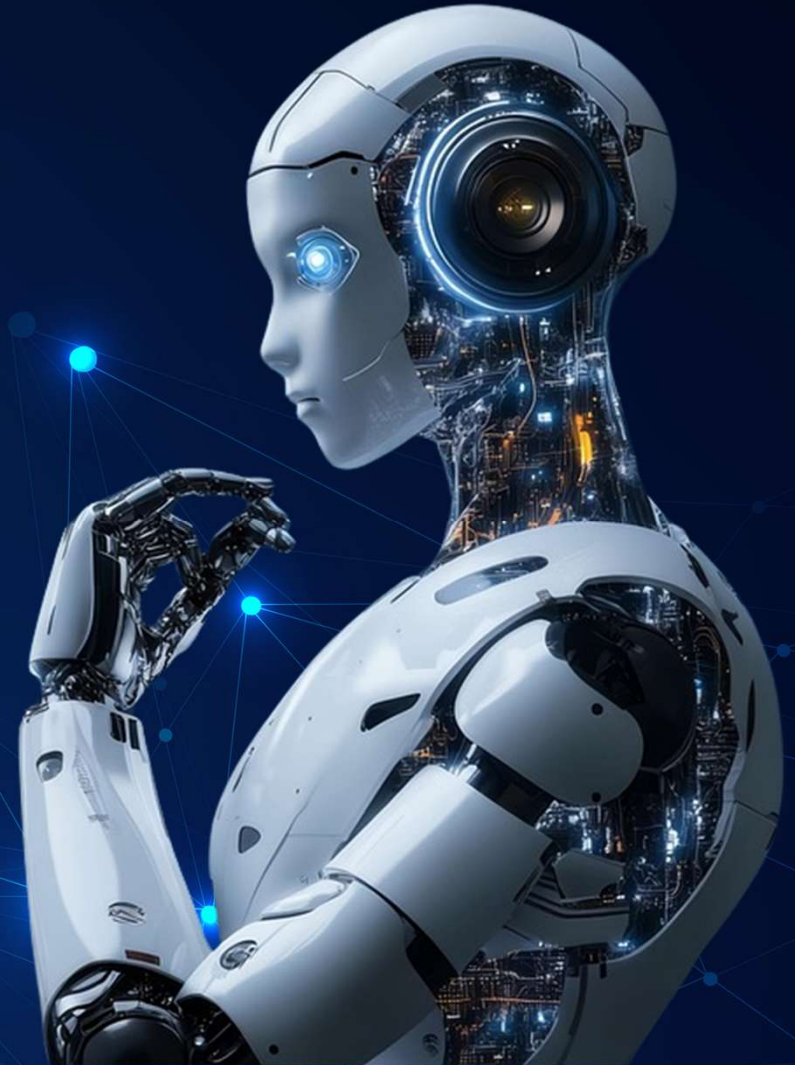


SAP Sales Order Automation with AI Agent

AI Design & Software developer: Haluk Üçkurt
Technical Admin: Samet Balcı
Functional Admin: Selin Rümeysa Kaya
Prompt & Instruction Engineer: Selin Rümeysa Kaya

Mart 2026



What is an AI Agent?

It is an automated application that analyzes customer emails and creates sales orders in the SAP system by extracting the relevant order information. The agent reads incoming customer emails to identify order details, including material numbers, quantities, customer information, and all other necessary data from the email content.

The system then performs a series of checks, such as stock availability, blocked materials, or data inconsistencies. If the information passes these validations, the sales order is automatically created in SAP.

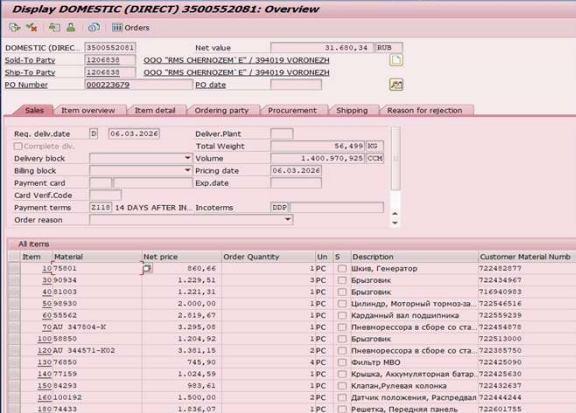
Once the order is generated, the agent prepares an order confirmation and sends it to the customer via email.

This eliminates the need for manual order entry.

The agent is configured to operate with zero-error tolerance.

3	4	5
Номер	Описание	Количество
75801	75801 AUGER Шкив, Генератор	1
112390	112390 AUGER Удлинение заднего крыла TGA/TGX/TGS / (684x310)	2
90934	90934 AUGER Брызговик	3
81003	81003 AUGER Брызговик	1
98930	98930 AUGER Цилиндр, Моторный тормоз-замедлитель	1
55562	55562 AUGER Карданный вал подшипника	1
AU347804K	AU347804K AUGER Пневморессора в сборе со стальным стак	1
73320	73320 AUGER AUG73320_ стакан топливного фильтра!	4
67154	67154 AUGER Брызговик	5
58850	58850 AUGER крыло заднее задняя часть МВ левое /правое	1
74563	74563 AUGER Брызговик	3
AU344571K02	AU344571K02 AUGER Пневморессора в сборе со стальным стак	2
76850	76850 AUGER Фильтр пневматической системы	4
77159	77159 AUGER Крышка, Аккумуляторная батарея	1
84293	84293 AUGER 84293_ клапан рулевой колонки	1
100192	100192 AUGER Датчик положения, Распределвал	2
AU346754K02	AU346754K02 AUGER пневмоамортизатор	1
74433	74433 AUGER Решетка радиатора MB Sprinter 03	1

The Excel file provided by the customer

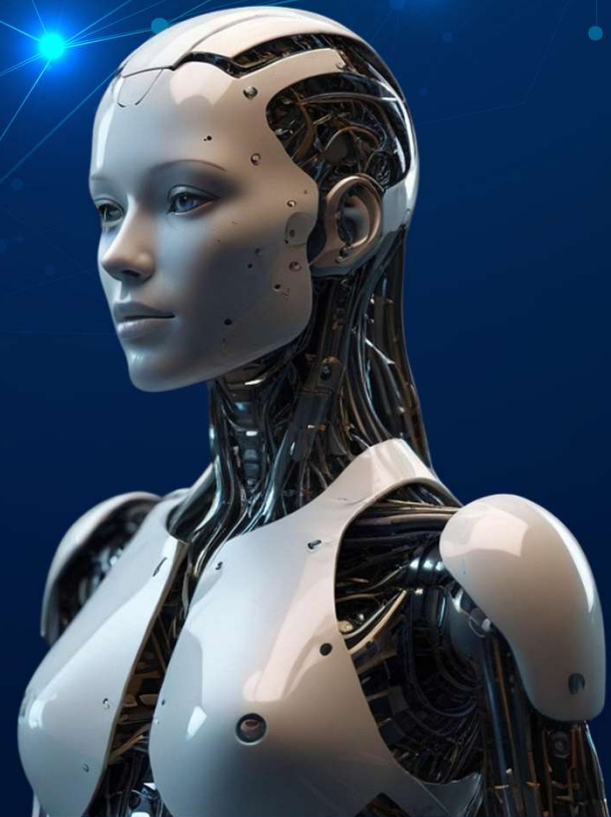


Item	Material	Net price	Order Quantity	Un	S	Description	Customer Material Num
10	75801	860,44	1	3PC		Шкив, Генератор	722442877
20	90934	1.229,31	3	3PC		Брызговик	722443467
30	81003	1.221,31	1	3PC		Брызговик	716940993
40	98930	2.000,00	1	3PC		Цилиндр, Моторный тормоз-за	722546516
50	55562	2.619,47	1	3PC		Карданный вал подшипника	722559239
60	247504-K	3.295,00	1	3PC		Пневморессора в сборе со ста	722454979
70	58850	1.204,92	1	3PC		Брызговик	722513000
80	AU 344571-K02	3.361,15	2	3PC		Пневморессора в сборе со ста	722395760
90	76850	749,90	4	3PC		Фильтр МВ	722426090
100	77159	1.024,59	1	3PC		Крышка, Аккумуляторная бат	722425630
110	84293	993,42	1	3PC		Клапан, Рулевая колонка	722432637
120	100192	1.500,00	2	3PC		Датчик положения, Распредел	722444244
130	74433	1.934,07	1	3PC		Решетка, Передняя панель	722601795

The sales order created in the SAP system

AI Agent Workflow

- 01 Reads incoming customer emails
- 02 Identifies order information
- 03 Automatically creates a sales order in SAP using this information
- 04 Eliminates manual tasks and accelerates the process





Process Flow

1. Müşteri sipariş
maili gönderir

1.The AI Agent reads the
email

1.After the order is
created, an order
confirmation email is
sent to the customer.

1.Identifies the order
details

1.For selected customers,
the agent automatically
creates the delivery
immediately after the
order is generated.

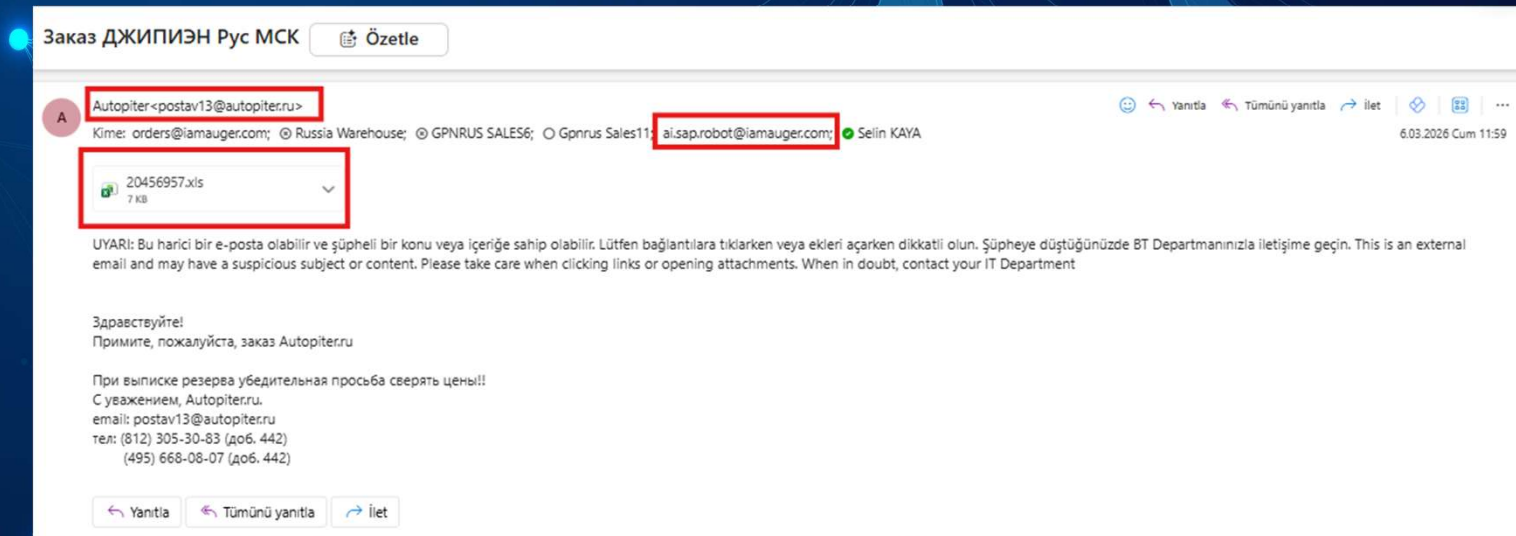
1.A secondary agent
verifies the order data
extracted from the
email content

1.The sales order is
created in the SAP
system

1.System checks are
performed

How It Works

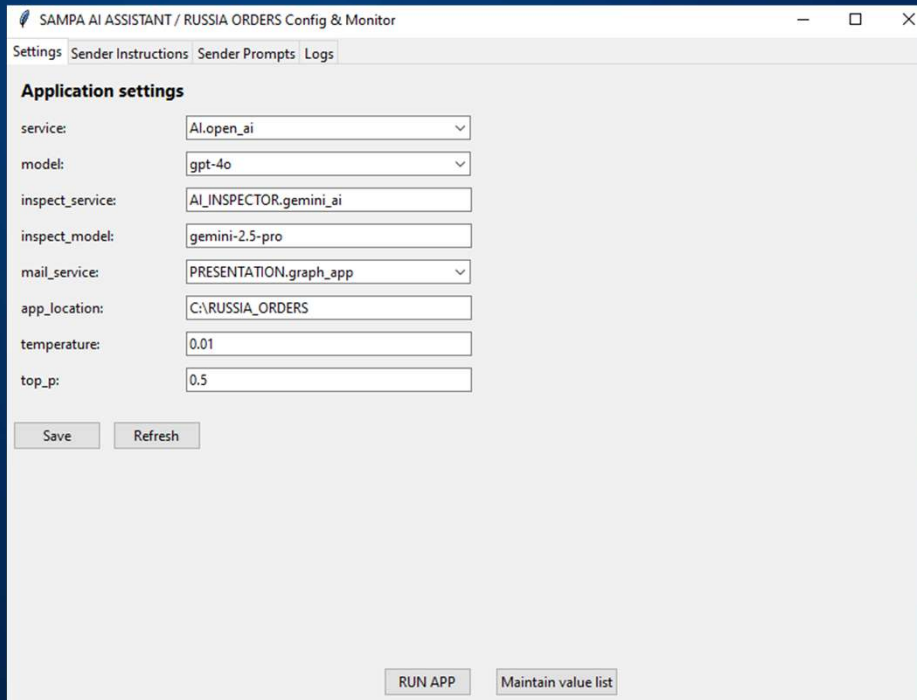
Emails from approximately 100 different customers are sent to ai.sap.robot@iamauger.com to be processed by the AI system.



There is **no predefined format** for the order content or attachments in these emails. Each customer sends their orders using their own **email structure and Excel format**.

Despite these variations, the AI Agent analyzes the email content and attachments, extracts the relevant order information, and prepares the data for processing in the SAP system.

ADMIN PANEL



The screenshot shows a web-based configuration interface for the 'SAMPA AI ASSISTANT / RUSSIA ORDERS Config & Monitor'. The interface has a top navigation bar with tabs for 'Settings', 'Sender Instructions', 'Sender Prompts', and 'Logs'. The 'Settings' tab is active, displaying 'Application settings'. The settings are organized into several rows, each with a label and a corresponding input field or dropdown menu. The settings include: 'service' (dropdown menu with 'AI.open_ai' selected), 'model' (dropdown menu with 'gpt-4o' selected), 'inspect_service' (text input with 'AI_INSPECTOR.gemini_ai'), 'inspect_model' (text input with 'gemini-2.5-pro'), 'mail_service' (dropdown menu with 'PRESENTATION.graph_app' selected), 'app_location' (text input with 'C:\RUSSIA_ORDERS'), 'temperature' (text input with '0.01'), and 'top_p' (text input with '0.5'). At the bottom left of the settings area are two buttons: 'Save' and 'Refresh'. At the bottom right of the window are two buttons: 'RUN APP' and 'Maintain value list'.

Setting	Value
service:	AI.open_ai
model:	gpt-4o
inspect_service:	AI_INSPECTOR.gemini_ai
inspect_model:	gemini-2.5-pro
mail_service:	PRESENTATION.graph_app
app_location:	C:\RUSSIA_ORDERS
temperature:	0.01
top_p:	0.5

This screen is the main configuration panel where the core settings that define how the AI agent operates are managed. The background rules of the AI agent platform are defined here. The agent reads customer emails, analyzes the content, creates sales orders and deliveries in SAP, and then sends an order confirmation email to the customer.

Service

The AI service provider to which the operator AI Agent is connected. Any preferred AI provider can be selected here, such as OpenAI, Gemini, Claude, or a local model.

Model

The main AI model that analyzes customer emails and extracts the order information. Any model with the desired capabilities from the selected AI provider can be used.

Inspect Service (AI_INSPECTOR.gemini_ai)

A secondary AI service that reviews and validates the results of the initial analysis.

Inspect Model (gemini-2.5-pro)

Any model with the required capabilities from the selected Inspector AI provider can be used.

Mail Service (PRESENTATION.graph_app)

The mail service used by the agent to read incoming customer emails.

App Location (C:\RUSSIA_ORDERS)

The directory where the application's configuration and log files are stored.

Temperature (0.01)

Controls the consistency of the AI responses, enabling the model to produce more deterministic and less speculative outputs.

Top_p (0.5)

Regulates probability sampling during response generation, helping produce more balanced and controlled outputs.

Different Options for the Selected Service and Model

Service

The AI service provider to which the Operator or Inspector AI agent is connected.

Any preferred AI provider can be selected here, such as **OpenAI**, **Gemini**, **Claude**, or a **local model**. If needed, additional providers such as **Groq**, **Mistral**, or **Cohere** can also be integrated.

- **OPENAI**
- **GEMINI**
- **CLAUDE**
- **LOKAL MODEL**

Model

The main AI model that analyzes customer emails and extracts order information.

Any model with the desired capabilities from the selected AI provider can be used. The currently used models are listed below.

GPT-4O

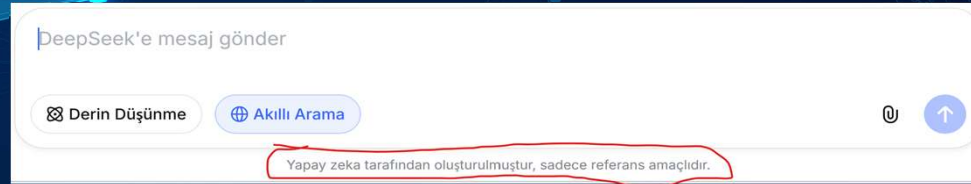
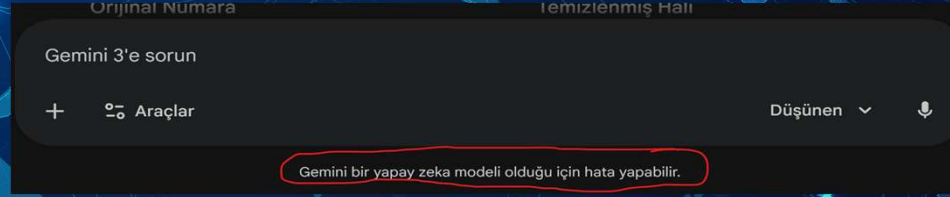
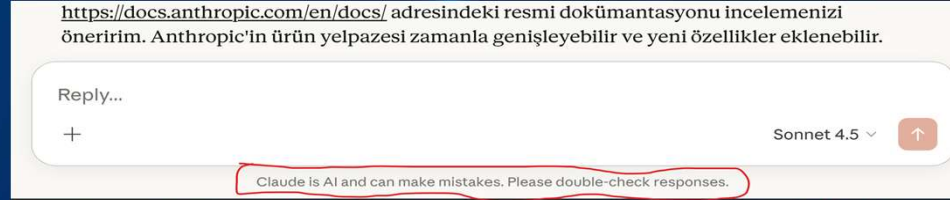
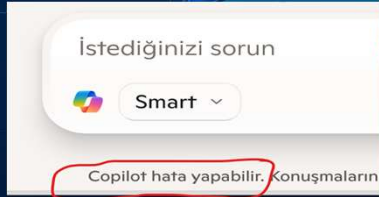
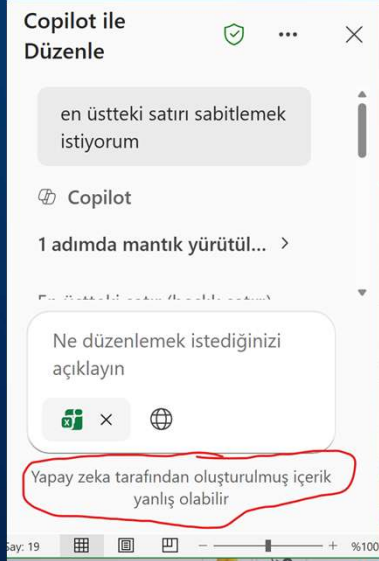
GEMINI-2.5-PRO

CLAUDE-OPUS-4-5

CLAUDE-SONNET-4-5

GPT-OSS-20B

WHY ARE TWO DIFFERENT AI AGENTS WORKING FOR ONE ORDER AND WHY ARE THERE SO MANY SMART CONTROL MECHANISMS?



(The areas outlined in red indicate AI alerts, signaling that there is a possibility of errors.)

To ensure that the process operates accurately and efficiently, specific configurations and custom settings have been implemented within the AI system.



Temperature:

Determines whether the model behaves creatively or deterministically. Higher values make the model more creative, but also increase the risk of inaccuracies, as it may start “filling in the gaps” with fabricated information. For this reason, a value close to zero, such as **0.01**, is used. The goal is to achieve **maximum consistency and minimal creativity**.



Top P:

Determines how narrowly the model’s probability pool is restricted. If set too low, the model behaves overly rigidly and may attempt to “fill in” missing intentions or information. To interpret email and Excel content in a way that closely resembles human understanding, the model was not overly constrained. For this reason, a value of **0.5** was chosen, providing a structure that is both **controlled and sufficiently flexible**.



Inspect_service ve Inspect_model:

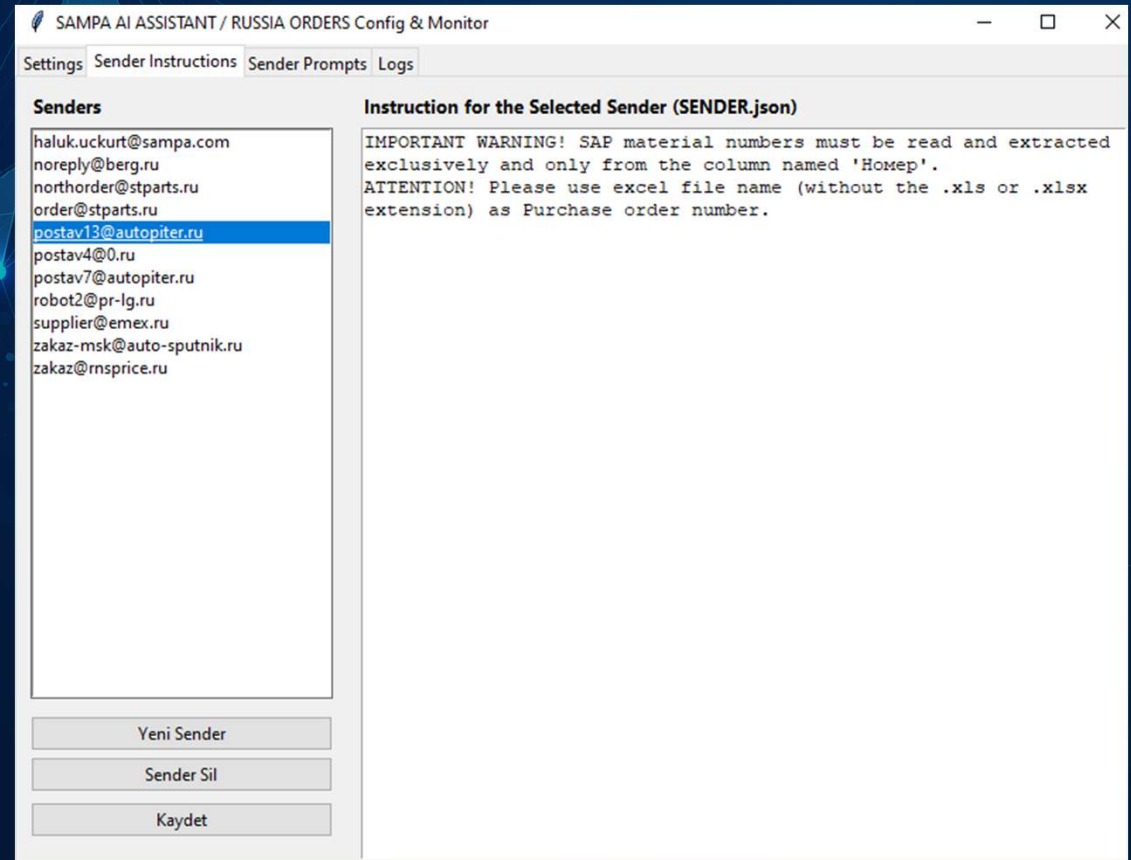
The Inspector model verifies the relevant data extracted by the Operator model from each email for creating sales orders in SAP. If there is a discrepancy between the data identified by the two models, the process is halted, and the workflow for that specific email is restarted. If the two models cannot reconcile the data after three attempts, the transaction is logged, and the email is not processed. (This scenario has not occurred in tests or in the live environment.) The email is neither marked as an error nor set to “read”; it remains in the inbox for review. This approach prevents incorrect orders and establishes a **two-layered control mechanism**, ensuring higher accuracy and reliability in the process.

instruction enrichment

The Sender Instructions screen, is where the guidelines for how the AI agent analyzes customer emails are defined.

On the left side, only the email addresses of selected customers who send orders are listed. For a customer chosen from the list, AI-specific reading and analysis rules can be defined on the right side if a requirement arises.

These instructions guide the AI agent in cases where it cannot correctly interpret the email content or attached Excel files, converting the order information into a format suitable for the system. Additionally, special directives—such as order numbers or data extraction rules—can be set here if needed. This ensures that orders from different customers, each with potentially unique formats, are processed accurately and consistently by the AI agent.



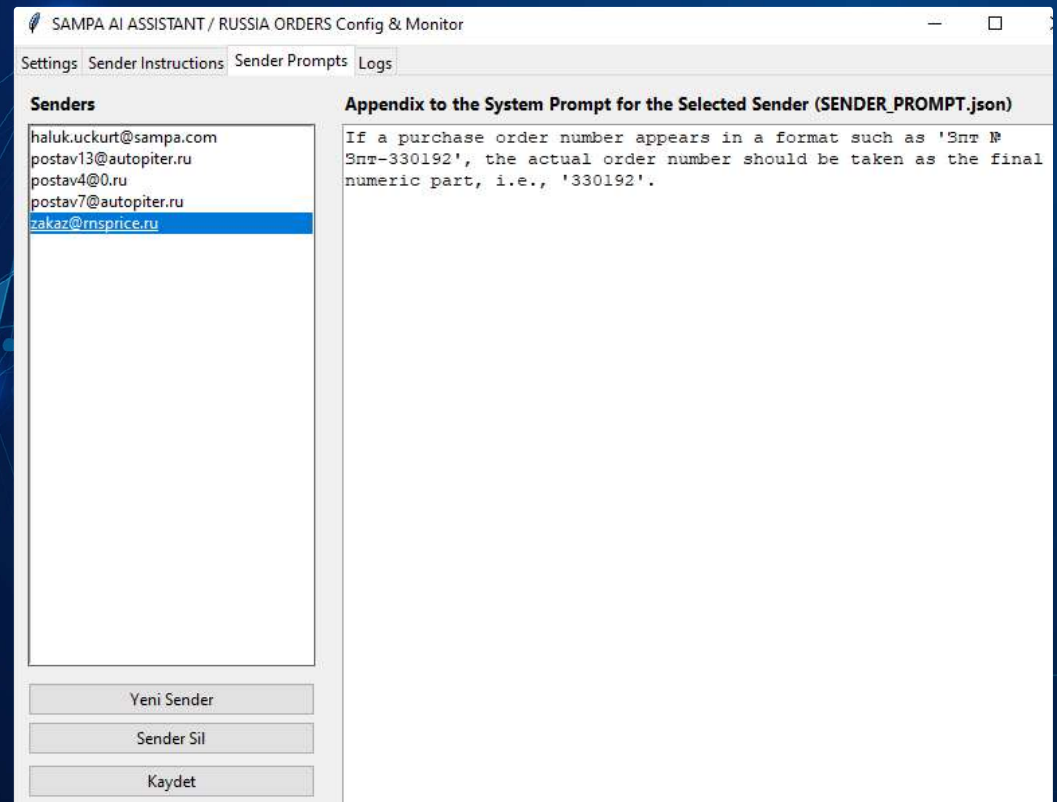
prompt injection

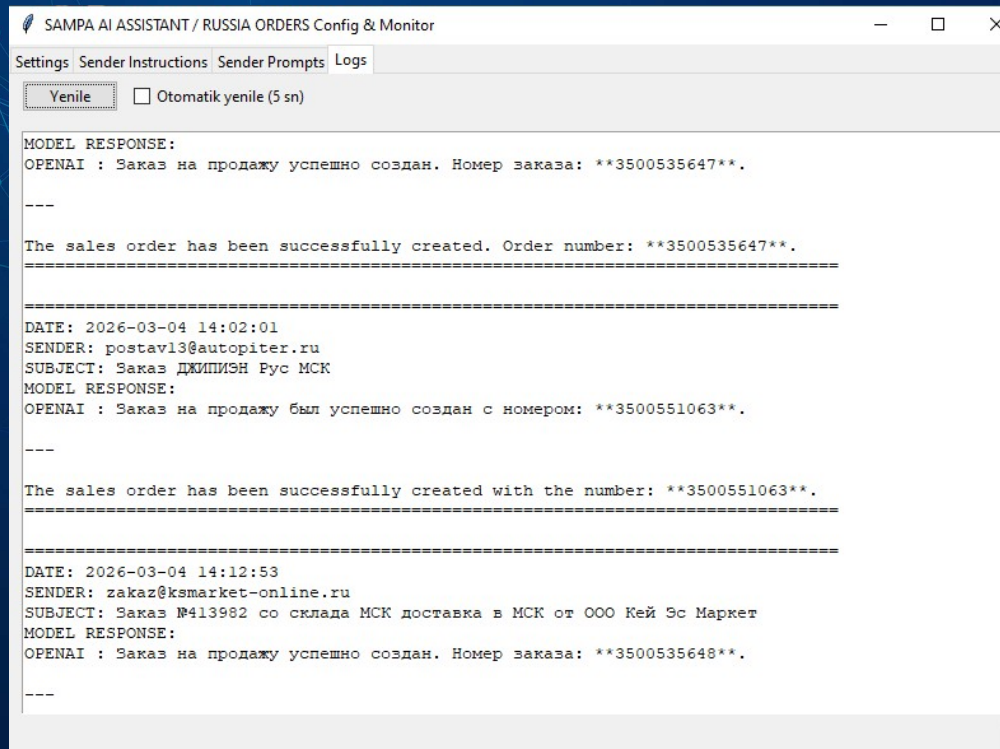
The Sender Prompts screen,

Notes and guidance specific to each sender's emails can be added here.

Additional instructions can be provided, particularly to ensure that order numbers sent in different formats are correctly recognized.

This allows the AI agent to process orders from different customers **more accurately and consistently**, regardless of the format variations.





Logs Screen,

This screen contains the logged messages generated by the AI agent after processing incoming emails and converting them into automated sales orders. It serves as a monitoring panel that can be used by the admin when necessary to track the process.

The Logs screen provides a professional oversight of the AI's operational activities, including which email generated which sales order, any errors or issues encountered when an order was not created, and the overall stability of the system.

A	B	C	D	E	F
Customer email	Confirmation email	TEST	Confirmation rule	Parameter	KDMAT_COLUMN
postav13@autopiter.ru	postav4@autopiter.ru, postav13@autopiter.ru, gpnrus.sales11@iamauger.com, selin.kaya@sampa.com		reject_column	Кол-во в отказ	НЕ УДАЛЯТЬ!
postav7@autopiter.ru	postav7@autopiter.ru, gpnrus.sales11@iamauger.com, selin.kaya@sampa.com		reject_column	Кол-во в отказ	НЕ УДАЛЯТЬ!
postav4@0.ru	postav4@autopiter.ru, gpnrus.sales11@iamauger.com, selin.kaya@sampa.com		reject_column	Кол-во в отказ	НЕ УДАЛЯТЬ!
noreply@berg.ru	confirm@berg.ru, gpnrus.sales11@iamauger.com, selin.kaya@sampa.com				
zakaz@rnsprice.ru	zakaz@rnsprice.ru, gpnrus.sales11@iamauger.com, selin.kaya@sampa.com		to_column	Кол-во подтверждено	
order@stparts.ru	order@stparts.ru, gpnrus.sales11@iamauger.com, northorder@stparts.ru, gpnrus.sales6@iamauger.com, selin.kaya@sampa.com		to_column	Фактическая_отгрузка	Внутренний_id_позиции
northorder@stparts.ru	order@stparts.ru, gpnrus.sales11@iamauger.com, northorder@stparts.ru, gpnrus.sales6@iamauger.com, selin.kaya@sampa.com		to_column	Фактическая_отгрузка	Внутренний_id_позиции
office@autostels.ru	office@autostels.ru, gpnrus.sales11@iamauger.com, selin.kaya@sampa.com				Ссылка
haluk.uckurt@sampa.com	haluk.uckurt@sampa.com	TEST			Ссылка
cross@favorit-parts.ru	gpnrus.sales1@iamauger.com	TEST			
Adts_zakaz@etsp.ru	gpnrus.sales1@iamauger.com	TEST			Идентификатор
zakaz@ksmarket-online.ru	gpnrus.sales2@iamauger.com	TEST			
zakaz@autorus.info	gpnrus.sales4@iamauger.com	TEST			
zakaz-msk@auto-sputnik.ru	gpnrus.sales6@iamauger.com	TEST			
robot2@pr-lg.ru	gpnrus.rostov@iamauger.com	TEST			
selin.kaya@sampa.com	selin.kaya@sampa.com	TEST			

Confirmation Settings

For each sender, the email address to which the order confirmation should be sent and whether the sender is in the test environment are defined in this Excel file.

The order confirmation file is, by default, created by writing the quantities of the orders generated in SAP into the **order quantity column** of the Excel file sent by the customer, and then sent back to the customer.

For some customers, if the confirmation quantities need to be written to a different column, the **Confirmation Rule** and **Parameter** fields are used. In standard usage, these fields are left blank.

Confirmation Rule Options:

to_column

The confirmed quantities are written to the column specified in the **Parameter** field of the Excel file.

add_to_column

The confirmed quantities are written to a newly created column in the Excel file. The header of the new column is specified in the **Parameter** field.

reject_column

Instead of the confirmed quantities, the rejected quantities are written to the column specified in the **Parameter** field.

template

When creating the confirmation file, a template file specified in the **Parameter** field is used instead of the customer's original Excel file.



Бренд	✓	Номер	Описание	Количество	Цена	Фактическая_отгрузка
AUGER	✓	76324	76324 AUGER Воздушный фильтр картридж	1	2.300,00	0
AUGER	✓	53555	53555 AUGER Резиновая втулка, Балансир	2	1.460,00	2
AUGER	✓	53555	53555 AUGER Резиновая втулка, Балансир	2	1.460,00	2
AUGER	✓	76162	76162 AUGER 76162_панель бампера правая	1	770,00	1
AUGER	✓	76384	76384 AUGER AUG76384_р/к диск.тормоза !(мр) втулка направляющей D39/35x73 с кольцом SB/SN	4	290,00	4
AUGER	✓	73298	73298 AUGER Двигатель стеклоочистителя	1	3.770,00	1
AUGER	✓	81546	81546 AUGER Комплект шкворней Поворотного кулака	2	2.940,00	2
AUGER	✓	87384	87384 AUGER Амортизатор капота правый FH(4) VOLVO 585 mm / 450 N	2	450,00	0
AUGER	✓	76192	76192 AUGER Крыло заднее верхняя часть	2	1.120,00	0
AUGER	✓	85331	85331 AUGER Трубопровод, Турбокомпрессор	1	2.230,00	1
AUGER	✓	20597	20597 AUGER Пневмоподушка Кабины Без Амортизатора	1	1.280,00	0

For example, in the Order Confirmation Excel file sent for this customer, the order quantities requested by the customer are shown in the **red box on the left**, while the quantities actually generated in SAP are shown in the **red box on the right**.

This setup was created using the **add_to_column** rule. The corresponding column name was defined as a parameter, allowing the quantities generated in SAP to be listed in a **newly created column** within the Excel file.

Some customers may order the same SAMPA material using different customer-specific material codes.

In this case, the **KDMAT_COLUMN** field is assigned the header of the column containing the customer material numbers in their Excel file.

This configuration ensures that order items for the same SAMPA material, but with different customer material codes, are processed **separately** rather than being merged.

As shown in the visual, items for the same material are created in **separate rows**.

Kalem	Malzeme	Net fiyat	Sipariş miktar	ÖB	Tanım
20	53555	1.196,72		2 ADT	Резиновая втулка,
30	53555	1.196,72		2 ADT	Резиновая втулка,

ZSD_SENDER_PARAM Table in the SAP System

This table details how customer emails and their related parameters are managed within the system.

It provides the **core configuration parameters** that enable the AI to correctly match incoming email orders with the appropriate customer and delivery information, ensuring proper processing in SAP:

Email Address: Lists the customer/system email addresses that the AI will process or monitor.

Customer: Shows the corresponding SAP customer number for each email address.

Ship-to Party in SAP is the customer or location where the delivery is sent.

Immediate Delivery: For customers requiring automatic delivery creation after an order, the **LISOF** field in the ZSD_SENDER_PARAM table is marked with 'X'.

Table to be searched	ZSD_SENDER_PARAM	Sender based transaction parameters		
Number of hits	17			
Runtime	0	Maximum no. of hits	500	
				
E-Mail Address	3-Byte field	Customer	Ship-to party	Immediate delivery
adts_zakaz@etsp.ru		1200087	1801535	
cross@favorit-parts.ru		1203238	1803415	
noreply@berg.ru		1204302	1802074	
noreply@berg.ru	SPE	1204302	1812194	
northorder@stparts.ru		1206838	1810555	
office@autostels.ru		1204720	1803936	X
order@stparts.ru		1206838	1206838	
postav13@autopiter.ru		1204291	1204291	
postav4@0.ru		1204291	1204291	
postav7@autopiter.ru		1204291	1811400	
robot2@pr-lg.ru		1205905	1802786	
zakaz-msk@auto-sputnik.ru		1210851	1809547	
zakaz@autorus.ru		1207520	1207520	
zakaz@ksmarket-online.ru		1211808	1810463	
zakaz@ksmarket-online.ru	MOW	1211808	1810463	
zakaz@ksmarket-online.ru	SPE	1211808	1810495	
zakaz@rmsprice.ru		1206277	1206277	



After all process steps are completed, the system creates the sales order, and the corresponding order confirmation email is sent from ai.sap.robot@iamauger.com to both the customer and the relevant sales representative.

görüntüle Russia Domest.Sales 3500552763: Genel bakış

Siparişler

Russia Domest.Sales 3500552763 Net değer 1.180,33 RUB

Sipariş veren 1204302 OOO "BERG HOLDING" / 115093 MOSCOW

Mali teslim alan 1802074 OOO "BERG HOLDING" / 117623 MOSCOW

SAS numarası 237772020 SAS tarihi

Satış Kalem genel bakış Kalem ayrıntıları SAS giren Tedarik Sevkiyat Ret nedeni

İstenen tsl.trh D 10.03.2026 Tsl.yapan ÜY

☐ Tam teslimat Toplam ağırlık 1,812 KG

Teslimat blg. Hacim 1.270,500 CM3

Ftrl.blokajı Fytl.trh. 08.03.2026

Ödeme kartı Geçerlilik sonu

Kart kntr.kodu

Ödeme kopulu 2119 21 GÜN Incoterms DDP

Sipariş nedeni

Tüm kalemler

Kalem	Malzeme	OB	T	Tanım	Müşteri malzeme numara	KimT	T...	T 1.Tarih	UY	P
1068384		☒	☐	T	Крестовина карданного шарни...	ZTAN		D 08.03.2026	4100	

AR AI Sap Robot <ai.sap.robot@iamauger.com>

Kime: confirm@berg.ru; O Gpnrus Sales11; S Selin KAYA

237772020.xls 26 KB

Добрый день.
Заказ номер: 237772020 подтвержден.
Во вложении – список подтвержденных позиций и количества.

Данное письмо сформировано автоматически.

Yanıtla Tümünü yanıtla İlet

Project Benefits

Speed: Order processes are automated, saving time.

Accuracy: Human errors are minimized.

Efficiency: Teams can focus on strategic tasks.

Standardization: Processes become consistent and controllable.

SAP Compliance: Full integration with the SAP system is ensured.

Customer Satisfaction: Orders are processed quickly and correctly.

The integration of AI with SAP not only accelerates business processes but also minimizes errors and makes data meaningful. Each order and data point is processed securely and accurately by the system.