



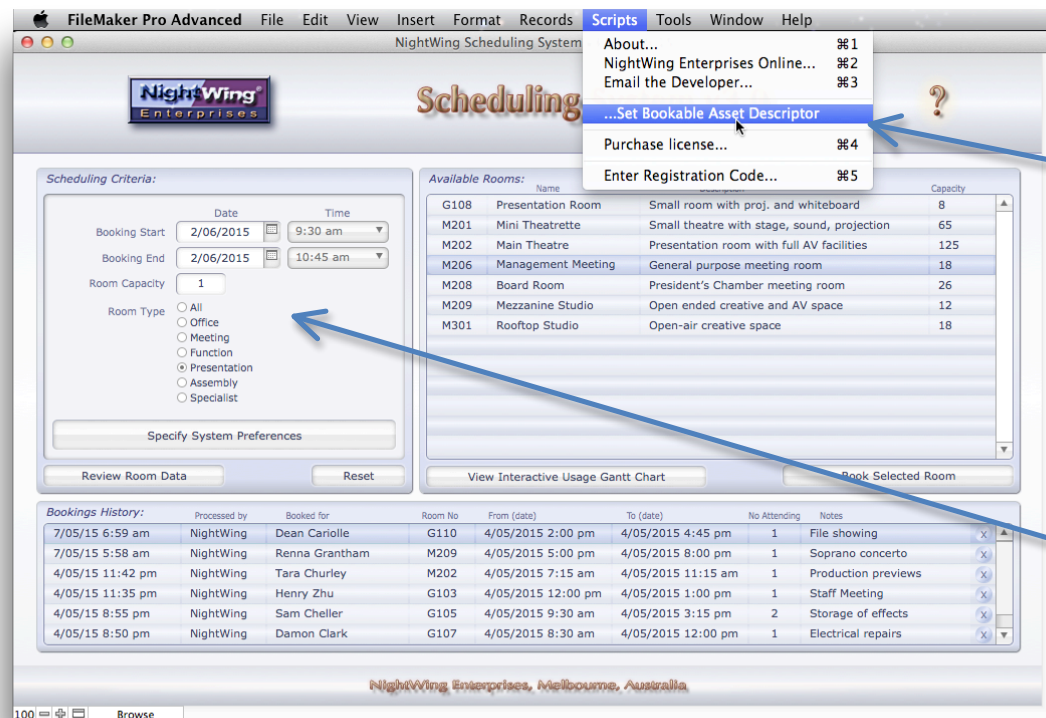
NightWing Scheduling System v3.0

Notes and General System Description

The NightWing Scheduling System takes a core set of requirements and presents them in a single compact solution with a simplified workflow. With just a few screens and a very short learning curve, users can be highly productive and can manage complex time-based asset scheduling requirements with ease.

Specifically, the system matches available assets (e.g. rooms or anything else you need to track such as people, booths, vehicles, equipment etc.) to booking criteria for start and stop times, capacity and type. When criteria are entered, a list of matching items that are available for the date/time span is presented on the same screen, allowing the user to select one and schedule a booking.

The whole process of entering criteria, viewing and selecting available matching items and placing a booking is done from the main system screen (pictured below) using the top two panels



By default, the demo is configured for the booking of rooms – but you can change this in one step.

Simply choose the “**...Set Bookable Asset Descriptor**” menu command on the Scripts menu to access a dialog where you can replace the name “Room” with an alternative item name/description (e.g. Car, Booth, Camera etc.).

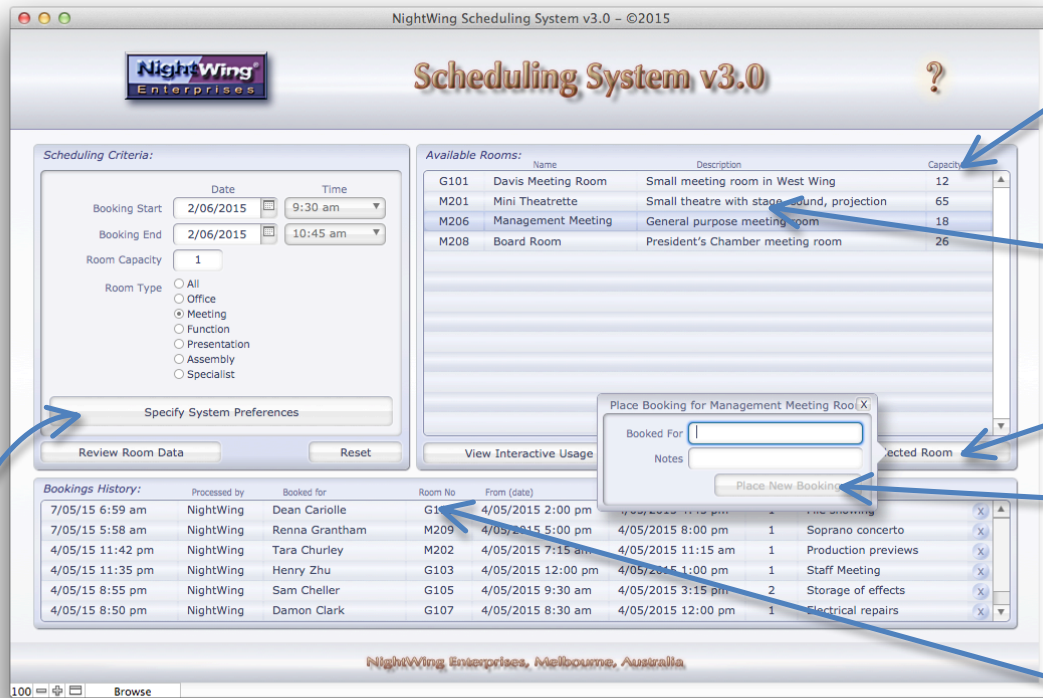
With an alternative descriptor entered, the screens and dialogs throughout the system will change to use the custom item name.

In the demo version, item details (the inventory of rooms/items) can’t be edited, but in a licensed copy, you can delete, add or edit the inventory records.

To get started with the workflow, enter criteria for a booking into the fields provided in the panel labelled “**Booking Criteria**” at the upper left of the main screen.

The booking criteria can include start and end date, required capacity and type for the room/item you wish to book. Each criterion evokes a dynamic response (change it and the list of available rooms/items adjusts accordingly)

As soon as you have entered criteria into the panel at the upper left, the list of available rooms/items in the adjacent panel at the right will update to show only the available items that correspond to the entered criteria (see image on next page).



As can be seen in the screen image at the left, with booking criteria entered, the list of available rooms (items) at the upper right has reduced to show only matching/available options.

Once a set of available rooms is displayed, you can choose one of them either by clicking on it or by using the up-arrow and down-arrow keys.

Clicking on a selected (highlighted) row de-selects it, clicking on the row again will re-select it.

With criteria in place and a row selected in the Available Rooms panel, the button labelled "**Book Selected Room**" at the lower right of the Available Rooms list becomes active.

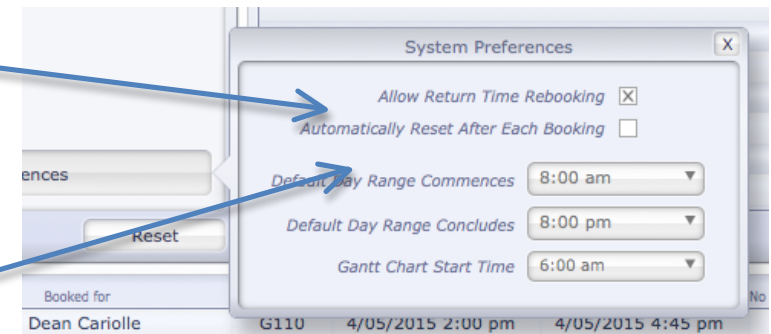
Pressing the Enter or Return key – or clicking on the "**Book Selected Room**" button – prompts you to indicate who the booking is for and allows you to enter an optional note.

Once you've added details for the booking, The "Place New Booking" button becomes active, and clicking it or pressing Enter or Return keys accepts the booking and adds it on the top line of the "**Bookings History**" portal along the bottom of the main system screen.

In addition to the features mentioned above, system preference controls affect the way the booking workflow operates. The preference settings can be accessed by clicking the button labelled "**System Preference Settings**" in the lower area of the Booking Criteria panel.

The first preference setting is labelled "**Allow Return Time Rebooking**". This setting permits a new booking to commence at the same time that a preceding booking concludes, and allows the system to support contiguous bookings (with this setting unchecked, a lapse of at least 15 mins will be required between the end of one booking and the start of the next).

A second preference setting is provided to "**Automatically Reset After Each Booking**". With this setting checked, as each booking is placed the booking criteria fields will be cleared (in the case of the Booking Start Date and Booking End Date fields), or set to default values ("1" for the Capacity criterion field and "All" for the Type criterion field).



unchecked, the criteria will remain in place after a booking is processed, facilitating placement of multiple bookings with similar criteria.

In addition, the system preferences allow you to set a default commencing and concluding time for bookings each day. For example, if you are managing bookings during conventional work day, you may wish to set the commencing time as 8:00am and the concluding time as 6:00pm. When you do this, the menus of available start and end times will be filtered to show only the time span between 8 am and 6 pm.

Finally, you can set the start time for the Gantt chart in the preferences panel (this can also be reset "on the fly" using controls appearing at the top right of the chart screen, as described later in this document).

Meanwhile, after a booking has been placed (and appears in the Bookings History portal) it can be reviewed, edited or deleted directly from the main system screen, as described below. This allows placement and basic management of bookings from a single screen, so that for many purposes, users will not need to leave the main system screen.

To review a recently processed booking, first locate its entry in the Bookings History portal at the bottom of the main system screen.

Note: Bookings are shown in the Bookings History portal in descending order of when they were processed, without regard to the chronological time of the booking. Hence the most recently processed booking (by any user) will always appear on the top row. As more bookings are made, previous bookings will move down the portal. The screen may be enlarged to see additional rows, but by default the six most recently processed bookings are displayed.

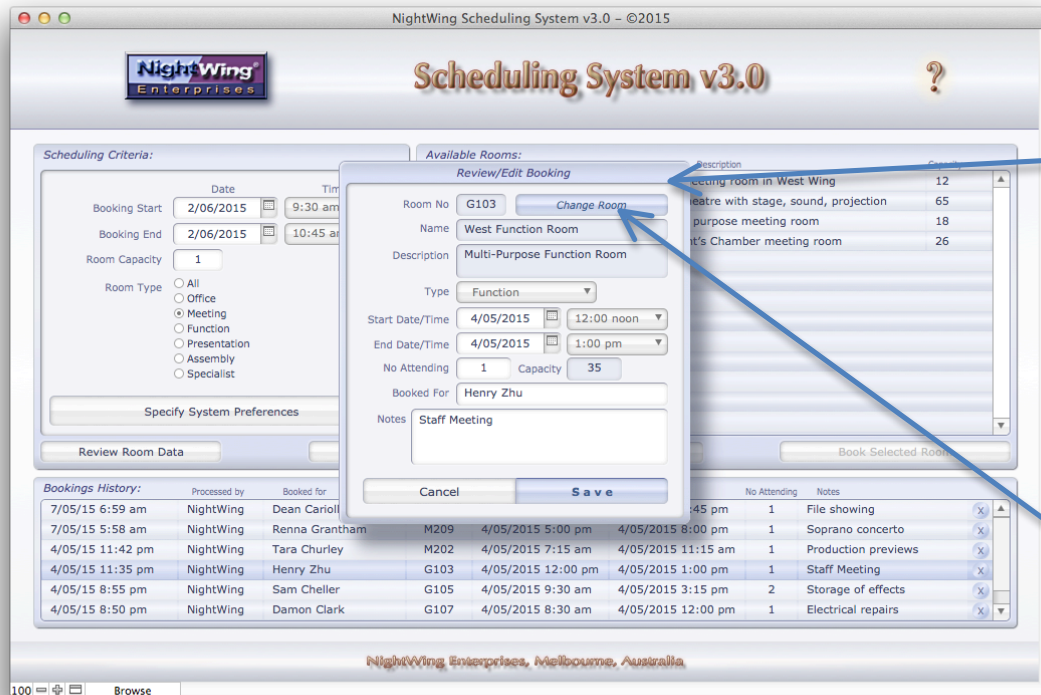
The information included in each row of the Bookings History portal gives a brief overview of the booking, including the user account of the person who made it, who it is for, the start and end dates etc.

Clicking on a row in the Bookings history portal selects the row and it becomes highlighted.

A control marked with an "X" symbol at the far right of each row in the booking portal can be used to delete a booking, after a confirmation dialog is accepted by the user. Bookings can be deleted at any time by any user (not only the user who made the booking).

While bookings may be viewed and deleted in place in the Bookings History portal, the data cannot be edited directly within the portal. However double-clicking or alt-clicking a row in the portal will invoke an editor window where the details of the booking can be amended and/or the booking can be reassigned (e.g. to an alternative room etc.).





When you double-click or alt-click a row in the Bookings History portal, the row remains highlighted for context while the editor pane is displayed, as shown in the illustration at the left.

In the “**Review/Edit Booking**” pane, all the details of the booking itself and the associated room/item are shown.

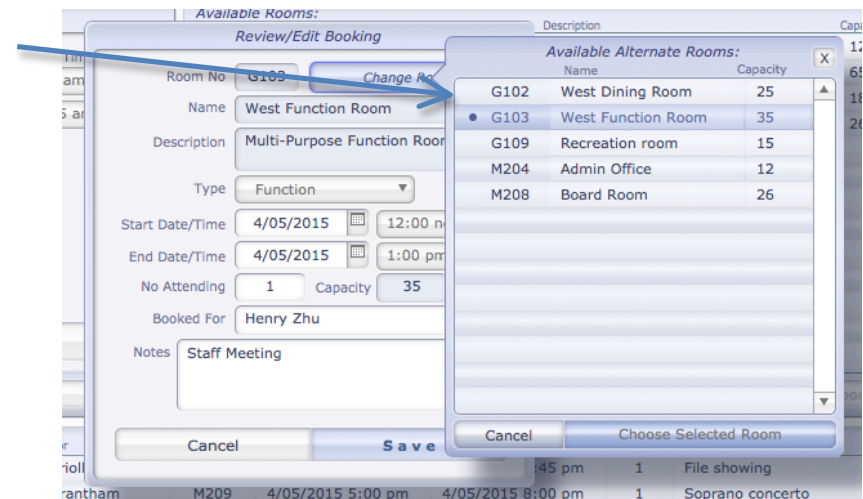
The booking details may be directly edited in the pane – however if you enter alternate dates/times, when you click the “Save” button, the system will check whether the room is available for the new time span, and will post an alert if there is a clash.

Regardless of whether the booking times are changing, you can access a list of alternate rooms/items that match the current criteria showing in the editor pane, by clicking the button labelled “**Change Room**” at the top right of the pane.

Doing so invokes an additional panel with a list of available rooms, as shown below.

The “**Available Alternate Rooms**” popover panel provides a list of rooms/items that match the criteria of the original booking, if invoked as soon as the editor pane appears. However if you make changes to the booking details in the editor pane before invoking the Available Alternate Rooms panel, the displayed list will be those rooms/items (if any) that match the updated booking criteria you have entered into the editor pane.

When the editor pane is invoked, the “Type” criterion is preset with the type(s) stored for the room/item that was booked. In some cases, rooms/assets may be listed with more than one type, in which case multiple type criteria will be set into the editor pane (though only one type shows in the pull-down field until/unless you click on it, whereupon the pre-selected types will each be ticked).



In FileMaker Pro, an alternate room/item may be selected by clicking on it or by using the up-arrow or down-arrow keys. In FileMaker Go or FileMaker WebDirect, the arrow keys don't control the selection and a tap or mouse click (respectively) is required to select an alternate room. After selecting an alternate room, you may press enter (in FileMaker Pro) or click/tap on the **"Choose Selected Room"** button at the lower right of the panel apply the selection. The Available Alternate Rooms panel will be dismissed and your selection will be shown in the editor pane ready to be saved to the booking.

You can cancel the alternate room/item selection at any time by clicking/tapping on the Cancel button at the lower left of the panel, or the close button (marked "X") at the top right of the panel, or by pressing the Esc key in FileMaker Pro.

When you click/tap on the **"Save"** button at the lower right of the editor pane, as well as checking the availability of the selected room/item for the dates entered, the system checks that the "No. Attending" value is within (equal to or less than) the stored capacity of the selected room/item. If not, you will be prevented from proceeding.

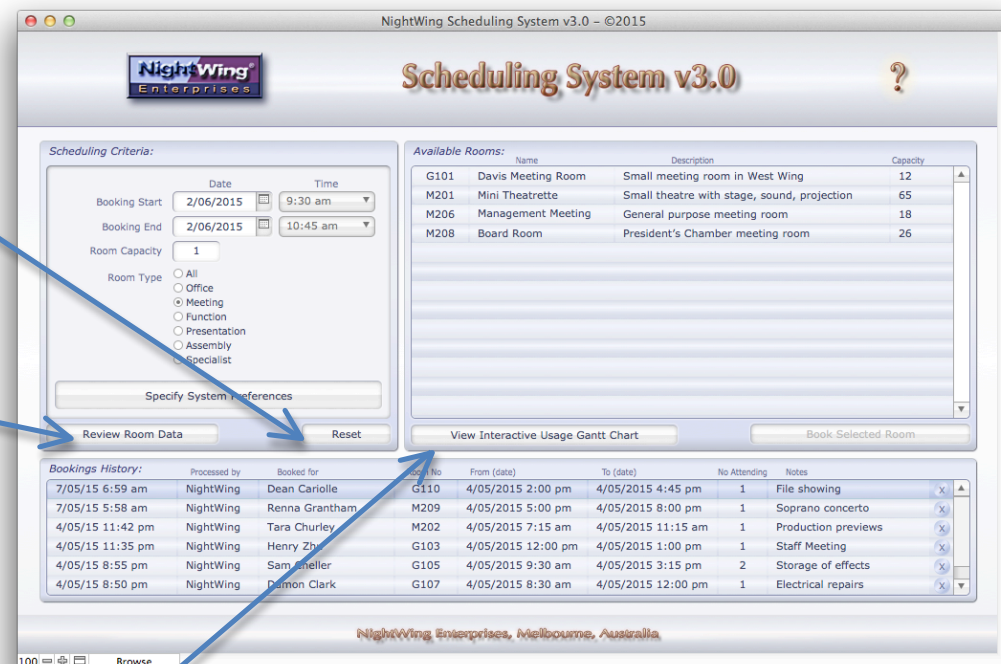
In addition to the features described above, several buttons are provided on the lower section of the criteria and available rooms panels in the upper part of the main system screen.

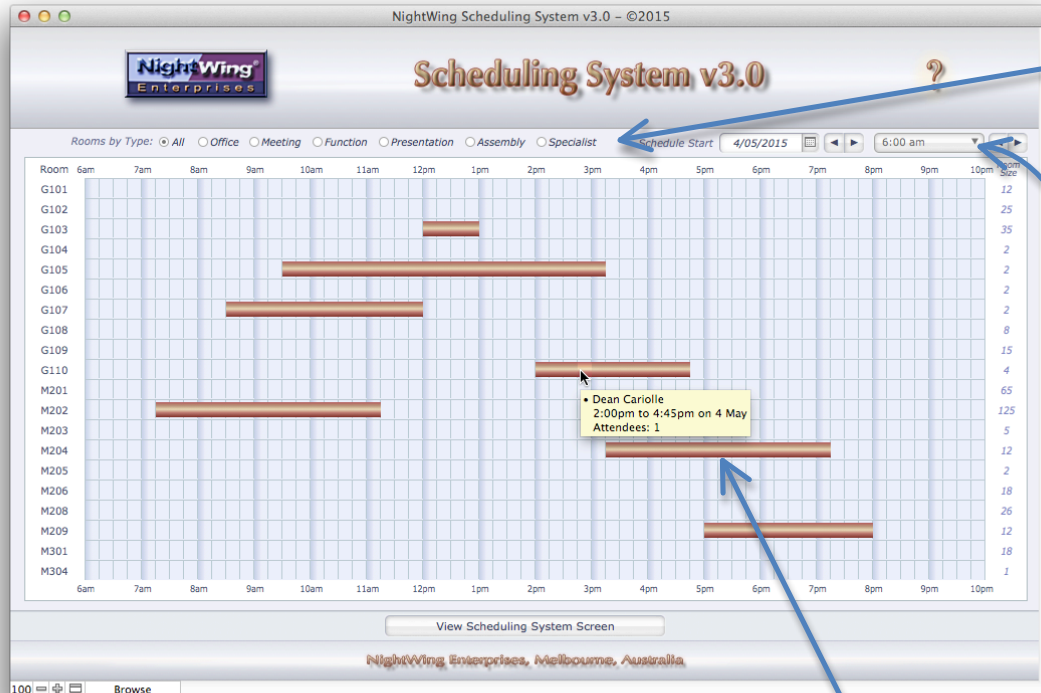
At the lower right of the Booking Criteria panel is a button labelled **"Reset"** which, when clicked/tapped clears the booking start and end date fields in the Booking Criteria panel, sets the Capacity criterion field to "1" and sets the Type criterion field to "All". These are the commencing/default values for starting a new search.

At the lower left of the Booking Criteria panel is a navigation button that will take you to a screen displaying the register of rooms (or other assets/items to be booked).

Note: In the demo version, rooms data may not be entered, edited or deleted, however when the system is registered (after purchase of a license code) the bookable items register may be updated fully by an administrator account, while the description, type and capacity fields may be edited by any user of a licensed copy of the system.

Finally, the main system screen includes a **"View Interactive Usage Gantt Chart"** button at the lower left of the Available Rooms panel, which will present a scrollable 16-hour calendar view corresponding to the selected Type criterion in the Booking Criteria panel.





If the Type criterion on the main system screen is set to the default value of "All" when you navigate to the Usage Gantt Chart, bookings for all rooms will be shown, as in the image at the left. However you can filter the view using the radio button selection options labelled "Rooms by Type:" at the top of the chart.

The chart displays a span of 16 hours (64 quarter hrs). You can set the date and start time using the pull-down menus labelled "Schedule Start:" at the top right, or you can scroll the chart to the left or right in increments of 1 day) by clicking the left and right arrow buttons to the right of the date field, or in increments of one hour using the buttons at the right of the time drop-down menu.

In FileMaker Pro, holding the Shift key while clicking on the left and right arrow buttons next to the date field causes the display to change (in the corresponding direction) in increments of 7 days.

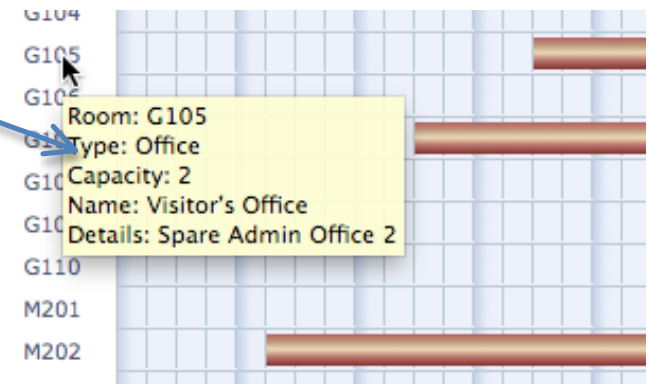
Across the top and bottom of the chart, each hour is marked as a major tick, while the quarter hour segments are indicated by minor tick vertical lines .

With the desired time span and items on the chart in view, roll-over tooltips on each segment provide brief details about the corresponding booking – who it was for, the start and stop dates and the number of attendees.

At the left of each chart row the identifying number of the room/item is displayed, and positioning the mouse pointer over the left column invokes a tooltip with details including type, capacity, name and description (as shown in the image at the right). Note: tooltips are available in FileMaker Pro and WebDirect, but not in FileMaker Go.

In addition, the column appearing at the far right of the chart lists the capacity of each room/item, for immediate reference.

In FileMaker Pro, dragging a booking horizontally within its row dynamically alters the start and end times to reschedule the booking to an earlier or later period, subject to room availability. Holding the shift key while dragging the start or end of a booking within its row extends or contracts the booking period accordingly. To modify booking dates in FileMaker Go or WebDirect, tap/click the booking to invoke the editor pane.



Dragging a booking from one row to another row will reassign the booking to a different room/item, subject to availability. If the capacity of the designation room/item is smaller than the "attendees" number recorded for the booking, an alert will be displayed, however you will have the option to cancel or proceed.

When dragging between rows, if the shift key is held down for the duration of the drag, the start and stop dates will be preserved regardless of whether your drag is vertical or diagonal. Without the shift key, dragging between rows diagonally will reassign and reschedule the booking simultaneously.

Alternatively, double-clicking or alt-clicking on a booking in the chart (or single-clicking in FileMaker WebDirect or FileMaker Go) invokes an editor pane where details of the booking are shown in full and may be directly edited, as shown in the image below.

The editor pane on the Gantt Chart screen resembles the editor pane that can be invoked from the Bookings History portal on the main system layout, and works in the same way.

Fields with details specific to the booking may be directly edited and the changes will be saved to the booking (unless they introduce a clash) when the "Save" button is clicked/tapped.

Similarly, a panel displaying a list of available alternative rooms/items (matching the criteria entered into the editor pane) can be invoked by clicking/tapping on the "Change Room" button at the upper right of the editor pane.

If you click cancel at any time, changes entered into the editor pane will be discarded and the booking will remain unchanged. However if you click the "Save" button, the revised booking details will be validated and, in the event a booking conflict would result (e.g. if start or end time or date changes conflict with another booking, or if a change to the number of attendees exceeds the capacity of the assigned room/item, an error dialog will be displayed.

When a change has been saved, the chart will automatically update to display the change (e.g. the booking will appear in a new position on the chart).

Note that with a large number of rooms/items appearing in the chart, well over a thousand booking time segments are being plotted and rendered on the chart. With fewer rooms/item types displayed (using the Type filter), the data in play is reduced, and the chart will refresh more rapidly to show changes in response to user interaction. If your device or connection is slow, consider filtering the chart by type (if/as appropriate) to yield improved performance.



As noted previously, the system provides access (via a navigation button on the main system screen) to the master list of bookable assets (rooms, items etc.). In the demo version of the system, the register is not editable and is displayed for information only.

When the system is registered (and a license code has been entered) however, the asset data may be managed (records can be deleted, added and edited), as described below.

RoomNo	Name	Description	Type	Capacity
G101	Davis Meeting Room	Small meeting room in West Wing	<input type="checkbox"/> Office <input checked="" type="checkbox"/> Meeting <input type="checkbox"/> Function <input type="checkbox"/> Presentation <input type="checkbox"/> Assembly <input type="checkbox"/> Specialist	12
G102	West Dining Room	Function Room with catering access	<input type="checkbox"/> Office <input type="checkbox"/> Meeting <input checked="" type="checkbox"/> Function <input type="checkbox"/> Presentation <input type="checkbox"/> Assembly <input type="checkbox"/> Specialist	25
G103	West Function Room	Multi-Purpose Function Room	<input type="checkbox"/> Office <input type="checkbox"/> Meeting <input checked="" type="checkbox"/> Function <input type="checkbox"/> Presentation <input type="checkbox"/> Assembly <input type="checkbox"/> Specialist	35
G104	Visitor's Office	Spare Admin Office 1	<input checked="" type="checkbox"/> Office <input type="checkbox"/> Meeting <input type="checkbox"/> Function <input type="checkbox"/> Presentation <input type="checkbox"/> Assembly <input type="checkbox"/> Specialist	2
G105	Visitor's Office	Spare Admin Office 2	<input checked="" type="checkbox"/> Office <input type="checkbox"/> Meeting <input type="checkbox"/> Function <input type="checkbox"/> Presentation <input type="checkbox"/> Assembly <input type="checkbox"/> Specialist	2
G106	Visitor's Office	Spare Admin Office 3	<input checked="" type="checkbox"/> Office <input type="checkbox"/> Meeting <input type="checkbox"/> Function <input type="checkbox"/> Presentation <input type="checkbox"/> Assembly <input type="checkbox"/> Specialist	2
G107	Visitor's Office	Spare Admin Office 4	<input checked="" type="checkbox"/> Office <input type="checkbox"/> Meeting <input type="checkbox"/> Function <input type="checkbox"/> Presentation <input type="checkbox"/> Assembly <input type="checkbox"/> Specialist	2
G108	Presentation Room	Small room with proj. and whiteboard	<input type="checkbox"/> Office <input type="checkbox"/> Meeting <input type="checkbox"/> Function <input checked="" type="checkbox"/> Presentation <input type="checkbox"/> Assembly <input type="checkbox"/> Specialist	8
G109	Recreation room	Waiting room with refreshments, TV etc	<input type="checkbox"/> Office <input type="checkbox"/> Meeting <input checked="" type="checkbox"/> Function <input type="checkbox"/> Presentation <input type="checkbox"/> Assembly <input type="checkbox"/> Specialist	15
G110	Technical Lab	Specialist room for computers, server etc.	<input type="checkbox"/> Office <input type="checkbox"/> Meeting <input type="checkbox"/> Function <input type="checkbox"/> Presentation <input type="checkbox"/> Assembly <input checked="" type="checkbox"/> Specialist	4
M201	Mini Theatre	Small theatre with stage, sound, projection	<input type="checkbox"/> Office <input checked="" type="checkbox"/> Meeting <input type="checkbox"/> Function <input checked="" type="checkbox"/> Presentation <input checked="" type="checkbox"/> Assembly <input type="checkbox"/> Specialist	65
M202	Main Theatre	Presentation room with full AV facilities	<input type="checkbox"/> Office <input type="checkbox"/> Meeting <input type="checkbox"/> Function <input checked="" type="checkbox"/> Presentation <input checked="" type="checkbox"/> Assembly <input type="checkbox"/> Specialist	125
M203	Admin Office	Main general purpose office	<input checked="" type="checkbox"/> Office <input type="checkbox"/> Meeting <input type="checkbox"/> Function <input type="checkbox"/> Presentation <input type="checkbox"/> Assembly <input type="checkbox"/> Specialist	5
M204	Admin Office	Reception and customer service area	<input checked="" type="checkbox"/> Office <input type="checkbox"/> Meeting <input checked="" type="checkbox"/> Function <input type="checkbox"/> Presentation <input type="checkbox"/> Assembly <input type="checkbox"/> Specialist	12
M205	Main Store Room	Storage and tech access area	<input type="checkbox"/> Office <input type="checkbox"/> Meeting <input type="checkbox"/> Function <input type="checkbox"/> Presentation <input type="checkbox"/> Assembly <input checked="" type="checkbox"/> Specialist	2
M206	Management Meeting	General purpose meeting room	<input type="checkbox"/> Office <input checked="" type="checkbox"/> Meeting <input type="checkbox"/> Function <input checked="" type="checkbox"/> Presentation <input type="checkbox"/> Assembly <input type="checkbox"/> Specialist	18
M208	Board Room	President's Chamber meeting room	<input type="checkbox"/> Office <input checked="" type="checkbox"/> Meeting <input checked="" type="checkbox"/> Function <input checked="" type="checkbox"/> Presentation <input type="checkbox"/> Assembly <input type="checkbox"/> Specialist	26
M209	Mezzanine Studio	Open ended creative and AV space	<input type="checkbox"/> Office <input type="checkbox"/> Meeting <input type="checkbox"/> Function <input checked="" type="checkbox"/> Presentation <input checked="" type="checkbox"/> Assembly <input checked="" type="checkbox"/> Specialist	12

On registering your copy of the NightWing Bookings System (after purchasing a license), you will be prompted to create one or more user accounts with which to gain licensed access to the system (corresponding to the number of seats you've licensed).

The first account created will become the admin account for the licensee, and that account will have full editing privileges for records on the asset register, shown at left, allowing addition, deletion and modification of records. In addition, the licensed admin user can edit the "AssetType" value list.

Subsequent accounts created under a multi-seat license will have limited editing capabilities for the asset register. For these user accounts, creation or deletion of asset records is not permitted, and the asset number (e.g. Room No etc.) and asset name fields and AssetType value list are not modifiable. However all licensed users may edit the data in the Description, Type and Capacity fields.

In addition to the screens and functionality outlined herein, users who have licensed the system for two or more seats will be provided with access to a "User Account Administration" screen (details will be provided separately to registered users).

NightWing Enterprises also offers a Booking System that allows booking of rooms or other items on a per-day (or overnight) basis (rather than a per quarter-hour period) that operates on similar principles to the NightWing Scheduling System. Details are available from the Products page of our web site.

License pricing & terms for the NightWing Scheduling System, are at: http://www.nightwingenterprises.com/info/schedulingsystem_v3.php

To purchase your license for one or more seats, visit: http://www.nightwingenterprises.com/registration/NSS_v3registration.php