

maiTour - Full Screen

# Product documentation maiTour

÷

10

20

Release: 2023/09 – September 2023

REWE Markt GmbH

Type: mai Start/End Address: Ro Prio: 1

Ends



# Table of Contents

1.	Prece	onditions	4
	1.1.	Supported languages	4
2.	Featu	ures and Usage	5
	2.1.	Sales Cloud integration	5
	2.2.	General Features	5
	2.2.1	. Days Overdue	5
	2.2.2	Priority	7
	2.2.3	. User settings	8
	2.2.4	Planning Session	9
	2.2.5	. Planning Period	9
	2.2.6	. Item Details	9
	2.2.7	2. Customer links	10
	2.3.	Map Features	11
	2.3.1	. Map Markers	11
	2.3.2	2. Map views	11
	2.4.	Customer selection	12
	2.4.1	. Automatic customer proposals	13
	2.4.2	2. Manual customer search	13
	2.4.3	. Distance search	14
	2.5.	Planning restrictions	15
	2.5.1	. Restrict planning	16
	2.5.2	ltem types in the Work Basket	17
	2.6.	Optimization	17
	2.7.	Optimization result review	18
3.	maiT	our Admin Cockpit	20
	3.1.	How to access the Admin Cockpit	20
	3.2.	General Information	20
	3.3.	Business Logic	20
	3.3.1	. Core Logic	20
	3.3.2	2. Visit Defaults	21
	3.3.3	. Amount of proposals	22
	3.3.4	Color coding	23
	3.4.	Customer Search	23





3.4.	1.	Default Search Values	.23
3.4.	2.	Search Parameters	.24
3.4.	3.	Search Result	.25
3.5.	U	sers	.25
3.6.	Vi	ew Configuration	.26
3.7.	С	ustomer assignment	.26
3.7.	1.	Reports	.26
3.8.	A	ccount Priority Calculator	.28
3.8.	1.	Status Overview	.28
3.8.	2.	Relationship definition & Rules	.28
3.8.	3.	Priority Information	.29
3.8.	4.	Initial Prioritization	.29



# 1. Preconditions

# 1.1. Supported languages

The user interface of MaiTour is available in six different languages (German, English, French, Italian, Spanish, Russian) and is displayed in the language chosen by the user when logging into the SAP Sales Cloud. If the user selects a language not supported by maiTour when logging into the SAP Sales Cloud, English is used by default.







# 2. Features and Usage

# 2.1. Sales Cloud integration

All users who are authorized to use maiTour in the SAP Sales Cloud will see a corresponding tile on their home screen. MaiTour can be opened by clicking on the tile. MaiTour will open showing the *Customer Selection View.* 

SAP						а 19 © Д. 8
fa Home						
🖬 Calendar		maiTour	My Visits This Week	Qualified	My Opportunities Opportunities	
in Feed		for SAP® Sales Cloud				
Business Analytics			0	2		
Business Configurat.		cxAddOns.				
$\beta_{1}^{\theta_{1}}$ Business Partners	My Tanka		Pipeline	Hot Leads	My Accounts Accounts	All
D Service Entitlements						
Organizational Mana.						1719
Customers						
8 People		Performance	Stalled Deals			
97 Sales Campaign						
80 A= Sales						
Activities						
eg Analysis					Win Ratio Weath: 8,25MEUR	
I Competitors						
Products		0	0			
Et anno 1						

Figure 2 maiTour tile

# 2.2. General Features

The following features are available at all stages of the applications or are relevant during the entire planning process.

## 2.2.1. Days Overdue

The usage of days overdue is one of the supported strategies to determine which customer is to be visited next.

MaiTour calculates the time span until the next visit for each Account by considering how many days have passed since the last visit compared to the visit frequency set for that customer. The difference is indicated in days overdue.

Days Overdue = (Last Visited) + (Recommended Frequency) – (Start Date of the tour)

Example: maiAccount has the following data maintained in SAP Sales Cloud

- 1 Last Visited: 01.01.2023
- 2 Recommended Frequency: 10 Days
- 3 The Start Date (the day for which the tour is planned in maiTour): 14.01.2023

Using the data:

 $Days \ Overdue = (01.01.2023) + (10) - (14.01.2023)$ 

Days Overdue = -3



If the displayed value is positive, this means the customer is not yet overdue but should be visited in the upcoming days.

A negative value indicates how many days ago the customer should have been visited.

### Information:

In the *Work Basket* the number of days a customer is overdue is calculated based on the set start date of the route, not the current date.

If the recommended frequency is not maintained in SAP Sales Cloud, a default value is provided. This value applies only to accounts without the recommended frequency maintained and is configurable from the maiTour Admin Cockpit.

### ! Restriction:

Planning a tour for multiple days including customers with a visit frequency less than half of the planning period results in overnight stays being ignored.

Example: Planning for a period of 5 days including customers with a visit frequency of 2 would lead to those customers being scheduled for a visit twice during that tour. Simply submitting this information to our service provider for route optimization (PTV) would then result in those 2 visits being scheduled directly succeeding each other as this would provide the best result regarding the optimization (no travel distance & time). To prevent this from happening maiTour is splitting up the route instead, planning for 2x 2 days and 1x 1 day. From PTV's point of view it is no longer just 1 but 3 separate routes. Assuming that an employee is driving home after finishing a route leads to the overnight stays on day 2 and 4 being ignored in this example.

100



# 2.2.2. Priority

The usage of priorities is the second supported strategy or determining which customer is to be visited next. The priority of a customer is calculated by a dedicated engine, which is part of the overall maiTour solution package. The data needed for the priority calculation must be present in the SAP Sales Cloud.

Priorities are calculated per customer and day. To support planning in the future, priorities are calculated for a limited period of time into the future.

MaiTour supports calculating priorities based on up to 4 rules, 5 entity types and 5 factors. All factors and entity types must be present in the default oData API of the SAP Sales Cloud System.

### Factors & Entity types

A factor can either be a distinct oData property or the existence of an entity of a certain type.

All Entity types refers to distinct entity types in the SAP Sales Cloud oData API. When counting the necessary entity types, those only necessary to create the association between the corporate account and other relevant entity types need to be included.

In the example below with four entity types and three factors, priorities are based on the ABC classification of the customer, the priority of a directly assigned promotion and the perfect store score of a visit.



Figure 3 connected entity types and their factors

### Rules

Rules represent the logic of calculating numerical values based on defined factors and can usually be visualized in a table.

Rules can take multiple factors as an input to create a priority value. The following table shows an example for the ABC-Classification as a factor.

ABC Classification Code	Priority
А	+ 100
В	+ 60
С	+ 30





Priorities are recalculated after a change is made to the data in the SAP Sales Cloud. Changes are entered in a queue and processed sequentially.

### ! Restriction:

Recalculating the priorities based on changes is only supported for entity types which are supported by Event Notification Service of the SAP Sales Cloud.

### Information:

ξŵ

The time necessary for a recalculation might vary since it is dependent on the following factors:

- Number of customers impacted by the change
- Response time of the SAP Sales Cloud system
- Amount of entity types relevant for the priority calculation
- Amount of unprocessed changes in the queue

### 2.2.3. User settings

Using the button in the upper right corner the user can access the *user settings* menu during the main planning stages.



#### Figure 4 User Settings

On the right side you can configure your individual working times per day. These are considered when calculating the first and last visits of a day.

Sunday

08:00

17:00

Э

If a day is to be excluded from planning, you can prevent a planning on those days by setting "Include day" to "No".

Additionally, there are options to allow for an overnight stay to be planned by maiTour on selected days.

On the left the starting and end point for the tour planning must be maintained. If you want to end the tour in a different location than where it started, you can enter two different addresses here. By using the "Locate my Address" you can determine your current location and use it as start or end address.

### ! Restriction

Planning routes spanning multiple days is not possible if overnight stays are disabled and the start and end address is not identical.





## 2.2.4. Planning Session

A planning session starts when opening maiTour and is bound to the tab used in the browser. A new planning session can be started either by using the "Reload everything" button or by opening maiTour in a new tab in the browser. Starting a new session will discard all changes and start with a new *Work Basket*.

Reloading a browser tab will not reset the current planning session.

Some information is saved by maiTour for a planning session so that users can continue where they left off. The information saved by maiTour are the following:

- The selected planning period
- The state of the Work Basket
  - o Content
  - o Optimization
  - o Manual restrictions
  - Adjustments to working times.

Changes in the configuration saved in the Admin Cockpit only take effect within the next new planning session.

## 2.2.5. Planning Period

At the beginning of planning a tour, users can choose either a single day or multiple days as planning period. Per default maiTour will start with the current day, or the timeframe selected in the last known planning session.

```
1 23 Planning Period: Aug 7, 2023 - Aug 8, 2023
```

Figure 5 Planning Period Selection

### 2.2.6. Item Details

The user can click on a work basket entry in maiTour to get more details on them.

1 23 Planning Period: Aug 7, 2023 - Aug 8, 2023 📖													9 B
Customer Selection Customers (7) Activities (3)						Q, Customer Sea	irch Star	t Planning	Netto 02 (1007321)	1			[] ×
						Search	Q	<b>1</b>	8	Priority Classi	ification		
Customer	Priority	Days overdue	ABC Classification	Last Visit	Contact	Note	Phone		Priority Detai	Opening Hour	rs ^ ×		
Netto 02 Breite Straße 27 14471 Potsdam	142	-41	AACCOUNT	2023-05-26				>			ABC CL	assification	100
Aldi Nord 01 Turmstraße 60 10551 Berlin	136	-35	AMCCOUNT	2023-08-26				>			Days O	verdue	42
Rewe Markt Uhlandstraße 30 10719 Berlin	129	-28	AACCOUNT	2023-08-26				>			Promot	ion	o
Edeka Dürr     Potsdamer Straße 177 14469 Potsdam	100		AACCOUNT					>					
Ainatura 02 Ainatura 02 Neuendorfer Straße 76 14770 Brandenburg an der Havel	70		BACCOUNT					>					
Bahnhofstraße 40 03046 Cottbus	30		CACCOUNT					>	i t				
Leipziger Straße 13 03048 Cottbus	30)		C-ACCOUNT)					>					
									Opening	Hours		1	
Activities (3)									Monday	00:	00 - 23:59		
									Tuesday	00:	00 - 23:59		
Activity	Priority	D	ays overdue	Туре	Time				Wednesda	y 00:	00 - 23:59	3	
Meeting with Nagarro				:::	8:00 AM - 8:30 AM	8/7/2023	>		Thursday	00:	00 - 23:59		
Overnight Stay				<u>  </u>	5:00 PM - 11:59 PM	1 8/7/2023	>		Friday	00:	00 - 23:59		
Call Client				S	10:30 AM - 11:00 AM	M 8/8/2023	>		Saturday	00:	00 - 23:59		
									Sunday	00:	00 - 23:59	J	



### 1. Total Priority

Total priority of the item (only available for customers or activities connected to a customer)





### 2. Priority Composition

Visualizes the partial priorities.

### 3. Opening Hours

Shows the opening times of the selecting customer or of the customer connected to the selected activity. The Visiting Hours configured for the customer in the SAP Sales Cloud are used.

## 2.2.7. Customer links

Customer names are displayed as links in the main tables during the customer selection, restrictions configuration and review stage. Clicking on a customer name will open a new browser window in the Sales Cloud navigating directly to the selected customer.

### Information:

This feature is supported in combination with basic and SSO authentication of the SAP Sales Cloud.





# 2.3. Map Features

At various places in maiTour, data is visualized on a map. The following features are available whenever a map is displayed.

## 2.3.1. Map Markers

By clicking a marker on the map, a popup with additional customer information appears:

- Name of the customer
- Type of the marker
- Priority of the customer
- Days overdue

Color coding of the marker:

- Purple: customer is already present in the Work Basket
- Purple + checked mark: selected; will be added to the Work Basket
- Red: customer is overdue / high priority
- Yellow: customer is due today / middle priority
- Green: customer is due in the future / low priority

Grey: No visit frequency is maintained / no priority

The threshold priority values for the pin colors can be maintained in the Admin Cockpit.

### 2.3.2. Map views

All maps displayed in maiTour offer a small legend which can be found in the upper right corner. It is also possible to select different display modes for the map:

- Real-time Traffic Information (RTTI)
- Standard Map View
- Satellite Map
- Hybrid Map (Satellite & Standard combined)

maiTour obtains the maps and traffic information from the map service provider HERE. While the normal view and the satellite view are self-explanatory, in terms of traffic information it should be highlighted that this is real-time information. As soon as this map view is called up, the current traffic information is retrieved by the provider and displayed on the roads through the following color code:

- A red-colored section of the route indicates an acute traffic problem (traffic jam, stagnant traffic, accident, construction site) and that serious delays are to be expected.
- Sections marked in yellow usually represent an increased traffic volume or average delays due to the current situation.
- On areas marked in green, on the other hand, there is no known obstruction.

### Information:

The traffic information displayed on the map has no impact on the optimization of a tour.

This easy-to-read data allows you to see immediately which areas should rather be avoided and how customer visits can be put together as effectively as possible for the route.



# **2.4. Customer selection**

*Customer selection* is the first of the three maiTour stages. In this stage users can choose the customers they want to visit.

The user can continue to the next stage by using the "Start Planning" button. All selected customers and all activities will be taken into the *Work Basket*.

### Information:

Only customers which can be found by the configured account selection report are available in the automatic proposals or the manual customer search.





### 1. Planning Period

Select the time range in days the tour planning should cover.

#### 2. Manual Customer Search

Executing a customer search.

### 3. Start Planning

Continue to configure restrictions for the optimization with the selected customers.

### 4. Quick navigation tabs

Switch between customers and activities section.

# 5. Work basket search bar

Search the work basket for customers by name.

# 6. Removing Customers

Remove selected customers from the work basket.

### 7. Work basket

Table containing customer proposals.

### 8. Activities Section

Displaying activities in the selected planning period.

100



## 2.4.1. Automatic customer proposals

MaiTour can propose a list of relevant customers. The relevance of a customer is either determined either by days overdue or due to a calculated priority. In the Admin Cockpit you can switch between these two options.

The number of proposed customers can be configured in the Admin Cockpit as well.

Three conditions must be met for a customer to be considered as a proposal.

### **Customer assignment**

The customer must be assigned to the user via the *customer selection report* configured in the admin cockpit.

### ! Restriction:

A maximum assignment of 5,000 customers is currently supported by maiTour.

### **Customer opening hours**

MaiTour takes the opening hours (of a customer), that are maintained in the SAP Sales Cloud, into consideration. Therefore, customers will not be proposed if the users' working times and the opening hours of the customer do not overlap at some point in the selected planning period.

The customers that are filtered through this logic can still be found using the manual customer search.

### No open visits

If a visit with a status other than 'closed' is present for a customer, it will not be proposed by maiTour. The customers that are filtered through this logic can still be found using the manual customer search.

### 2.4.2. Manual customer search

By using the customer search additional customers can be added to the list of proposals.

"Distance" and "Maximum number of hits" are always available as search parameters. Depending on the chosen account sorting logic either "Visit overdue in (days)" or "Priority greater or equal than" is also available.

Additional search parameters can be configured in the Admin Cockpit

Account ID:	contains	~	Role:			$\sim$
			Name:	contains		$\sim$
Date of Last Visit:	equal $\checkmark$ MMM d,	у 🖽				
Account ABC Classification:		$\sim$	Priority:	0		
City:	contains	× 1	Range Search distance (km):			0
			Maximum number of hits:	equal 🗸		
Industry:		$\sim$				
					Cancel	Q Search

### Figure 8 Customer Search

The search result is displayed in a map and a table. Customers that should be added to the proposals in the *Work Basket* can be selected in the table or directly on the map.

Customers can not be added more than once. Also, a customer cannot be added if an activity connected to the customer is already present.





## 2.4.3. Distance search

When using the proximity search (button next to the distance field) the user can specify an address.

If the button is highlighted blue, an address different from the start address is selected.

Only customers within the specified distance to this address will be included in the search result. As a default the address is filled with the maintained start address, but the current address of the user can be located by using *Locate my Address*.



# 2.5. Planning restrictions

*Configuring planning restrictions* is the second of three maiTour stages. In this stage the user can configure general or customer specific restrictions for the optimization.

L) 23	Planning Peri	od: Aug 2, 202	3 - Aug 2, 2023	· · · · · · · · · · · · · · · · · · ·	)			3		4 5	6	7	8	9 :	8 ®
(	Optimizati	on Restrictio	ons				2 — 🖽 Table	V 🕐 Adj	ust working hour	rs 📖 🏹	Ø Bulk Edit		< Back to Sele	ction Optimize	• ~
	Туре	Consider	Mandatory	Name	Priority	Days overdue	Address		Start Time	End Time	Date		Duration	Preparation	
	\$	<ul><li></li></ul>	O OFF	Netto 02	136	-36	Breite Straße 27 14471 Potsdam	0	нн: 🕒	нн: 🕑	уууу-MM-dd	<b>11</b>	Minute(s)	0:10	>
	\$	<ul><li></li></ul>	O OFF	Rewe Markt	123	-23	Uhlandstraße 30 10719 Berlin	0	нн: 🗊	нн: 🕒	уууу-MM-dd	30	Minute(s)	0:10	>
	\$	<ul><li></li></ul>	O OFF	Baumarkt 01	86	14	Friedrichstraße 10117 Berlin	0	нн: 🗊	HH: 🕒	уууу-MM-dd	<b>11</b>	Minute(s)	0:10	>
	\$	<ul><li></li></ul>	O OFF	Rossmann 02	30		Annenstraße 03044 Cottbus	0	нн: 🕞	нн: 🕤	уууу-MM-dd	30	Minute(s)	0:10	>
							< 1	>							

### Figure 9 Optimization Restrictions

### 1. Planning Period

Select the time range in days the planning should cover.

### 2. Select view

Select between a calendar and a table view. The default can be set in the Admin Cockpit

### 3. Adjust working hours

Adjust your working times for each day of the selected planning period on a one-time basis. The selected times are only applied for the current planning session.

### 4. Manage overnight stays

Customize the days the tour does not end at the end address, but instead includes an overnight stay.

### 5. Filters

Display available options to filter the contents of the Work Basket.

- a. Supported filters are Account, City, Zip Code Range, Zip Code, Street, ABC Classification, Promotion Name
- b. All hidden items are still taken into consideration
- c. The values available in the filters correspond to all the items in the Work Basket including the hidden items.

### 6. Bulk Edit

Changing restrictions for multiple workbasket items at the same time

### 7. Remove selected items

Remove the selected elements from the Work Basket.

### 8. Back to Selection

go back to the selection page to manage the proposals.

### 9. Optimize

Optimize the chosen items within your planning period.

100



## 2.5.1. Restrict planning

The user can specify a set of restrictions for each customer or activity in their respective row.



Figure 10 Restrictions per customer

### 1. Consider Customers

The flag "Consider" can be used to exclude customers from optimization. By default, this option is active for all entries in the *Work Basket*.

### 2. Mandatory

The optimization will try to plan mandatory elements before all others.

Existing activities (visits, appointments and phone calls) are per default mandatory, but can be set to be not mandatory. If set to not mandatory, they will be moved to the optimal timeframe during the optimization.

The user must be the organizer of an activity to set it to be not mandatory. An element in the *Work Basket* with a set start and end time is always "mandatory" as well.

### 3. Edit Address

With a click on the pencil symbol next to an address in the *Work Basket*, an alternative address can be stored for the respective entry, which is then used when optimizing the tour.

Information:

Addresses that are adjusted here will not be transferred to the account data itself - it is simply an update of the address used for this route for this customer.

### 4. Start & End Time

The user can specify a start and end time for each proposed customer. During optimization, this customer is only considered at the specified time on any day of the planning period. Time restrictions can be combined with date restriction.

Start and end of existing activities (visits, appointments, and phone calls) can be adapted as well. Changes made to the start and end times are only applied to the corresponding SAP Sales Cloud activites when an optimized route is saved

Times of two customers are not allowed to overlap.

### 5. Date

The user can specify a date for each proposed customer. During the optimization, the customer is considered at any time on the specified day. Date restrictions can be combined with time restrictions.

The date of existing activities (visits, appointments and phone calls) can be adapted as well. When the optimized route is saved, this change is applied to the activity in the SAP Sales Cloud.

### 6. Duration

The desired duration can be specified for customer proposals and already existing activities (visits, appointments, phone calls).

100



## 2.5.2. Item types in the Work Basket

The *Work Basket* can contain five different types of items. Every element will be displayed as a single row in the table or calendar view.



**Proposals** represent customer accounts in the SAP Sales Cloud and is the main tool for maiTour to suggest the most important customers.

**Visits** represent an already existing visit in the SAP Sales Cloud Calendar. They come prefilled with their start- and end time as well as the date. Visits cannot be removed from the *Work Basket*.



**Appointments** represent an already existing appointment in the SAP Sales Cloud Calendar. They come prefilled with their start- end time and date. Appointments cannot be removed from the *Work Basket*.

**Phone Calls** represent an already existing phone Call in the SAP Sales Cloud Calendar. They come prefilled with their start- end time and date. Phone Calls do not have an address or location. Phone Calls cannot be removed from the *Work Basket*.

**Overnight Stays** are representing an overnight stay between two planning days. They are at the end of their respective day. Overnight stays can be removed or added via the Overnight stays menu.

### ! Restriction:

Providing and maintaining an address for the overnight stay in maiTour is not supported.

# 2.6. Optimization

When optimizing the user can choose between one of two optimization goals.

### **Tour optimization**

When optimizing a tour maiTour will generate a schedule which is optimized for visiting customers. Driving time and distances will be considered.

When saving an optimized tour, maiTour will create visit objects in the SAP Sales Cloud.

### **Phone Call optimization**

When optimizing phone calls, maiTour will generate a schedule which is optimized for calling customers. Driving time and distances will not be considered.

When saving optimized calls, maiTour will create phone call objects in the SAP Sales Cloud.

100



# 2.7. Optimization result review

Optimization Results is the third and last of the three maiTour stages.

Щл	2 Planning Period:	Aug 7, 2023 - Aug 8, 2023				- Contractor				) ھ	8
	Optimization	Results						1- 5# < Back t	Restrictions	Save	I
	OPTIMIZED (14)	NOT OPTIMIZED (3)							2	3	1
	Туре	Account	Priority	Days overdue	Travel Time	Distance	Time	Date			1
	[[ <b>*</b> ]	Baumarkt 01 Friedrichstraße 10117 Berlin	22	9	0.04	2.0	8:55 AM 9:40 AM	Aug 7, 2023	>		1
	(:	Edeka See Hauptstraße 141 10827 Berlin	(100)		0-11	5.5	10:01 AM - 10:46 AM	Aug 7, 2023	>		1
	[: <b>*</b> ]	DM 01 An der Alten Zauche 45 14478 Potsdam	70		0.26	30.2	11:23 AM · 12:08 PM	Aug 7, 2023	>		1
	[]	Baumarkt 02 Lotte-Pulewka-Straße 8 14473 Potsdam	100		0:06	2.7	12:24 PM - 12:54 PM	Aug 7, 2023	>		1
	[ <u>*</u> ]	Netto 03 Nedlitzer Straße 19 14469 Potsdam	70		0:11	0.0	1:15 PM - 2:00 PM	Aug 7, 2023	>		1
					More						1
					[5/14]						1
	NOT OPTIM	IZED (3)									1
	Туре	Account		Priority	Days overdue	Time	Date		Status		1
	:::	Meeting with Nagarro				00:00:80	8:30:00 Aug 7, 2023				1
	S	Call Client				10:30:00 - 1	1:00:00 Aug 8, 2023				5
	\$	Globus 01 03205 Calau		30					8		1

Figure 11 Optimization Results

### 1. Map View

Visualizing the optimization result on a map.



Figure 12 Route Map View

Clicking on map pins will show more detailed information. Clicking on a customer in the overlay (left) will center the map on the customer in question.

Individual days of the tour can be shown or hidden using the gears button.

### 2. Back to Restrictions

Navigating back to the configuration of restrictions.

### 3. Save

Saving the optimized result and creating the necessary objects in the SAP Sales Cloud.

Depending on the chosen mode of optimization either a visit or a phone call will be created. Default values for visits (e.g., visit type) can be configured in the Admin Cockpit.





If changes have been made to already existing activities (visits, appointments, calls), these will also be transferred.

### 4. Optimized Section

Containing all items that are included in the optimized schedule.

### 5. Not optimized Section

Containing all items that could not be included within the final schedule by the optimization.

Every element which was not optimized provides information about the individual result of the optimization through its status plan. Additional information can be displayed by clicking on the icon.



# 3. maiTour Admin Cockpit

In the Admin Cockpit maiTour can be adapted to individual use cases, users can be managed and information about the application can be checked. To open the Admin Cockpit, follow these steps:

# 3.1. How to access the Admin Cockpit

Direct links to the admin cockpit will be provided during the deployment of the maiTour solution package. To access the admin cockpit a dedicated authentication is necessary, which will be configured during the deployment.

The QA and PROD environment share the same credentials but require separate links.

# 3.2. General Information

The landing page provides an overview of the current number of users and licenses and enables you to activate maiTour. This is also the place where you can set the maiTour standard time zone.

<	Menu		General Information
General Informat	tion >	License Status:	26 Out of 50 Users
Business Logic	>	Active:	
Customer Search	n >	Default Time Zone:	CET
Users	>		
View Configuration	on >		
Customer assign	ment >		
Priority Calculation	on >		

Figure 13 General Information

# 3.3. Business Logic

## 3.3.1. Core Logic

This is where you choose in which mode maiTour should run and how items should be displayed in the *Work Basket*. You can choose between a central planning possibility and an individual planning. When choosing central planning a designated person from the back office plans the days' visits of the sales representative, in the individual mode each sales representative plans his or her own days.

<	Menu	Business Logic	
General Informatio	in >	Core Logic Visit Defaults Amount of proposals Color coding	
Business Logic	>		
Customer Search	>	Fetch accounts based on: Priority	~
Users	>	Visit at highest priority: OFF ②	
View Configuration	i>	Centralized planning: OFF	
Customer assignme	ent >	Consider historical traffic data:	
Priority Calculation	n >		

Figure 14 Core Logic





### Fetch accounts based on

It can be chosen between "days overdue" scenario or the priority scenario. MaiTour will sort and automatically propose accounts by using this logic.

### Visit at highest priority

If activated customers are only visited on the days, they have the highest priority. For example, if on Wednesday the priority is 3 and on all other days 2, the customer will be only considered for Wednesday. If deactivated, customers will be considered for all days of the planning period. The highest priority in the planning period will be assumed for all days.

### Centralized Planning [currently out of work]

Scenario to be used when one central user (Planning Manager) plans for other users (Sales Reps).

### **Consider historical traffic data**

The use of historical traffic information for route planning can be switched on and off. Historical traffic information, also known as traffic patterns, represents traffic flows as static speed profiles for specific road networks. To give an example: A road has a speed limit of 80 km/h. However, the actual average speed driven on this road on weekdays between 5 and 7 pm is 30 km/h. Since the delay occurs regularly - at the same time of any weekday – it is referred to as a traffic pattern. By factoring traffic patterns into route calculation, detours can be planned beforehand to minimize the need for spontaneous replanning.

#### Information:

When using this functionality, an optimization can take significantly more time.

### 3.3.2. Visit Defaults

Default parameters are considered if no value is specified for these options for already existing visits and visits created by maiTour.

<	Menu		Business Logic						
General Information	n >	Core Logic	Visit Defaults	Amount of proposals	Color coding				
Business Logic	>								
Customer Search	>				Visit Preparation:	5	Minutes		
Users	>				Visit Duration: *	45	Minutes		
View Configuration	>				Visit Frequency:	14	Days		
Customer assignme	ent >				Visit Type Filter:		~		
Priority Calculation	>				Visit type:		~ ⑦		
					Perfect Store Visit:	OFF			

### Figure 15 Visit Defaults

### **Visit Preparation**

Time that is added for every activity to the actual duration.

#### **Visit Duration**

The assumed duration of an activity if nothing else is already specified. The default value can be overwritten separately for each *Work Basket* element.

#### **Visit Frequency**

Assumed visit frequency if none was maintained at the customer tab in the SAP Sales Cloud.

### Visit Type Filter

Only if their visit type is included in the list specified here existing visits are shown by maiTour. If the list is empty, no restrictions are applied. All visit types configured in the SAP Sales Cloud are available for selection.

100



### Visit Type

The maiTour application will save your visits in SAP Sales Cloud with this visit type. Only one value is possible. Leave it blank if you don't want maiTour to save your visits with a particular visit type. The visit type of existing visits from your SAP Sales Cloud Calendar will not be overwritten by maiTour. If the selected visit type was deleted in the SAP Sales Cloud a different one must be selected before saving the configuration again.

### **Perfect Visit Store**

Visits created by maiTour can be saved as "Perfect Store Visit".

## 3.3.3. Amount of proposals

In this section the automatic proposals displayed in the *Work Basket* can be configured using the following settings:

<	Menu	Business Logic
General Informati	on D	Core Logic Visit Defaults Amount of proposals Color coding
Business Logic	;	
Customer Search	>	Automatic Calculation: OV
Users	)	Max Number Of Elements per day:
View Configuratio	n D	Max Number Of Elements:
Customer assignr	nent 🔅	
Priority Calculatio	in D	

### Figure 16 Amount of Proposals

### **Automatic Calculation**

The number of proposed customers for each day in the planning period is calculated by maiTour based on this formular:

$$Number of \ proposals = \frac{(Total \ available \ time \ within \ the \ planning \ period)}{(Preparation \ Time + \ Visit \ Duration)}$$

For an example of a visit preparation time of 12 minutes and a standard visit duration of 30 minutes (both to be maintained in the admin cockpit), as well as a 3-day planning (3x 8 hours), the procedure is as follows:

 $\frac{(3 \times 8 h)}{(30 \min + 12 \min )} = \frac{24 \text{ hours}}{42 \text{ minutes}} = 34,28 = 34 \text{ (rounded of f)}$ 

In this example 34 suggestions would be generated for a 3-day route.

### Max number of elements per day

MaiTour will limit the number of proposals for each day to this value.

### Max number of elements

MaiTour will limit the number of proposals for the entire planning period to this value.



# 3.3.4. Color coding

<	Menu						Business Logic	
General Informatio	n	>	Core Logic	Visit Defaults	Amount of proposals	Color coding		
Business Logic		>						
Customer Search		>				Priority treshold for yellow pin:	200	
Users		>				Priority treshold for red pins:	400	
View Configuration		>						
Customer assignm	ent	>						
Priority Calculation	L. C.	>						

Figure 17 Color Coding

### **Priority red starting from**

Threshold value for priority when a proposal item is shown as a red pin on the map.

### Priority yellow starting from

Threshold value for priority when a proposal item is shown as a yellow pin on the map.

# 3.4. Customer Search

## 3.4.1. Default Search Values

Configurable default search parameters for the account search. The search parameters of the customer search will be prefilled with the values configured here.

<	Menu			Customer Search							
General Informatio	n	>	Default Search Values Search Parameters Search	Result							
Business Logic		>									
Customer Search		>		Priority:	0						
Users		>		Days overdue:	2			A the factor			
View Configuration		>	1	Distance for around-me search:	10 km						
Customer assignme	ent	>		Maximum number of hits:	30			~			
Priority Calculation	i i	>									
								~			
						contains					
			Date of Last Visit:								
			equal 🗸 🗸	MMM d, y	<b>…</b>	Priority:					
			Account ABC Classification:			0					
					$\sim$	Distance Search	(km):				
			City:		10 , 1**** Berlin			0			
			contains		$\sim$	Maximum numb	er of hits:				
						equal		~	<		
						30					

Figure 18 Default Search Values





## 3.4.2. Search Parameters

It is also possible to configure which search parameters are available for a customer search. A field must be included in the account selection report to be configured as a search parameter.

<	Menu		Customer Search						
General Information	>	Default Search Values	Search Parameters Search	Result					
Business Logic	>								
Customer Search	>								
Users	>	Ordering	Property Name	Name	Туре	Code Collection ?	Code Collection Filter	Visible	
View Configuration	>		CACCOUNT ID	Account ID	Text				
Customer assignme	nt >	·							
Priority Calculation	>	<b>⇔</b>	CLAST_VISITING_DATE	Date of Last Visit	Date 🗸				
		¢	CCUST_ABC	Account ABC Classification	Text 🗸	CorporateAccount ∨	All Codes 🗸 🗸		
		¢	CCITY_NAME	City	Text 🗸	~			

Figure 19 Search Parameters

### Order

The order of search parameters can be chosen freely. Using drag and drop the desired order can be chosen.

On a mobile device drag and drop is not supported for this table.

### **Property Name**

Shows the EDM ID of the property in the account selection report.

### Name

Shows the name of the property in the account selection report.

### Туре

Provides the possibility to configure the type of the search field. Depending on the chosen type, a different input field will be displayed during the customer search. The supported types are:

Text	The search field is displayed as a free text field
Date	The search field is displayed as a date input field
Flag	The search field is displayed as a YES / NO switch
Number	The search field is displayed as an input field only for numerical values

The chosen type must match the data type of the field in the account selection report.

### **Code Collection**

A code collection available in the SAP Sales Cloud can be specified for the field of the type "Text". The search field will be displayed as a dropdown automatically. All values from the given code list are available in the drop down.

### **Code Collection Filter**

If a code collection was specified, additional filters can be applied. Only specified values of the code collection will be available in the dropdown during the customer search. If no values are specified, all of them will be available.

### Visible

Each field in from the customer selection report can be set to be a visible search parameter or not.

100



< Menu					Customer Search	
General Information	>	Default Search Values	Search Parameters Search Result			
Business Logic	>					
Customer Search	>				23 Planning Period: Aug 7 2	2023 - Aug 8, 2023 🛗
Users	>	Ordering	Property Name	Name	Aug /, 2	
View Configuration	>	<b>A</b>	CCUST ARC	Account ABC Classification	Account APC Classification:	
Customer assignment	>				Account Abo otassineation.	
Priority Calculation	>	\$	CINDSSCTR_CODE	Industry	Industry:	
		¢	CORG_NAME	Name	Name:	contains
		÷	CLAST_VISITING_DATE	Date of Last Visit		
					Date of Last Visit:	equal V

Figure 20 Search Parameters Visibility

## 3.4.3. Search Result

This setting allows to add additional columns to the search result. The columns **Priority**, **ABC Classification** and **Days since last Visit** are always shown.

		<	Menu		Customer Search					
		General Information		>	Default Search Values Search Parameters	Search Result				
		Business Logic		>						
		Customer Search		>		Additional Fields:	Next Planned Visit 🗙	~		
		Heare		~						
1 23	Planning Period: Aug	3, 2023 - Aug 3, 2023					e ha			
	Account		Prio		ABC Classification	Days since last visit	Next Planned Visit			
	Netto 02 Breite Straße 27 14471 Potsdam		137		A-ACCOUNT	38	27.08.2023			
	Aldi Nord 01 Turmstraße 60 10551 Berlin		131		AACCOUNT	38	07.09.2023			

Figure 21 Search result columns

# 3.5. Users

In this view the maiTour users can be maintained. Users are created automatically by maiTour as soon the user logs into SAP Sales Cloud and opens maiTour with all the settings retrieved from the system (language, country, time zone, user id, UUID).



By using the waste bin button users can be deleted. The saved start and end address as well as the maintained working times will be lost for the deleted user.



The maintained start address, end address and the working times can be viewed for each user.

### Information:

If the time zone of a user is changed in the SAP Sales Cloud, the user must reopen maiTour once for the change to be visible also in the Admin Cockpit.



# 3.6. View Configuration

In this section it can be configured which views should be available to the users and which one should be the starting view. At least one view must be visible and at most one can be chosen as default.

<	Menu		View	Configuration		
General Informatio	n	>	View ID		Visible	Default view
Business Logic		>	Calendar view		() NO	() NO
Customer Search		>				
Users		>	Table view		YES O	YES O
View Configuration	ı	>				
Customer assignm	ent	>				
Priority Calculation	ı	>				

Figure 22 View Configuration

# 3.7. Customer assignment

In this view you can configure how relevant customers are assigned to the user in the SAP Sales Cloud. The available search parameters can be configured as well.

## 3.7.1. Reports

The chosen report determines which customers are seen as relevant for a user.

<	Menu		Customer assignment						
General Informatio	on	>	Reports						
Business Logic		>							
Customer Search		>	Please be aware that the reports have to be assigned to work center Analytics (COI)	D_Account_WC_analytics.svc)					
Users		>	Account setection report:	manour Account selection - Responsible Employee by Oser					
View Configuration	n	>	Key tield for query:						
Customer assignm	nent	>	Key field in result:	CACCOUNT_ID					
Priority Calculation	n	>	Field for next planned visit:	CNEXT_VISITING_DATE					
			Field for latest recommended visit:	CLATEST_RECOM_VISITING_DATE					
			Sales Rep selection report:						
			Key field for query:						
			Key field in result:						

### Figure 23 Reports

### **Account selection report**

Select the SAP Sales Cloud report used to assign customers to a specific user. In the dropdown all reports are available that are assigned to the workcenter "cc\_home\_analytics.svc" and start with "maiTour |". If a new report is added in the SAP Sales Cloud, the Admin Cockpit must be reloaded twice to make it available.

### Key field for query

Determines the field with the EDM ID in the report which identifies the user.

### Key field in result

Determines the field with the EDM ID in the report which identifies the customer.





### Field for next planned visit

Determines the field with the EDM ID in the report which contains the date of the next planned visit for the customer.

### Field for latest recommended visit

Determines the field with the EDM ID in the report which contains the latest recommended visit.

### **Sales Rep selection report**

If the Central Planning feature is activated this report assigns the sales representatives to the central planner.

### Key field for query

Determines the field with the EDM ID in the report which identifies the central planner.

### Key field in result

Determines the field with the EDM ID in the report which identifies then the sales representative.

100



# **3.8. Account Priority Calculator**

In this menu the calculation of priorities can be configured.

### 3.8.1. Status Overview

The status overview page shows the status of the prioritization engine.

<	Menu	Priority Calculation
General Information	n Š	Status Overview Relationship Definition Rules Priority Information Initial Prioritization
Business Logic	>	
Customer Search	>	General
Users	>	Version: 2307.0.42-SNAPSHOT -1
View Configuration	>	Prioritisation
Customer assignme	ent >	Prioritisation: Octive
Priority Calculation	>	Queue Length: 0 C - 3
		Connectivity
		SAP Sales Cloud: 📀 https://my347468.crm.ondemand.com —4

Figure 24 Priority Calculation Overview

### 1. Version

Version of the deployed prioritization engine

### 2. Status of automatic processes

Shows if automatic prioritization and deletion of old priorities is active

### 3. Queue Length

Shows the amount of change events that are currently in the queue and to be processed

### 4. Connectivity

Shows the URLs the system is configured to work with

### 3.8.2. Relationship definition & Rules

In these sections, it is determined how the priorities are calculated.

### Information:

Configuring the prioritization requires in depth knowledge of the SAP Sales Cloud oData service and the programming language groovy. There is a risk of saving a configuration that won't work. Changing prioritization configurations always requires extensive testing

In the Relationship definition section, the entity types, properties and relationships between the entity types are configured.

In the Rules section rules can be specified using groovy. The return value of an individual rule is a partial priority for the day the rule was executed for.

100



equals	flatten	between
minus	multiply	until
plus	compareTo	getClass
max	info	java.time.Period.*
min	warn	java.time.LocalDate.*
size	error	java.time.ZonedDateTime.*
sum	debug	java.time.chrono.ChronoLocalDate.*
getYear	toLocalData	java.util.Collection.size
isEqual	daysUntil	

### The available groovy functions are restricted to:

## 3.8.3. Priority Information

Here, the priority of a customer can be checked for a specific day. This requires the customer's Account ID from the SAP Sales Cloud.

As a result, an accumulated priority as well as all parts of the priority are shown. The totalled priority matches the priority shown during the planning in the maiTour application.

< Menu			Priority Calculation	
General Information	>	Status Overview Relationship Definition Rules Priority Information	Initial Prioritization	
Business Logic	>	Priority Information		
Customer Search	>			
Users	>	Account ID:*	1007321	
View Configuration	>	Date: *	3 Aug 2023	
Customer assignment	>		Get Calculation Data	
Priority Calculation	>		137 Total Priority	
		Partial priority:37	Partial priority:100	Partial priority:0
		{     'value': 27,     'value': 27,     'value': 28,     'value': 28,	{     Secure HP: {         Value: HP: {         Value: Secure HP: {         Value: Sec	{     valuer: II;     valuer: II;     valuer: III;     valuer:

Figure 25 Priority try out information

### 3.8.4. Initial Prioritization

Usually, the prioritization of an account is only triggered after a change in the SAP Sales Cloud, but through this section the admin cockpit offers an option to manually trigger a re-priorization for either all or just a specific set of customers - without requiring manual changes to them.

<	Menu		Priority Calculation					
General Information	n	>	Status Overview Relationship D	efinition Rules Priority Information	Initial	Prioritization		
Business Logic		>						
Customer Search		>		ABC Classification	$\sim$	equal ~	A X B X	Ŵ
Users		>		Account ID	$\sim$	smaller or equal to $\sim$	10000 ×	Ŵ
View Configuration		>						
Customer assignme	ent	>				+ Add Filter		
Priority Calculation		>				Preview affected accounts		

### Figure 26 Prioritization





# Table of Figures

Figure 1: Languages	4
Figure 2 maiTour tile	5
Figure 3 connected entity types and their factors	7
Figure 4 User Settings	8
Figure 5 Planning Period Selection	9
Figure 6 Customer details	9
Figure 7 Customer Selection	12
Figure 8 Customer Search	13
Figure 9 Optimization Restrictions	15
Figure 10 Restrictions per customer	16
Figure 11 Optimization Results	18
Figure 12 Route Map View	18
Figure 13 General Information	20
Figure 14 Core Logic	20
Figure 15 Visit Defaults	21
Figure 16 Amount of Proposals	22
Figure 17 Color Coding	23
Figure 18 Default Search Values	23
Figure 19 Search Parameters	24
Figure 20 Search Parameters Visibility	25
Figure 21 Search result columns	25
Figure 22 View Configuration	26
Figure 23 Reports	26
Figure 24 Priority Calculation Overview	28
Figure 25 Priority try out information	29
Figure 26 Prioritization	29