

wortell



Book - Documentation

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1 Communication.

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2 Introduction.

Book is an application which is used to make reservations. Book is made with Microsoft PowerApps.

Book is fully configurable to suit your own needs and situation. All data is stored in SharePoint.

Wortell uses Book internally, functionality may or may not be added in future releases.

The current version of Book supports reservations of workplaces. Book is designed to be extended to provide reservations for other 'products' like parking places.

Book is made available to the public on request and through GitHub.

In this document you will find information regarding installation, configuration and use of Book.

Disclaimer

Wortell provides Book and this documentation as a free product without guarantees. You may use and modify Book as you please, Wortell is not liable for any damage or claims related to the use of Book.

3 Prerequisites

To install and use Book the following prerequisites apply:

3.1 PowerApps

3.1.1 User licenses and connections

Every user of Book needs an activated PowerApps license which is included in Microsoft 365. Book uses SharePoint and Office 365 Users connections.

3.1.2 Environments

It is possible to install Book in any environment including the default environment. It is best practice however, to install important apps like Book, in a separate environment specific for this category of apps.

Wortell recommends creating 2 environments. For instance, environment 'PowerPlatform' (production) and 'PowerPlatform Sandbox' (sandbox). Use 'PowerPlatform' for production apps and 'PowerPlatform Sandbox' for apps under development.

For Book a database in the environment is not needed but possibly a requirement for other apps you want to install in this same environment. You can add a database later if needed.

Install a copy of Book in both environments call them Book and Book-DEV respectively (or any other name you like (see chapter 4).

3.1.3 Book installation account

Book is installed using a Microsoft 365 account, the following recommendations apply:

- **Non-personal account**
Use a non-personal account to install and/or maintain Book in both environments.
Using a non-personal account ensures that the app is not related to a specific user account which can cause problems when that user is no longer part of your organization.
- **Role in environment**
Any account which is used to install or maintain Book must have the 'environment maker' role in the environment. Users of the app do not need a role in the environment.

- License

Any account which is used to install or maintain Book must have an activated PowerApps license which is included in Microsoft 365.

3.2 SharePoint

A SharePoint TeamSite or Communication site is used for storing all reservations and configuration data. A PnP script is provided to create the necessary lists. Table 1 gives a brief description of these lists.

List name	Remarks
RR_GuiContent	Contains all text as displayed in Book GUI
RR_Relations	Contains hierarchy of resources of type workplace
RR_Reservations	Contains all reservations
RR_Resources	Contains all resources like workplaces
RR_Selections	Contains all choices available in Book
RR_Settings	Contains Book app settings

Table 1 lists in SharePoint site

3.2.1 SharePoint Security

Normal users of Book need read-only access to all lists in the Book SharePoint site. Furthermore, they need read-write access for their own items in list **RR_Reservations**.

SharePoint is used as a database; normal users of Book should not access the SharePoint site directly through the SharePoint user interface. Read-write access for their own items in list RR_Reservations is a safety measure in case they do access the site through the SharePoint user interface. Logic in the Book app controls which reservations a user can see.

Book administrators need read-write access to all lists. These users typically use the SharePoint UI to configure Book.

3.2.2 Production and DEV SharePoint site

Wortell recommends creating 2 SharePoint sites; one for production data and one for DEV data. PowerApp 'Book' is connected to lists in the production site, 'Book-DEV' is connected to lists in the DEV site. You can give these sites any name you like for instance BOOK and BOOK-DEV.

4 Installation

Installation is a three-step process:

1. Prepare SharePoint
2. Prepare PowerApps
3. Configure Book

4.1 Prepare SharePoint

As mentioned in paragraph 3.2.2, Wortell recommends creating two SharePoint sites.

4.1.1 Create SharePoint DEV site

A xml file is provided to create the lists in the SharePoint site. Follow this procedure to create the lists:

1. Create a SharePoint TeamSite or Communication site, note the URL.
2. Open PowerShell ISE as admin, execute the following commands:
 - a. `Connect-PnPOnline -Url "<YourSiteURL>"`
 - b. `Apply-PnPProvisioningTemplate -Path "<path>book.xml"`

After successful execution of the script, your site should have the following content:














	Name	Type	Items
	Documents	Document library	0
	Form Templates	Document library	0
	Site Assets	Document library	2
	Style Library	Document library	0
	RR_GuiContent	List	0
	RR_Relations	List	0
	RR_Reservations	List	0
	RR_Resources	List	0
	RR_Selections	List	0
	RR_Settings	List	0
	Events	Events list	0
	Site Pages	Page library	1

Figure 1 Site content of SharePoint site

4.1.2 Fill SharePoint lists

An Excel spreadsheet is provided to fill the SharePoint lists. Open the Excel file, this file contains sheets for five lists. Follow these steps for RR_Settings, RR_Selections and RR_GuiContent:

1. Open corresponding list in SharePoint in Quick edit mode
2. Copy all rows in spreadsheet and past them in SharePoint
3. Exit quick edit

As an example, the content for list RR_Settings should look like this:

RR_Settings

ID	Key	KeyValue	DataType	Deprecated	KeyDescription	CustomKey
6	AppAdmin	svc_powerplatform@wortell.nl	String	No	debug user	No
7	AppServerVersion	V 1.13	String	No	used in conjunction with ControlUpdate	No
8	ControlUpdate	true	Boolean	No	When true users app version is compared with AppServerVersion, when not equal, app is closed (V1.09 and later)	No
9	CustomGuiContent	false	Boolean	No	when true custom content instead of default content is displayed from RR_GuiContent (version V1.7)	No
10	MaintenanceMode	false	Boolean	No	when true user cannot use app	No

Figure 2 RR_Settings (note: your ID's may differ)

Lists RR_Relations and RR_Resources are dependent on your own situation. To check the installation, copy and paste the sample content from the Excel file just like you did with the first three list.

RR_Relations

ID ▾	Key ▾	Parent ▾	Child ▾	Sequence ▾	Deprecated ▾
12	LocationSubLocation	Amsterdam	-	100	No
13	LocationSubLocation	Amsterdam	1e - ruimte A	101	No
14	LocationSubLocation	Amsterdam	1e - ruimte B	102	No
15	LocationSubLocation	Amsterdam	2e - ruimte C	103	No
16	LocationSubLocation	Amsterdam	2e - ruimte D	104	No
17	LocationSubLocation	Rotterdam	-	500	No
18	LocationSubLocation	Rotterdam	ruimte X	501	No
19	LocationSubLocation	Rotterdam	ruimte Y	502	No
20	LocationSubLocation	Rotterdam	ruimte Z	503	No
11	LocationSubLocation	Utrecht	Utrecht	600	No

Figure 3 sample data for RR_Relations (note: your ID's may differ)

RR_Resources

ID	ResourceID	ResourceLocation	ResourceSublocation	ResourceType	Deprecated	ResourceDescription
32	A1RA01	Amsterdam	1e - ruimte A	Werkplek	No	
33	A1RA02	Amsterdam	1e - ruimte A	Werkplek	No	
34	A1RA03	Amsterdam	1e - ruimte A	Werkplek	No	
35	A1RB01	Amsterdam	1e - ruimte B	Werkplek	No	
36	A1RB02	Amsterdam	1e - ruimte B	Werkplek	No	
37	A1RB03	Amsterdam	1e - ruimte B	Werkplek	No	
38	A1RB04	Amsterdam	1e - ruimte B	Werkplek	No	
39	A1RB05	Amsterdam	1e - ruimte B	Werkplek	No	
40	A2RC01	Amsterdam	2e - ruimte C	Werkplek	No	
41	A2RC02	Amsterdam	2e - ruimte C	Werkplek	No	
42	A2RC03	Amsterdam	2e - ruimte C	Werkplek	No	
43	A2RD01	Amsterdam	2e - ruimte D	Werkplek	No	
44	A2RD02	Amsterdam	2e - ruimte D	Werkplek	No	
45	A2RD03	Amsterdam	2e - ruimte D	Werkplek	No	

Figure 4 sample data for RR_Resources (note: your ID's may differ)

In chapter 5 you can find how to modify these lists to reflect your own situation.

4.1.3 SharePoint PROD site

Repeat the procedure from paragraph 4.1.1 and 4.1.2 for your production site.

4.2 Prepare PowerPlatform

As mentioned in paragraph 3.1.2, Wortell recommends installing Book in a separate environment.

4.2.1 Mange creation of environments

By default, every user can create an environment, Wortell recommends switching this off so only a user which has the Power Platform administrator role can create environments. To change this setting follow this procedure:

1. Sign in to the **Power Platform admin center** as a **global admin** or as a **Power Platform admin** <https://admin.powerplatform.microsoft.com/>
2. Select gear icon (upper righthand corner)
3. Select Power Platform settings
4. Select Who can create production environments, Only specific admins
5. Select Who can create trial environments, Only specific admins
6. Select Save

4.2.2 Power platform administrator

Follow this procedure to assign the PowerPlatform administrator role:

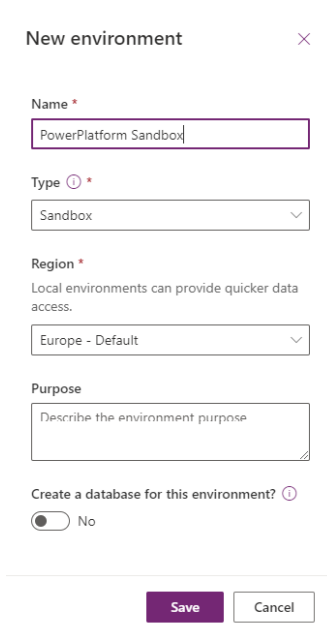
1. Sign in to the Microsoft 365 admin center **as a global admin**.
<https://admin.microsoft.com/Adminportal/Home?source=applauncher#/homepage>
2. Go to Users > Active users and select a user or users.
3. Select Manage roles
4. Select Admin center access
5. Select Show all by category.
6. Under Collaboration select either Dynamics 365 administrator or **Power Platform administrator**.
7. Select Save changes

4.2.3 Create environment(s)

Using an account which has the PowerPlatform administrator role, create the 2 recommended environments. For Book you do not need a database in the environment.

Follow this procedure in Power Platform admin center:

1. New environment



New environment

Name *

PowerPlatform Sandbox

Type ⓘ *

Sandbox

Region *

Local environments can provide quicker data access.

Europe - Default

Purpose

Describe the environment purpose

Create a database for this environment? ⓘ

☒ No

Save Cancel

2. Press Save

Create a Sandbox and a Production environment and name them accordingly.

4.2.4 Assign Environment maker role

Follow this procedure in Power Platform admin center:

1. Select environments
2. Select your environment
3. Select Access, Environment maker, See all
4. Select Add people

5. Search for the account you want to add
6. Press Add

4.2.5 Install PowerApp Book

Using an account which has environment maker role in the required environment, follow this procedure:

1. Open PowerApps
2. Select correct environment
3. Select Import canvas app
4. Upload provided zip file Book.zip

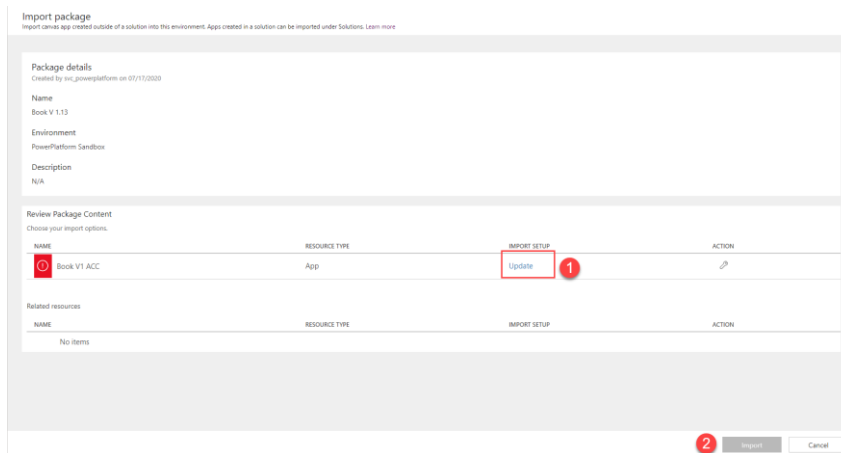


Figure 5

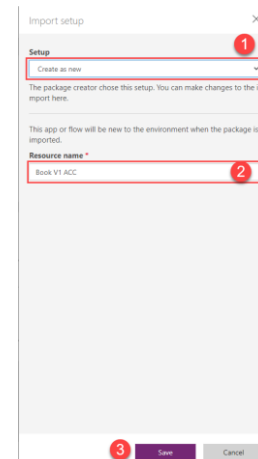


Figure 6

5. Press Update (Figure 5)
6. Select 'Create as new' (Figure 6), give a name, press Save
7. Press 'Import'
8. Refresh your app list, Book will show up in the list of apps.

4.2.6 Update SharePoint connection in Book

Once Book is imported in the environment, the connection to the correct SharePoint data source must be updated. Using an account which has environment maker role in the required environment, follow this procedure:

1. Open PowerApps
2. Select correct environment
3. Select Book app, press Edit

4. Select Data Sources (Figure 7)

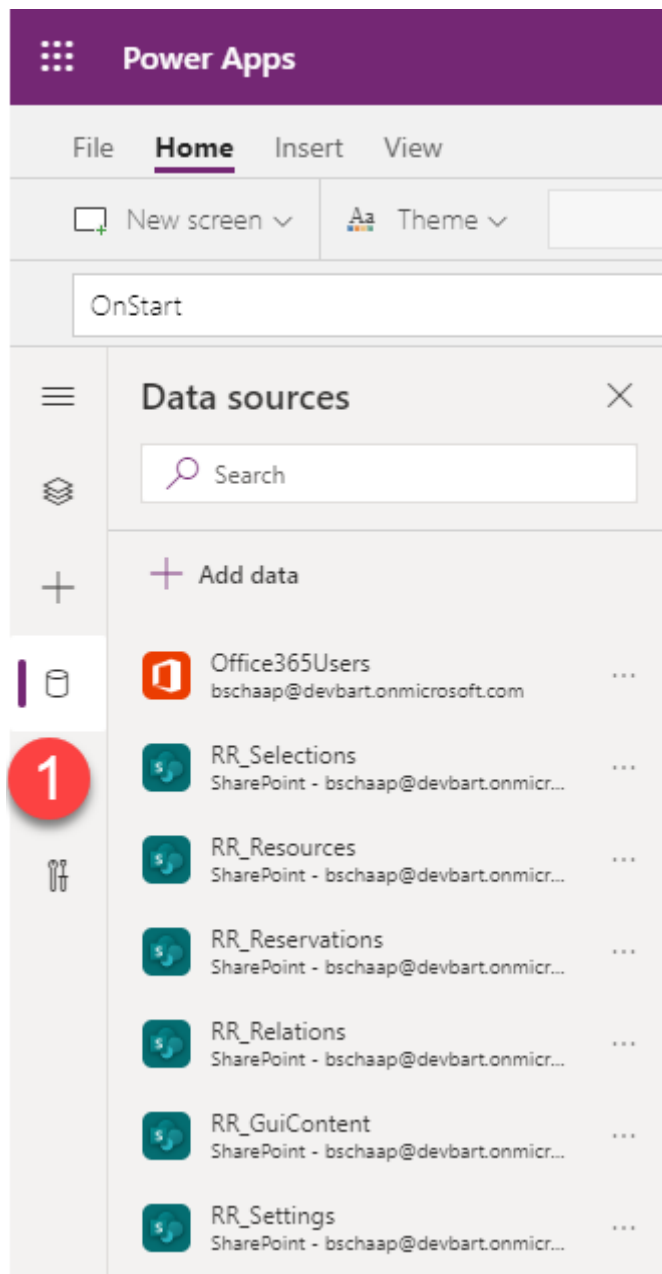


Figure 7

5. Using the 3 dots, remove all SharePoint data connections

6. Search for existing SharePoint data source if you do not have one, press Add a connection (Figure 8)

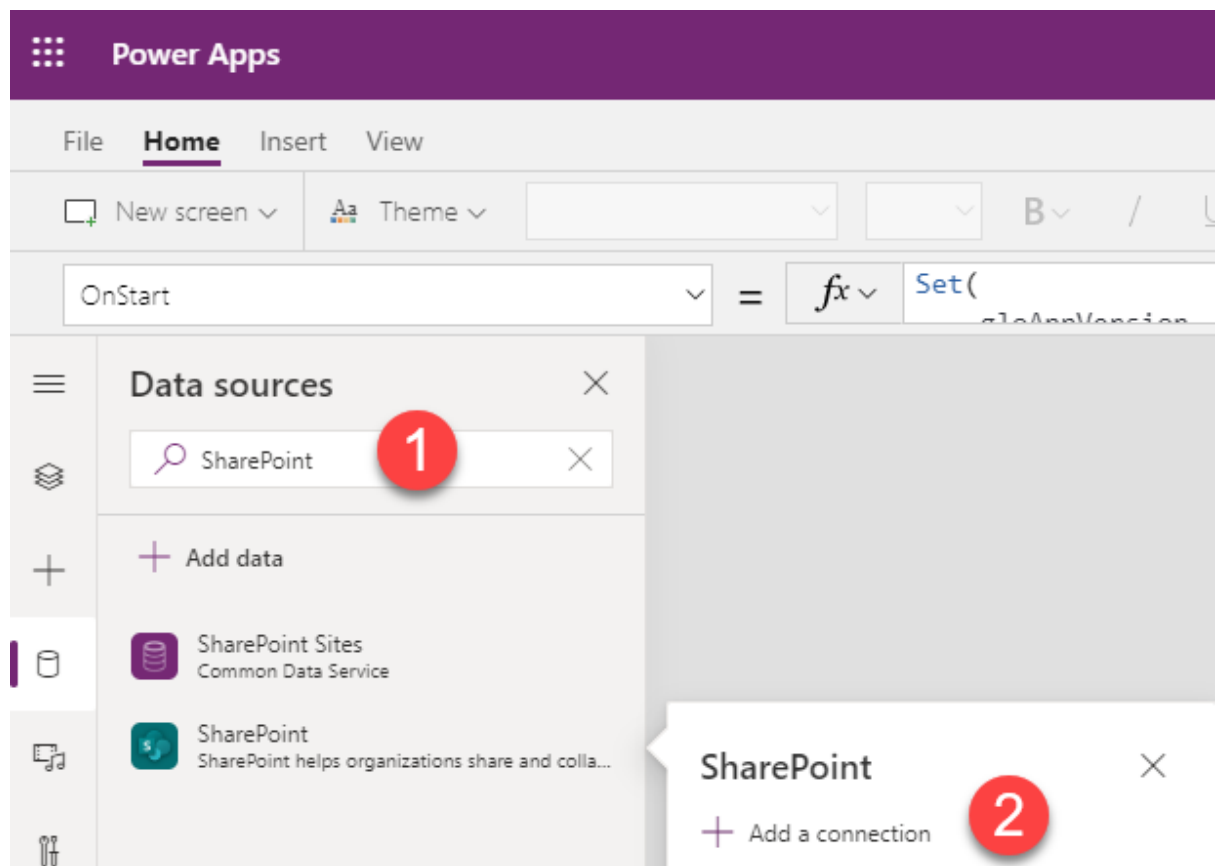


Figure 8

7. Select your SharePoint site, remember to choose either the production or the DEV site (Figure 9). If you do not see your site, enter the URL.

← Connect to a SharePoint site

×


Enter the SharePoint URL for the location of your list.
[Learn more](#)

2

Connect

Recent sites

🔍 Search

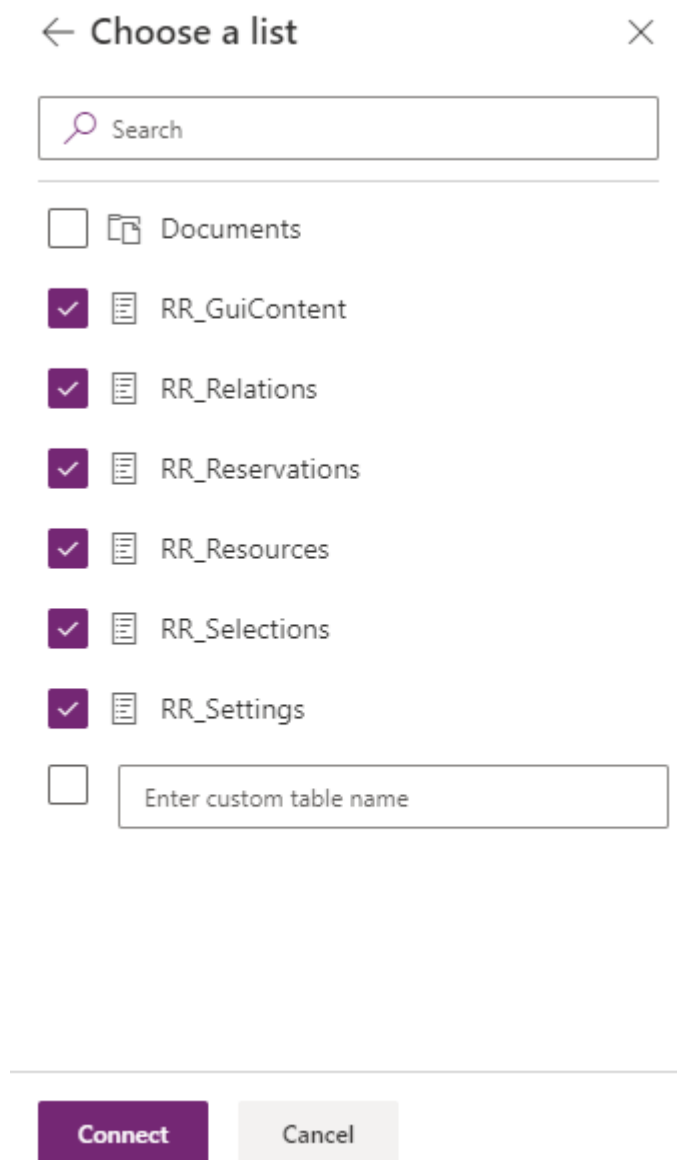


Book - <https://dev.sharepoint.com/sites/Bo...>

1

Figure 9

8. When your site is selected, choose all lists and press Connect (Figure 10).



← Choose a list ×

Search

☐ Documents

☒ RR_GuiContent

☒ RR_Relations

☒ RR_Reservations

☒ RR_Resources

☒ RR_Selections

☒ RR_Settings

☐ Enter custom table name

Connect Cancel

Figure 10

9. After this action, all red crosses which were previously visible on the first screen of Book are gone. This screen should look like Figure 11. Note: if your installation account

does not have a first name configured you will not see a name.

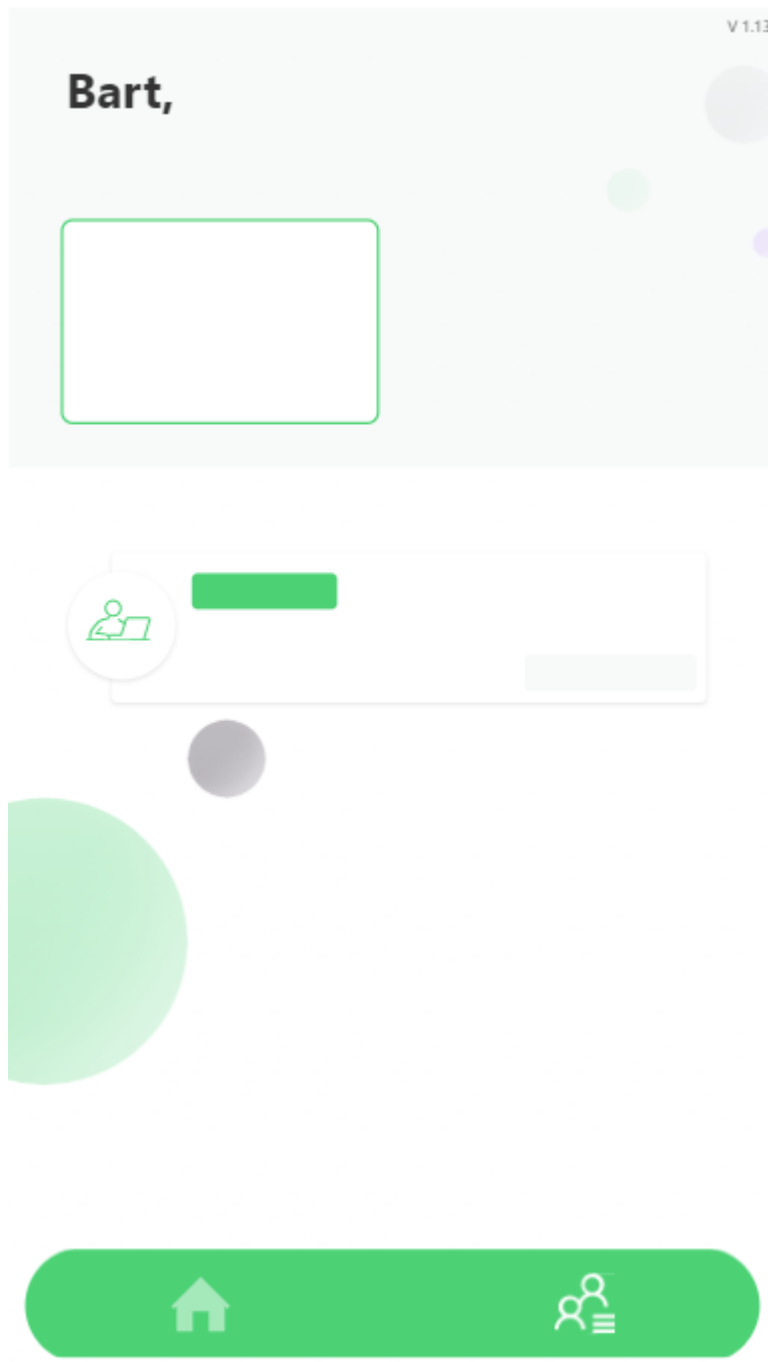


Figure 11

10. Press File, enter the version number V 1.13 in de version note and press Save. Note you can find the version number in the App.OnStart code section.

11. Press Publish, Publish this version (Figure 12)

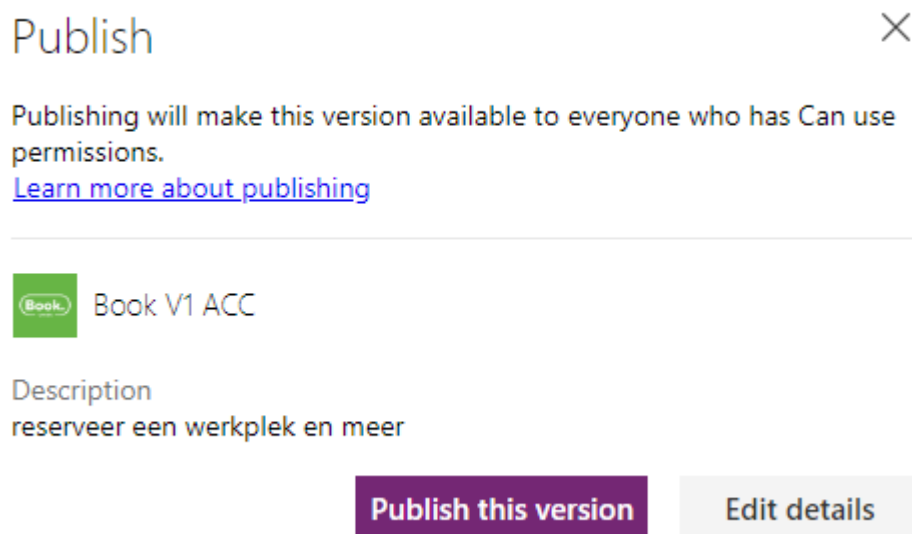


Figure 12

12. Press Close

13. Refresh your list of apps and try running Book. Book should show the following screens:



Figure 13

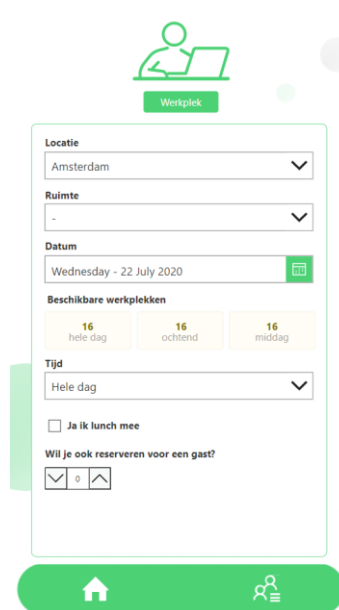


Figure 14

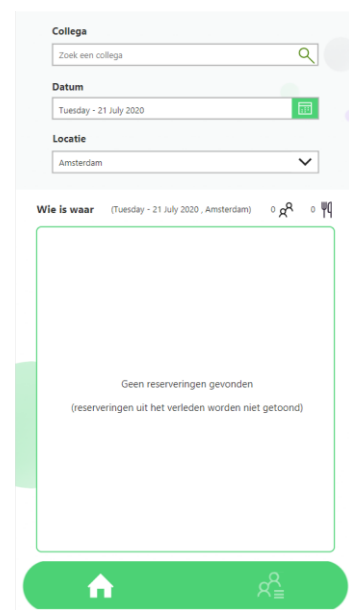


Figure 15

4.2.7 Sharing Book

Once Book is ready, the final step is to share it with the users. Wortell recommends using an AAD group for this purpose, that way administrators must only add users to the group to give them access to Book. To share Book, do the following:

1. Open PowerApps
2. Select correct environment
3. Select Book app, press Share
4. Enter name of AAD group, uncheck 'Send an email invitation to new users' if you do not want that.
5. Press Share.

Book will be available in the PowerApps app on the phone of these users.

4.2.8 Making Book available for PC users

One way of doing this is to put the URL of Book on the intranet of your organization so everyone can find Book. To get the URL for Book, do the following:

1. Open PowerApps
2. Select correct environment
3. Select Book app, press Details
4. Here you find the URL for the web link for Book.

5 Configuration

After installation you need to configure Book to make it suitable for your own organization. Book is designed to adopt to your needs. Configuration is done by editing several SharePoint lists, as all configuration is stored in SharePoint.

Caution:

Please read these instructions carefully and in full!

Some items in columns in certain lists you can, and some items in columns in certain lists you cannot change!

5.1 Settings

All settings are stored in list RR_Settings. A setting is a combination of a 'Key' and a 'KeyValue'. These settings control the way Book functionality behaves. Some of the settings are connected, others are not.

To be able to store any kind of setting, column 'KeyValue' is in SharePoint of SharePoint data type string. In column 'DataType' the actual datatype is stored. Column 'DataType' controls the way Book interprets 'KeyValue'. Do not change this for items where 'CustomKey' is false (no)!

You can add your own settings if you like, mark them as custom key by setting column 'CustomKey' to true (yes).

5.1.1 Administrator

You can store the email address for a user who acts as a developer or administrator for Book in KeyValue under key 'AppAdmin'. When a user with this account uses Book, a gear icon is displayed in the upper left corner of the home screen.

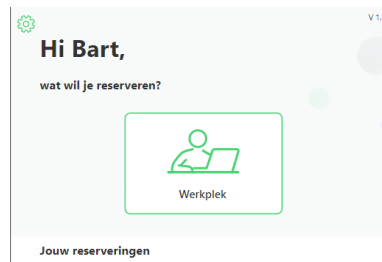


Figure 16

When the gear icon is selected, a settings screen is opened. In this screen useful info is displayed when you want to modify Book. The most important feature is activating debug mode.

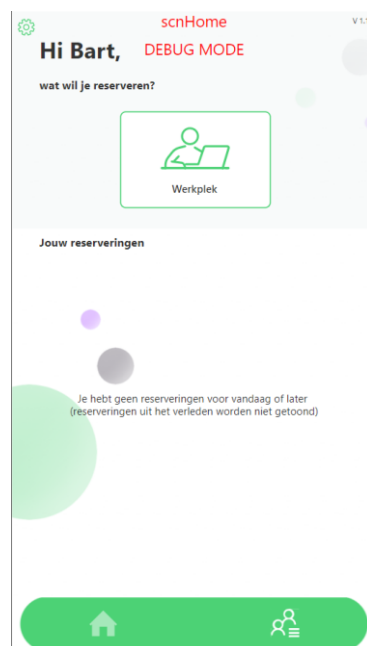


Figure 17

With debug mode active, additional info is displayed in all screens. Again, useful when modifying Book. Also, the name of every screen is shown. This feature is useful when you want to modify texts which are displayed throughout Book, see paragraph 5.1.4).

5.1.2 Version control

Book is designed primarily for use on a phone but is runs also in your browser on a PC. On a phone you install the PowerApps app. All PowerApps which are shared with you, appear in the list of available apps.

When a new version of an app is published, this is detected automatically by PowerApps. A pop-up appears notifying the user to download the new version. Unfortunately, this new version is used only after the user stops and re-starts PowerApps. This behavior can cause unwanted side effects when updating Book.

Therefore, in Book a mechanism is implemented to force automatic updates. You can switch this mechanism on or off by setting 'ControlUpdate' to true or false. Note: use these exact strings!

When 'ControlUpdate' = true, Book compares its own version with the version which is stored in key 'AppServerVersion'. When these values do not exactly match, a pop-up is displayed in Book. Note: 'AppServerVersion' is a case-sensitive string!

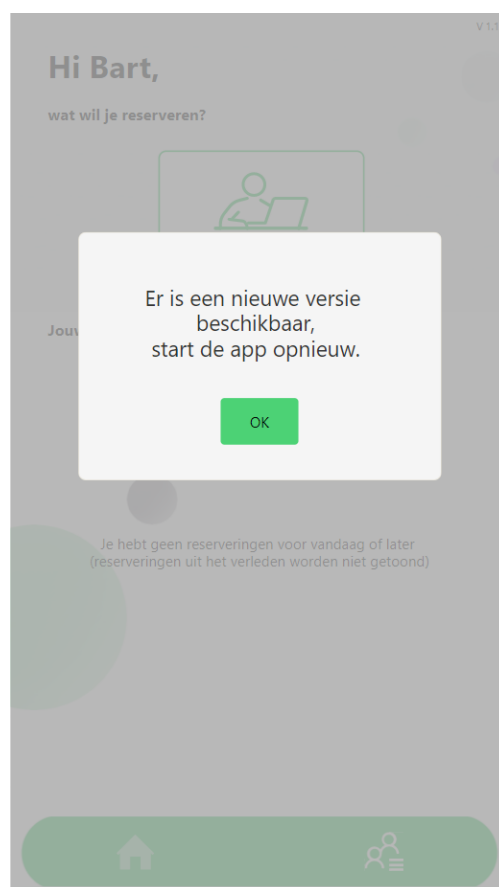


Figure 18

When the user presses OK, PowerApps is stopped. When Book is started again, the new version is downloaded and activated, the versions will match, and Book is available for use.

The version of the Book app is stored internally in the app in de `App.OnStart` code section in global variable 'gloAppVersion':

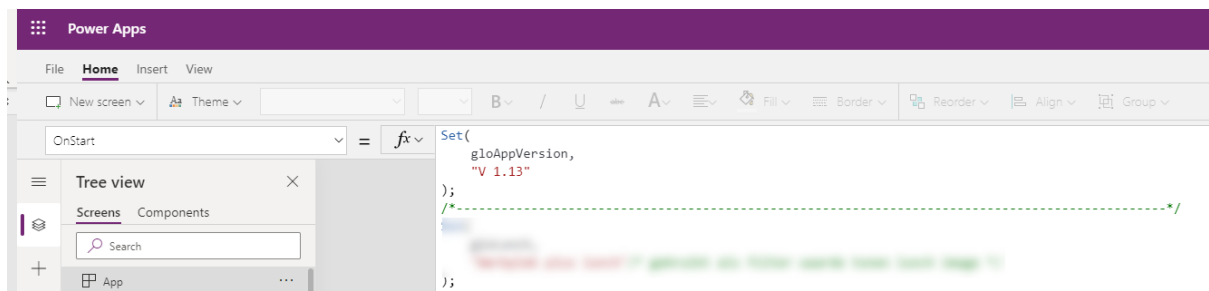


Figure 19

5.1.3 Maintenance mode

Sometimes you do not want users to use Book. For instance, when you are making changes to resources (see paragraph 5.3). For this situation maintenance mode is available.

When 'MaintenanceMode' = true a screen is displayed notifying the user that making reservations is not possible.

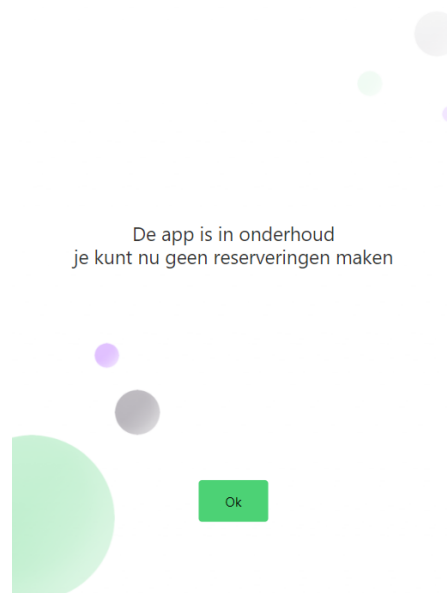


Figure 20

5.1.4 Custom GUI content

The display text as shown on all screens, is read from list RR_GuiContent¹. This list contains references to elements like textboxes, labels, dropdowns, buttons etc. per screen.

RR_GuiContent

Screen ▾	Element ▾	Default ▾	Custom ▾	Remark ▾	Deprecated ▾
all	imgNavHome	Start pagina	Home page	tooltip text	No
all	imgNavSearch	Overzicht collega's	Search	tooltip text	No
scnBookingWerkplekDetails	btnCancelReservation	Reservering annuleren	Cancel reservation		No
scnBookingWerkplekDetails	btnConfirmNo	Nee	No		No
scnBookingWerkplekDetails	btnConfirmYes	Ja	Yes		No

Figure 21

As you can see in Figure 21, there is a column called 'Default' and a column called 'Custom'.

When setting 'CustomGuiContent' = false, Book displays text from column 'Default'. When setting 'CustomGuiContent' = true, Book displays text from column 'Custom'.

As delivered column 'Default' is filled with text in Dutch, column 'Custom' is filled with text in English.

As delivered 'CustomGuiContent' = false, therefore Book will show all text in Dutch.

You can change both default and custom as you like. Please bear in mind that space for text is limited. So, when you change a short text to a long text, it is possible that text does not fit, is truncated, or wrapped.

5.2 Selections

In the Book GUI you will notice a dropdown where you can select the period for a reservation. The text is read from list 'RR_Selections'.

¹ Choices for dropdown boxes are read from list 'RR_Selections'.

Just like list 'RR_Settings' this list supports default text and custom text, see Figure 22. **But with a significant difference** (see below)! Which column is used in the GUI is determined by setting 'CustomGuiContent'.

RR_Selections

ID ▾	Key ▾	KeyValue ▾	KeyValueCustom ▾	Sequence ▾	Deprecated ▾	Selectable ▾	KeyDescription ▾
25	ResDuration	Hele dag	Whole day	1	No	Yes	08:00 - 18:00
26	ResDuration	Alleen ochtend	Morning	2	No	Yes	08:00 - 12:00
27	ResDuration	Alleen middag	Afternoon	3	No	Yes	12:00 - 18:00
28	ResourceType	Werkplek	Workplace	1	No	Yes	
29	ResourceType	Werkplek plus lunch	n.a	2	No	No	
30	ResourceType	Parkeerplaats	Parkingplace	3	Yes	Yes	
31	ResourceType	Parkeerplaats met laadpunt	Parkingplace with charge	4	Yes	Yes	
32	ResourceType	Stoelmassage	Chairmassage	5	Yes	Yes	

Figure 22

Caution!

This is the exception to the rule! You **CANNOT** change items in column KeyValue for any key!

The good news is, you can change items in column 'KeyValueCustom' as you please.

This is also the place where additional products (ResourceTypes) can be activated. As delivered items 30,31 and 32 are switched off, column 'Deprecated' = true (Yes). You can activate them by changing 'Deprecated' to false (No).

When you start Book you will notice these extra products in the top of the screen.

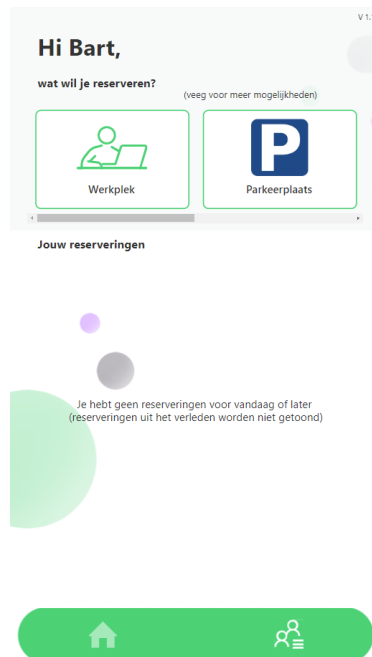


Figure 23

You can swipe to see them all. When you select for instance 'Parkeerplaats' (parking place) a screen is shown which is not yet finished.

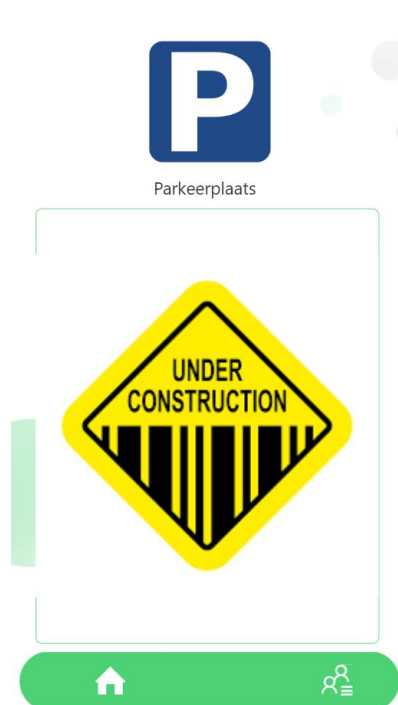


Figure 24

Wortell may or may not do this in future versions of Book (note disclaimer on page 5).

5.3 Configuring workplaces

This version of Book offers a flexible way of making a reservation for a workplace. As delivered a sample configuration is provided. I will use this sample to explain how to configure this.

It is a two-step process, first you must define a hierarchy of locations and sublocations. This is done in list 'RR_Relations'. This list is designed as a parent child construction. The parent is a location, the child is a sub location for a given location.

Secondly you must define which workplace belongs to which location and sublocation. This is done in list 'RR_Resources'. Please note that every Resource must have a unique ResourceID.

5.3.1 Configuring location hierarchy

RR_Relations

ID ▾	Key ▾	Parent ▾	Child ▾	Sequence ▾	Deprecated ▾
12	LocationSubLocation	Amsterdam	-	100	No
13	LocationSubLocation	Amsterdam	1e - ruimte A	101	No
14	LocationSubLocation	Amsterdam	1e - ruimte B	102	No
15	LocationSubLocation	Amsterdam	2e - ruimte C	103	No
16	LocationSubLocation	Amsterdam	2e - ruimte D	104	No
17	LocationSubLocation	Rotterdam	-	500	No
18	LocationSubLocation	Rotterdam	ruimte X	501	No
19	LocationSubLocation	Rotterdam	ruimte Y	502	No
20	LocationSubLocation	Rotterdam	ruimte Z	503	No
11	LocationSubLocation	Utrecht	Utrecht	600	No

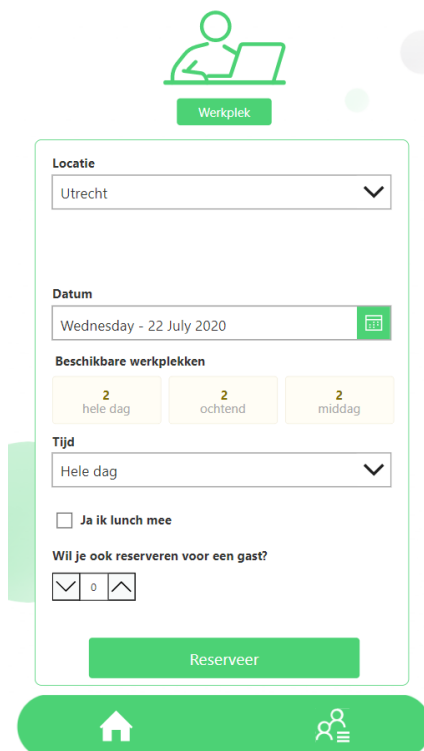
Figure 25 Sample content list 'RR_Relations'

Book offers two type of locations, with or without sublocations.

Location without sublocations

If you want to define a location without sub locations, you simply enter the same name in column 'Parent' and 'Child' in list RR_Relations. In Figure 25 location 'Utrecht' (ID=11) is an example of such a location.

When you make a reservation for a workplace in a location without sublocations, Book will not show a dropdown for sublocation, see Figure 26.



The image shows a mobile application interface for making a reservation. At the top, there is a green icon of a person at a laptop with the label 'Werkplek' (Workplace). Below this is a form titled 'Locatie' (Location) with a dropdown menu showing 'Utrecht'. The 'Datum' (Date) field shows 'Wednesday - 22 July 2020'. Under 'Beschikbare werkplekken' (Available workplaces), there are three yellow buttons: '2 hele dag' (2 full day), '2 ochtend' (2 morning), and '2 middag' (2 afternoon). The 'Tijd' (Time) dropdown menu is set to 'Hele dag' (Full day). There is a checkbox for 'Ja ik lunch mee' (Yes I am having lunch with me) which is currently unchecked. Below that is a question 'Wil je ook reserveren voor een gast?' (Do you also want to reserve for a guest?) with a numeric input field showing '0'. A green 'Reserveer' (Reserve) button is at the bottom of the form. The app's bottom navigation bar is green with a home icon and a user profile icon.

Figure 26 Reservation in location without sublocation

Location with sublocations

If you want to define a location with sub locations, enter different names in column 'Parent' and 'Child' in list RR_Relations.

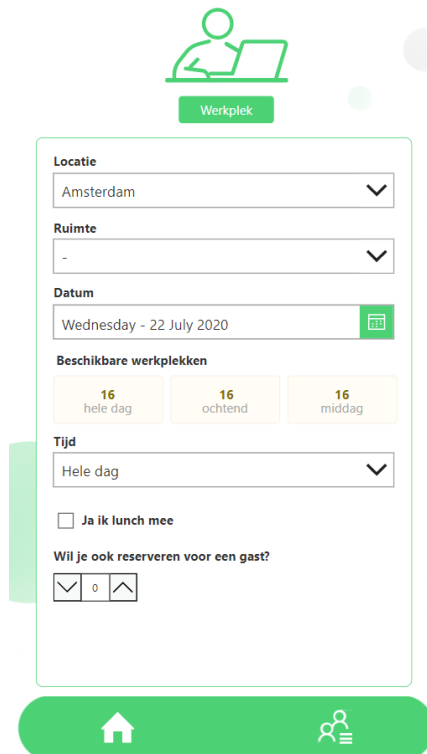
Sublocations of the same location must have the same name in column 'Parent'. In Figure 25 all locations other than 'Utrecht' (ID=11) have sublocations.

When you define a location to have sublocations you **must** name the first sublocation '-' (a dash). This means for the Book logic 'no sublocation selected'. This is hard coded and cannot be any other name. If a user has not chosen a specific sublocation you cannot make a reservation.

The order in which sublocation are displayed is determined by column 'Sequence'. This also applies for location. A location with a lower number is displayed in the dropdown before a location with a higher number, the same for sublocation.

When you make a reservation for a workplace in a location with a sublocations, Book will show a dropdown for sublocation, see Figure 27.

Please note that by default a sublocation is called 'Ruimte'. As you will know by now, you can change this to anything you like, see paragraph 5.1.4.



The image shows a mobile application interface for making a reservation. At the top, there is a green icon of a person at a laptop with the label 'Werkplek' (Workplace). Below this is a form with the following fields:

- Locatie** (Location): A dropdown menu showing 'Amsterdam'.
- Ruimte** (Room): A dropdown menu showing '-'.
- Datum** (Date): A date picker showing 'Wednesday - 22 July 2020'.
- Beschikbare werkplekken** (Available workplaces): Three yellow buttons labeled '16 hele dag', '16 ochtend', and '16 middag'.
- Tijd** (Time): A dropdown menu showing 'Hele dag'.
- ☐ Ja ik lunch mee (Yes, I am having lunch with me).
- Wil je ook reserveren voor een gast?** (Do you also want to reserve for a guest?): A numeric input field showing '0'.

At the bottom of the screen is a green navigation bar with a home icon and a user profile icon.

Figure 27 Reservation in location with sublocation

5.3.2 Configuring number and availability of workplaces

A workplace is an item in list 'RR_Resources' for which column 'ResourceType' = 'Werkplek', see Figure 28. Note; do not change the name 'Werkplek'!.

In the sample data provided, the list only contains items of this type. However, the list is designed to contain other types as well.

Please note that **every Resource must have a unique ResourceID**.

RR_Resources

ID	ResourceID	ResourceLocation	ResourceSublocation	ResourceType	Deprecated
32	A1RA01	Amsterdam	1e - ruimte A	Werkplek	No
33	A1RA02	Amsterdam	1e - ruimte A	Werkplek	No
34	A1RA03	Amsterdam	1e - ruimte A	Werkplek	No
35	A1RB01	Amsterdam	1e - ruimte B	Werkplek	No
36	A1RB02	Amsterdam	1e - ruimte B	Werkplek	No
37	A1RB03	Amsterdam	1e - ruimte B	Werkplek	No
38	A1RB04	Amsterdam	1e - ruimte B	Werkplek	No
39	A1RB05	Amsterdam	1e - ruimte B	Werkplek	No
40	A2RC01	Amsterdam	2e - ruimte C	Werkplek	No
41	A2RC02	Amsterdam	2e - ruimte C	Werkplek	No

Figure 28

The process is to enter all available resources in this list. All columns are required. So, the number of records per location and sublocation in list 'RR_Resources' determines available maximum capacity.

Locatie
Amsterdam

Ruimte
-

Datum
Wednesday - 22 July 2020

Beschikbare werkplekken

16 hele dag

16 ochtend

16 middag

Figure 29

Locatie
Amsterdam

Ruimte
2e - ruimte C

Datum
Wednesday - 22 July 2020

Beschikbare werkplekken

3 hele dag

3 ochtend

3 middag

Figure 30

Whether or not a reservation has been made for a certain date for a certain location and / or sub location for a certain time slot, determines the actual capacity. Book calculates actual capacity every time you change one of these parameters, you will notice an indication when this happens. Actual capacity is displayed for the three available timeslots.

Managing capacity

If for instance you need to temporarily disable a resource (for instance because of COVID-19) you simply set column 'Deprecated' to true (Yes).

6 Application lifecycle management

If you plan to make modifications to Book, then you need to have an ALM process in place.

As said before, we recommend having a production and dev version of Book each in its own environment and connected to separate SharePoint sites. The ground rule is to make modifications in DEV and test them. When ok, update production. To update production, follow this procedure:

1. Start PowerApps, select DEV environment
2. Make sure you updated the version number in Book, see paragraph 5.1.2
3. Export published DEV version of Book.
4. Select SharePoint production site
5. Activate maintenance mode in production, see paragraph 5.1.3.
6. Update version setting in SharePoint production to make it equal with the version number of step 2.
7. Select production environment in PowerApps
8. In production environment, import new version **AS AN UPDATE** to the existing Book app. This way the URL of the app remains unchanged.
9. Edit imported Book version
10. Remove SharePoint data sources, refer to paragraph 4.2.6
11. Add SharePoint data source, use existing connector but change to production SharePoint site
12. Select all lists
13. Save app, put new version number in comments as a reminder
14. Publish app
15. De-activate maintenance mode in production.

The new version is now up and running.