:10:14
 - IRT Status: 0%
 - Due By: 3/23/2020, 11:34:44
 - MPT Status: 9%

Operator's Interactive Workplace

Operator cancels fallback phrase of AI assistant

In the dialogues with low confidence of scenario recognition, the operator can route them in the right way by canceling the fallback phrase of the AI Assistant.

The screenshot displays the SAP Hybrid Chats Operator Workplace interface. The top navigation bar includes the SAP logo, the title 'Hybrid Chats Operator Workplace', and a search icon. Below the navigation bar, there are filters for 'Conversations: All' and 'Confidence: Any'. The main chat area shows a conversation with 'John Malkovich'. The chat history includes the following messages:

- John Malkovich: Hello
- John Malkovich: Hello! May I know your name please?
- John Malkovich: Nice to meet you, John Malkovich.
- John Malkovich: Am I a rich guy?
- Operator: Aliaksandr Shapel joined the conversation.
- Operator: Aliaksandr Shapel is assigned to the conversation.
- Operator: Aliaksandr Shapel canceled message from bot: I'm afraid I can't help with that.
- Operator: I can assist you to:
 - Order new card for me, please.
 - Show me my card account balance, please.
 - Transfer money to another customer's account.
 - ... and also help you to
 - Change some data in contact details for me.

The right sidebar contains details for the conversation, including 'General Information' (Conversation ID, Log ID, Owner, Operator, Email), 'Category' (Channel, Line of Business, Category 1, Category 2, Category 3), and 'Dates' (Created On, First Response By, IRT Status, Due By, MPT Status).

Operator's Interactive Workplace

Operator adjusts dialogue

The operator cancels the fallback message of the AI assistant, pauses the bot and messages directly to the user to clarify the situation, “Mr. Malkovich, do you want to know your card balance?” Getting the affirmative answer, the operator gets the AI back to the conversation and sends the trigger phrase of "Card balance".

The screenshot displays the SAP Hybrid Chats Operator Workplace interface. The top navigation bar includes the SAP logo, the title "Hybrid Chats Operator Workplace", and a search icon. Below the navigation bar, there are filters for "Conversations: All" and "Confidence: Any". The main chat area shows a conversation with a user named John Malkovich. The chat history includes messages from the user and the operator, Aliaksandr Shapel. The operator's last message is "Mr. Malkovich, do you want to know your card balance?". The right sidebar contains details about the conversation, including the Conversation ID, Log ID, Owner, Operator, Email, Status, Priority, Category, and Dates. The bottom of the interface features a text input field for the operator to respond, with buttons for "Reply in Chat", "Message to AI", and "Make Internal Note".

Conversations: All **Confidence:** Any

Search

John Malkovich 9%

Client: Am I a rich guy?

Joi: Mr. Malkovich, do you want to know ...

Operator: Aliaksandr Shap... 100%

Details

General Information

Conversation ID: ildf7oyz6htsr1v8g0nsqq7ul6baw8fb03bfdbm

Log ID: 1000007937

Owner: John Malkovich

Operator: Aliaksandr Shapel

Email: No Data

Status: In Process

Priority: 3: Medium

Category

Channel: Webchat

Line of Business: No Data

Category 1: No Data

Category 2: No Data

Category 3: No Data

Dates

Created On: 3/23/2020, 11:09:45

First Response By: 3/23/2020, 11:10:14

IRT Status: 0%

Due By: 3/23/2020, 11:34:44

MPT Status: 9%

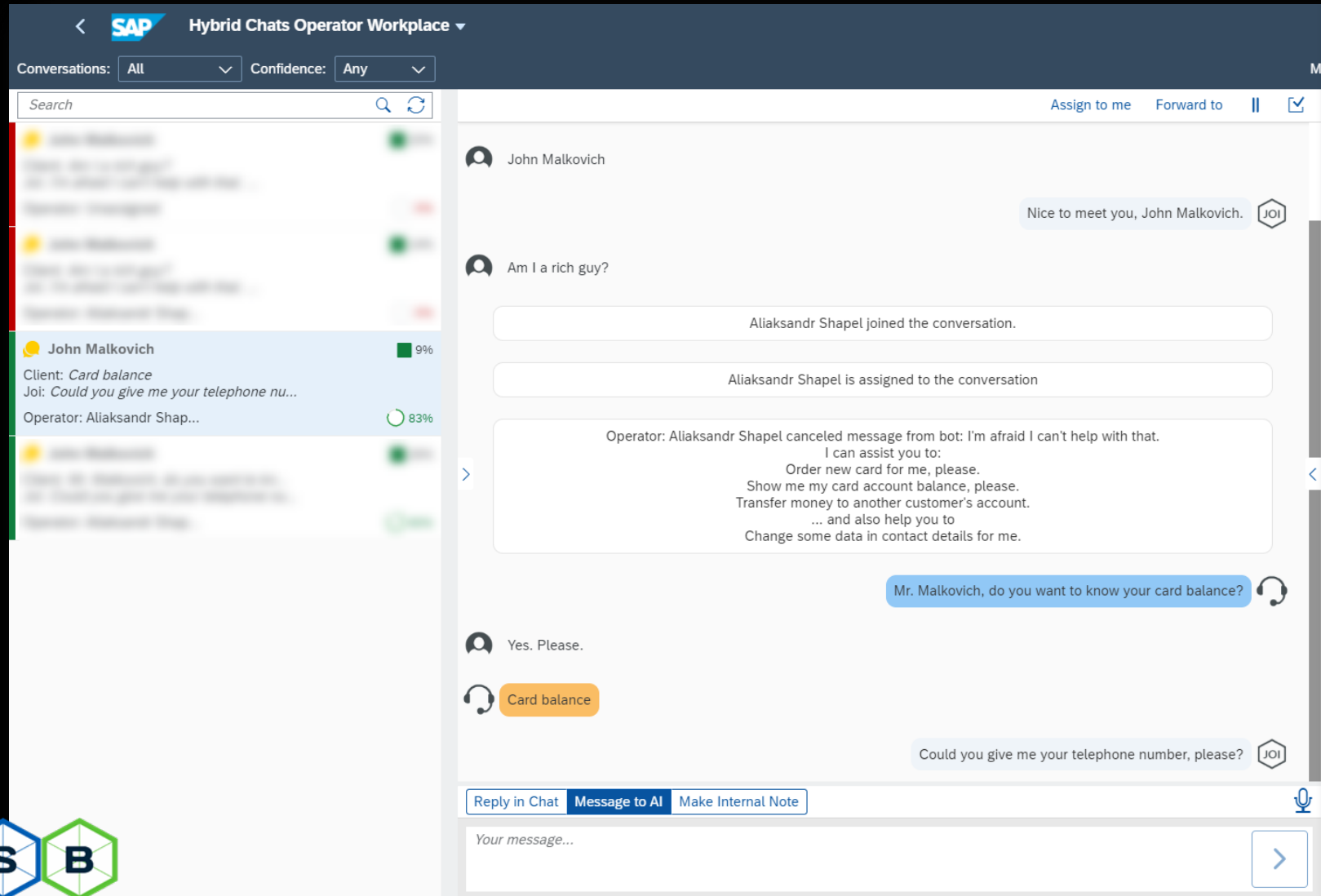
Assign to me Forward to

Reply in Chat Message to AI Make Internal Note

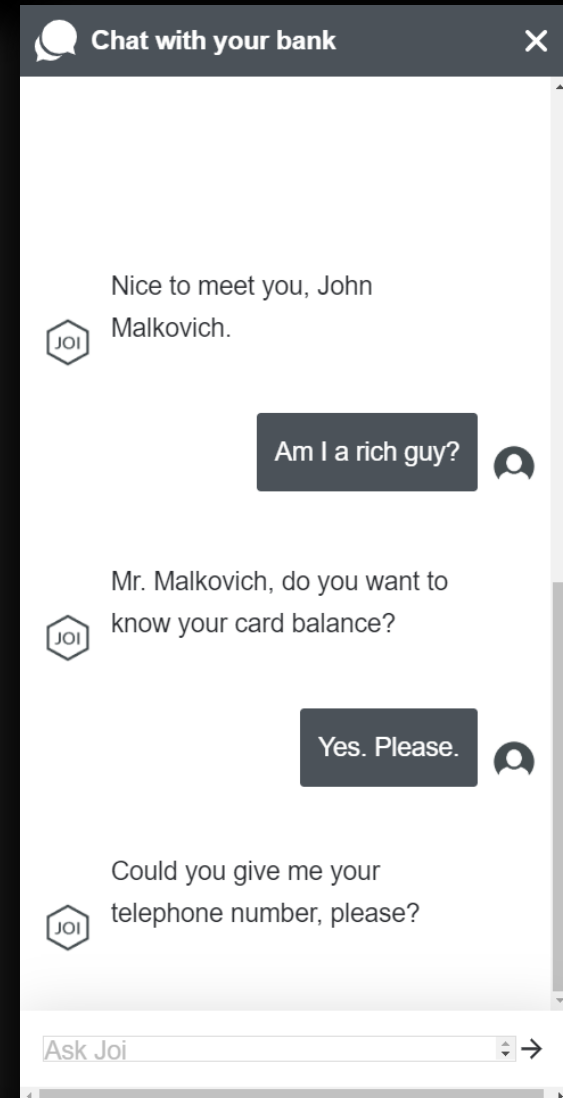
Your message...

Operator's Interactive Workplace

Operator activates cognitive automation scenario



The screenshot shows the SAP Hybrid Chats Operator Workplace interface. The top bar includes the SAP logo and the title "Hybrid Chats Operator Workplace". Below this, there are filters for "Conversations: All" and "Confidence: Any". A search bar is located on the left side of the main chat area. The main chat area displays a conversation with "John Malkovich". The chat history shows a message from the client: "Card balance" and a message from the operator: "Aliaksandr Shapel...". The current message from the client is "Am I a rich guy?". The operator's response is a system message: "Aliaksandr Shapel joined the conversation." followed by "Aliaksandr Shapel is assigned to the conversation". The operator then sends a message: "Operator: Aliaksandr Shapel canceled message from bot: I'm afraid I can't help with that. I can assist you to: Order new card for me, please. Show me my card account balance, please. Transfer money to another customer's account. ... and also help you to Change some data in contact details for me." The client responds with "Yes. Please." and a "Card balance" button. The operator then sends a message: "Mr. Malkovich, do you want to know your card balance?". The client responds with "Could you give me your telephone number, please?". The interface includes buttons for "Assign to me", "Forward to", and "My". At the bottom, there are buttons for "Reply in Chat", "Message to AI", and "Make Internal Note".



The screenshot shows the "Chat with your bank" interface. The top bar includes the title "Chat with your bank" and a close button. The chat area displays a conversation with "Joi". The chat history shows a message from the client: "Nice to meet you, John Malkovich." and a message from the operator: "Am I a rich guy?". The client then sends a message: "Mr. Malkovich, do you want to know your card balance?". The operator responds with "Yes. Please.". The client then sends a message: "Could you give me your telephone number, please?". The interface includes a search bar at the bottom.

Operator's Interactive Workplace

Users' requests automatic categorization (up to 10 levels)

All the users' messages get automatically categorized (except general skills, such as "greeting", etc.) Categorization is a standard SAP functionality and, accordingly, the categories' reporting is available out-of-the-box with an ability to build customized reports and dashboards. Additionally, categorization can be used to control authorization and routing the users' messages to particular operators. For example, operators assigned to handle card products requests, will see only those chats which were routed into this category, either automatically, or manually by the supervisor

The screenshot displays the SAP Hybrid Chats Operator Workplace interface. The main chat window shows a conversation with a client who needs to change their PIN. The client's message is "I need to change my PIN". The operator's response is "Can you please tell me your telephone number?". The chat is categorized as "Card Processing" and "Pin Code Change". The interface includes a search bar, filters for conversations and confidence, and a details panel on the right showing general information, category, and dates.

Completed automatically according to the topic of the conversation

Details

- General Information**
 - Conversation ID: 3r1cfyv60w1gy5cfohe4hbxx99mv8c379vpvigny
 - Log ID: 1000007860
 - Owner: No Data
 - Operator: No Data
 - Email: No Data
- Category**
 - Channel: Webchat
 - Line of Business: Banking
 - Category 1: Card Processing
 - Category 2: Pin Code Change
 - Category 3:
- Dates**
 - Created On: 3/22/2020, 18:28:41
 - First Response By: 3/22/2020, 18:29:09
 - IRT Status: 0%
 - Due By: 3/22/2020, 18:53:39
 - MPT Status: 2%

Operator's Interactive Workplace

Recalculation of MPT based on request priority

The operator can change the priority of the user's request, for example, to 4 - "Low". This will automatically recalculate and increase the time value for MPT.

The screenshot displays the SAP Hybrid Chats Operator Workplace interface. On the left, a list of conversations is shown, including one from an 'Unknown Client' with a 49% confidence level. The main chat area shows a conversation where the client says 'I need to change my pin' and the operator asks for the telephone number. A system message indicates 'Aliaksandr Shapel joined the conversation.' On the right, the 'Details' panel is open, showing 'General Information' and 'Category' sections. The 'Priority' dropdown menu is open, showing options: 1: Very High, 2: High, 3: Medium, and 4: Low. The '4: Low' option is selected. A yellow callout box points to this selection with the text: 'MPT recalculated according to the priority of the request'. The 'Dates' section shows the conversation was created on 3/22/2020 at 18:57:23, with an IRT status of 0% and an MPT status of 49%.

MPT recalculated according to the priority of the request

Operator's Interactive Workplace

MPT status is available from operator's workplace

The operator can observe the MPT percentage on the requests processing dashboard.

It is possible to configure in which case to display the percentage of MPT on the tiles.

For example, in cases of approaching the maximum time acceptable, or beyond the MPT.

It is also possible to combine controlling the MPT displayed on tiles, for example, to display all requests, or display warnings where percentage is exceeded.

The screenshot displays the SAP Hybrid Chats Operator Workplace interface. The top navigation bar includes the SAP logo, the title 'Hybrid Chats Operator Workplace', and a 'My Status' dropdown menu set to 'Active'. Below the navigation bar is a search bar. The main area contains a grid of chat tiles, each representing a customer interaction. Each tile shows the customer's name, their message, the operator's response, and a progress indicator (a circle with a percentage). The progress indicator is color-coded: green for 'Valid MPT' (percentage within acceptable limits), yellow for 'Attention needed' (percentage approaching the limit), and red for 'MPT exceeded the permissible value' (percentage beyond the limit). Three callout boxes highlight these status indicators: a yellow box for 'Attention needed' (Kai, 73%), a green box for 'Valid MPT' (Lucy, 100%), and a red box for 'MPT exceeded the permissible value' (Mark, 183%).

Operator	Client Message	Joi Message	Operator	MPT Percentage	Status
Kai	Do a flip...	I'm afraid I can't help with that. ...	Unassigned	73%	Attention needed
Olivia	No...	Sorry, but without the data I am as...	Unassigned	28%	Valid MPT
Sindy	I need a loan	We offer a great variety of credits...	Unassigned	55%	Valid MPT
Peter Quinn	No, thanks	Pleased to have been useful for you...	Unassigned	52%	Valid MPT
Cloudia Mendoza	Show me card balance	Could you give me your telephone nu...	Unassigned	62%	Attention needed
Unknown	Show me my card account balance,...	Our offices and ATMs can be found h...	Unassigned	17%	Valid MPT
Gavin	Show me my card balance...	Can you please tell me your telepho...	Unassigned	62%	Attention needed
Kyra	I want to transfer money to my f...	Could you give me your telephone nu...	Unassigned	25%	Valid MPT
Jacob Stefanovski	Can you change my contact data?...	Could you give me your telephone nu...	Unassigned	42%	Valid MPT
Nolan Garther	Lock my card!	Could you give me your telephone nu...	Unassigned	39%	Valid MPT
Dean Farrow	Thanks!	The pleasure is all mine. ...	Unassigned	50%	Valid MPT
Julian	Show me my card account balance,...	Could you give me your telephone nu...	Unassigned	22%	Valid MPT
Ian Myers	Show me my card account balance,...	Could you give me your telephone nu...	Unassigned	21%	Valid MPT
Mark	Show me weather forecast for tod...	Looks cloudy. How can I Help you?...	Aliaksandr Shap...	183%	MPT exceeded the permissible value
David	David	Glad to meet you, David. ...	Unassigned	64%	Attention needed
Lucy	No	As far as I can see you are unwilli...	Unassigned	58%	Valid MPT
Chris	+148 55869522	I tried to find the customer by the...	Unassigned	100%	Valid MPT

Example of Targeted Marketing in Retail

Operator joins to make an offer

SAP Hybrid Chats Operator Workplace

My Status: Active Active Archived

Search

Alex 20%

Client: How to make payment for phone pl...

Joi: Select the mobile operator: <https://...>

Operator: Unassigned 88%

Chat with your bank

Hello!

Can you please introduce yourselves?

Alex

Happy to meet you, Alex.

How to make payment for phone plan?

Select the mobile operator:

MTS

A1

Life

Ask Joi

Example of Targeted Marketing in Retail

Operator triggers scenario of selling cell phone on credit

The screenshot displays the SAP Hybrid Chats Operator Workplace interface. On the left, a sidebar shows a list of conversations. The selected conversation is with a customer named Alex, who has a 29% confidence score. The chat history shows the following messages:

- Client: How to make payment for phone pl...
- Joi: Select the mobile operator: https://...
- Operator: Unassigned

The chat area shows the following messages:

- Hello
- Alex: Hello! Can you please introduce yourselves?
- Happy to meet you, Alex.
- How to make payment for phone plan?
- Select the mobile operator: https://ideabank24.by/

A system message indicates: Aliaksandr Shapel joined the conversation.

At the bottom, there are buttons for "Reply in Chat", "Message to AI", and "Make Internal Note". The "Message to AI" button is highlighted. Below these buttons, the text "offer smartphone" is visible.

On the right, the "Details" panel shows the following information:

- General Information**
 - Conversation ID: gg5dgbmw4dcz1fp6p3zu h42gbliatqjix45m1c
 - Log ID: 1000007866
 - Owner: Alex
 - Operator: No Data
 - Email: No Data
- Status**: In Process
- Priority**: 3: Medium
- Category**
 - Channel: Webchat
 - Line of Business: No Data
 - Category 1: No Data
 - Category 2: No Data
 - Category 3: No Data
- Dates**
 - Created On: 3/22/2020, 20:05:44
 - First Response By: 3/22/2020, 20:06:13
 - IRT Status: 0%
 - Due By: 3/22/2020, 20:30:43
 - MPT Status: 29%

The operator can step into the dialogue even when it is "green" to trigger some marketing scenario when appropriate and make a user an offer they can't refuse. In this case, the operator joins the chat and writes a message to the AI Assistant in the "Message to AI" area. The text is sent directly to the AI and it triggers the skill of selling a cell phone on credit with one of the company's partnering organizations.

Example of Targeted Marketing in Retail

Only marketing message is displayed to user

SAP Hybrid Chats Operator Workplace

Conversations: All Confidence: Any My Status: Active Active Archived

Search

Alex 11%
Client: offer smartphone
Joi: By the way, your smart phone is alr...
Operator: Aliaksandr Shap... 99%

Hello

Alex

Happy to meet you, Alex.

How to make payment for phone plan?

Select the mobile operator:
<https://ideabank24.by/>
<https://ideabank24.by/>
<https://ideabank24.by/>

Aliaksandr Shapel joined the conversation.

offer smartphone

Aliaksandr Shapel is assigned to the conversation

By the way, your smart phone is already 2 years old, am I not mistaken? Our partner store currently has a special offer - the latest Huawei model with a 50% discount in 12 months installment, care to see?
<https://www.21vek.by/mobile/all/huawei/>

Reply in Chat Message to AI Make Internal Note

Your message...

Details

General Information

Conversation ID: 85z8j6f6a486n29ai75jm2
26uvh3wxbrfggu9db
Log ID: 1000007870
Owner: Alex
Operator: Aliaksandr Shapel
Email: No Data

Status: In Process
Priority: 3: Medium

Category

Channel: Webchat
Line of Business: Banking
Category 1: Internet Banking
Category 2: Make Payment
Category 3:

Dates

Created On: 3/22/2020, 20:39:19
First Response By: 3/22/2020, 20:39:48
IRT Status: 0%
Due By: 3/22/2020, 21:04:18
MPT Status: 11%

Chat with your bank

Select the mobile operator:

MTS
A1
Life

By the way, your smart phone is already 2 years old, am I not mistaken? Our partner store currently has a special offer - the latest Huawei model with a 50% discount in 12 months installment, care to see?

Buy now

Ask Joi

Example of Targeted Marketing in Retail

Operator returns to take up the conversation again (optional)

SAP Hybrid Chats Operator Workplace

Conversations: All Confidence: Any My Status: Active Active Archived

Search

Alex 59%
Client: Yes! Sounds good. Thank you!...
Joi: The pleasure is all mine. ...
Operator: Aliaksandr Shap... 83%

How to make payment for phone plan?

Happy to meet you, Alex. JOI

Select the mobile operator:
<https://ideabank24.by/>
<https://ideabank24.by/>
<https://ideabank24.by/> JOI

Aliaksandr Shapel joined the conversation.

offer smartphone

Aliaksandr Shapel is assigned to the conversation

By the way, your smart phone is already 2 years old, am I not mistaken? Our partner store currently has a special offer - the latest Huawei model with a 50% discount in 12 months installment, care to see? <https://www.21vek.by/mobile/all/huawei/> JOI

Do you like our offer? JOI

Yes! Sounds good. Thank you!

The pleasure is all mine. JOI

Reply in Chat Message to AI Make Internal Note

Your message...

Details

General Information

Conversation ID: 85z8j6f6a486n29
ai75jm226uvh3wx
brfggu9db

Log ID: 1000007870

Owner: Alex

Operator: Aliaksandr Shapel

Email: No Data

Category 1: Internet Banking

First Response By: 3/22/2020, 20:39:48

IRT Status: 0%

STEP 1: Operator starts marketing scenario

STEP 3: User replies to Operator in the chat

STEP 2: Operator talks to User while AI Assistant is still active

STEP 4: AI assistant is back to the chat again and replies to User

Chat with your bank

By the way, your smart phone is already 2 years old, am I not mistaken? Our partner store currently has a special offer - the latest Huawei model with a 50% discount in 12 months installment, care to see?

[Buy now](#)

JOI Do you like our offer?

Yes! Sounds good. Thank you!

JOI The pleasure is all mine.

Ask Joi

Operator's Interactive Workplace

Operator leaves note in history of conversation (optional)

The screenshot displays the SAP Hybrid Chats Operator Workplace interface. The top navigation bar includes the SAP logo, the title 'Hybrid Chats Operator Workplace', and filters for 'Conversations: All' and 'Confidence: Any'. The 'My Status' dropdown is set to 'Active'. The main chat area shows a conversation with 'Alex' (17% confidence). The chat history includes messages from the client and the operator, Aliaksandr Shapel. A system message indicates that Aliaksandr Shapel joined the conversation. The operator offers a smartphone and provides a link to a special offer. The client responds with 'Yes! Sounds good. Thank you!'. The operator concludes with 'Happy to have helped.' and a 'JOI' icon. A yellow callout box points to the 'Make Internal Note' button in the bottom toolbar, which is labeled 'Note for internal use'. The bottom toolbar also includes 'Reply in Chat' and 'Message to AI' buttons. The bottom status bar shows the time '21:27:40' and the 'IRT Status' as '0%'.

Internal Notes can be used for various purposes, for example:

- To analyze marketing proposals made by a particular operator in order to sell the product, so that the operator could get remuneration commission
- To analyze messages concerning the AI skills correct triggering and processing or calls for their additional training
- Requests for additional skills creation

Operator can close the ticket and remove it from the board

User widget permits continuation of the dialogue

The screenshot displays the SAP Hybrid Chats Operator Workplace interface. The top navigation bar includes filters for 'Conversations: All' and 'Confidence: Any', along with 'My Status: Active' and buttons for 'Active' and 'Archived'. A search bar is located on the left. The main chat area shows a conversation with a client named Alex, with messages from the client and the operator, Aliaksandr Shapel. Three yellow callout boxes highlight specific interface elements: 'Button to forward the chat to another Operator' points to the 'Forward to' button; 'Button to pause AI Assistant and steer the course of the dialogue manually' points to the 'Assign to me' button; and 'Button to close the conversation (only for Operator)' points to the 'Close' button (represented by a checkmark icon). The right sidebar contains a 'Details' panel with sections for 'General Information', 'Category' (Channel: Webchat, Line of Business: Banking, Category 1: Internet Banking, Category 2: Make Payment), and 'Dates' (Created On: 3/22/2020, 21:59:02; First Response By: 3/22/2020, 21:59:31; IRT Status: 0%). At the bottom, there are buttons for 'Reply in Chat', 'Message to AI', and 'Make Internal Note', followed by a text input field for the operator's message.

The Operator can close the ticket which results in setting the status: “Proposed solution” and moving the conversation into history.

The dialogue remains open for the user who can continue their communication. That is exactly why the hybrid chats use dual numbering of the dialogues:

- Conversation ID
- Log ID

This allows dividing the user's conversations into several logically completed requests and being able to view the entire conversation.

Hybrid Chats

My Teams Fiori Application

The screenshot displays the 'Team Members' view in the SAP My Teams Fiori application. At the top, there is a navigation bar with the SAP logo and a dropdown menu currently set to 'Team Members'. Below this, the 'Teams View' section shows a list of team members. A dropdown menu is open, showing the following options: 'SAP ERP Support Team', 'Banking Support Team', 'SAP ERP Support Team' (highlighted), and 'Idea Bank Support Team'. A yellow callout box labeled 'Team selection' points to this dropdown. The list of team members includes the following details:

Name	Status	Email	Phone
Volha Krasavina	Offline	[redacted]	+4 [redacted]
Siarhei Tsikhanenka	Offline	[redacted]	+4 [redacted]
Tatsiana Skrypko	Offline	[redacted]	+37529 [redacted]
Tatiana Kojar	Active	[redacted]	[redacted]
Aliaksandr Shapel	Active	[redacted]@skybuffer.com	+375 [redacted]

A yellow callout box labeled 'Operator status' points to the status indicator (green dot) next to Aliaksandr Shapel's name.

My Teams application allows us to view groups of operators according to their SAP authorization to access this or that particular information.

“My Teams” allow seeing the status of the operator, the contact details, data on organizational structure.

Additionally, the functionality of My Teams can be enriched with the history of latest dialogues processed by the operator.

Regular Fallback Channel Disadvantages

Compared to Hybrid Chats in Support and Marketing Scenarios



Users will always forward conversation to Operators in case they know the utterance that triggers Fallback Channel integration



Operator is not able to return the conversation back to the digital assistant and he/she will have to keep wasting time even on the scenarios that are well automated in cognitive channels



Operator is not able to join any time, he/she only joins when Fallback Channel forwarding is activated either directly by the business user or by the fact of the digital assistant's constant failure.

AI Skills Testing Automation based on SAP Solution Manager

Extending the functionality of SAP Solution Manager to automate testing of smart assistant's skills using standard SAP Solution Manager Test Suite tools

The SkyBuffer logo features two hexagons, one blue and one green, each containing a white letter 'S' and 'B' respectively. Below the hexagons, the word 'SKYBUFFER' is written in a bold, black, sans-serif font.

Skybuffer Hybrid Chats Analysis

SAP Solution Manager Reports Examples for On-Premise Conversations Log

Number of Conversations

Week / Month / Year / Categorization

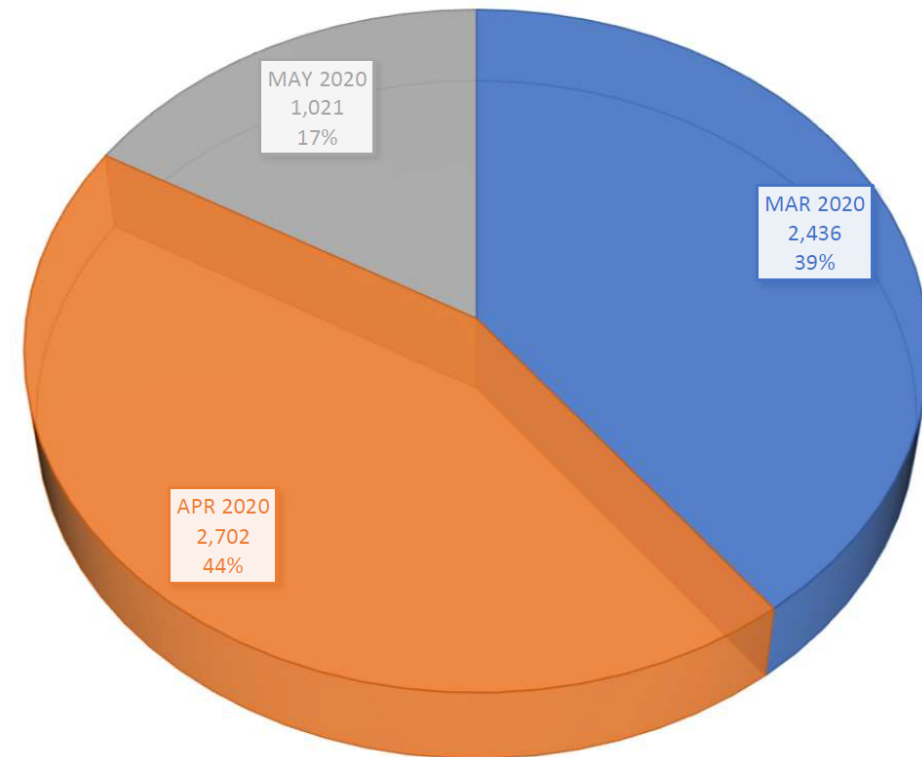
Number of Conversations

Data Source Name Incident - Current Cube
Last Data Update Tuesday, May 19, 2020 11:42:13 PM
Key Date Wednesday, May 20, 2020

Filters

Calendar Year/Week 21.2020
Category Level 1
Category Level 2
Category Level 3
Category Level 4
Reporter

Calendar Year/Month Key Figures	[+] ITSM Counter
[-] MAY 2020	172
[+] Accounting	3
[+] Banking	27
[+] Business Applications	6
[+] Cross-application Components	26
[+] Healthcare	1
[-] Material Management	13
[-] Purchasing	7
[-] Purchase Requisition	7
[+] Create Purchase Requisition	6
[+] Display list of Purchase Requisitions	1
[+] Service Entry Sheet	6
[+] Plant Maintenance	5
[+] Solution Manager	4
[+] Time Management	10
[+] Not assigned	77



Conversations Processed by Operator

Week / Month / Year / Categorization

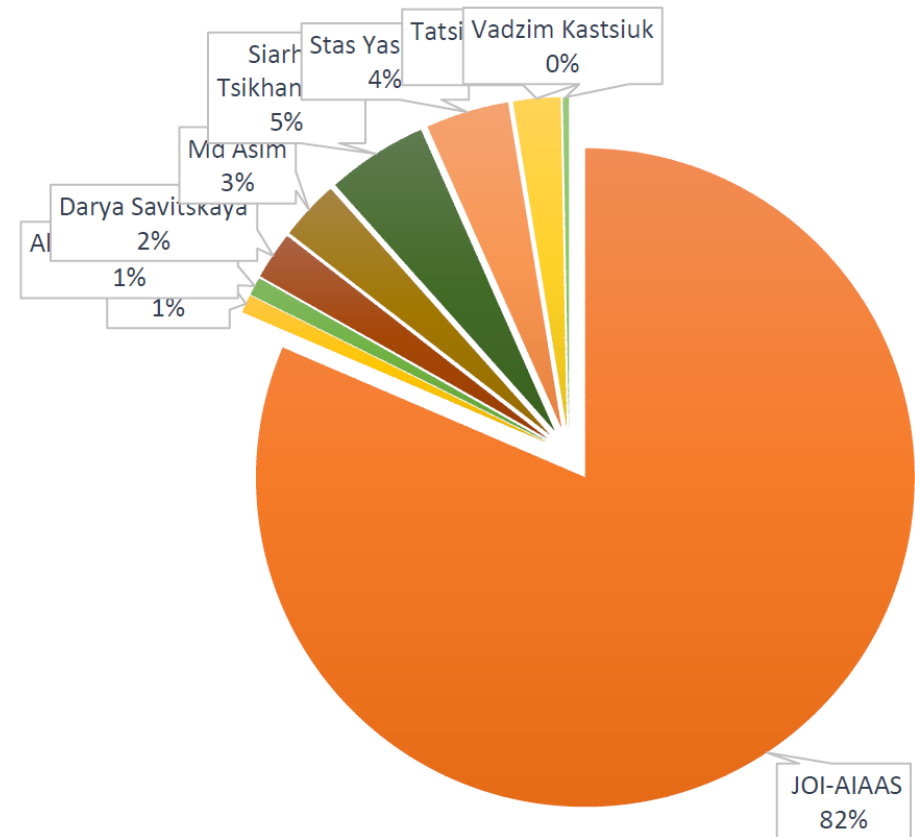
Conversations Processed by Operator

Data Source Name Incident - Current Cube
Last Data Update Thursday, May 21, 2020 10:48:13 PM
Key Date Thursday, May 21, 2020

Filters

Calendar Year/Week 21.2020
Category Level 1
Category Level 2
Category Level 3
Category Level 4
Reporter

Processor	ITSM Counter
JOI-AIAAS	281
Alexandr Basyukov	3
Aliaksandr Shapel	3
Darya Savitskaya	8
Md Asim	10
Siarhei Tsikhanenka	17
Stas Yasnitski	14
Tatsiana Skrypko	8
Vadzim Kastsiuk	1
Overall Result	345



Conversations Categorization

User Management. Drill Down Analysis

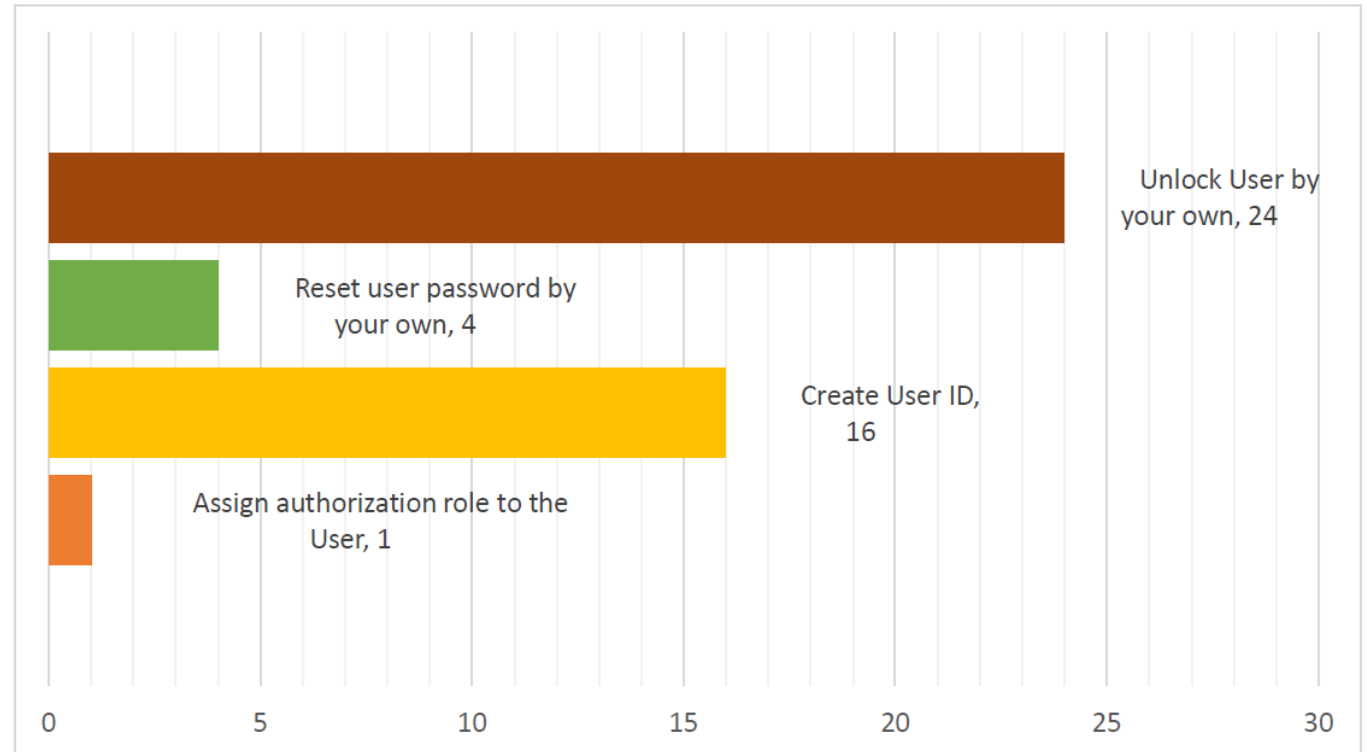
Conversations Categorization Drill Down Analysis

Data Source Name Incident - Current Cube
Last Data Update Thursday, May 21, 2020 10:48:13 PM
Key Date Thursday, May 21, 2020

Filters

Calendar Year/Month MAY 2020
Category Level 1
Category Level 2 User Management
Category Level 3
Category Level 4
Reporter

Category Level 1 Key Figures	ITSM Counter
[-] Cross-application Components	45
[-] User Management	45
Assign authorization role to the User	1
Create User ID	16
Reset user password by your own	4
Unlock User by your own	24



Conversations by Priority

Month / Year / Category / Priority

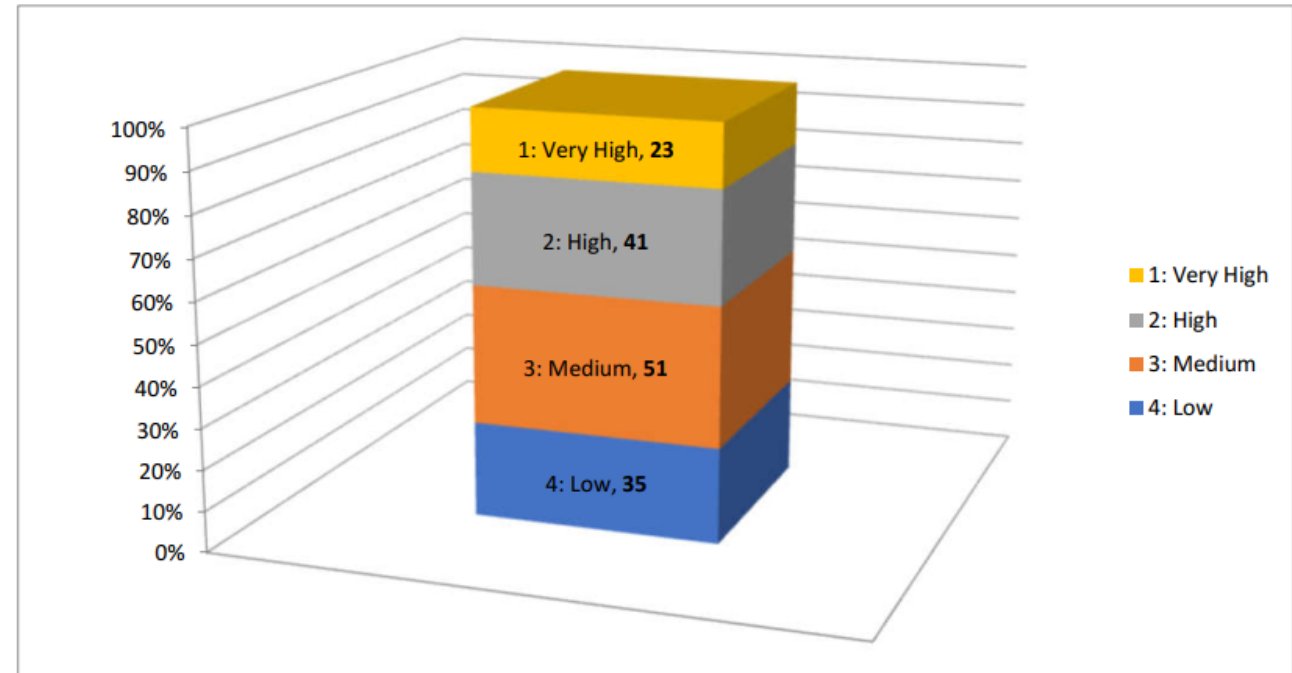
Conversations Priority Analysis

Data Source Name Incident - Current Cube
Last Data Update Thursday, May 21, 2020 5:58:11 PM
Key Date Friday, May 22, 2020

Filters

Calendar Year/Month MAY 2020
Category Level 1
Category Level 2 User Management
Category Level 3
Category Level 4

Priority	ITSM Counter
4: Low	35
3: Medium	51
2: High	41
1: Very High	23
Overall Result	150



Conversations by Channel

Month / Year / Category / Channel

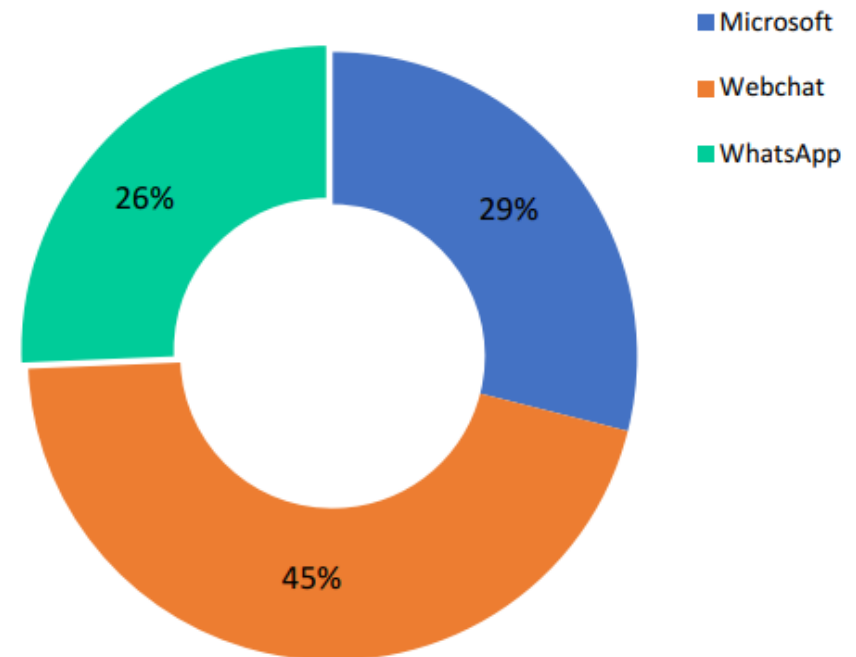
Conversations Channel Analysis

Data Source Name Incident - Current Cube
Last Data Update Tuesday, May 26, 2020 8:47:32 AM
Key Date Wednesday, May 27, 2020

Filters

Calendar Year/Month MAY 2020
Category Level 1
Category Level 2 User Management
Category Level 3

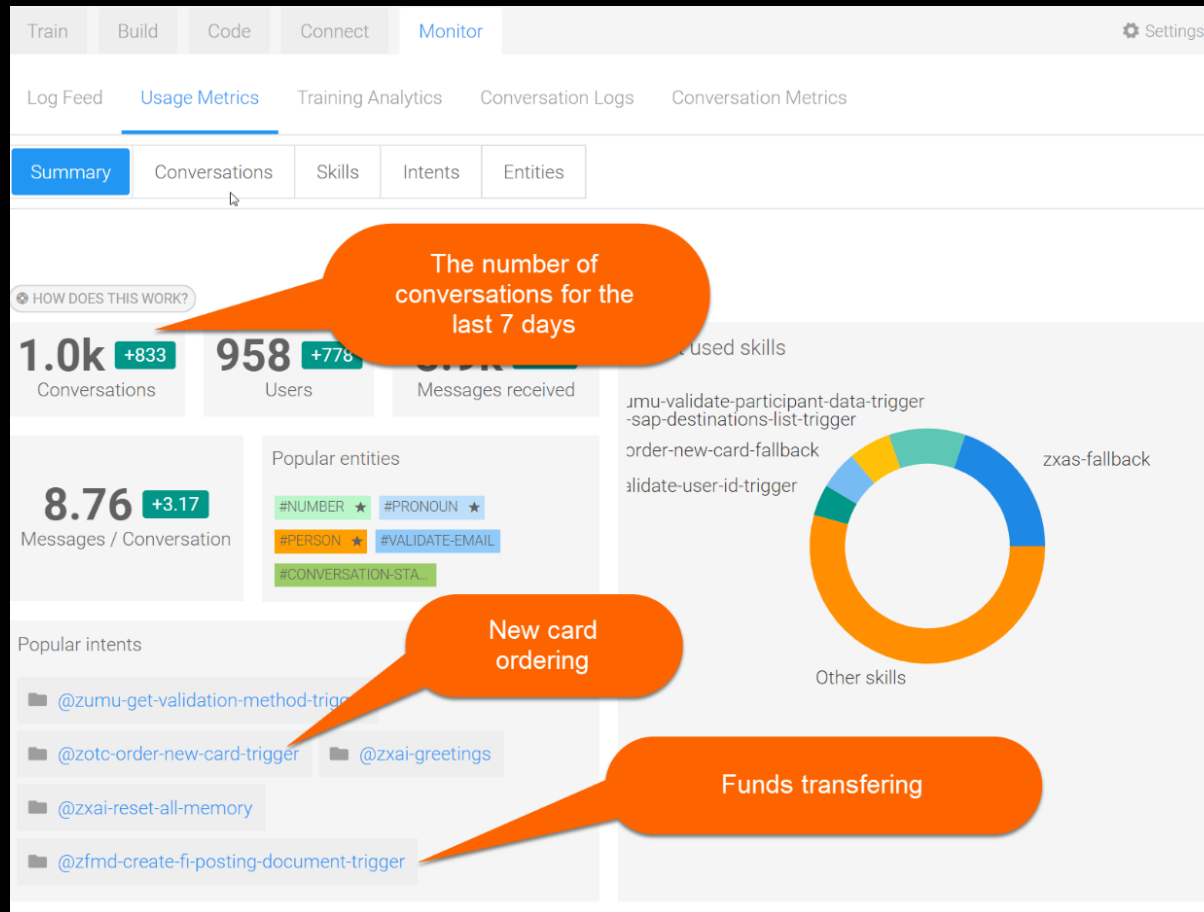
Channel	ITSM Counter
Microsoft	44
Webchat	69
WhatsApp	39
Overall Result	152



Conversational AI Performance Analysis

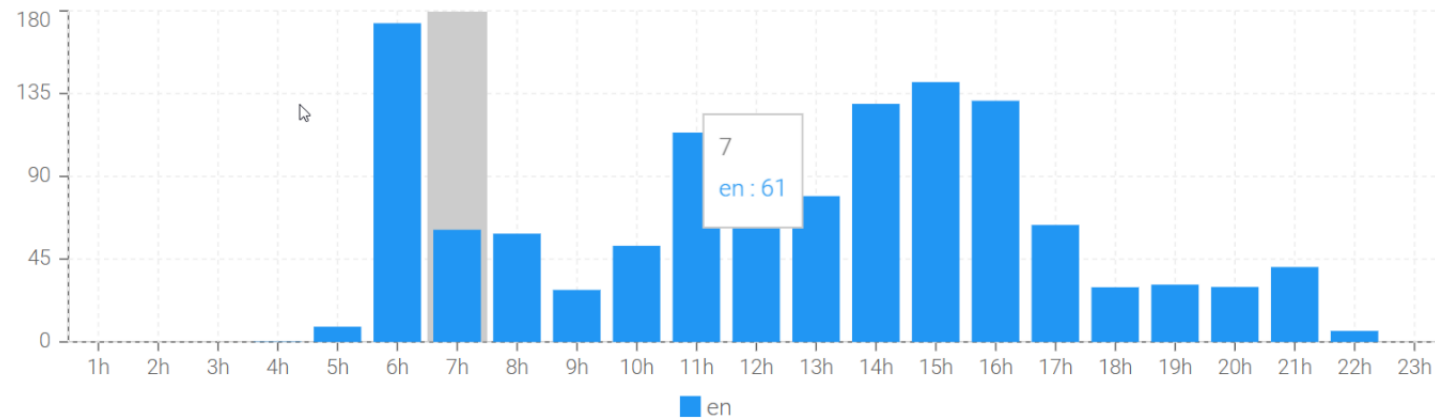
Built-in Standard SAP Conversational AI Reports

Analysis of Requests and Most Frequent Skills Triggered

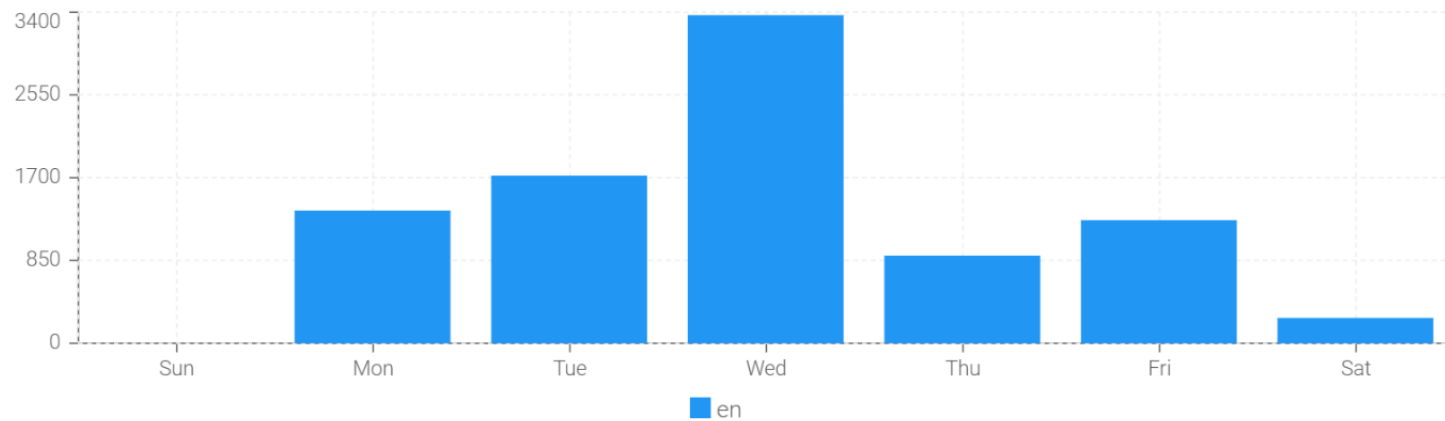


Analysis of Requests by Time and Day of the Week

Your typical day



Your typical week



Intelligent Decision Dimensions Architecture

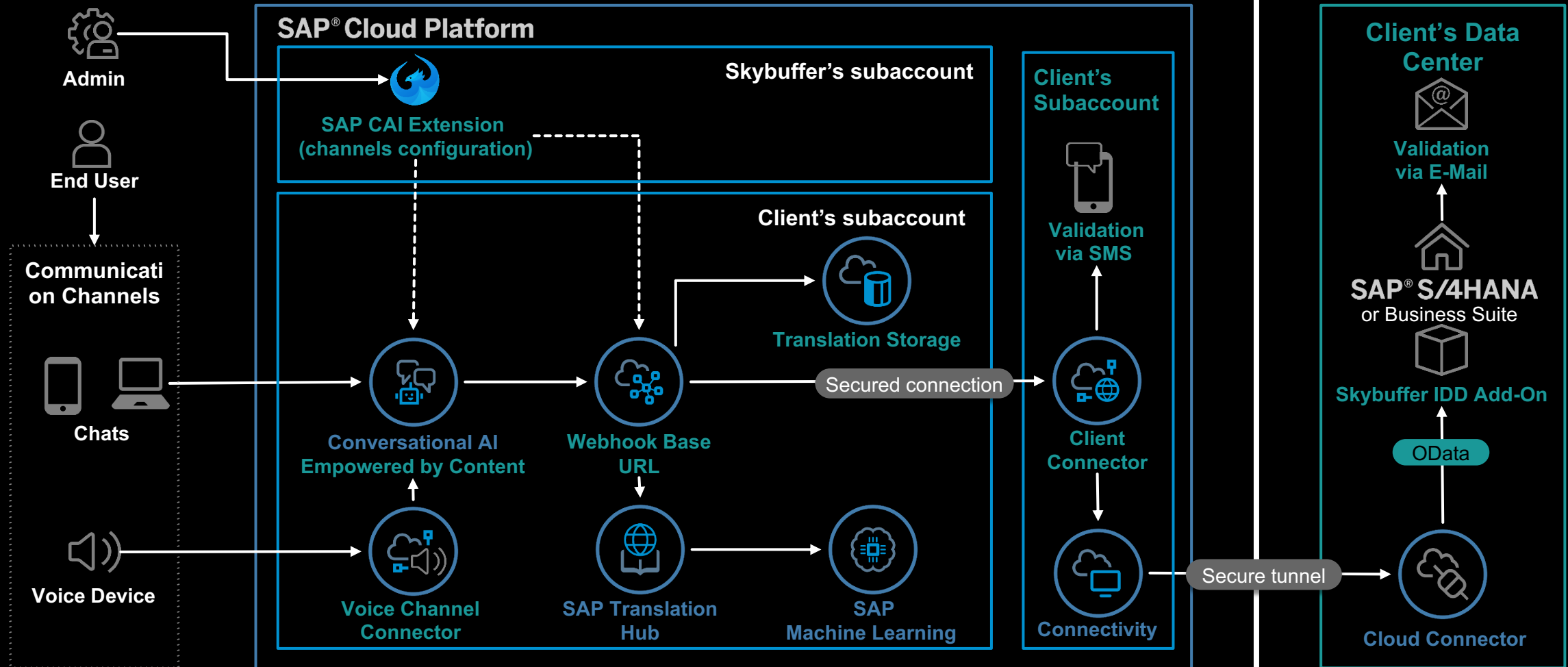
The solution is installable into SAP On Premise system as an add-on and is plugged into SAP Cloud Foundry via SAP Cloud Connector using OData protocol

Intelligent Decision Dimensions

Solution Diagram – Deployment with SAP Cloud Connector

INTERNET

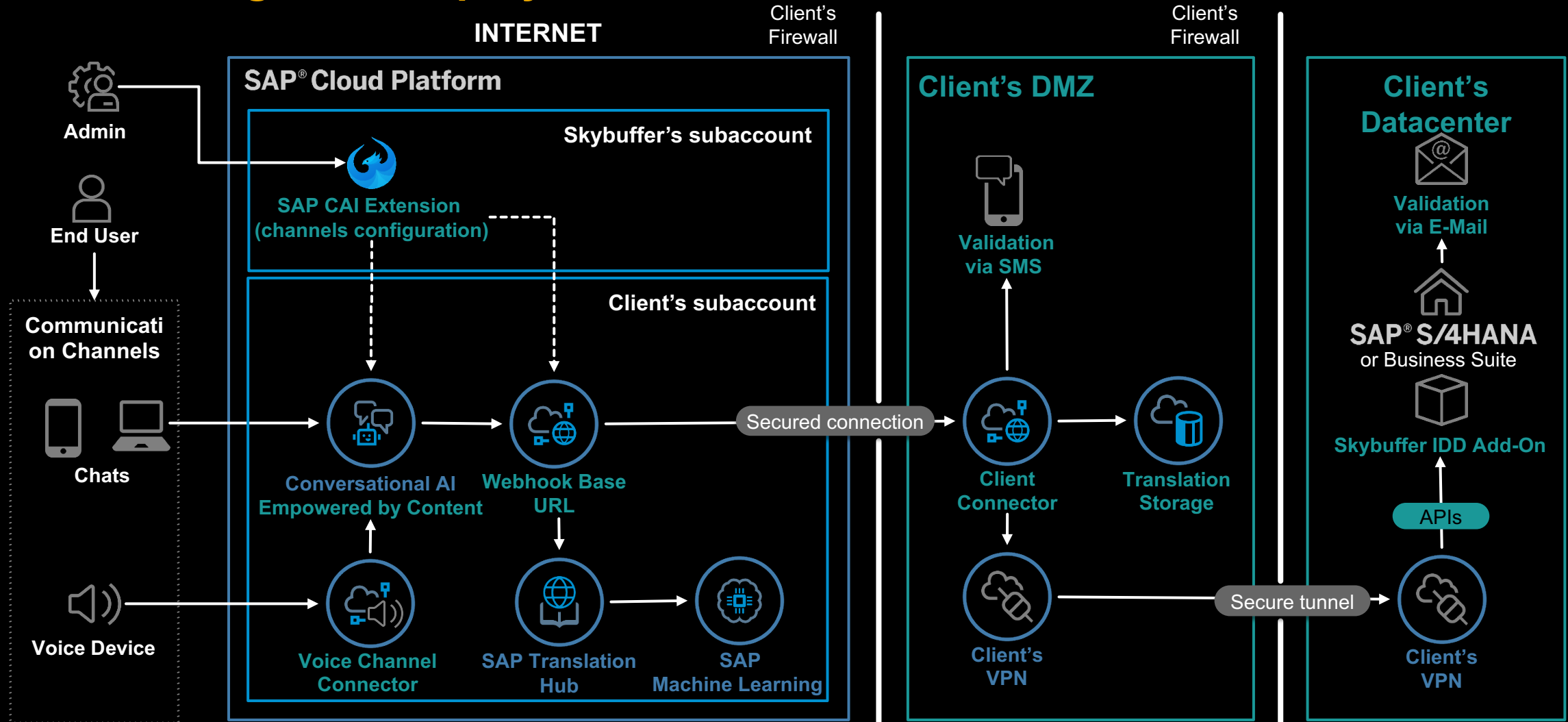
Client's
Firewall



Skybuffer solution-related development is highlighted with this color

Intelligent Decision Dimensions

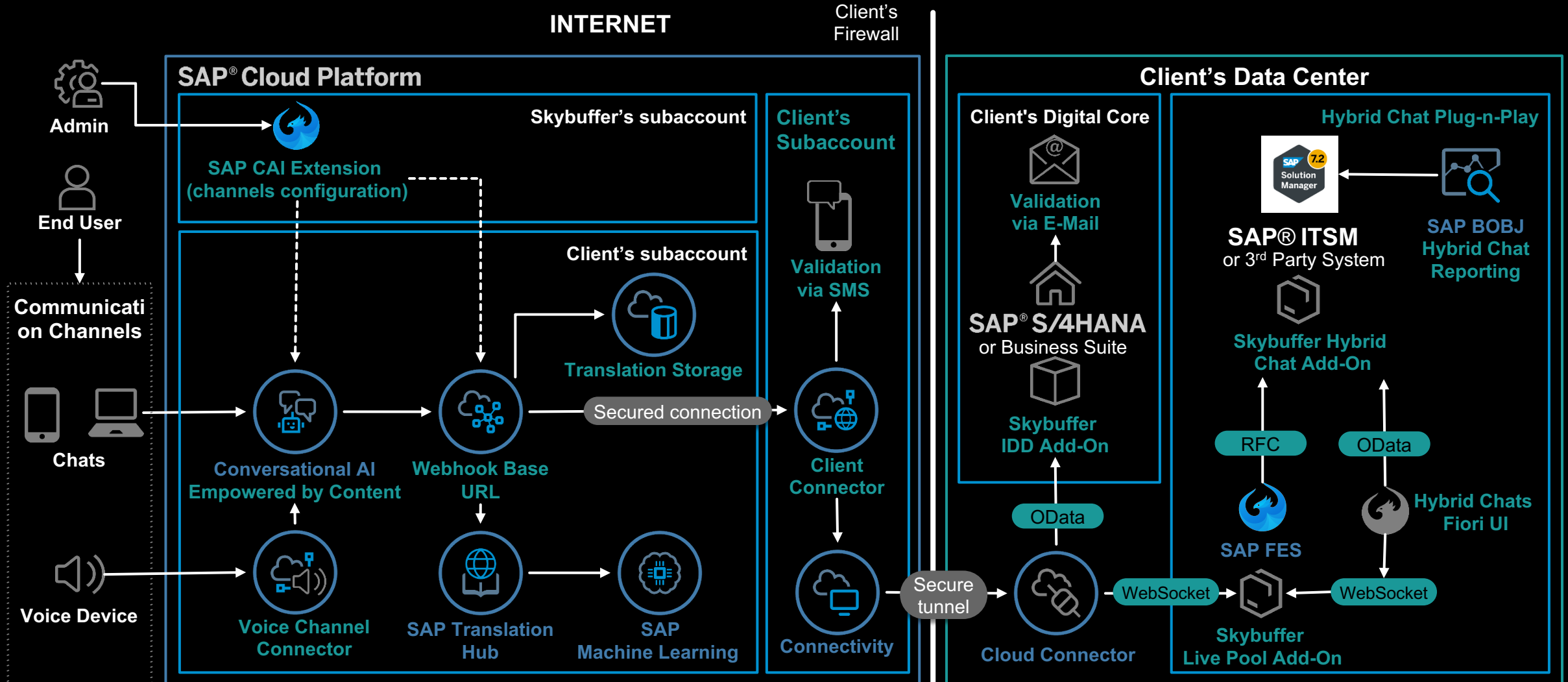
Solution Diagram – Deployment with Client's VPN



Skybuffer solution related development is highlighted with this color

Intelligent Decision Dimensions

Solution Diagram – Deployment with SAP Cloud Connector and Hybrid Chats



Intelligent Decision Dimensions

SAP Qualified Partner Packaged Solution Pricing Options

Intelligent Decision Dimensions

Price Options (EUR). Packages Details



EASY CHATS	TELL ME MORE	OVER AND ABOVE
2 500 EUR / month	5 000 EUR / month	8 500 EUR / month
Conversational AI AI Foundation Kit (SDK) Unlimited number of business scenarios for AI from one line of business* or up to 15 full business scenarios without integration** Medium AI skills development priority	Conversational AI AI Foundation Kit (SDK) Up to 30 business scenarios for AI from different lines of business* or up to 30 full business scenarios without integration** High AI skills development priority	Conversational AI AI Foundation Kit (SDK) Unlimited number of business scenarios for AI from different lines of business Integration to unlimited number of systems** Urgent AI skills development priority
Unlimited use of SAP workflow management (reconciliation) functionality via email Unified inbound email processor ABAP rapid implementation kit Prototyping assistance Implementation assistance		
Implementation within 5* to 45** days		

* if SAP systems are used as backend, ** if systems of other vendors are used as backend

Recommended SAP products usage volume per month (based on Skybuffer's experience)		
1 000 EUR / month (3 000 chat sessions, 100 000 symbols, 1GB RAM) ***	3 300 EUR / month (10 000 chat sessions, 300 000 symbols, 3GB RAM) ***	6 200 EUR / month (20 000 chat sessions, 1 000 000 symbols, 10GB RAM) ***

*** 8006013 SAP Conversational AI (300 EUR / month for each 1 000 chat sessions), 8005694 SAP Translation Hub (39 EUR for 100 000 symbols), 8005365 SAP Cloud Platform application runtime (61 EUR for 1GB)

Intelligent Decision Dimensions

Price Options (USD). Packages Details



EASY CHATS	TELL ME MORE	OVER AND ABOVE
2 700 \$ / month	5 500 \$ / month	9 400 \$ / month
Conversational AI AI Foundation Kit (SDK) Unlimited number of business scenarios for AI from one line of business* or up to 15 full business scenarios without integration** Medium AI skills development priority	Conversational AI AI Foundation Kit (SDK) Up to 30 business scenarios for AI from different lines of business* or up to 30 full business scenarios without integration** High AI skills development priority	Conversational AI AI Foundation Kit (SDK) Unlimited number of business scenarios for AI from different lines of business Integration to unlimited number of systems** Urgent AI skills development priority
Unlimited use of SAP workflow management (reconciliation) functionality via email Unified inbound email processor ABAP rapid implementation kit Prototyping assistance Implementation assistance		
Implementation within 5* to 45** days		
Recommended SAP products usage volume per month (based on Skybuffer's experience)		
1 100 \$ / month (3 000 chat sessions, 100 000 symbols, 1GB RAM) ***	3 630 \$ / month (10 000 chat sessions, 300 000 symbols, 3GB RAM) ***	6 820 \$ / month (20 000 chat sessions, 1 000 000 symbols, 10GB RAM) ***

* if SAP systems are used as backend, ** if systems of other vendors are used as backend

*** 8006013 SAP Conversational AI (330 USD / month for each 1 000 chat sessions), 8005694 SAP Translation Hub (43 USD for 100 000 symbols), 8005365 SAP Cloud Platform application runtime (67 USD for 1GB)

Intelligent Decision Dimensions

SAP-Embedded AI Content Developed on SAP Conversational AI Platform



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