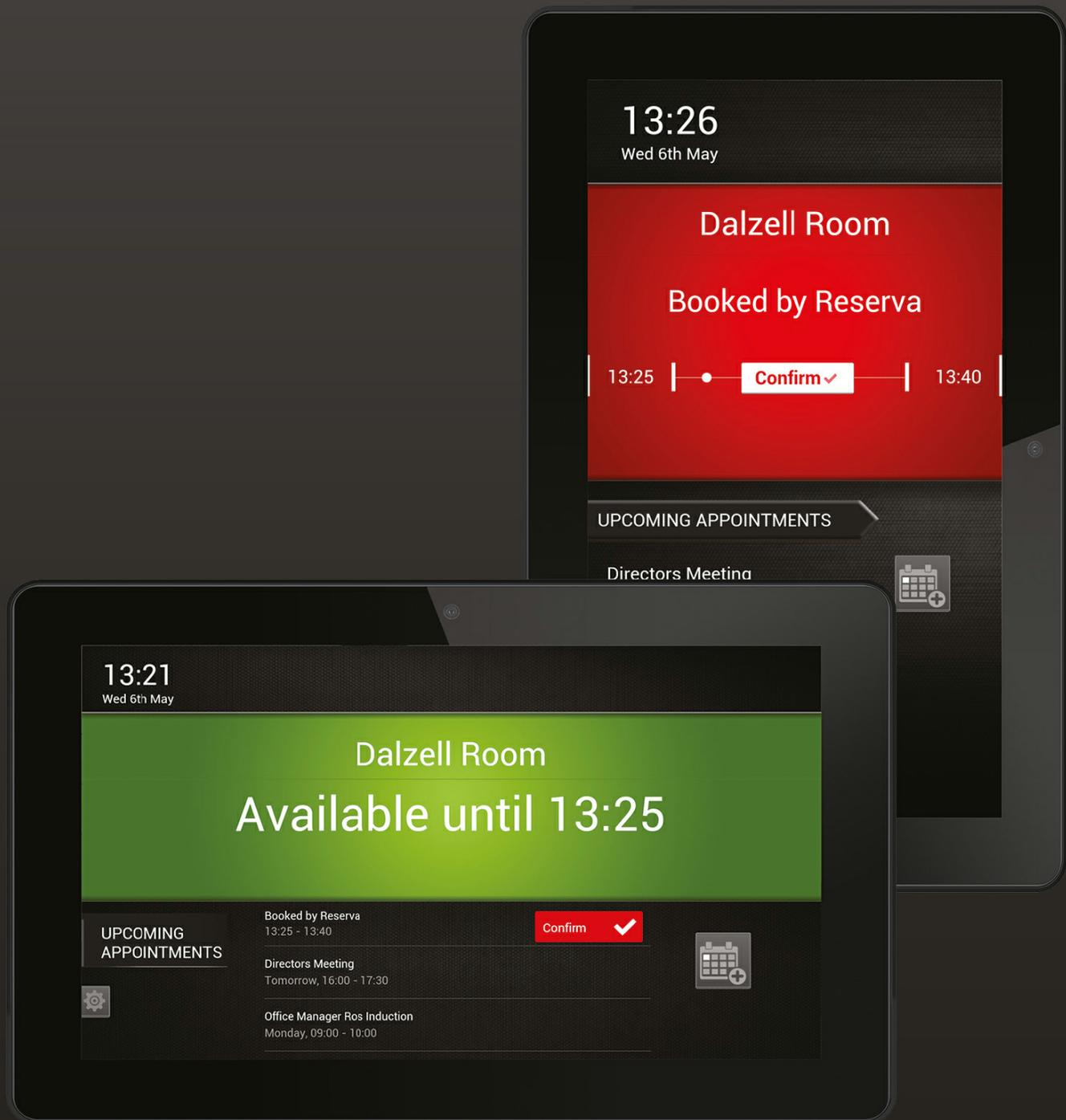


Reserva Room Signage: Installation Instructions and Administration Guide



Reserva Room Signage

Installation Instructions and Administration Guide

V3.6.0 (55952)

by ONELAN Limited

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Reserva is a range of dedicated meeting room signage which offers a compact and attractive door side display with dynamic integration to multiple Calendar systems.

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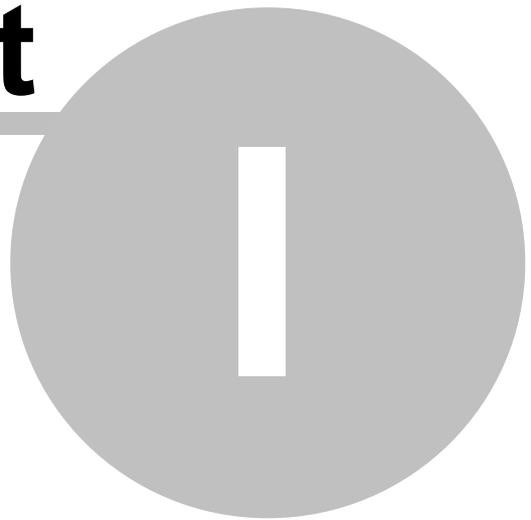
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Part



Introduction

1 Introduction

Thank you for choosing Reserva Room Signage. This guide is for administrators responsible for deploying Reserva and explains how to plan, install, configure and manage a Reserva deployment.



Other resources include:

- User Guide: A concise guide explaining how your end users book meeting rooms and manage bookings using a Reserva room sign.
- Reserva Connection Manager Help: Context-sensitive help, providing further details regarding administration and management of Reserva.

1.1 About Reserva

Reserva provides intuitive digital displays to allow efficient use of your meeting rooms and collaboration spaces. Reserva is linked dynamically with your calendar system, ensuring room information is up to date and accurate. Meeting rooms are managed more efficiently, avoiding issues such as the inconvenience of double bookings or meeting rooms shown as busy despite being vacant (for example, where attendees are unable to make meetings at short notice).

Reserva provides two types of display:



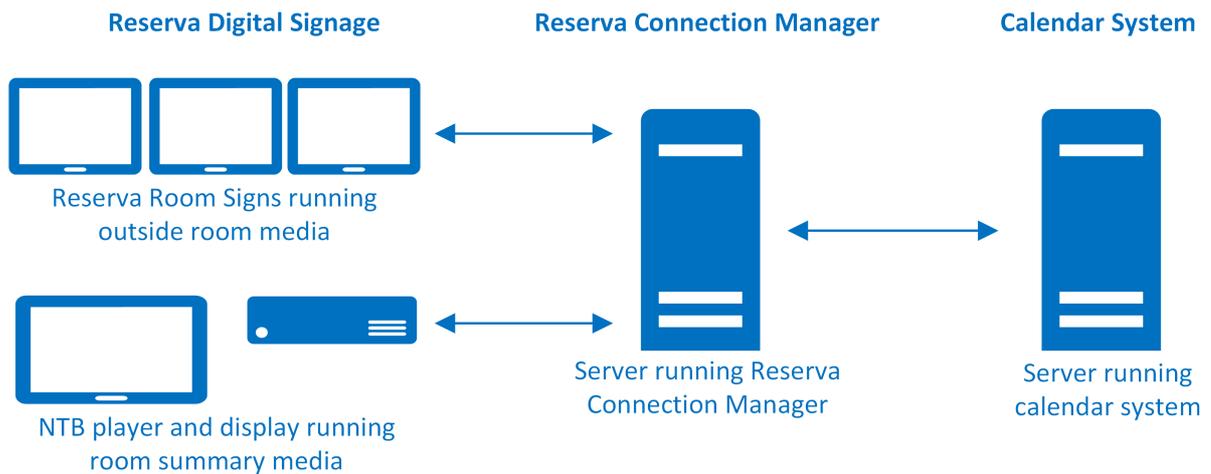
Reserva room sign and room summary display

- **Reserva room sign**
Interactive room sign, showing the current status of a meeting room along with a summary of upcoming appointments. Using the interactive touchscreen users can book, confirm, extend/shorten and cancel appointments.
- **Reserva room summary display**
Provides a clear summary of appointments across a collection of meeting rooms. Typical deployment of room summary displays include reception areas and foyers, helping guide staff, students and guests to the correct meeting room and collaboration spaces. The room summary content can be displayed in full screen or within a 'zone' within a screen layout with multiple 'zones'.

Reserva digital displays are available in a range of sizes to complement your requirements and space considerations. For example, you might decide to mount smaller room signs alongside meeting rooms, larger room signs for big rooms such as auditoriums, and large room summary displays in your reception to provide a summary of appointments across multiple meeting rooms. You can customise the Reserva media to suit your branding and environment.

1.2 Reserva Components

Reserva deployments comprise the following components.



Reserva Components

The components include:

Reserva Displays

Reserva supports two types of display:

- Room sign: Reserva room sign running outside room media
- Room summary: ONELAN Net-Top-Box (NTB) and display running room summary media

Reserva Media

- **Reserva outside room media**

Linked to a single room within your calendar system, the interactive room sign shows the status of the meeting room and a list of upcoming appointments. It allows users to book and manage their appointments.

- **Reserva room summary media**

Provides summary of appointments for a number of rooms within your calendar system. The media runs on an NTB and can be displayed in full screen mode or within a specified zone in a multi zone layout. The media is read-only.

Both outside room media and room summary media can be customised to include a logo of your choice, a dark or light theme to complement your branding. You can also specify language options to suit your location and user requirements.

Reserva Connection Manager

Reserva Connection Manager allows you to setup, manage and monitor your Reserva deployment.

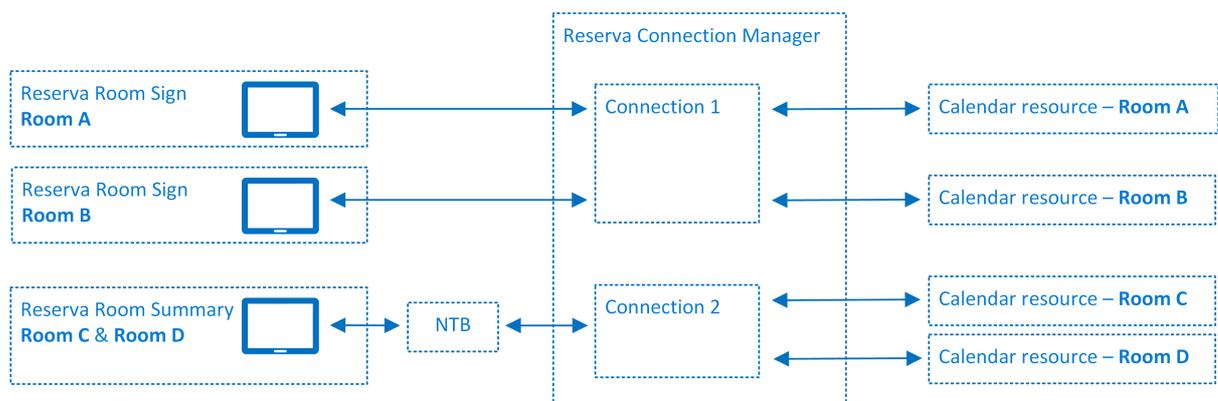
You configure Reserva outside room media and room summary media for a specific Connection. The Connection specifies the room information to present on the room sign or room summary display and how often the information is updated. For room signs, the Connection also specifies the options available to the end users.

You add the required rooms, from your calendar system, to the Connection. Room signs are configured to show the details for a specific room added to the Connection. Room summary media presents a summary of appointments for all rooms added to the Connection.

Reserva Connection Manager allows you to add, modify and test Connections.

Note that Reserva Connection Manager installs the Reserva Room Signage Service on the server running Reserva Connection Manager. The service is required, starts automatically and runs in the background.

Reserva components are configured to communicate as shown in the example below.



Reserva Connections

In this example, the room signs for Room A and Room B are interactive and configured to allow users to book appointments. The room summary for Room C and Room D, provides a summary of the appointments for both Room C and Room D and is non-interactive (the summary information is read-only).

Calendar System

Reserva integrates with your preferred calendar system, ensuring meeting room information and bookings are accurate, up to date and synchronized across all room signs.

This version of Reserva supports Microsoft Exchange, Google Calendar, Scientia and Oracle OPERA. For more details regarding the supported calendar systems and requirements, see [Calendar Requirements](#).

Please contact ONELAN at <%sales@onelan.com%> for information on deploying Reserva with other calendar systems.

1.3 Reserva Displays

Two types of Reserva display are available:

- [Reserva room sign](#) - Outside room media runs on the room sign, showing the status of the meeting room, a list of upcoming appointments and booking options.
- [Reserva room summary](#) - Room summary media runs on an NTB and provides summary of appointments for a number of rooms.

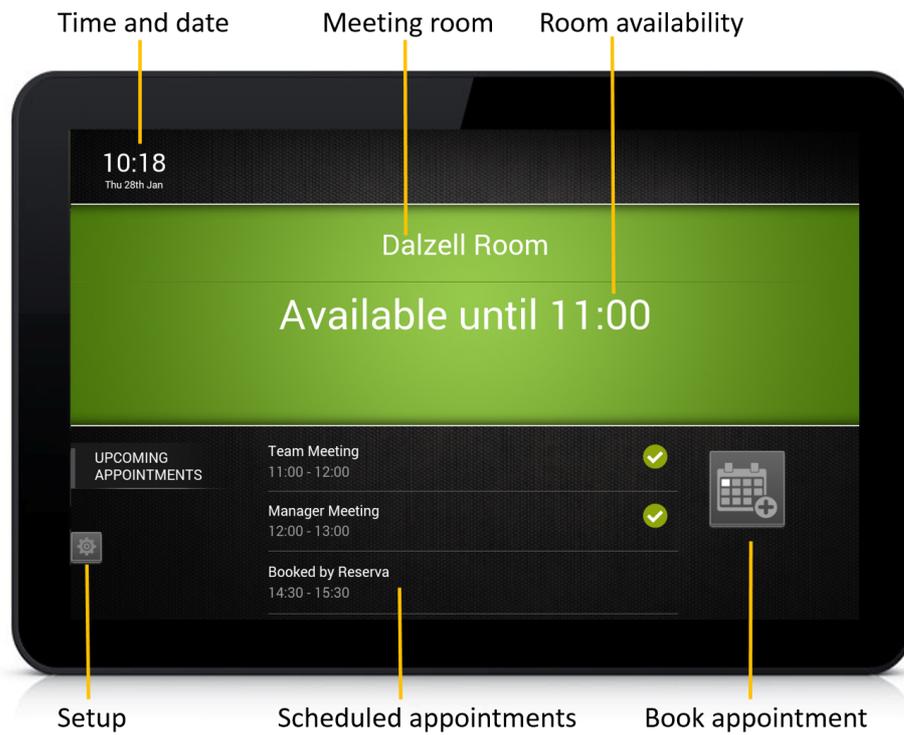
1.3.1 Room Sign Interface

Reserva room signs running outside room media show meeting room availability, a summary of scheduled appointments and booking options. The options available depend on the meeting room status (available or busy) and the options you enable for your end users. Each Reserva room sign is configured to display the information for a specific room in your calendar system.

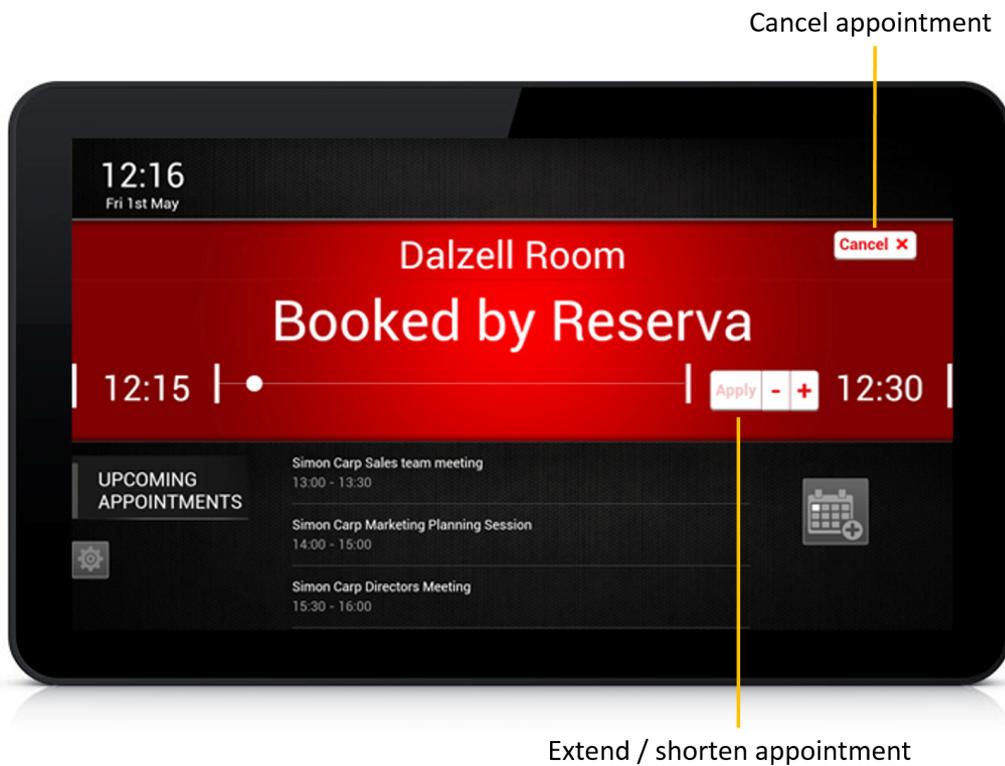
Note that the media can be customised. The examples below include a dark theme without a logo and default language settings.

Outside Room Sign Interface

The examples below show all options, including interactive features. The first example shows the room sign options for an available meeting room, the second shows the options available when a meeting room is busy.



Options – Meeting Room Available



Options – Meeting Room Busy

Room Sign Features

These features are available on all devices.

Time and date

The current time and date is shown in the top left corner. Room signs automatically display the time and date for your time zone. You can update this manually if required.

Meeting room

The meeting room name is shown. This is the room name as defined in the calendar system.

Room availability

If the room is available, the availability (for example, 'Available until tomorrow at 14:00') is shown on a green background.

If the room is busy, the meeting title (in the example above, 'Booked by Reserva') and the start time and end time is shown on a red background.

Scheduled appointments

A list of the scheduled appointments is shown in the UPCOMING APPOINTMENTS area.

Interactive Features

These features must be enabled for your end users. You can configure the options per Connection.

Book an appointment

Users can book a new appointment and specify the meeting name. The appointment is added to the calendar and the meeting room is reserved.

Note that you can configure the maximum number of days in advance that users can book appointments. For example, you might allow users to book appointments up to 30 days in advance.

Confirm appointment

Users are prompted to confirm the appointment before the meeting starts. If the appointment is not confirmed ahead of the meeting, users are reminded to confirm the appointment once the meeting starts. Provided they confirm, the meeting room is reserved.

If the appointment is not confirmed, the appointment is removed from the calendar automatically and the meeting room is shown as available. This ensures rooms are not shown as busy when attendees are unable to make the meeting.

Note that you can configure the timing for confirming appointments. For example, you might prompt users to confirm appointments 5 minutes before the scheduled start time and allow users up to 10 minutes (from the scheduled start time) to confirm their appointment.

Extend or shorten appointment



Users can extend or shorten appointments during the meeting. For example, if more time is needed the meeting can be extended (provided it is not booked already) and the room reservation is updated accordingly.

Cancel appointment

Users can cancel an appointment during the meeting. For example, if other attendees are unable to join the meeting and the room is no longer needed, the appointment can be cancelled. This removes the appointment from the calendar and the meeting room is shown as available.

Note that each interactive feature can be enabled or disabled, per Connection. See [Specify Connection Settings](#).

1.3.2 Room Summary Interface

Reserva room summary media shows a list of appointments for a number of rooms in your calendar system. The information is read-only. An example is shown below.



Time	Meeting Title	Room	Organiser
16:00	Prep for Customer Meeting	Room1	Andy Mottershead
16:30	Budget Meeting	Room 3	Andy Mottershead
16:30	Project Meeting	Room 4	Andy Mottershead
16:30	Customer Meeting	Room1	Andy Mottershead
16:30	Team Meeting	Room2	Andy Mottershead
17:00	Manager Meeting	Room 4	Andy Mottershead

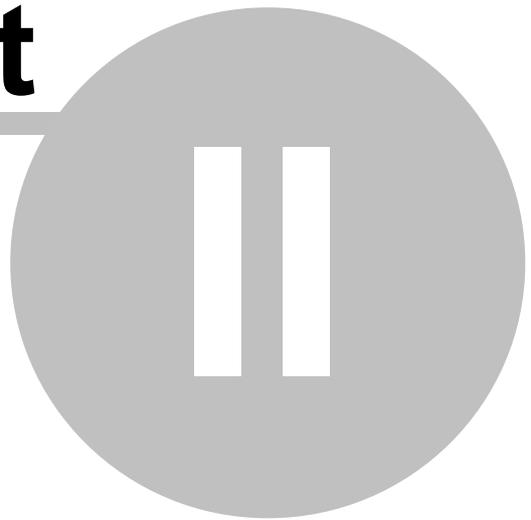
Page 1 of 2

Room Summary Example

If the list of appointments spans more than one page, as shown in the example, the display cycles through the pages.

Meetings scheduled as 'all day' meetings appear at the top of the list, followed by all other individual meetings. Meetings are shown in order, according to the scheduled start time for each appointment.

Part



Planning

2 Planning

Before you deploy Reserva, it is important to plan your deployment and determine the features you require. This section provides guidance and recommendations to help with your planning, together with three example deployment scenarios.

2.1 Reserva Connection Manager Requirements

Considerations

Reserva room sign media and room summary media are configured for a specific Connection. The Connection specifies the room information to present, how often the information is updated and the options available to the end users. Room sign media show the details for a specific room within your calendar system; room summary media provides a list of the appointments for a number of rooms within your calendar system.

There are a number of factors you need to consider during the planning phase:

Room Signs

- The number of room signs in your deployment
- What features do your users require. This will determine the room sign options you must configure.

Room Summary

- Do you require room summary displays. If your deployment includes room summary signs, you require an NTB for each display.

Customisation

- Are you going to customize the outside room media or room summary media to use a logo of your choice. If so, you need to ensure the logo is appropriate for the theme and of the correct resolution (recommended logo size is: width 450 pixels, height 100 pixels).

Calendar Integration

- How many calendar systems are you working with. For example, does your deployment include a single calendar system or are you working with a number of calendar systems.
- If working with a number of calendar systems, are they of the same type (Scientia, for example) or a mix of systems (for example, Scientia and Google)

Networking

- If your deployment spans offices or sites, do they share the same network and/or calendar systems.

These factors help you determine your deployment needs.

2.1.1 Configuration Recommendations

Reserva Connection Manager Recommendations

Recommended configuration and sizing for Reserva Connection Manager:

- For ease of management and administration, we suggest you install one Reserva Connection Manager per site

Connection Configuration Recommendations

Recommended configuration and sizing for each Connection:

- We recommend up to 50 rooms (or calendars, where there is a one-to-one mapping of room and calendar, as is the case with Google Calendar) per Connection
- All room signs have the same options enabled and the same access credentials (this is mandatory)
- A single calendar system per Connection (this is mandatory)
- For ease of management and administration, we suggest you configure a Connection per floor or other logical grouping (assuming all room signs within the group are to be configured with the same options)

Note that if you require more than 50 rooms for a particular Connection, do not exceed 200 rooms (this is the maximum number of rooms per Connection tested and supported).

NTB Recommendations

If your deployment includes room summary displays, an NTB is required for each display. Each NTB must be licensed to run the room summary media. The license may have been purchased and installed during the sales process (see [License NTB for Room Summary Media](#)).

2.1.2 Minimum System Specification

This section details the minimum system requirements for the server running Reserva Connection Manager.

A PC or Server that meets the following requirements:

Requirements

- Processor: 1 GHz or faster 32-bit (x86) or 64-bit (x64) processor
- Memory: 1 GB RAM (32-bit) or 2 GB RAM (64-bit)
- Disk space: 1 GB of available disk space
- Network: Always connected (a permanent network connection is required)
- Domain: Added to your domain

Supported Operating Systems

Server

- Microsoft Windows® Server 2012 R2 (64-bit version only). Recommended operating system for production deployments
- Microsoft Windows® Server 2008 R2 (64-bit version only). Recommended operating system for production deployments.

Desktop

- Microsoft Windows® 10 (64-bit version only)
- Microsoft Windows® 8.1 (32-bit and 64-bit versions are supported)
- Microsoft Windows® 7 with Service Pack 1 (32-bit and 64-bit versions are supported)

Virtual

- VMware Workstation version 12

Note: Please contact ONELAN Limited to discuss deployment of other operating systems or virtual machines.

2.1.2.1 NTB Requirements

If your deployment includes room summary signs, an NTB is required for each room summary sign. The following NTB versions are supported:

- NTB Version 10.0 or later

Each NTB must be licensed to run the room summary media. The license may have been purchased and installed during the sales process (see [License NTB for Room Summary Media](#)).

2.1.3 Networking Requirements

Overview

Reserva outside room media and room summary media is configured to connect to the Web Service (hosted on the server running Reserva Connection Manager) to obtain configuration settings and meeting room information. The Web Service is installed with Reserva Connection Manager.

Depending upon the chosen calendar system the Reserva Connection Manager may require additional network connectivity. This is detailed in the relevant Calendar system requirements sections.

You must ensure anti-virus and firewall software is configured to allow the Reserva room signs to communicate with the Reserva Web Service.

Reserva Connection Manager Web Service Port

An HTTP connection is established between the media on each device (room sign or room summary) and the Reserva Connection Manager. By default, the media connects with Reserva Connection Manager using (HTTP) port 8080. If necessary, you can change the port. You must ensure your firewall and network restrictions allow communication using the specified port. For more information regarding configuration of the Web Service, see [Configure Reserva Web Service](#).

2.2 Calendar System Requirements

Before you deploy Reserva, it is important to ensure you have the necessary calendar systems configured.

This version of Reserva supports the following calendar systems:

- [Microsoft Exchange® Server and Office 365](#)
- [Google Calendar and Google Calendar for Business \(Google Apps for Business\)](#)
- [Scientia Enterprise Reporting](#)
- [Oracle OPERA Sales and Catering](#)

The table below shows the supported calendar systems and whether or not Reserva is able to edit the calendar. This determines whether or not interactive features are supported. For example, Reserva can edit Microsoft Office 365 calendars so outside room interactive features such as booking an appointment can be configured. Scientia calendars are read-only so although Reserva can present room information and availability, interactive features are not supported.

Calendar System	Reserva can edit the calendar
Microsoft Exchange®	Yes - interactive features are supported
Microsoft Office 365	Yes - interactive features are supported
Google Calendar	Yes - interactive features are supported
Google Calendar for Business	Yes - interactive features are supported
Scientia Enterprise Reporting	No - interactive features are not supported
Oracle OPERA Sales and Catering	No - interactive features are not supported

For further detail regarding each calendar system, see the relevant calendar system sections.

Please contact <%sales@onelan.com%> for information on deploying Reserva with other calendar systems.

2.2.1 Microsoft Exchange and Office 365 Requirements

This section explains the choices and requirements if you are configuring Microsoft Exchange® and/or Office 365 Calendar Connections.

Supported Versions

The following versions are supported:

- Exchange Server 2010
- Exchange Server 2013
- Exchange Online using Office 365

Microsoft Exchange

To configure Microsoft Exchange connections, you require:

Server: You need the address (IP Address or host name) of the server running Microsoft Exchange

Credentials: You need the email address, user name and password for your Microsoft Exchange calendar. This user must have access and the required permissions to access the required Exchange mailboxes (for more information, see [Appendix A: Optimising Exchange®](#)). We recommend a unique user name and password for each Connection.

Calendar Accounts: You need to ensure the necessary Exchange mailboxes are configured for your deployment. Note: If not configured already, we recommend a unique Exchange mailbox for each room. For example, for 'Room A', you require a corresponding Exchange mailbox.

For additional configuration options, please refer to [Appendix A: Optimising Exchange®](#).

Microsoft Office 365 (Exchange Online)

To configure Office 365, you require:

Credentials: You need the email address and password for your Office 365 (Exchange Online) calendar. This user must have access and the required permissions to view and modify (if appropriate) the required Exchange mailboxes. We recommend a unique user name and password for each Connection.

Calendar Accounts: You need to ensure the necessary calendar account(s) are configured for your deployment. Note: If not configured already, we recommend a unique Exchange Online mailbox for each room. For example, for 'Room A', you require a corresponding Exchange Online mailbox.

Microsoft Office 365 Room Finder

To locate rooms using the Add Room finder option when setting up Connections for Office 365, you need to create a Room List Distribution file. This file ensures the finder list is automatically populated with the available rooms. Note that this is optional as you can add rooms manually (by typing the room names), if you do not create the file.

To create a room list, the Exchange administrator connects to Exchange Online using Windows PowerShell. Using PowerShell commands, the administrator creates a Room List Distribution Group and adds the required rooms to the list. Once Exchange Online is updated, rooms will be viewable in the Add Room finder.

For more information, please refer to Microsoft Office TechNet - <https://technet.microsoft.com> (see the Office 365 Education blog article: 'Get a Room! Enable Room Finder with Room List Distribution Groups').

Please contact your network or IT administrator if you are unsure of these details.

2.2.2 Google Calendar Requirements

This section explains the choices and requirements for Google Calendar Connections.

Supported Versions

The following versions of Google Calendar are supported:

- Google Calendar
- Google Calendar for Business (Google Apps for Business)

Features and Choices

Google Calendars can be either **Public** or **Shared** and this determines the features available in your Reserva deployment.

The options are shown below:

Google Calendar	Can be edited by Reserva	Calendar available to anyone on the internet
Shared	Yes. Shared calendars can be edited by Reserva. Therefore, with appropriate configuration and room signs, users can make and manage bookings.	No. You control who can access the calendar.
Public	No. Reserva cannot edit Public calendars. However, Reserva can query Public calendars and show room availability (free or busy).	Yes. Public calendars are indexed and searchable.

The primary consideration is likely to be whether or not your users need the ability to make and manage bookings. If so, you require the calendar to be a Shared calendar. Configuration and integration with Shared calendars requires some additional steps, as detailed below. If displaying room availability (free/busy) only is acceptable, and the calendar being available on the internet is not a concern, a Public calendar may be appropriate.

Configuration

To configure Google Calendar Connections, you require the following calendar details:

Calendar Accounts: You need to ensure the necessary calendar account(s) are configured for your deployment. You require a Google calendar for each room/resource.

Configuration differs depending on the calendar type:

Public: Google Calendars set to 'Public' are available to anyone, indexed and searchable on the internet. If you use a public calendar within your Reserva deployment, the calendar is read-only. Reserva is unable to edit the calendar; therefore, features such as booking appointments are not available. You require the Calendar ID when adding Connections for Public calendars.

Shared: Google Calendars set to 'Shared' can be edited by Reserva. With the appropriate settings enabled, users can book and manage appointments. You require a Google Service Account when adding Connections for Shared calendars. The calendar is shared with a Google Service Account and Reserva uses this account to read and write to the calendar.

This table provides a summary of the Google Calendar configuration options and requirements. It lists the calendar type (shared or public), whether the calendar requires a Google Service Account, how the calendar is shared and whether or not the calendar is read-only or can be edited by Reserva (e.g., is it possible to book appointments using Reserva room signs).

Google Calendar	Google Service Account	Sharing	Actions Allowed from Reserva	Calendars auto-discovered
Shared	Yes	With Service Account	Read/write	Yes. Calendars shared with the Google Service Account appear when adding a Shared calendar.
Public	No	Public	read-only	No. You add the calendar manually (using the Calendar ID or URL).

Note that you require a dedicated Google Calendar for each room/resource. Therefore, for each Google Calendar you configure, you are adding a room/resource (there are no additional tasks required to add a room)

Google Service Account

To deploy a Shared Google Calendar, the calendar must be shared with a Google Service Account. The Google Service Account allows Reserva to query and edit Google Calendars. This account is used by Reserva to authenticate and interact with the Google Calendar APIs. For guidance on setting up a Google Service Account, see [Appendix B: Google Service Account](#).

Please contact your network or IT administrator if you are unsure of these details.

2.2.3 Scientia Enterprise Reporting Requirements

This section explains the choices and requirements if you are configuring Scientia Calendar Connections.

Note that if your system includes Connections to Scientia, these are ready-only Connections. Room signs can present room information and availability but it is not possible to edit the calendar, so interactive features such as making a booking are not available.

Supported Versions

The following versions of Scientia Enterprise Reporting are supported:

- Version 3.1.1
- Version 3.10
- Version 3.11

ODBC Database

You need the details for the database containing your Scientia calendar system details. The supported database options:

- Microsoft SQL Server
- Oracle

You need the credentials required to authenticate with the database.

Open Database Connectivity (ODBC) Driver and Data Source Name (DSN)

You must ensure the Open Database Connectivity (ODBC) driver is installed on Reserva Connection Manager. You also require the Data Source Name (DSN) details to configure and connect to the Scientia database.

For further details, see [Appendix B: Scientia Database Configuration](#)

2.2.4 Oracle OPERA Calendar Requirements

This section explains the choices and requirements if you are configuring Oracle OPERA Sales and Catering Calendar Connections.

Note that OPERA Connections are read-only. Reserva can present room information and availability. However, interactive features such as booking an appointment are not supported.

Supported Versions

The following versions of Oracle OPERA Sales and Catering are supported:

- Full and Xpress: Version 4.x to Version 5.0.03.03

Note that the product was previously owned and marketed by Micros and is also referred to as Oracle Micros OPERA Sales and Catering.

OPERA Reader Board Export File

Reserva reads events and retrieves room information from the specified OPERA file. The file is exported and updated using the OPERA reader board export feature. The file can be hosted on the server running Reserva Connection Manager or a remote server (accessible using FTP, HTTP or SFTP protocols). You specify the file location during configuration of OPERA Connections.

For more information regarding your OPERA calendar and reader board export feature, contact your OPERA administrator.

License

You require a license for this feature. See [Licensing Reserva Connection Manager for Oracle OPERA](#).

2.3 Common Deployment Scenarios

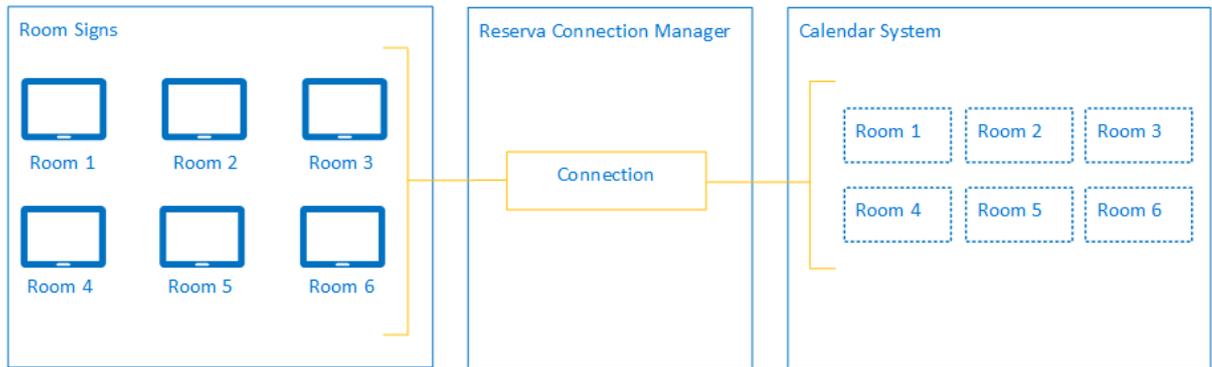
There are various factors that determine the requirements and design for each deployment. For example, for smaller and simple deployments, one Reserva Connection Manager and one Connection is sufficient. For larger and more complex deployments, you may require more than one Reserva Connection Manager, multiple Connections and different room sign configurations.

These example deployment scenarios provide more information and guidance.

- [Example Deployment A: Single Connection](#) - comprising one Reserva Connection Manager and one Connection
- [Example Deployment B: Multiple Connections](#) - comprising one Reserva Connection Manager with multiple Connections
- [Example Deployment C: Multiple Connections and Room Sign Configurations](#) - comprising one Reserva Connection Manager with multiple Connections and both room signs and room summary displays

2.3.1 Example Deployment A: Single Connection

This example is a simple deployment comprising a single Reserva Connection Manager and Connection, serving 6 room signs. All room signs provide the same options (in this case, interactive features allowing users to book and manage appointments). All room signs are located on one site and share the same calendar system).



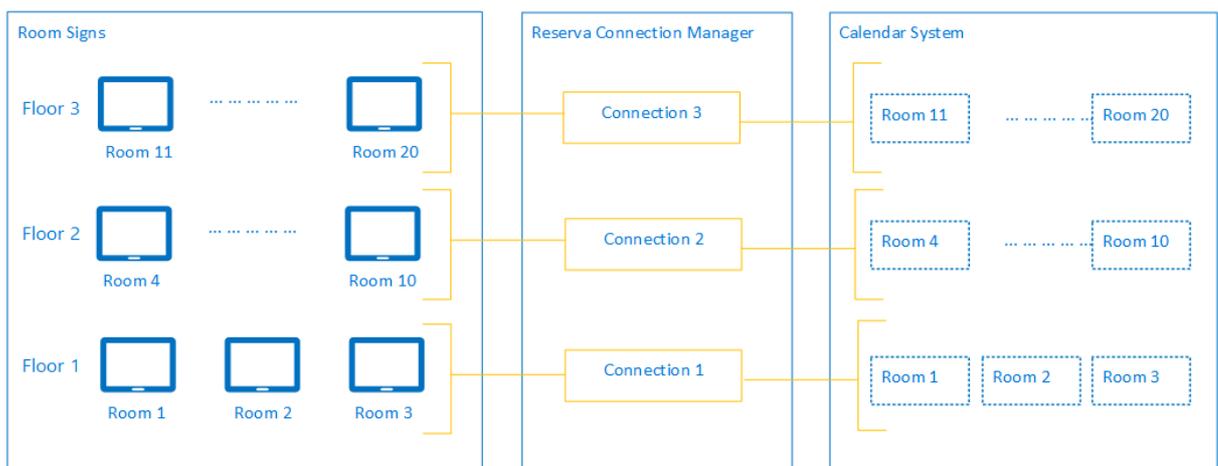
Simple Deployment Scenario

In this deployment:

- One Reserva Connection Manager is deployed and one Connection configured to serve all room signs
- Each room sign is configured for a specific calendar room (for example, Room 2 is configured for Room 2 in the calendar system).
- All room signs share the same Connection and therefore have the same features enabled (for example, the ability to book appointments and extend and shorten meetings, as configured in the Connection settings).
- All room signs are located on the same site and linked to the same calendar system (in this example, a Shared Google Calendar, allowing Reserva read and write access)

2.3.2 Example Deployment B: Multiple Connections

This example comprises one Reserva Connection Manager with multiple Connections, and one calendar system. A Connection is provided for each floor.



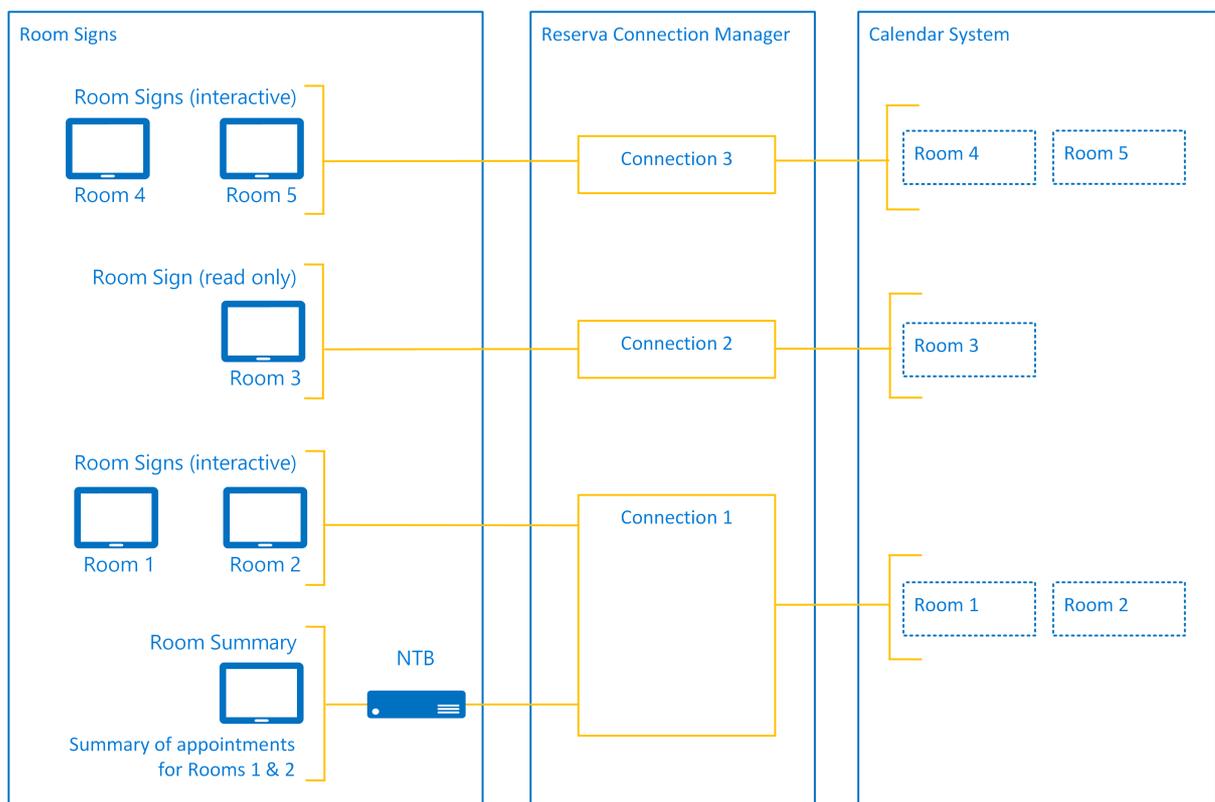
Medium Deployment Scenario

In this deployment:

- One Reserva Connection Manager is deployed with three Connections
- Each Connection supports a number of room signs, all located on the same floor
- Each room sign is configured for a specific calendar room (for example, Room 4 is configured for Room 4 in the calendar system).
- All room signs have the same interactive features enabled (for example, the ability to book appointments and extend and shorten meetings as configured in the Connection settings)
- All rooms signs are located on the same site and linked to the same calendar system

2.3.3 Example Deployment C: Multiple Connections with Room Signs and Room Summary Displays

This example shows a complex deployment comprising one Reserva Connection Manager with multiple Connections, and one calendar system. It includes room signs and a room summary display.



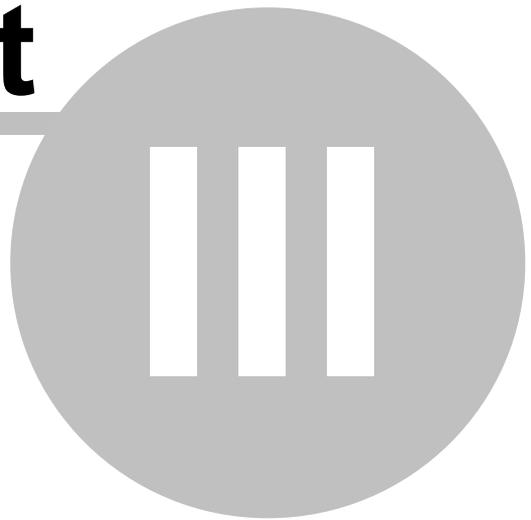
Complex Deployment Scenario

In this deployment:

- One Reserva Connection Manager is deployed with three Connections
- Various Connections are required to support the different room sign configurations:

- A room summary display shows a summary for Room 1 and Room 2. This is configured for Connection 1. In this example, the room summary display is located in the reception area and shows the appointments scheduled for two training rooms. As shown, an NTB is required. The NTB runs the room summary media.
 - Room 1 and Room 2 each have a room sign, configured for Connection 1. In this example, the room signs are configured to allow booking and management appointments for Room 1 and Room 2 respectively.
 - For Room 3, the room sign shows room availability and upcoming appointments. This is configured for Connection 2. No interactive features such as booking an appointment, are enabled on this Connection.
 - Room 4 and Room 5, each have a room sign, configured for Connection 3. In this example, the room signs are configured to allow booking and management appointments for Room 4 and Room 5 respectively.
- All rooms signs and the room summary display are located in the same office and are linked to the same calendar system

Part



Installing Reserva

3 Installing Reserva

To install Reserva Connection Manager

1. Download the Reserva Connection Manager Version 3.6.0 installation zip file from:
<http://www.reserva.co.uk/support/>
2. The zip file includes this guide and the Setup application. Start the Setup application:
`ONELAN_Reserva_Setup_V3.6.0.release.exe`
3. Follow the onscreen instructions to complete the installation.

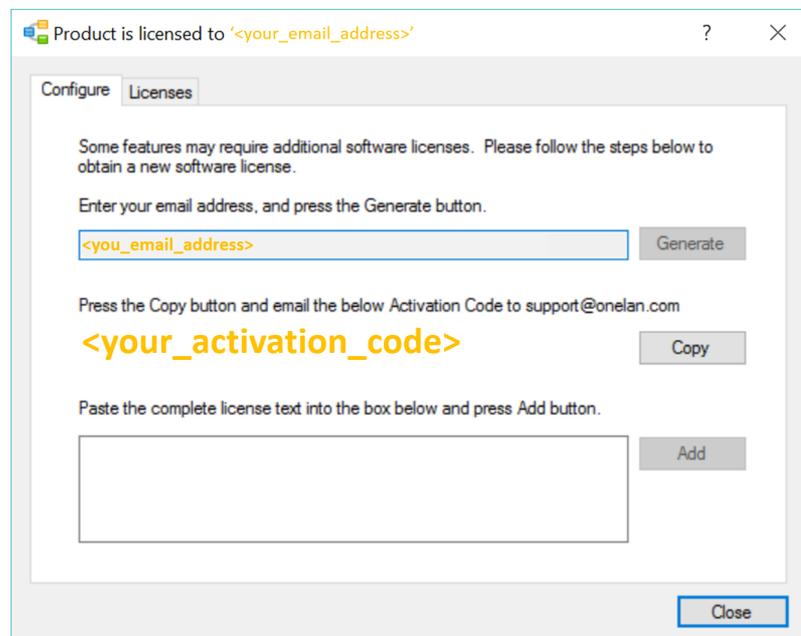
After installing Reserva Connection Manager, continue to the Configuring section to complete your deployment. See [Configuring Reserva](#).

3.1 Licensing Reserva Connection Manager for Oracle OPERA

If your deployment includes the Oracle OPERA Sales and Catering calendar system, you must obtain and add a license to Reserva Connection Manager. The procedure is detailed below.

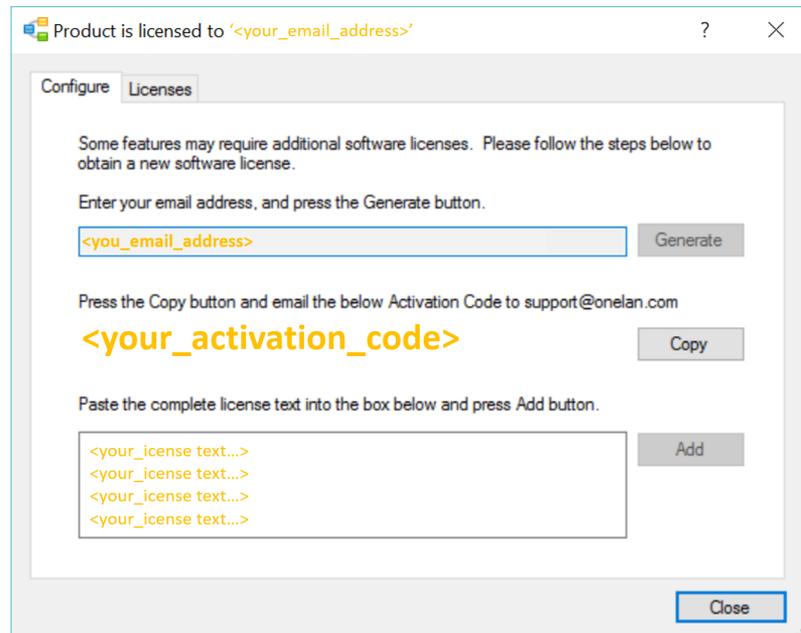
To license Reserva Connection Manager for Oracle OPERA

1. Open Reserva Connection Manager and select **Manage > Licensing**. The Licensing dialog appears.
2. Enter your email address and click **Generate**. Your Activation Code appears.



3. Copy the Activation Code. Send an email confirming the Activation Code to <%sales@onelan.com %>.

4. On receipt of the licensing text from <%sales@onelan.com%>, copy the text and paste in to the license text box. Click **Add**.



This completes licensing of Reserva Connection Manager to support the Oracle OPERA Sales and Catering calendar system.

If your deployment includes room summary displays, you require a license for your NTB. A license may be pre-installed. To check and if necessary add a license, see [License NTB for Room Summary Media](#).

Part



IV

Configuring Reserva

4 Configuring Reserva

Following installation of Reserva Connection Manager, you must complete the following tasks:

- [Configure the Web Service](#) if the defaults are not sufficient
- [Create one or more Connections](#) and configure Calendar Connection Settings
- [Configure Room Signs](#)
- [Configure Room Summary Displays](#) if your deployment includes room summary displays

4.1 Configure Reserva Web Service

Note that for most deployments, the default Web Service port (HTTP 8080) is appropriate and it is not necessary to configure the Web Service. However, if necessary, you can change the Web Service port number as detailed below.

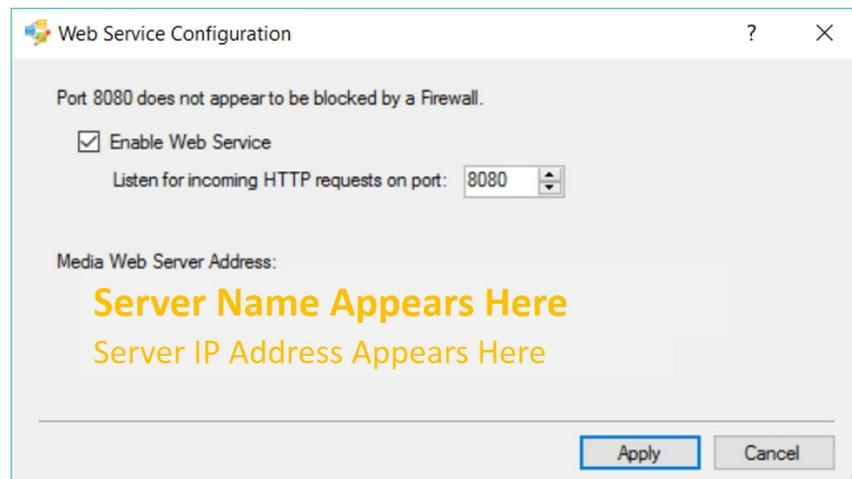
Reserva outside room media and room summary media is configured to connect to the relevant Reserva Connection Manager Web Service to obtain configuration settings and meeting room information.

The default settings for the Web Service:

Web Server Address: Name and IP address of the server running Reserva Connection Manager. These values are set and managed using Windows®.

Port: HTTP 8080. This is the default port number. You can change the port as required.

For example:



Web Server Configuration

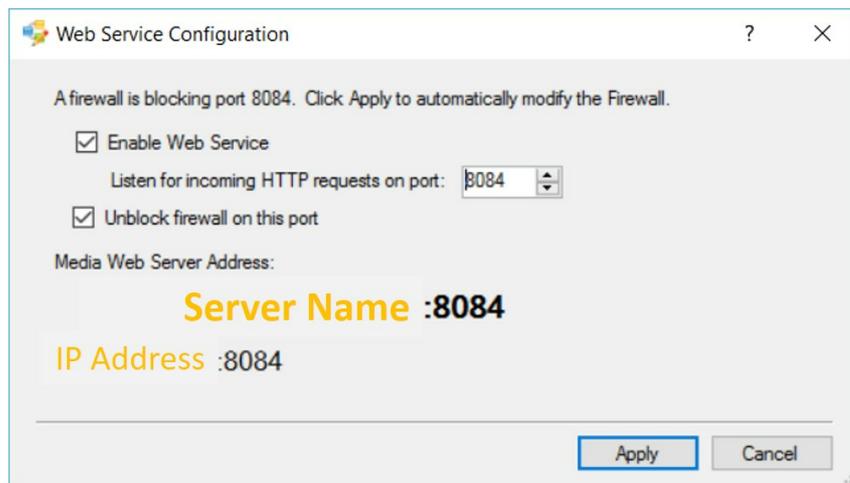
If you need to change the port number, follow the procedure below.

Modify Web Service Port Number

To change the Web Service port number

1. From the Reserva Connection Manager **Manage** menu, select **Web Service**. The Web Service Configuration dialog appears.
2. Enter the required port number and click **Apply**.

Note: If the Web Service detects the port selected is blocked by your firewall, you are prompted to unblock the port.



Web Server - Change Port

If prompted to unblock the port, ensure **Unblock firewall on this port** is selected and click **Apply**. The Web Service attempts to modify the firewall to allow Reserva Connections on the specified port.

3. You are prompted to confirm the port number change. Click **Yes** to save and apply the change.

4.2 Create and Configure a Connection

Reserva outside room media and room summary media is configured to retrieve information for a specific Connection. The Connection specifies the room information to present, how often the information is updated and the options available to the end users.

Reserva Connection Manager is capable of running one Connection or multiple Connections simultaneously. Each Connection can be configured and customised as required. A Connection can be linked to several rooms/resources. However, it is recommended that no more than 50 rooms are added to a Connection.

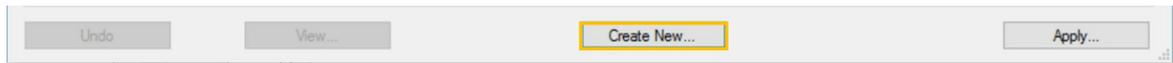
For simple deployments, one Reserva Connection Manager may be sufficient. For more complex deployments and scenarios, or for ease of administration and organization, multiple Reserva Connection Managers and Connections are required. For more guidance and examples, see [Planning](#).

Note that when configuring a Connection for the room summary media (where the display shows appointments for a number of rooms), all rooms added to the Connection are shown on the summary display. Room summary media shows the appointments for all rooms added to the Connection.

Create New Connection

To create a new Connection

1. Open Reserva Connection Manager and click the **Create New** button.



Create New Connection

The Reserva Connection Editor appears.

2. Configuration of Connections differs depending on your calendar system. See the following topics:
 - [Configure Microsoft Exchange® Connection](#)
 - [Configure Google Calendar Connection](#)
 - [Configure Scientia Connection](#)
 - [Configure Oracle Opera Connection](#)

4.2.1 Microsoft Exchange and Office 365

This section explains how to configure Microsoft Exchange and Office 365 Connections.

For more information regarding the requirements, see [Microsoft Exchange® and Office 365 Requirements](#).

For additional configuration options, please refer to [Appendix A: Optimising Exchange®](#).

4.2.1.1 Configure Microsoft Exchange or Office 365 Connection

To configure a Connection for Microsoft Exchange or Office 365

1. From the Connection **Data Source** tab, select **Microsoft Exchange server or Office 365**.

2. Select the **Exchange** tab. You can configure a connection to an Office 365 server or an Exchange Server. For Exchange Server connections, you can configure the connection manually or automatically.

Connect using an Office 365 account: Select this option to connect and configure an Office 365 cloud-based environment.

Automatically discover settings for an on premises Exchange server: Select this option to configure a Microsoft Exchange® environment, and automatically discover server settings based on the credentials and details you provide. This is the default option if automatic discovery is enabled on your Microsoft Exchange® environment.

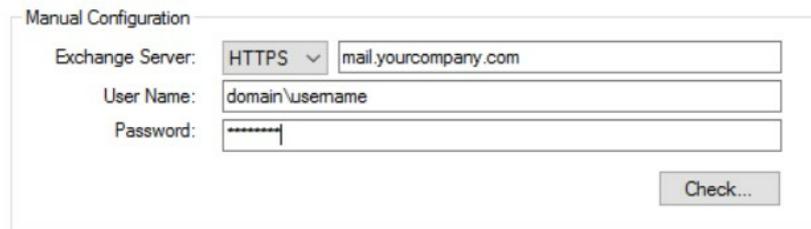
Manually configure Exchange Server settings: If automatic discovery is not enabled within your Exchange® environment, select this option to enter details manually.

3. Select the appropriate Server Setup option and follow the relevant steps below.

Connect using an Office 365 account: Enter the email address and password required to connect to the Office 365 server. To confirm the credentials and connection, select **Check**.

Automatically discover settings for an on premises Exchange server: Enter the email address, user name (domain\username) and password required to connect to the Exchange® server. To confirm the credentials and connection, select **Check**.

Manually configure Exchange Server settings: Select the protocol (in general, this should be set to **HTTPS**) and enter the Exchange®Server host name or IP Address (for example, 'mail.yourcompany.com'). Enter the user name and password required to connect to the Exchange® Server. For example:



Manual Configuration

Exchange Server: HTTPS mail.yourcompany.com

User Name: domain\username

Password: *****

Check...

To confirm the credentials and connection, select **Check**.

Please contact your network administrator if you are unsure of the details.

The next step is to [add room\(s\)](#).

4.2.1.2 Add Room(s) to a Microsoft Exchange or Office 365 Connection

You specify the rooms for each Connection. Reserva Connection Manager will retrieve events for the room(s) added to the Connection.

To add rooms to your Connection

1. To add rooms to the connection, click **Add**.



Room Names

Add...

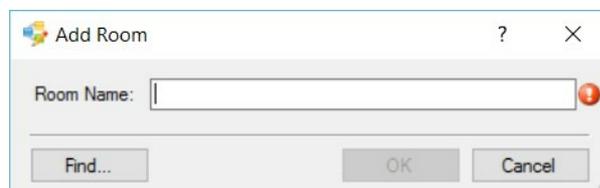
Remove

The Add Room dialog appears.

2. To view the available rooms, click **Find**. Alternatively, enter the name of the required **Room Name**.

Note that multiple rooms can be entered separated by a semicolon.

Note that you can use the **Find** option provided you are on the same domain as the Exchange Server. If you are on a different domain, the Find option is not available.



Add Room

Room Name: []

Find... OK Cancel

3. Select the required room(s). To select multiple rooms, hold the Ctrl or Shift key and select the required rooms. Once you have selected the rooms, click **OK**.
4. Click **OK** to add the selected room(s) to the Connection.

5. The rooms are shown in the Room Names list.



You can amend the list using **Add** and **Remove**.

4.2.2 Google Calendar

This section explains how to configure Google Calendar Connections.

For guidance on features, choices and considerations, see [Google Calendar Requirements](#).

4.2.2.1 Configure Google Service Account

Google Calendars can be either Public or Shared and this determines the features available in your Reserva deployment. Google Calendars that are 'Shared' can be edited by Reserva, and with the appropriate settings enabled, users can book and manage appointments. The Google Calendar options are described in detail in the Planning section, see [Google Calendar Requirements](#).

If you are configuring a Shared Google Calendar, you require a Google Service Account. Reserva uses this account to read and write to the calendar.

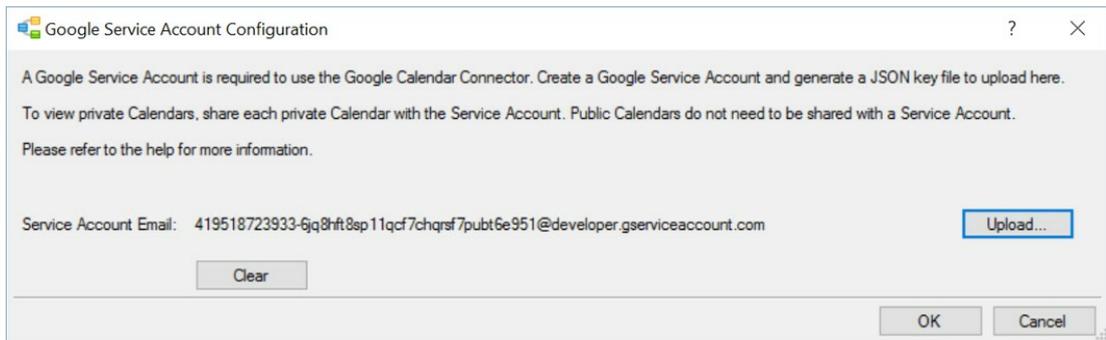
You need to ensure you have the Google Service Account details before setting up a Google Calendar Connection for any Shared Google Calendars. Configuring a Google Service Account is likely to be a one-off task as you can use the same Google Service Account across multiple Google Calendars.

The procedure to create a Google Service Account and to share a Google Calendar with the Google Service Account is detailed in [Appendix B: Google Service Account](#).

After you have created a Google Service Account and shared the required Google Calendar(s) with the Google Service Account, you add the Google Service Account to Reserva.

To add a Google Service Account to Reserva

1. From the Reserva Connection Manager **Manage** menu, select **Google Service Account**. The Google Service Account Configuration dialog appears.



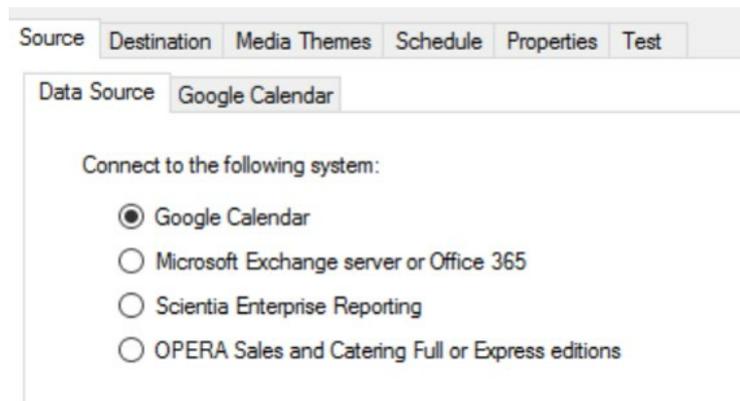
2. Click **Upload**. Locate and upload the Google Service Account (.json) file. Click **OK**.

4.2.2.2 Configure Google Calendar Connection

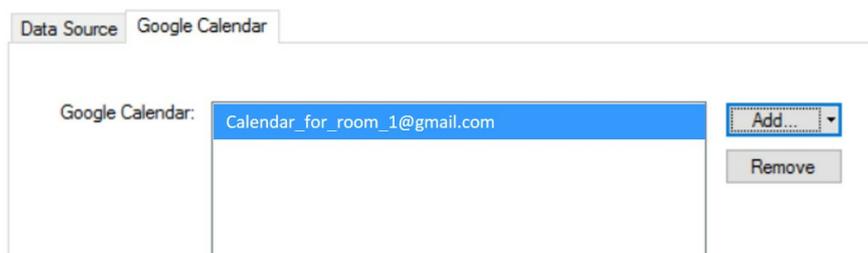
This section explains how to create a Google Calendar Connection and add rooms to the Connection. Note that you require a dedicated Google Calendar for each room/resource. Therefore, for each Google Calendar you configure, you are adding a room/resource (there are no additional tasks required to add a room).

To configure a Connection for Google Calendar

1. From the Connection **Data Source** tab, select **Google Calendar**.



2. You require a Google Calendar for each room/resource. To add rooms, select the **Google Calendar** tab and click **Add**.



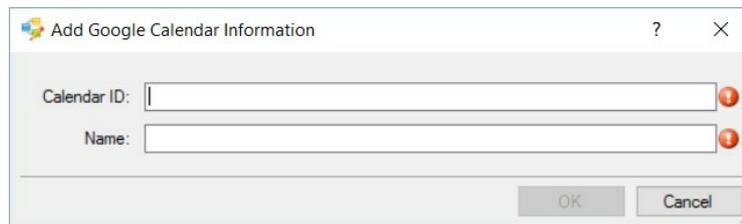
You can add public and shared calendars:

Public: Google Calendars set to 'Public' are available to anyone, indexed and searchable on the internet. If you use a public calendar within your Reserva deployment, the calendar is read-only. Reserva is unable to edit the calendar; therefore, features such as booking appointments are not available. You require the Calendar ID when adding Connections for Public calendars.

Shared: Google Calendars set to 'Shared' can be edited by Reserva. With the appropriate settings enabled, users can book and manage appointments. You require a Google Service Account when adding Connections for Shared calendars. The calendar is shared with a Google Service Account and Reserva uses this account to read and write to the calendar.

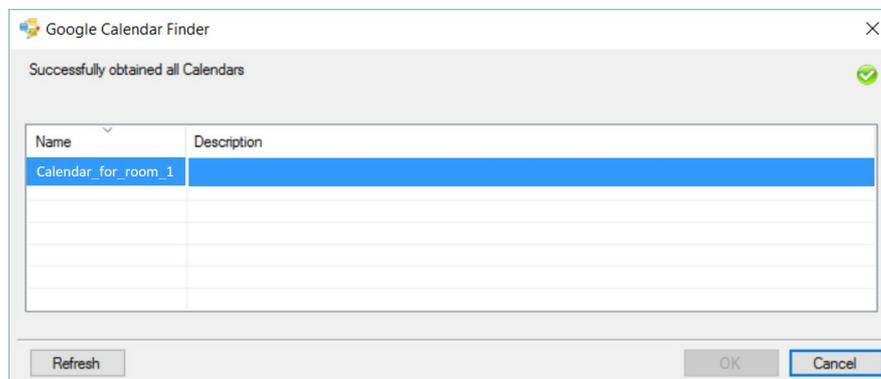
For more information, see [Google Calendar Requirements](#).

For **Public** Google Calendars:



- Enter the Calendar ID. You enter the Google Calendar ID or URL. See the Google Calendar settings for more information and details.
- Enter the Name. This is the name displayed on the Reserva room sign. For example, Building 1: Room A.

For **Shared** Google Calendars:



Name	Description
Calendar_for_room_1	

Google Calendars shared with the Google Service Account appear in the Google Calendar list. Select the calendar you require and click **OK**.

3. Repeat the above steps to add more calendars (rooms/resources) to the Connection.

Please contact your network administrator if you are unsure of the details.

The next step is to [Specify Connection Settings](#).

4.2.3 Scientia Enterprise Reporting

This section explains how to configure Scientia Connections.

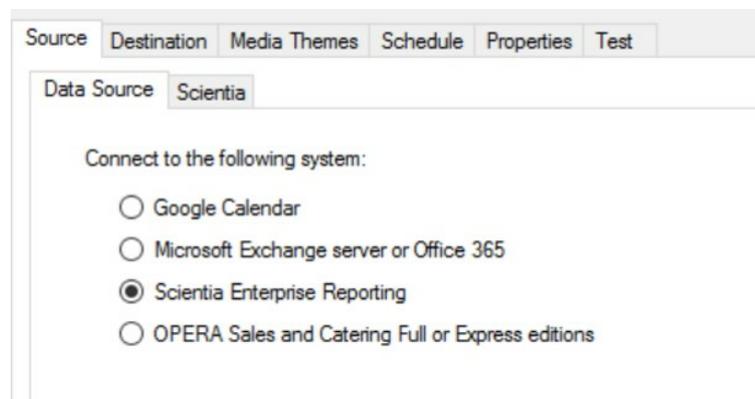
For information regarding the requirements and guidance, see [Scientia Requirements](#).

For information regarding the Open Database Connectivity (ODBC) driver and Data Source Name (DSN) requirements, see [Appendix B: Scientia Database Configuration](#)

4.2.3.1 Configure Scientia Connection

To configure a Connection for Scientia Enterprise Reporting

1. From the Connection **Data Source** tab, select **Scientia Enterprise Reporting**.



2. Select the **Scientia** tab and in Enterprise Reporting section, configure the following:

Enterprise Reporting System ODBC System Data Source Name: Select the required ODBC DSN.

Note: You can click ODBC to launch the ODBC Data Source Administrator tool to create or modify DSN entries. For more information regarding the Enterprise Reporting System ODBC options and configuration, see [Appendix C: Scientia Database Configuration](#). If you make changes or create a new ODBC DSN, click **Refresh** to update the DSN list.

Authentication: Select the required authentication (Windows authentication or database authentication) option and enter the required credentials. Click **OK**.

Please contact your network administrator if you are unsure of the details.

The next step is to [add room\(s\)](#) (identified as Locations within a Scientia environment).

4.2.3.2 Add Room(s) to a Scientia Connection

You specify the rooms for each Connection. Reserva Connection Manager will retrieve events for the room(s) added to the connection. Note that within Scientia, rooms are known as Locations.

To add rooms to your Scientia Connection

1. To add rooms to the connection, in the Locations area, click **Add**. The Scientia – Location Finder dialog appears. Select the required room(s). To select multiple rooms, hold the Ctrl or Shift key and select the required rooms. Once you have selected the rooms, click **OK**. The rooms are shown in the Locations list.

You can amend the list using **Add** and **Remove**.

The next step is to specify the [Connection settings](#).

4.2.4 Oracle OPERA

This section explains how to configure Oracle Opera Connections.

Note that Oracle OPERA Sales and Catering calendar system is supported.

For information regarding the requirements and guidance, see [Oracle OPERA Calendar Requirements](#)

4.2.4.1 Configure Opera Connection

To configure a Connection for Oracle OPERA

1. From the Connection **Data Source** tab, select **OPERA Sales and Catering Full or Express editions**.

The screenshot shows the 'Data Source' tab selected in the 'OPERA' connection configuration. Under the heading 'Connect to the following system:', there are four radio button options:

- Google Calendar
- Microsoft Exchange server or Office 365
- Scientia Enterprise Reporting
- OPERA Sales and Catering Full or Express editions

2. Select the **OPERA** tab. You specify the OPERA file used by Reserva to read events and retrieve room information. You can specify a local file or the URL for a file located on a web server:

The screenshot shows the 'Data Source' tab selected in the 'OPERA' connection configuration. It displays two main sections:

- File Source:** Contains two radio button options:
 - Read local file written by OPERA reader board interface
 - Read OPERA reader board interface file stored on remote website
- Local File Source:** Contains a 'Filename:' text input field with a red warning icon and a browse button (...). Below the input field, it states 'No access credentials have been specified' and includes an 'Access Permission...' button.

Read local file written by OPERA reader board interface: Select this option to link to an OPERA file on the local file system. Locate the file.

Read OPERA reader board interface file stored on remote website: Select this option to link to an OPERA file located on a remote server (for example, a web server). The file must be accessible using FTP, HTTP or SFTP protocols. Specify the path and proxy details, as required.

- If credentials are required to access the file, click **Access Permissions** and enter the credentials (user name, domain and password). Click **OK**.

Please contact your network administrator if you are unsure of the details.

The next step is to [add room\(s\)](#) (identified as Resources within an OPERA environment).

4.2.4.2 Add Room(s) to an Opera Connection

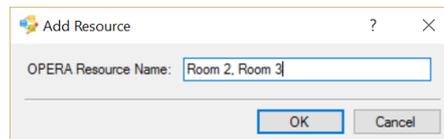
You specify the rooms for each Connection. Reserva Connection Manager will retrieve events for the room(s) specified. Note that within OPERA, rooms are known as Resources. It is recommended that you add rooms manually as shown below.

To add rooms to your OPERA Connection

- To add rooms to the connection, in the Resources area, click **Add > Add Resource**.



- The Add Resource dialog appears. Enter the required room(s). To enter multiple rooms, type each room name followed by a comma, as shown in the example below. Once you have entered the required room names, click **OK**. The rooms are shown in the Resources list.



You can amend the list using **Add**, **Remove** and **Modify**.

The next step is to specify the [Connection settings](#).

4.2.5 Specify Connection Settings

You must specify the settings for each Connection. These include the credentials used to authenticate outside room media and room summary media, and the options available to your end users.

Note that this procedure is the same for all Connections, irrespective of the calendar system.

To specify Connection settings

- Select the **Destination** tab.

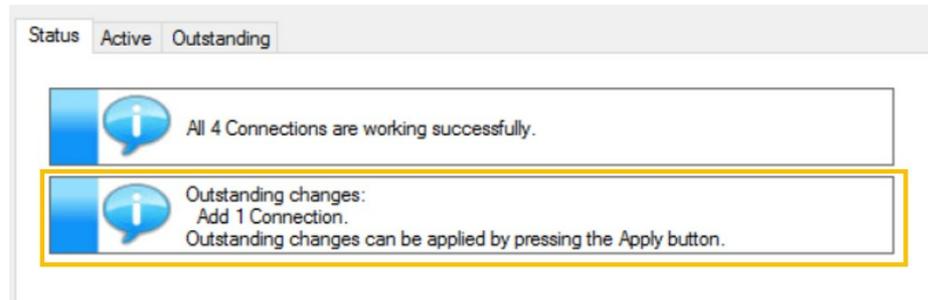
2. Set the Media Authentication **User Name** and **Password**. These credentials are used to authenticate outside room media and room summary media configured to use this Connection. You require these credentials when installing and configuring the media. The default user name is *admin* and the default password is *password*.
3. In the Allowed Media Actions section, select the options to enable on outside media configured for this Connection. This determines the features available to your end users. For example, to allow users to schedule their own appointments, select **Appointments may be created**. Note that these options are applicable to outside room media; they are not applicable to room summary media.

Note that selected options are available to all users. This includes Cancel (**Appointments may be deleted**). If you enable this feature, all users will be able to cancel meetings, regardless of whether or not they booked the meeting. For many implementations, this may not be appropriate.

4. Make a note of the Media Web Server Address. You need this information when installing and configuring room signs.
5. Select the **Properties** tab and enter a name for your Connection.

6. To test the Connection, select the **Test** tab and select **Test Query**. The log messages window shows the test tasks, status messages and test results. If necessary, address any issues and repeat the test to confirm the Connection test is successful.

7. Reserva regularly tests active Connections automatically. To view and, if necessary, change the test scheduling, select the **Schedule** tab and update timing as required.
8. Click **Update**. Close the Connection dialog.
9. Reserva Connection Manager shows the new Connection, ready to be added to the deployment.



10. Click **Apply** to add the new Connection, and apply any other pending changes.
11. The new Connection is shown in the list of Active Connections on the Active tab.

Note, to view and modify a Connection, select the Connection in the Active list and click **View**. The Connection details appear.

4.3 Configuring Room Signs

This section explains how to configure your Reserva room signs. Topics include:

- Configure Reserva outside room media that runs on the room sign
- Set the room sign time and date
- Set the room sign time zone
- Reconfigure room sign

4.3.1 Configure Reserva Room Sign Media

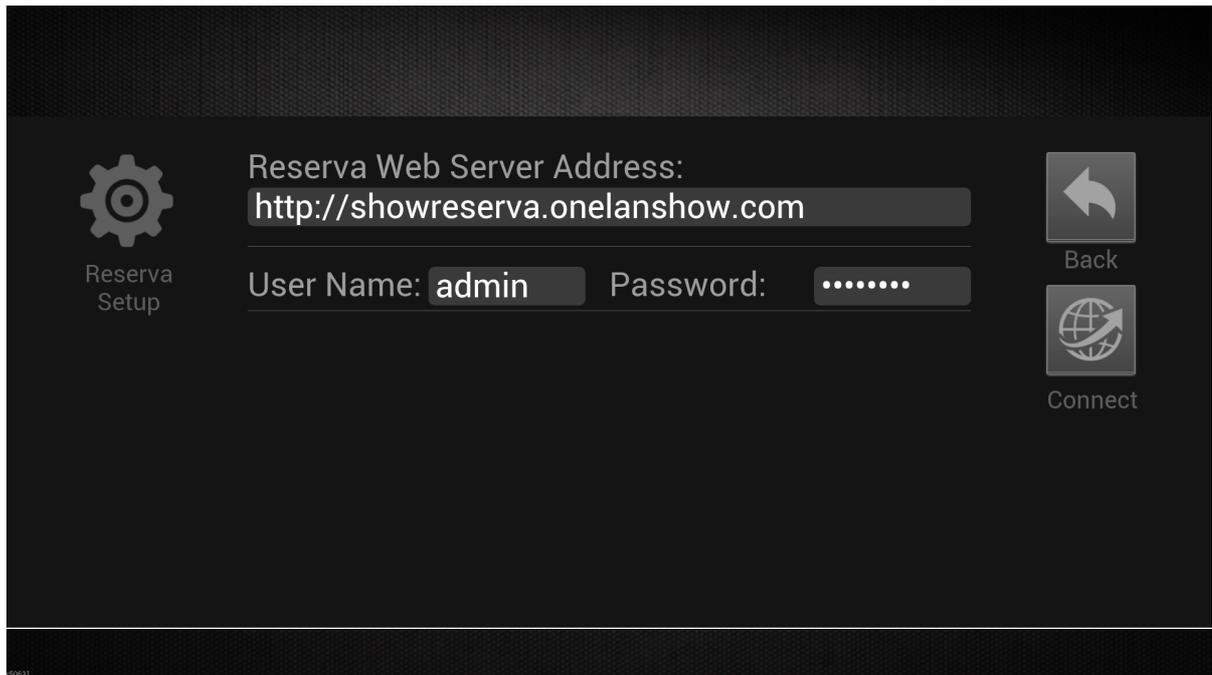
After setting up the required Connections you configure the outside room media on each room sign, for the appropriate Connection and room. Once configured, the room sign shows the relevant room information and options.

Each room sign is configured to display the information for a single room within your calendar system. To connect to a specific room, you specify the Connection and room.

To configure Reserva outside room media

1. Switch on the device and follow the onscreen instructions to:

- Connect to the relevant network (to allow the room sign to communicate with Reserva Connection Manager).
 - Specify an Access Code. This code is required to access the device management features.
 - Ensure the room sign time and date is correct. The time and date should be correct. However, if you need to make any changes, see [Set the Room Sign Date and Time](#).
2. You are prompted to provide the Reserva **Web Server Address**, **User Name** and **Password**.



Reserva Web Server Address: The IP Address or host name of the server running the Reserva Connection Manager.

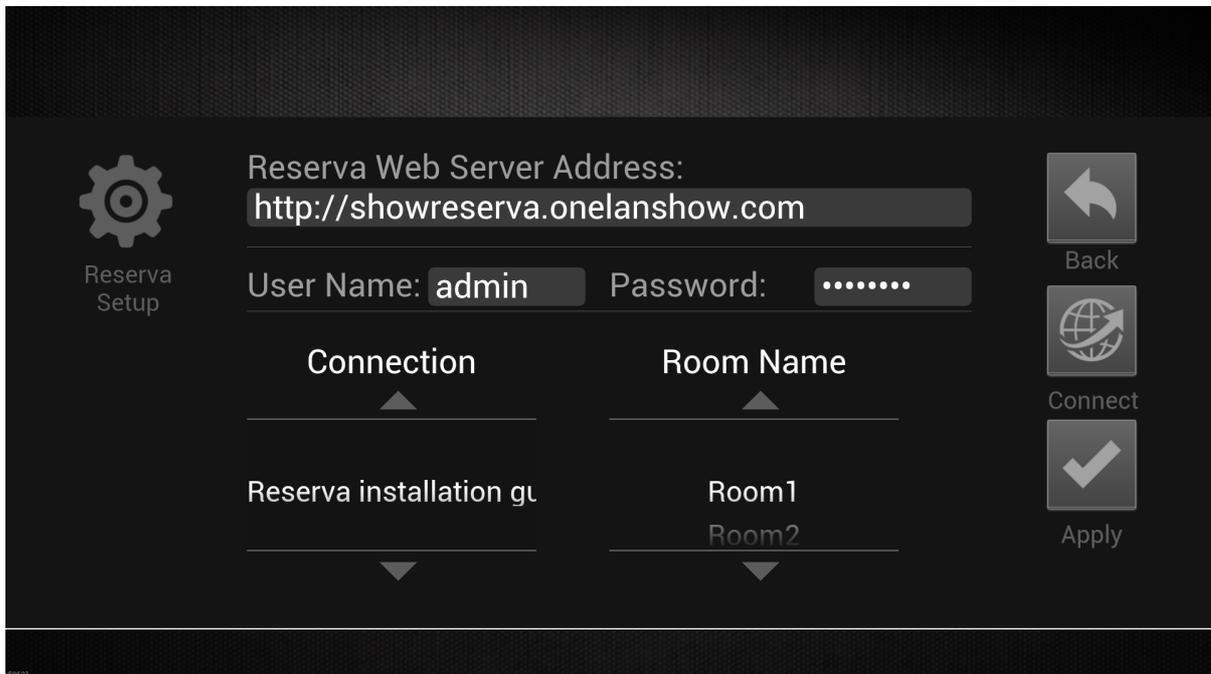
Note that if you modified the [Web Service](#) default port (8080) you must append the relevant port number, for example '10.0.1.18:8081'.

User Name and Password: The user name and password specified in Reserva Connection Manager, for Media Authentication.

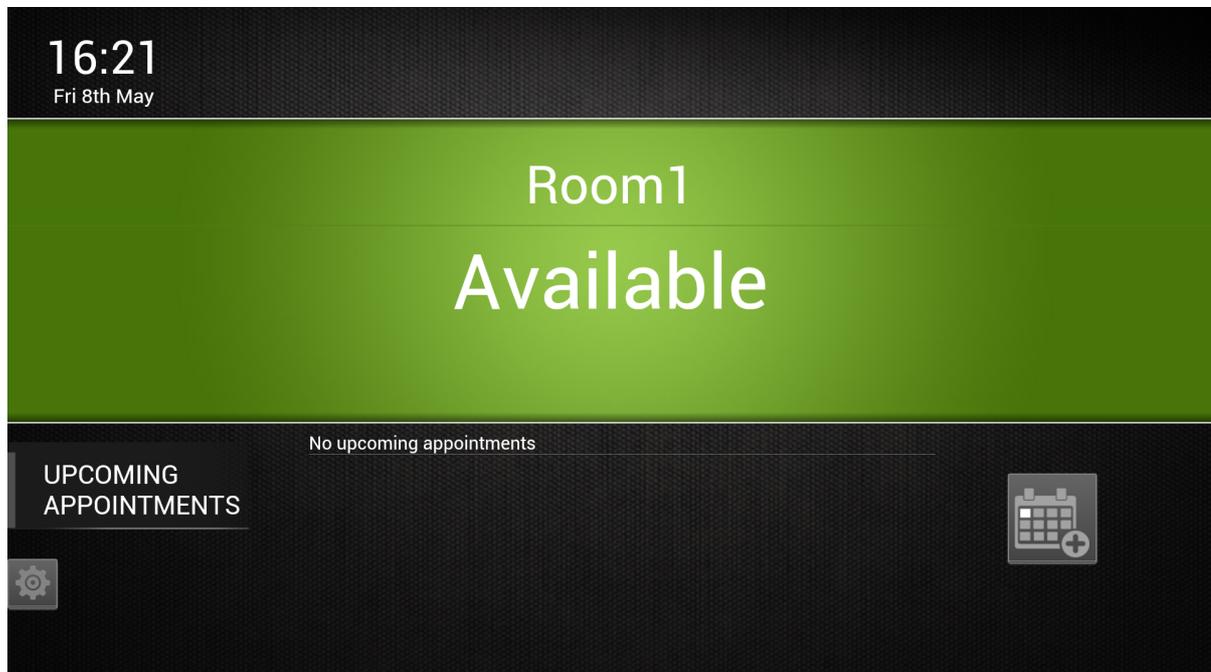
Note: You can check these details using Reserva Connection Manager. See [Specify Connection Settings](#).

3. Tap **Connect** to connect to the Reserva Connection Manager. The list of available Connections and Rooms appear.
4. Select the required Connection and, if applicable, Room:
- To connect to a specific room within your calendar system: Select the required **Connection** and **Room Name**. Tap **Apply**.

- To configure a summary for a number of rooms within your calendar system: Select the required **Connection**. Tap **Apply**.



- This completes the initial setup. The room sign presents the room information and relevant/enabled options. For example, the availability of a specific room within your calendar system:



4.3.2 Set the Room Sign Date and Time

Reserva room signs automatically display the time and date for your time zone. You can override the date and time manually or using a Network Time Protocol (NTP) service. Both options are detailed below.

To change the time and date manually

1. Tap five times on the time and date, displayed in the top left corner of the screen.
2. At the prompt, enter the access code (as specified during the initial configuration) and tap **Unlock**. The Player Management screen appears.
3. Tap **Support and Maintenance Menu**. The Support and Maintenance screen appears.
4. Tap **Show Android Settings**. The device settings options appear.
5. In the Systems section, tap **Date & Time**. Tap **Automatic date & time** to deselect the automatic date and time functionality. This allows you to specify your own settings.
6. To change the date, tap **Set Date**. The Set date dialog appears. Set the date and tap **Done** to apply the change.
7. To change the time, tap **Set Time**. The Set time dialog appears. Set the time and tap **Done** to apply the change.
8. Tap the Back button to return to the Support and Maintenance page.

To configure the room sign to synchronise and set the time based on the NTP protocol

1. Tap five times on the time and date, displayed in the top left corner of the screen.
2. At the prompt, enter the access code (as specified during the initial configuration) and tap **Unlock**. The Player Management screen appears.
3. Tap **Configuration**. The Configuration screen appears.
4. Tap **Enable NTP**. (If not already enabled).
5. Tap **NTP Host**. The NTP Host dialog appears. Enter the NTP Host path and tap **OK**.
6. Tap **Done** to accept the change and return to the Player Management screen.

4.3.3 Set the Room Sign Time Zone

Reserva room signs automatically display the time and date for your time zone. If you need to change the time zone manually, follow this procedure.

To set the room sign time zone manually

1. Tap five times on the time and date, displayed in the top left corner of the screen.
2. At the prompt, enter the access code (as specified during the initial configuration) and tap **Unlock**. The Player Management screen appears.

3. Tap **Support and Maintenance Menu**. The Support and Maintenance screen appears.
4. Tap **Show Android Settings**. The device settings options appear.
5. In the Systems section, tap **Date & Time**. Tap **Automatic time zone** to deselect the automatic date and time functionality. This allows you to specify your own settings.
6. To change the time zone, tap **Select time zone**. The list of time zones appear. Select the time zone you require.
7. Tap the Back button to return to the Support and Maintenance page.

4.3.4 Reconfigure Room Sign Media

A Reserva room sign can be reconfigured at any time, using the Settings  option. For example, you may need to reconfigure the room sign to retrieve information for a different meeting room.

Note: If the Settings icon is not visible, you can enable the option. It is set per Connection. Navigate to the Destinations tab and select the **Show settings icon** option and apply the change. See [Specify Connection Settings](#).

To view and update the room sign settings

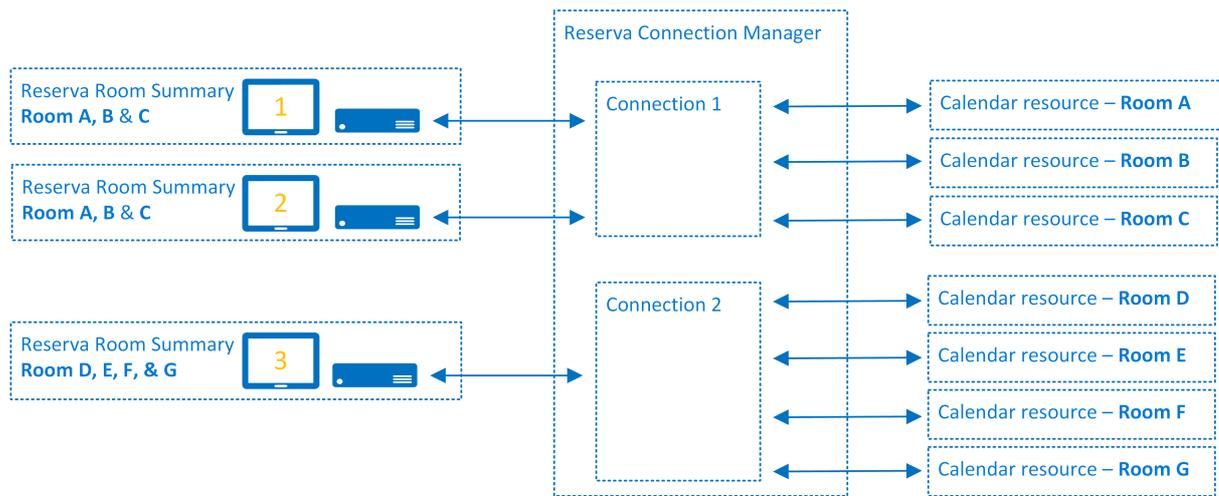
1. Tap the **Settings** icon. The Reserva Setup screen appears.
2. Specify the required details (for example, select a different Connection and Room Name).
3. Tap **Apply** to save the changes and return to the main screen.

4.4 Configuring Room Summary

This section explains how to configure Reserva room summary media on your NTB.

Reserva room summary media runs on your NTB and provides a summary of the appointments scheduled for the meeting rooms added to a specified Connection.

You configure each NTB to show a summary of appointments for all rooms added to a Connection. Your room summary display is configured for the required connection. In the example below, screens 1 and 2 show a summary of the appointments for rooms A, B and C (rooms added to Connection 1), and screen 3 shows a summary of the appointments for rooms D, E, F and G (rooms added to Connection 2)..



Reserva Room Summary Configuration

Room summary media and outside room media can share Connections. Where both room summary media and outside room media are served by the same Connection, the room summary media ignores the interactive feature settings (media actions, set per Connection). These settings are not relevant to room summary media.

4.4.1 Configure Reserva Room Summary Media

After setting up the required Connections, you configure the Reserva room summary media on your NTB. The room summary media shows a summary of the appointments for the rooms added to the Connection.

Note: For more information regarding your particular NTB model, features and configuration, please refer to the relevant NTB User Guide. This procedure assumes your NTB is set up already and describes how to configure Reserva room summary media only.

The procedure below explains how to configure the room summary media using the Layout Package available from ONELAN. This results in the room summary media displayed in full screen (in a single zone layout). However, if preferred, you can reconfigure the layout as a multi zone layout. Please refer to your NTB User Guide for further details.

The NTB is configured to show a mix of media, including Reserva room summary information. The NTB display is divided into zones and the recommended sizing for the zone configured to display Reserva room summary media is shown below:

Configuration of the room summary media includes the following tasks:

- Obtain Room Summary Media Layout Package
- Check NTB License
- Configure NTB XML Web Services
- Install Room Summary Media Layout Package
- Configure Room Summary Media

- Configure NTB Schedule

Obtain Room Summary Media Layout Package

Before configuring the room summary media on your NTB, ensure you have the Reserva room summary media Layout Package. The Layout Package can be downloaded from www.reserva.co.uk/support. The Layout Package is a single file containing all the media and control files needed to install the room summary media layout on your NTB. During configuration of your NTB, you upload the Layout Package file to the NTB.

Check NTB License

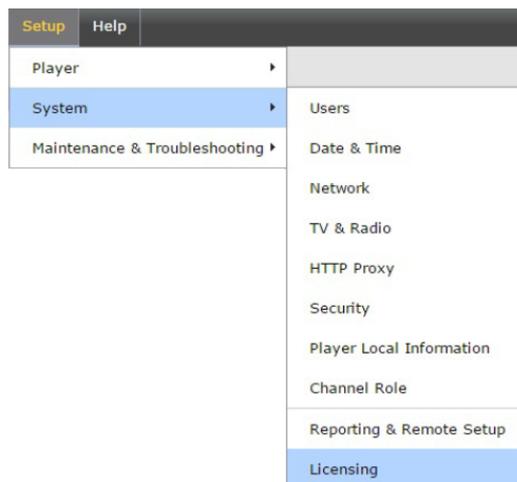
A license is required to enable room summary media support. The license may have been purchased and installed during the sales process. The procedure shows you how to check if your NTB includes the license already.

To configure Reserva room summary media on your NTB

1. Log on to your NTB.



2. To check if your NTB is licensed to run the room summary media, select **Setup > System > Licensing**.



The Licensing screen appears.

Installed	Description
2016-04-06 16:08:45	NTBHD10FSA
2016-04-29 09:23:23	RoomSummaryNonInteractive

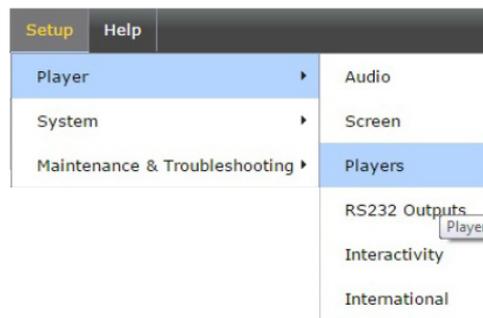
- If 'RoomSummaryNonInteractive' appears in the list of licenses, the NTB is licensed to run room summary media and no further licensing is required. Continue to Step 3.
- If 'RoomSummaryNonInteractive' is not on the list, you must obtain and apply a room summary license. For more information see [License NTB for Room Summary Media](#) (then return to this procedure to complete the room summary media configuration).

Configure NTB Player XML Web Services

You must configure the NTB Player to allow XML web services to external sites, to allow the room summary media to retrieve the room summary information from Reserva Connection Manager.

To configure the NTB Player XML web services.

1. Select **Setup > Player > Players**.



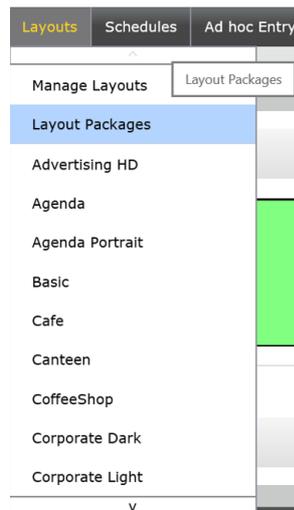
2. Ensure **Allow XML web services to access external sites** is selected. Click **Save Changes and Restart the NTB**.



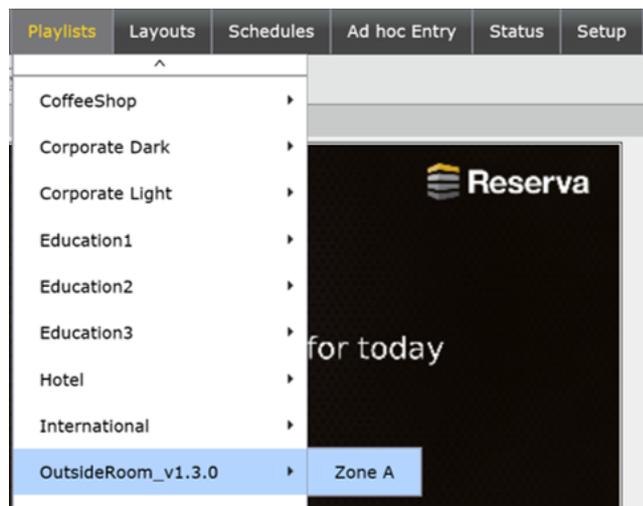
Install Room Summary Media Layout Package

To install the Reserva room summary media Layout Package.

1. To upload the Layout Package file, select **Layouts > Layout Packages**.



2. Click **Browse** and select the Reserva room summary Layout package <file>. Click **Upload**.
3. Select **Playlists** > <Layout_Name?> > **Zone A**.



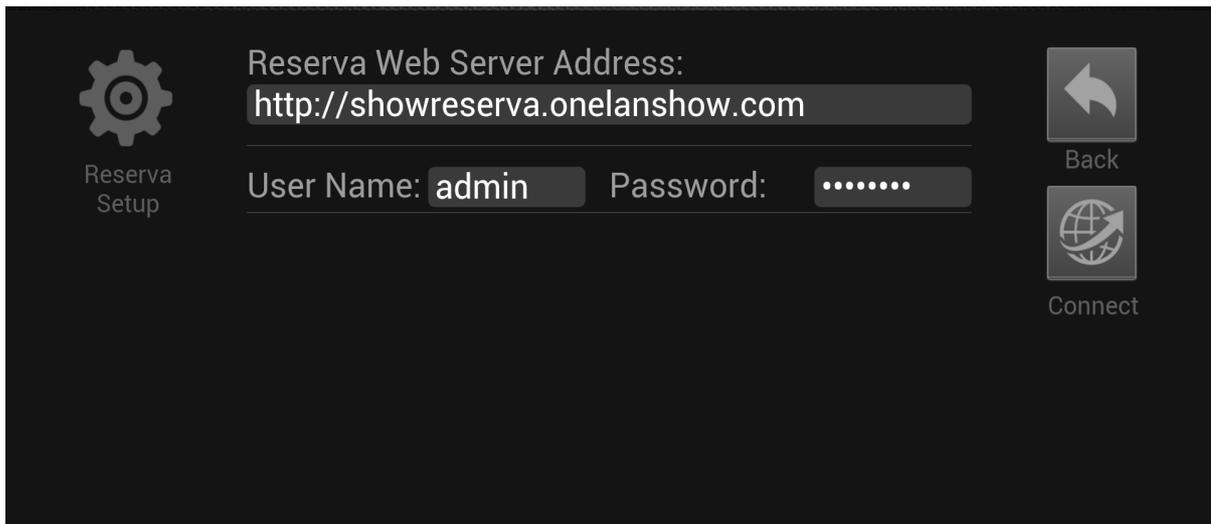
4. Click **index.html** link to open the Reserva configuration page.



Configure Room Summary Media

To configure the Reserva room summary media for the required Connection.

1. Enter the Reserva **Web Server Address**, **User Name** and **Password**.

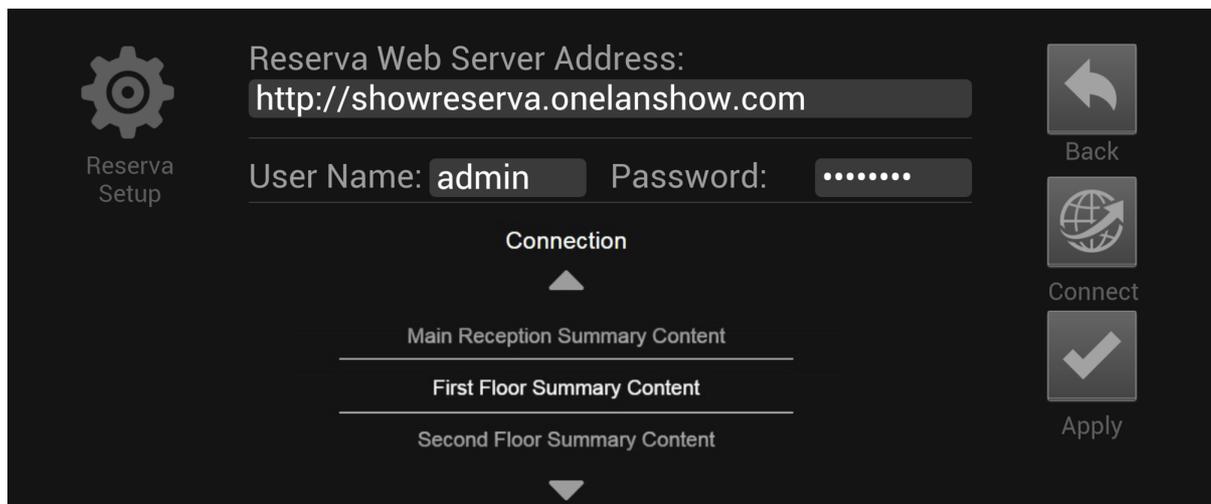


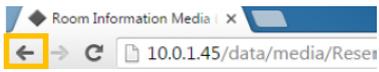
Reserva Web Server Address: The IP Address or host name of the server running the Reserva Connection Manager.

User Name and Password: The user name and password specified in Reserva Connection Manager, for Media Authentication.

Note: You can check these details using Reserva Connection Manager. See [Specify Connection Settings](#).

2. Click **Connect** to connect to the Reserva Connection Manager. The list of available Connections appear.
3. Select the required **Connection**. Click **Apply**.

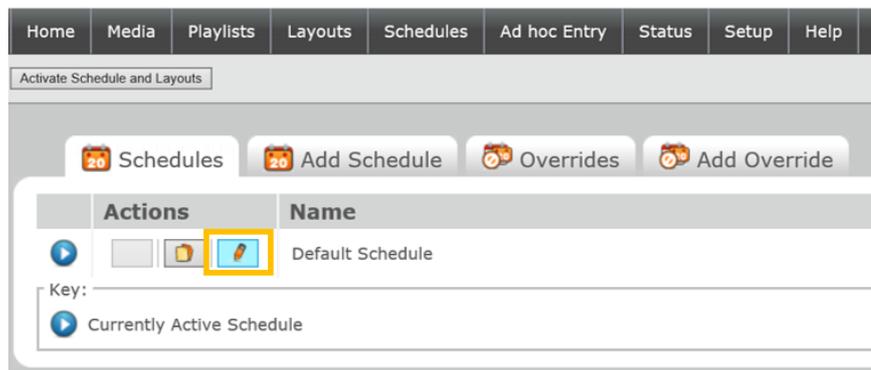


5. Click the browser Back button. For example: 

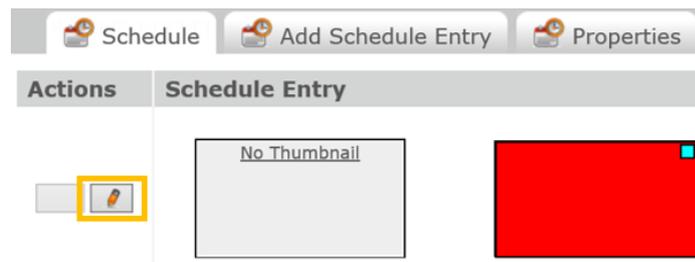
Configure NTB Schedule

To complete the configuration, you add the new Layout to a schedule and activate the schedule. The schedule determine the layout to display and the specific times and dates for the schedule. For more information regarding schedules and layouts, refer to your NTB User Guide or online help. In the steps below, a room summary layout is added to the default schedule.

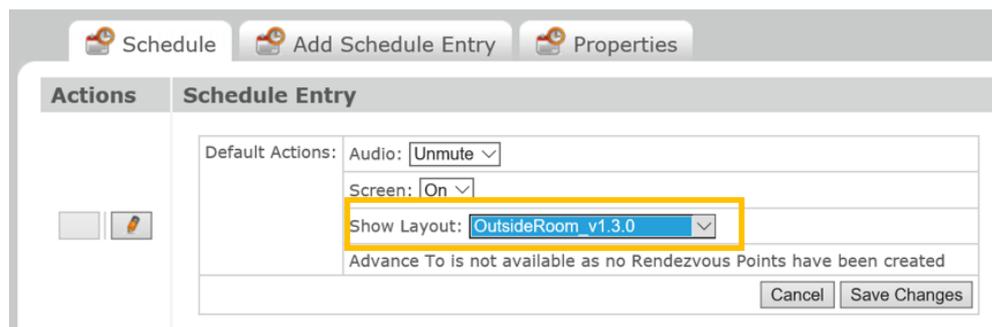
1. Select **Schedules > Manage Schedules**.
2. Click the edit option for the Default Schedule.



3. Click the edit button.



4. From the Show Layout menu, select the desired Layout and click **Save Changes**.



5. Click **Activate Schedule and Layouts** to apply the changes.

Activate Schedule and Layouts

This completes the room summary media configuration. The NTB presents a summary of the appointments for the rooms added to the Connection.

Meetings scheduled as 'all day' meetings appear at the top of the list, followed by all other individual meetings. Meetings are shown in order, according to the scheduled start time for each appointment.

4.4.2 License NTB for Room Summary Media

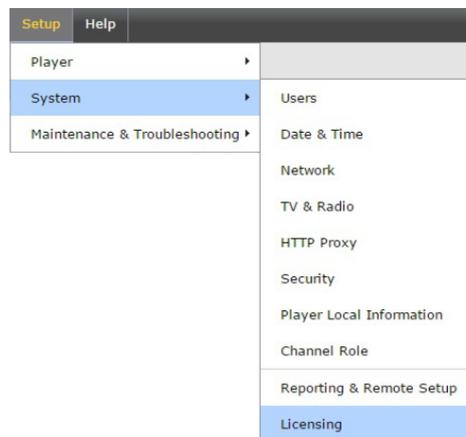
A license is required to allow your NTB to run the room summary media. The license may have been purchased and installed during the sales process. If so, no additional licensing steps are required. However, if the license is not installed, you must obtain and add the license.

This topic explains how to:

- Check if a room summary license is installed on your NTB
- License your NTB for room summary support.

To check if your NTB is licensed to run the room summary media

1. Select **Setup > System > Licensing**.



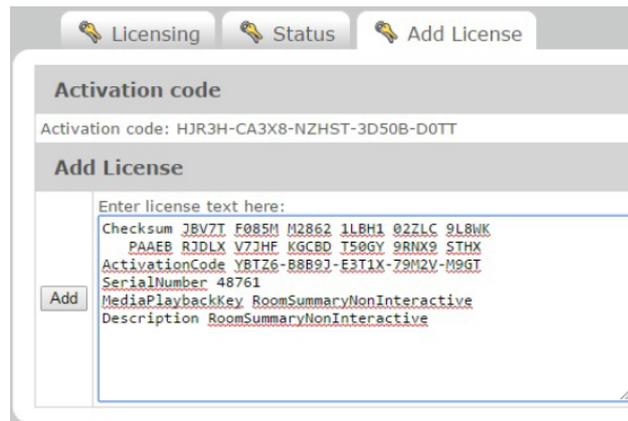
- If 'RoomSummaryNonInteractive' appears, the NTB is licensed to run room summary media and no action is required.

Installed	Description
2016-04-06 16:08:45	NTBHD10FSA
2016-04-29 09:23:23	RoomSummaryNonInteractive

- If 'RoomSummaryNonInteractive' is not on the list, you must obtain and apply a room summary license as shown below.

To add a license for room summary

1. Contact ONELAN to request a room summary license for your NTB. You must provide your NTB serial number and request a room summary media license.
2. On receipt of your license details, add the license. Click **Add License** and copy and paste the license into the text box. Click **Add**.



2. Reboot your NTB.

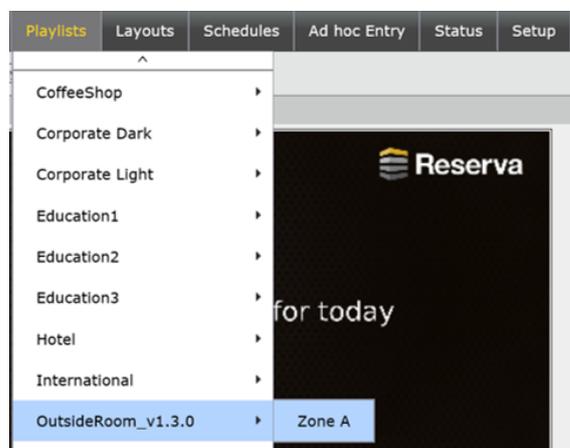
This completes the room summary media licensing. You can now configure your NTB room summary media. See [Configure Reserva Room Summary Media](#).

4.4.3 Reconfigure Room Summary Media

Reserva room summary media can be reconfigured at any time. For example, you may need to reconfigure the room summary media to retrieve summary information for rooms on a different Connection.

To reconfigure room summary media

1. Log on to your NTB and select **Playlists** > <Layout_Name> > **Zone A**.



The Reserva zone playlist window appears.

2. Click the **index.html** link to open the Reserva configuration page.



3. Modify the Configure Room Summary Media. For more information regarding the configuration options, see [Configure Reserva Room Summary Media](#).

4.5 Customising Reserva Media

This section explains how to customise Reserva outside room media and room summary media.

Reserva media can be customised to complement your branding and environment. For example, you can upload a logo of your choice and set a dark or light theme. You can also specify the display language.

You customise outside room media and room summary media separately. This gives you the flexibility to configure different branding for outside room media and room summary media, as required.

Note that if your deployment includes a mix of media versions, you configure the theme settings per version too. For example, some room signs are running outside room media version 'x' and others are running version 'y', you configure the theme for each version separately.

You set the options globally, for outside media and for room summary media. You can also override the global settings on a per Connection basis, allowing you to specify different options for different locations for example.

Customisation options

- [Theme](#): You can set the theme to dark or light
- [Logo](#): You can use the default logo, specify your own logo or remove the logo
- [Language](#): You also specify the language settings

4.5.1 Configure Reserva Media Themes

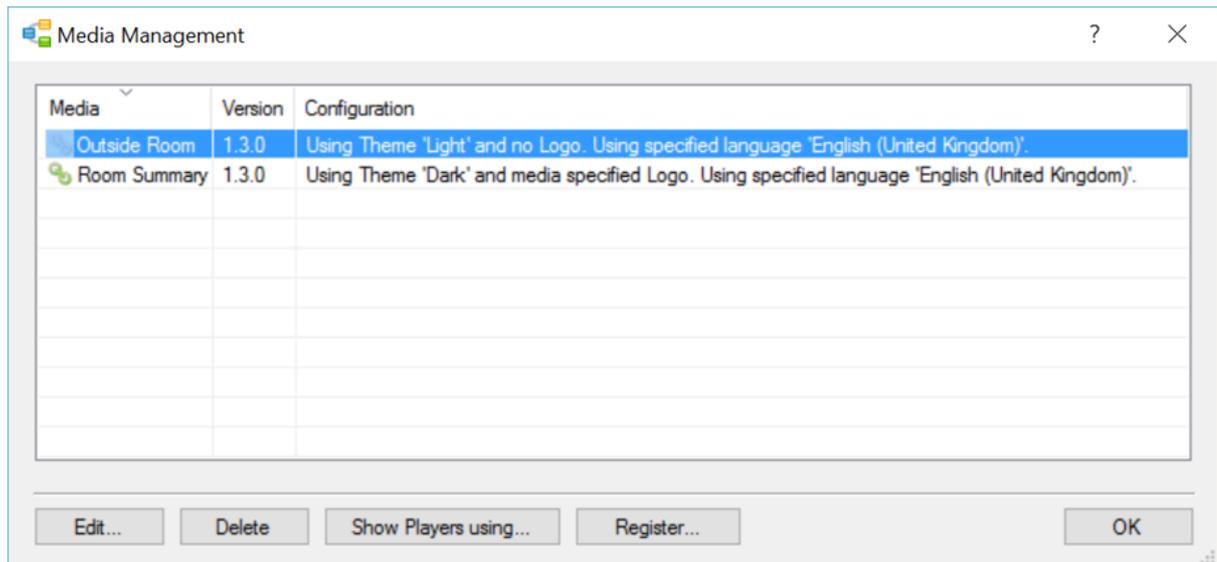
You can customise the theme for outside room media and room summary media. You can select a light or dark theme, to match your design and branding. Note that you customise the media separately for outside room media and room summary media.

Theme settings are set globally, for outside media and for room summary media. You can also override the global settings on a per Connection basis.

Note that if your deployment includes a mix of media versions, you configure the theme settings per version too.

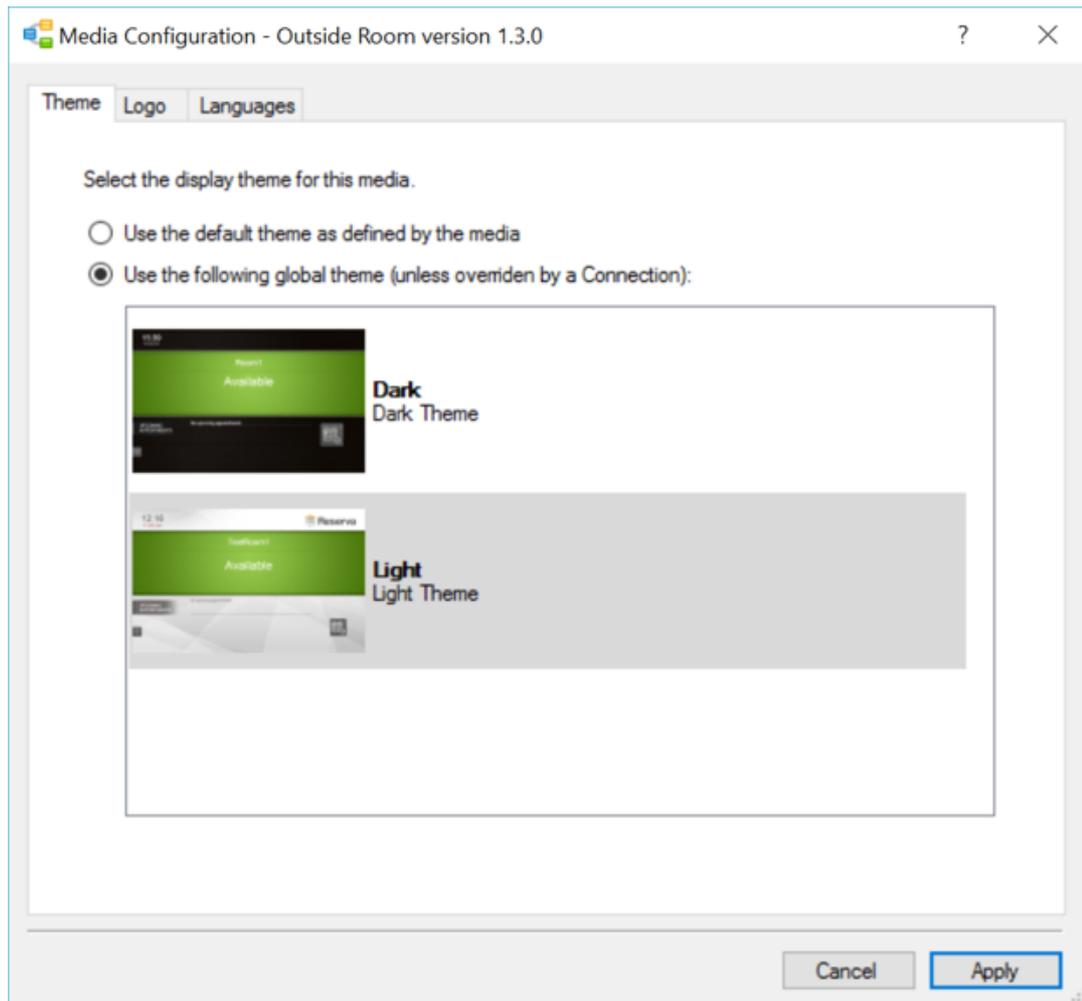
To configure Reserva media theme (global setting)

1. From the Reserva Connection Manager **Manage** menu, select **Media**. The Media Management dialog appears.



Note that Reserva Connection Manager retrieves media configuration details when the media connects. In the example above, media configuration details have been retrieved from outside room media (version 1.3.0) and room summary media (1.3.0).

2. Select the media to configure (Outside Room or Room Summary) and click **Edit**. Alternatively, double-click the media to configure. The Media Configuration dialog appears, with the Theme tab selected.



3. Select one of the following:
 - Use the default theme as defined by the media. This defaults to the theme settings as set on the device.
 - Use the following global theme (unless overridden by a Connection). You can specify a dark theme or a light theme.
4. Click **Apply**. Click **Yes** to confirm and return to the Media Configuration dialog.
5. Click **OK** to close the dialog and accept the changes.

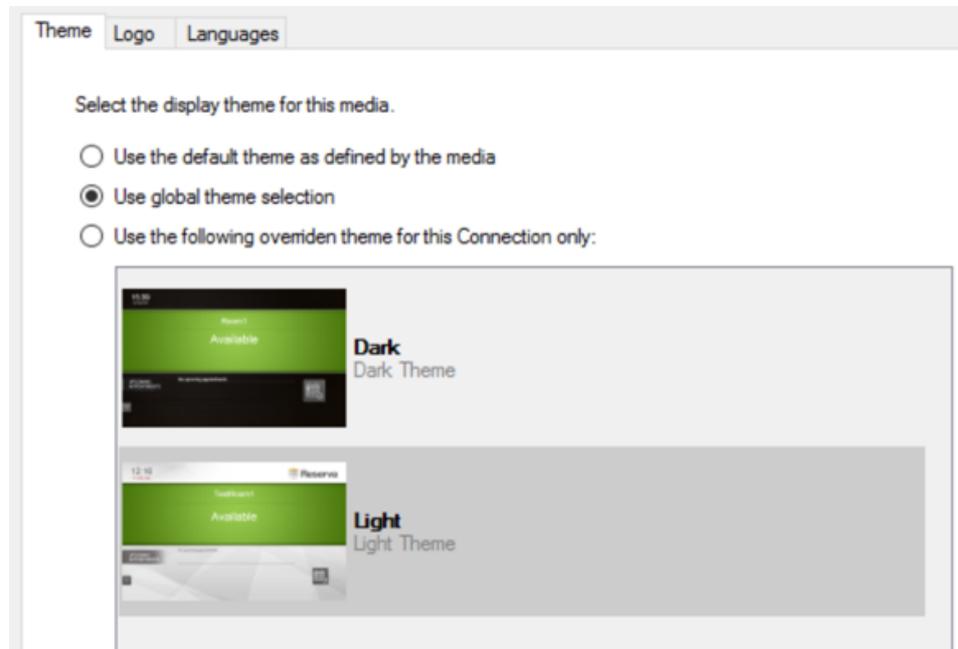
The theme settings are applied the next time the device polls the Web Service (typically within a few minutes). This is the global setting, applied to media of the same type and version.

You set the theme for each media type (room summary and room sign) and each version.

You can override the global theme setting, per Connection as detailed below.

To configure Reserva media theme - per Connection

The procedure to configure the media theme setting for a Connection is very similar to setting a global theme. The only difference is the theme selection options:



- Use the default theme as defined by the media. This defaults to the theme settings as set on the device
- Use global theme selection. This defaults to the global theme selection.
- Use the following overridden theme for the Connection only. You can specify a dark or light theme for the Connection

To override the theme setting for the selected Connection, select **Use the following overridden theme for the Connection only** and select the theme (Dark or Light).

The theme settings are applied for the selected Connection, and applicable to media of the same type and version.

You set the theme for each media type (room summary and room sign) and each version.

4.5.2 Configure Reserva Media Logo

You can customise the logo options for outside room media and room summary media. You can use the default logo, upload your own logo or remove the logo from the design. Note that you customise the media separately for outside room media and room summary media.

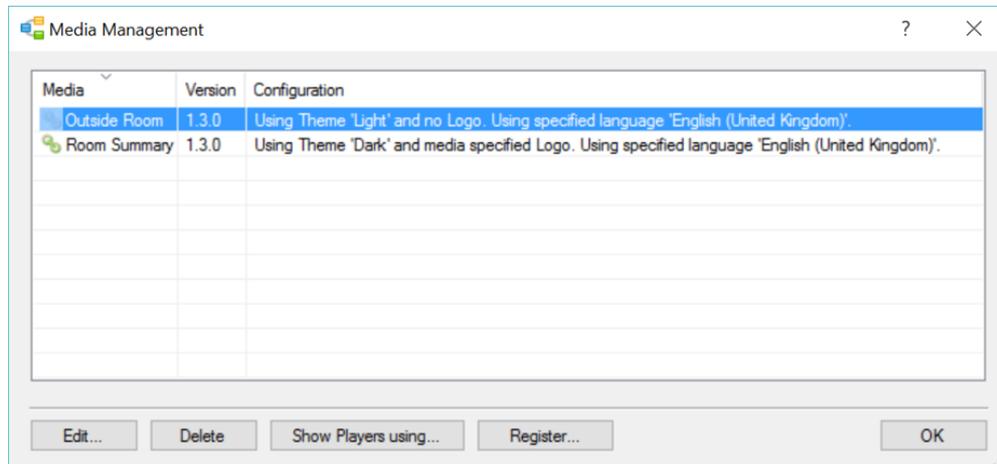
If you upload your own logo, the recommended logo size is: width 450 pixels, height 100 pixels.

Logo settings are set globally, for outside media and for room summary media. You can also override the global settings on a per Connection basis.

Note that if your deployment includes a mix of media versions, you configure the logo settings per version too.

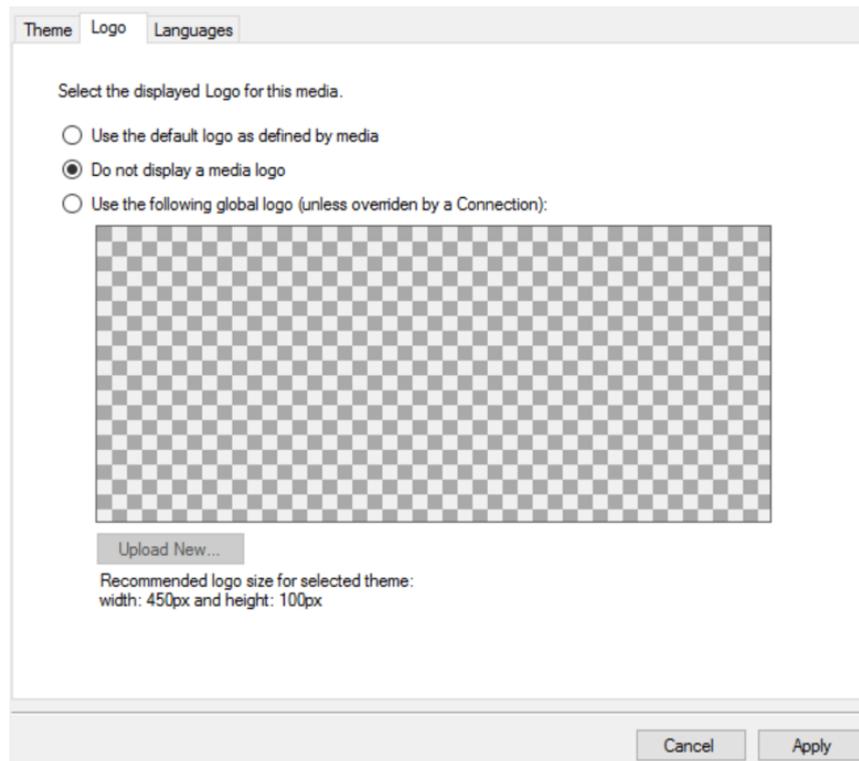
To configure Reserva media logo (global setting)

1. From the Reserva Connection Manager **Manage** menu, select **Media**. The Media Management dialog appears.



Note that Reserva Connection Manager retrieves media configuration details when the media connects. In the example above, media configuration details have been retrieved from outside room media (version 1.3.0) and room summary media (1.3.0).

2. Select the media to configure (Outside Room or Room Summary) and click **Edit**. Alternatively, double-click the media to configure. The Media Configuration dialog appears, with the Theme tab selected.
3. Select the **Logo** tab.



4. Select one of the following:

- Use the default logo as defined by media. This defaults to the theme settings as set on the device.
- Do not display a media logo. Remove the logo from the design.
- Use the following global logo (unless overridden by a Connection). To use your own logo, click **Use the following global logo (unless overridden by a Connection)**. Click **Upload New** and select your logo.



5. Click **Apply**. Click **Yes** to confirm and return to the Media Configuration dialog.
6. Click **OK** to close the dialog and accept the changes.

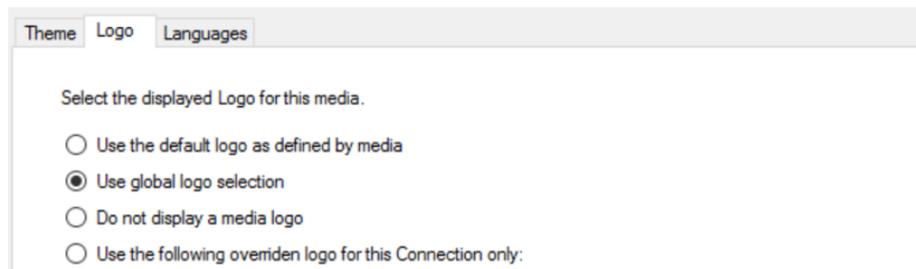
The logo settings are applied the next time the device is polled (typically within a few minutes). This is the global setting, applied to media of the same type and version.

You set the logo for each media type (room summary and room sign) and each version. You configure the logo per type and version.

You can override the global logo setting, per Connection as detailed below.

To specify the logo for a Connection

The procedure to configure the logo for a Connection is very similar to setting a global logo. The only difference is the logo selection options:



- Use the default logo as defined by the media. This defaults to the theme settings as set on the device.
- Use global logo selection. Use the logo defined globally.
- Do not display a media logo. Remove the logo from the design.
- Use the following overridden logo for this Connection only. Specify a logo for this Connection.

To specify a logo for the selected Connection, select **Use the following overridden theme for this Connection only** and upload and apply a logo of your choice, as described above.

The logo settings are applied for the selected Connection, applied to media of the same type and version.

You set the logo for each media type (room summary and room sign) and each version.

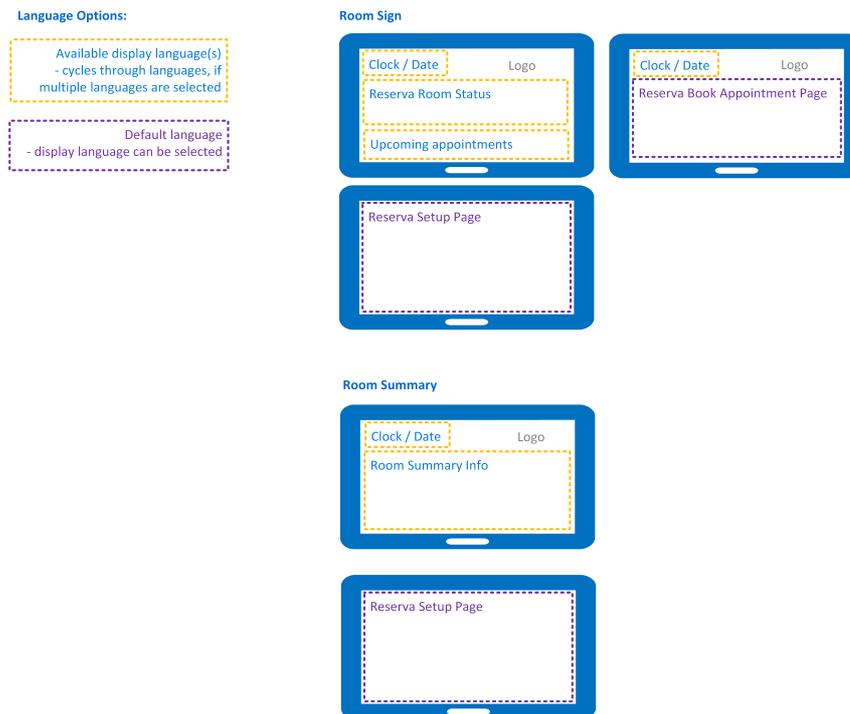
4.5.3 Configure Reserva Media Language

You can customise the language options for outside room media and room summary media.

Note that you customise the media separately for outside room media and room summary media.

You can set the following language options:

- **Available display language:** The language for the 'home' screen on both outside room media and room summary media. If more than one language is selected, the media cycles through each language (each language is displayed for 10 seconds). This flexibility allows you to cater for an environment where you have a need to display the Reserva media in a selection of languages. For example, a room summary display in a foyer could be customised to display the room summary information in English and Japanese.
- **Default display language:** The language for the set up screen for room summary media and set up screen and book appointment screen for outside room media. However, if additional Available display languages are set, they can be selected using the language menu that appears on the set up and book and appointment screens.



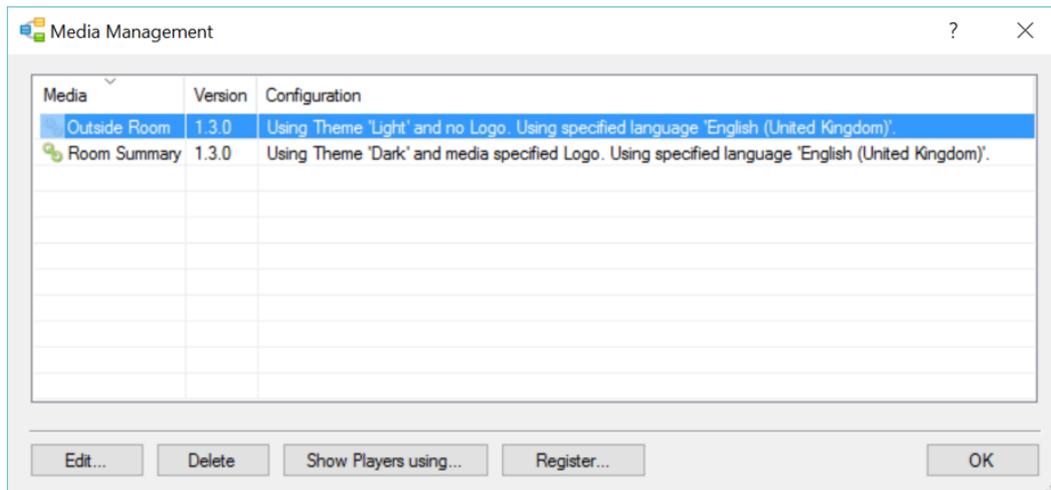
Language options

Language settings are set globally, for outside media and for room summary media. You can also override the global settings on a per Connection basis.

Note that if your deployment includes a mix of media versions, you configure the language settings per version too.

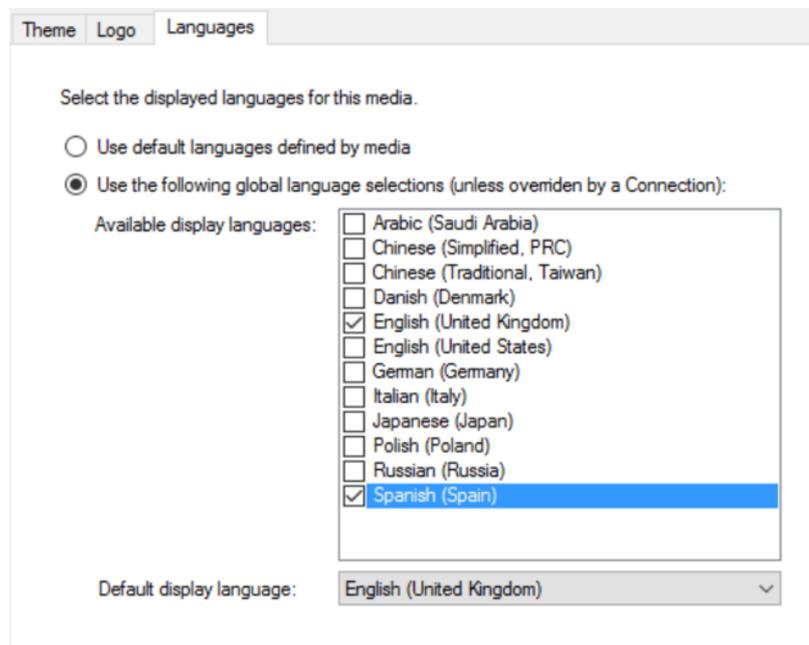
To configure Reserva media language (global setting)

1. From the Reserva Connection Manager **Manage** menu, select **Media**. The Media Management dialog appears.



Note that Reserva Connection Manager retrieves media configuration details when the media connects. In the example above, media configuration details have been retrieved from outside room media (version 1.3.0) and room summary media (1.3.0).

2. Select the media to configure (Outside Room or Room Summary) and click **Edit**. Alternatively, double-click the media to configure. The Media Configuration dialog appears, with the Languages tab selected.
3. Select the **Language** tab.



4. Select your language options:
 - Use default languages defined by the media. To use the language settings as set on the device.

- Use the following global language selections (unless overridden by a Connection). This allows you to set the global language settings for all media, unless overridden on a per Connection basis. You can set Available display languages and Default display language:

Available display languages: Language for the home screen. Note that if you select more than one display language, the media cycles through the languages.

Default display language: Language for the set up screen for room summary media, and the set up screen and book appointment screen for outside room media. Note that if additional Available display languages are set too, they can be selected using the language menu that appears on the set up and book and appointment screens.

5. Click **Apply**. Click **Yes** to confirm and return to the Media Configuration dialog.
6. Click **OK** to close the dialog and accept the changes.

The language settings are applied the next time the device is polled (typically within a few minutes). This is the global setting, applied to media of the same type and version.

You set the language for each media type (room summary and room sign) and each version.

You can override the global language setting, per Connection as detailed below.

To specify language settings for a Connection

The procedure to configure language settings for a Connection is very similar to setting the global language settings. The only difference is the language selection options:

- Use the default languages defined by the media. Use the language settings as set on the device.
- Use global language selection. Use global language settings (as set above).

- Use the following overridden language selections for the Connection only. Set language settings for the selected Connection. You can set Available display languages and Default display language:

Available display languages: Language for the home screen. Note that if you select more than one display language, the media cycles through the languages.

Default display language: Language for the set up screen room summary media and set up screen and book appointment screen for outside room media. Note that if additional Available display languages are set too, they can be selected using the language menu that appears on the set up and book and appointment screens.

To override the language settings for the selected Connection, select **Use the following overridden language selections for the Connection only** and specify the required language settings.

The language settings are applied for the selected Connection, applied to media of the same type and version.

You set the language for each media type (room summary and room sign) and each version.

Part



Managing Reserva

5 Managing Reserva

This section explains how to manage and monitor your Reserva deployment and covers:

- Managing Reserva Connections
- Managing Reserva Media and Players

5.1 Managing Reserva Connections

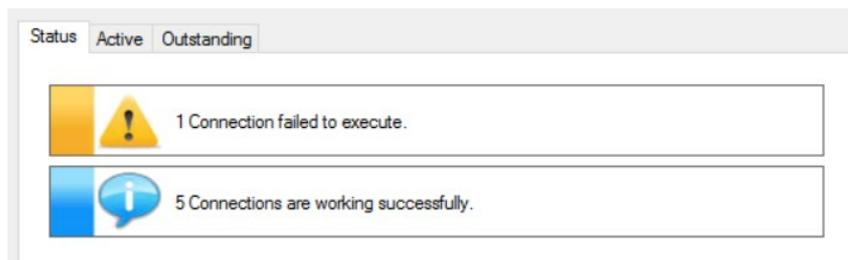
This section explains how to monitor and manage your Reserva deployment.

Reserva Connection Manager provides a summary of your deployment and allows you to monitor and manage Connections. This section covers the following:

- Status Page: View the status of your deployment
- Monitoring Active Connections
- Managing Active Connections
- Reviewing and applying updates to Connections
- Viewing Connection status messages

5.1.1 Status Page

The Status page provides a summary of your deployment, showing active Connections plus any pending updates and error messages. An example is shown below.



In this example, there is a problem with one Connection, and five Connections are active without any issues. No updates are pending.

Please ensure anti-virus and firewall software is set to allow the Reserva room signs to communicate with the Reserva Web Service. An error is reported if Reserva Connection Manager identifies an issue when attempting to open an IP socket on the local host to determine the live service status.

5.1.2 Monitoring Active Connections

The Active page shows the status and details for all active Connections.

Reserva Connection Manager executes (tests) active Connections regularly and provides a summary. The summary table includes the following details:

Status - one of the following:



Connection live with no issues



Connection failed to execute. The reason for the failure is shown in the Last Status column.



Connection status unknown. Reserva Connection Manager is unable to obtain the status from the ONELAN Reserva service.



New Connection. This Connection is ready to be made active.

Name. Connection name. The name specified on the Connection Properties tab.

Type. Calendar system – for example, Exchange

Last Execute Time / Next Execute Time. The most recent Connection test and the next scheduled Connection test

Last Status Message. Description to accompany the most recent test. An asterisk indicates that changes were applied to the Connection since the test.

Comment. Connection comment. Additional text to accompany the Connection Name, as specified on the Connection Properties tab.

You can reorder columns by drag-and-dropping as required. You can also sort details alphabetically by clicking on the appropriate column title.

To view a log of detailed status messages for a Connection, select the required Connection in the table and select **View Status Messages** from the **Connection** menu. Alternatively, you can right-click on the required Connection and select **View Status Messages**.

5.1.3 Managing Active Connections

The following options are available on the Active page.

Note that Outstanding actions are applied when you click **Apply**. This allows you to apply the changes when convenient and to avoid disruption to active Connections.

Create a New Connection

Click the **Create New** button to add a new Connection. The Connection Editor dialog appears. You specify the Connection details and properties (for more information, see [Create New Connection](#)). Once you have entered the new Connection details and saved the changes, the Connection is ready to be added to your deployment. Click **Apply** to make the Connection active.

Add an Existing Connection File

You can add a new Connection to your deployment using an existing Connection file. From the **Connection** menu, select **Add Existing**. Select the required file and click **OK**. The Connection is ready to be added to your deployment. Click **Apply** to make the Connection active.

Remove an Active Connection

To remove an active Connection, select the Connection and click **Remove**. The Connection is ready to be removed. On the Outstanding Actions page, click **Apply** to remove the Connection.

View or modify an Active Connection

To view or modify an Active Connection, select the Connection and click **View**. The Connection Editor appears. After you have made and saved changes, the Connection is ready to be modified. On Outstanding Actions page, click **Apply** to make the changes.

Undo Changes

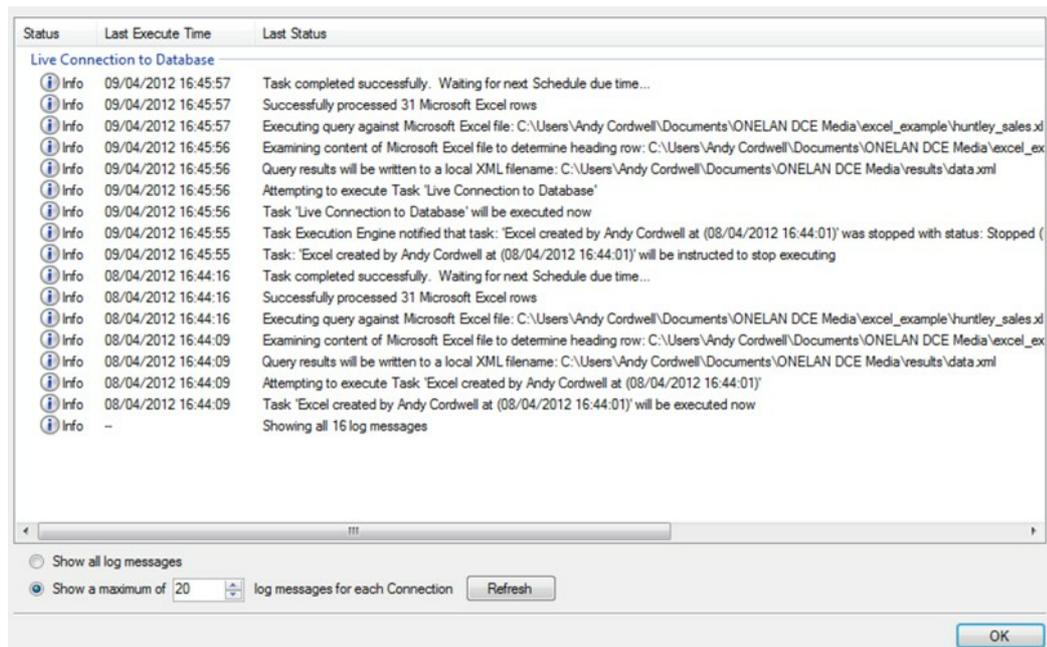
You can undo pending changes. Pending actions are shown on the Outstanding and Active page. Select the required update and click **Undo**.

Apply Changes

To apply all outstanding actions, click **Apply**. This restarts the Connection service and applies all outstanding changes.

5.1.4 Viewing Connection Status Messages

If an active Connection is not working as expected, you can view status messages for the Connection. Select the connection on the Active page and from the Connection menu, click **View Status Messages**. The Status messages dialog appears as shown in the example below.



5.1.5 Reviewing and Applying Updates to Connections

All pending changes are shown on the Outstanding page. To apply all outstanding actions, click Apply. This restarts the Connection service and applies all outstanding changes. A summary of outstanding actions is also shown on the Status page.

The actions that may appear on the Outstanding page:

Action	Name	Type	Comment	Filename
Remove	Connection 6	Exch...	Room 1	
Modify	Connection 5	Googl...		
Add	Connection 9	Googl...		

Outstanding Updates

- **Add** – New Connection to be made active.
- **Modify** – Updates to Connection to be applied.
- **Remove** – Connection to be removed.

To apply the changes, click **Apply**. Note that before applying pending changes, you can review and amend changes as detailed below.

Add

To make the Connection active, click **Apply**.

Note that before making the new Connection active, you can review the details and, if necessary, make further changes. To view the details, select the Connection and click **View**. The Connection Editor dialog appears, showing the details for the new Connection. You can make further changes as required.

If you no longer need the new Connection, select the required Connection and click **Undo Add**. This removes the Connection. Note that if you undo a new Connection that you added using a Connection file, the Connection file is not deleted.

Modify

Updates to the Connection are applied on selection of **Apply**.

Note that before applying the changes, you can view the details and, if necessary, cancel the change. To view the details, select the Connection and click **View**. The Connection Editor dialog appears, showing the details for the Connection. You can make further changes as required.

To cancel updates to the Connection, select the required Connection and click **Undo Changes**.

Remove

To remove a Connection, click **Remove**.

Note that you if you change your mind and decide to keep the Connection, select the Connection and click **Undo Remove**.

5.2 Managing Reserva Media and Players

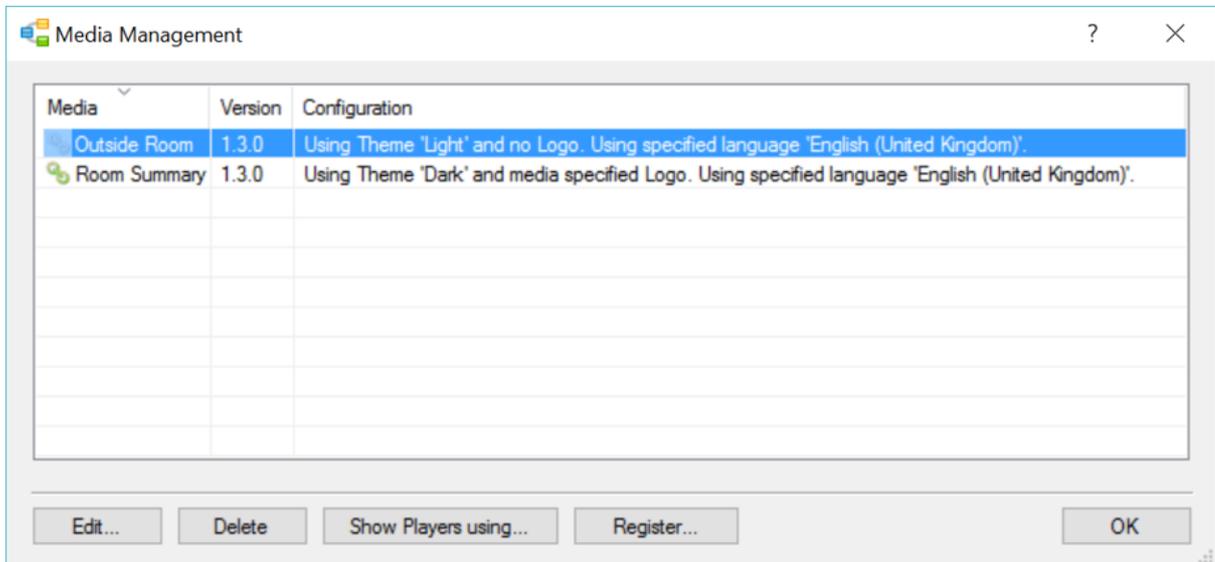
This section explains how to manage Reserva media and players (room signs and room summary displays) using the media.

- [Managing Reserva Media](#)
- [Managing Reserva Media Players](#)

5.2.1 Managing Reserva Media

Reserva media can be customised, including theme (dark or light), logo (use the default, upload your own logo, or remove the logo), and language options. The media management options allow you to view and manage the Reserva media configurations.

To view the Media Management dialog, select **Manage > Media**.



Note that Reserva Connection Manager retrieves media configuration details when the media connects. In the example above, media configuration details have been retrieved from outside room media (version 1.3.0) and room summary media (1.3.0).

The dialog details the following:

- Media: The media is managed separately for outside room media (room signs) and room summary media.
 indicates the media is being used.  indicates the media is not in use.
- Version: media version is shown. If your deployment includes a mix of media versions, you configure the theme settings per version too. For example, some room signs are running outside room media version 'x' and others are running version 'y', you configure the theme for each version separately.
- Configuration: This provides a summary of the configuration including theme, logo and language settings

Modify Media Configuration

To modify media, select the media to configure (Outside Room or Room Summary) and click **Edit**. Alternatively, double-click the media to configure. The Media Configuration dialog appears. You can modify the theme, logo and language settings as required. For more information, see [Customising Reserva Media](#).

View Players using Media

To view a list of the players (room signs and room summary displays) using a media configuration, select the media option (Outside Room or Room Summary) and click **Show Players using**. A list of the players using the selected media appears. The dialog includes the following information:

- Serial: The serial number of the devices (room sign or NTB) using the media.
- Media: The media type (outside room media (room signs) or room summary media)
- Media Version: The version number of the media running on the device.
- Theme: The theme (dark or light)
- Last Seen: The date and time the media on the device polled the Web Service
- Status: The status of the media which is either up to date or pending changes.
- Connection: The Connection the device is using
- Resource: The Calendar resource - for example, Room 1. This is applicable to outside room media only (not applicable to room summary media).
- Start Time: The date and time the device was powered up (since the last report)
- Up Time: The time since the device last booted to the last time it polled the Web Service

Remove Media Configuration

You can remove a media configuration that is no longer required or used. This allows you to ensure you only maintain media configurations that are current and relevant, simplifying management of your media. To remove a media configuration, select Manage > Media, then select the media to remove and click Delete. If the media is in use by one or more players the Delete option will be unavailable and these players will need to be removed from the media first. In the same window click Show Players Using to display players using the selected media. Select one or more players and click Remove or right click and select Remove. Note, you may have to shut down the players or shut down the service to be able to remove them if they are active otherwise they will re-appear.

Register Media Configuration

1.3 or later media will automatically register their supported media once they have contacted the server. It is possible to also manually register media by selecting Manage > Media and clicking on Register. You will need a media registration file for this, which would typically be supplied by ONELAN. This option is provided for future use to update or provide custom media registration files without the need for a media release.

To register a media configuration, select the required media and click **Register**.

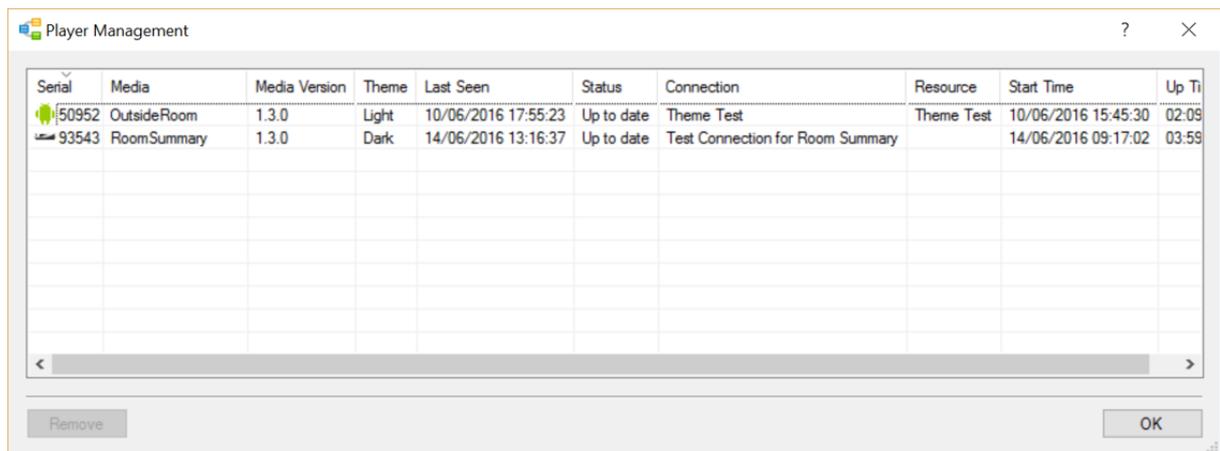
5.2.2 Managing Reserva Media Players

Reserva supports two types of media and device pairings:

- Outside room media running on a room sign
- Room summary media running on an NTB.

In this topic, room sign and NTB devices are referred to collectively as Players.

To view the Player Management features, select **Manage > Player**. The Player Management dialog appears.



Serial	Media	Media Version	Theme	Last Seen	Status	Connection	Resource	Start Time	Up Ti
50952	OutsideRoom	1.3.0	Light	10/06/2016 17:55:23	Up to date	Theme Test	Theme Test	10/06/2016 15:45:30	02:09
93543	RoomSummary	1.3.0	Dark	14/06/2016 13:16:37	Up to date	Test Connection for Room Summary		14/06/2016 09:17:02	03:59

The dialog details the following for each player:

- Serial: The serial number of the player (room sign or NTB) using the media.  denotes a room sign running outside room media and  denotes an NTB running room summary media
- Media: The media type (outside room media (room signs) or room summary media)
- Media Version: The version number of the media running on the player.
- Theme: The theme (dark or light)
- Last Seen: The date and time the media on the player polled the Web Service
- Status: The status of the media which is either up to date or pending changes
- Connection: The Connection the player is using. This is applicable to outside room media only (not applicable to room summary media).
- Resource: The Calendar resource - for example, Room 1.
- Start Time: The date and time the player was powered up (since the last report)
- Up Time: How long the player has been connected

Remove Player (manually)

If a player does not connect to the Web Service within 7 days, Reserva automatically removes the Player from the deployment (the Player is removed from the list and the database). However, you can manually remove players if necessary. For example, when replacing a player you can remove the player during the upgrade, rather than wait for the automatic removal. To remove a player manually, select the required Player and click **Remove**. The Player is removed from the deployment.



Part



Appendix A: Optimising Exchange

6 Appendix A: Optimising Exchange

This section details recommendations and options to optimise integration with Microsoft Exchange®.

Auto accept meetings

It is recommended that Exchange® is configured to automatically accept or decline meetings.

If this is not enabled, there will be a discrepancy between the information displayed on Reserva room signs and the information in Exchange. This discrepancy will be present from the point at which an appointment is added, or modified, until the change is approved manually in Exchange. During this time, it is possible for conflicting meetings to be booked for the same resource (mailbox).

Resource permissions

All accounts used by Reserva require, at a minimum, **Reviewer** permission within Exchange.

If a Reserva Connection is configured to allow users to create, cancel, or modify meetings, the Exchange account for the Connection also requires **Editor** permission.

Room Resource Display Properties

You can use the Exchange `AddOrganizerToSubject` mailbox property to automatically display the organizer within the appointment subject, if required.

Privacy

The Exchange `DetailLevel` mailbox property specifies the level of calendar detail to be published and displayed on the room signs. The following values can be specified:

- `AvailabilityOnly`
- `LimitedDetails`
- `FullDetails`
- `Editor`

Note the default value is `AvailabilityOnly`.

Remove Private Meeting Property

The Exchange `RemovePrivateProperty` boolean mailbox property indicates if Exchange will show details for meetings that are marked as private.

It is recommended that the setting is disabled (false) for each mailbox used by Reserva, indicating that private meetings will be displayed with obscured details.

Throttling

Exchange may throttle the number of requests that each user is allowed to execute.

These are per user limits, and the impact avoided or minimized by using one user account per Connector.

Exchange 2013 Settings

Property	Description
EwsCutoffBalance	Defines the resource consumption limits for Exchange Web Services (EWS) user before that user is completely blocked from performing operations on a specific component.
EwsMaxBurst	Defines the amount of time that an EWS user can consume an elevated amount of resources before throttling is applied. This is measured in milliseconds. This value is set separately for each component.
EwsRechargeRate	Defines the rate at which an EWS user's budget is recharged (budget grows by) during the budget time.

Exchange 2010 Settings

Property	Description
EWSPercentTimeInAD	Defines the percentage of time per minute during which a specific user can execute Active Directory requests.
EWSPercentTimeInCAS	Defines the percentage of time per minute during which a specific user can execute Client Access server code.
EWSPercentTimeInMailboxRPC	Defines the percentage of time per minute during which a specific user can execute mailbox RPC requests

Part



Appendix B: Google
Service Account

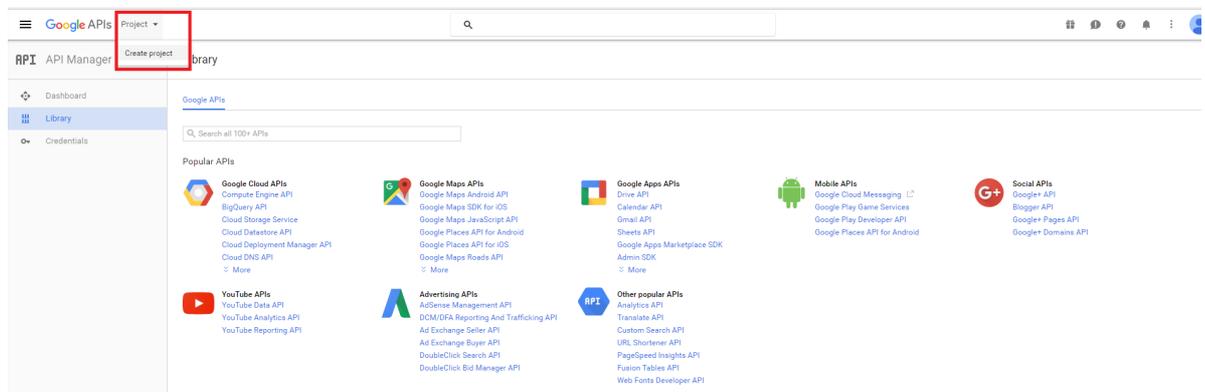
7 Appendix B: Google Service Account

7.1 Create a Google Service Account

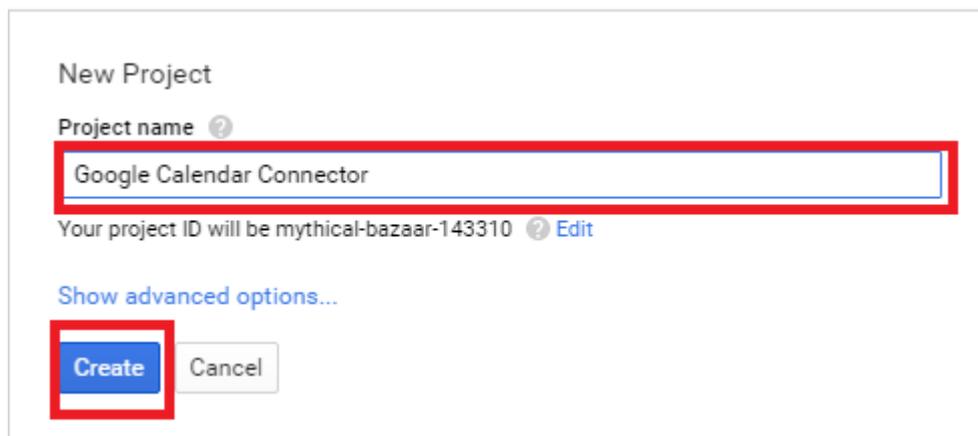
To deploy a Shared Google Calendar, the calendar must be shared with a Google Service Account. The Google Service Account allows Reserva to query and edit Google Calendars. This account is used by Reserva to authenticate and interact with the Google Calendar API.

To create a Google Service Account.

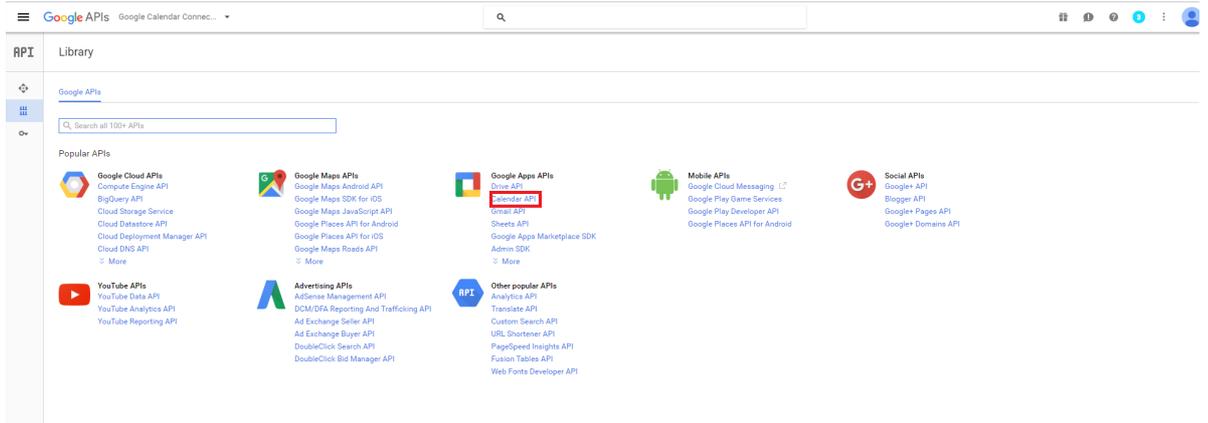
1. Start the Google Developer Console. If prompted, log on to your Google account. <https://console.developers.google.com/start>
2. Click on the 'Project' for creating a new project.



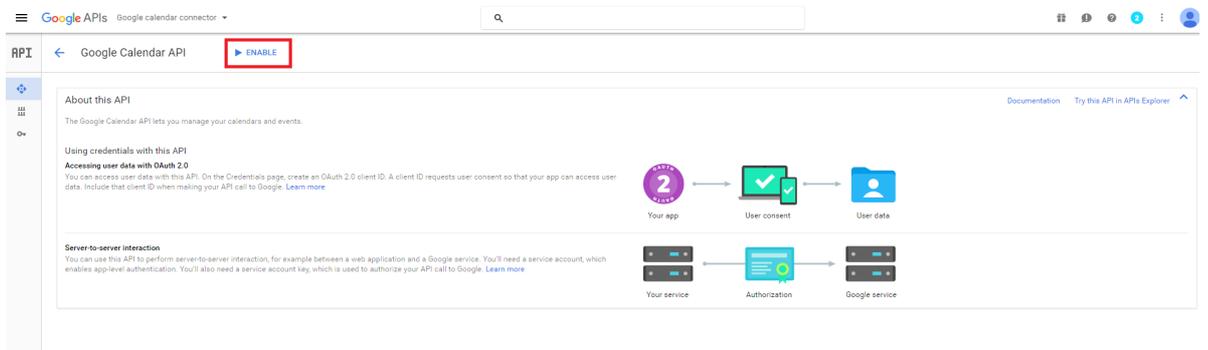
3. Enter the name of the project. Click Create to confirm the details and create the new project.



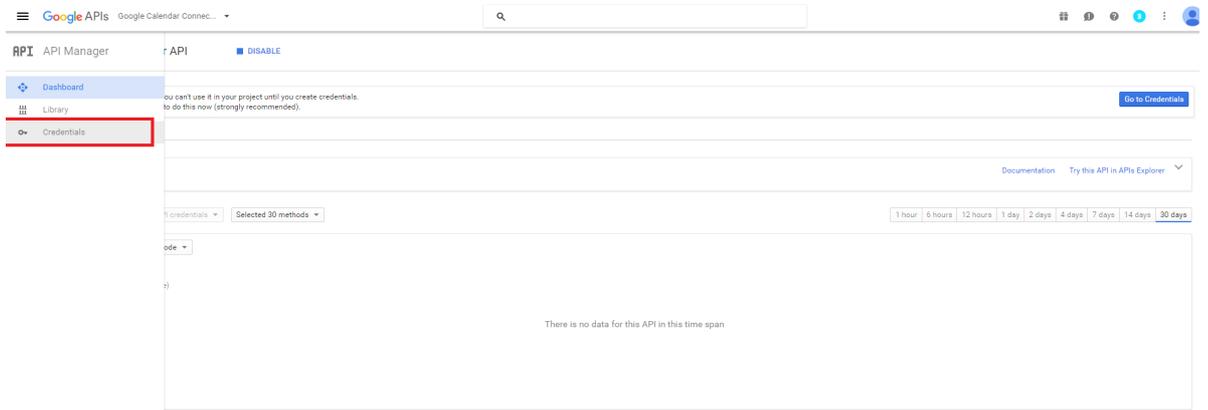
4. After the project is created, you enable the Google Calendar API. From the menu on the left, select, APIs & auth > APIs. In the right pane, locate the Google Apps APIs section and click Calendar API.



5. Click Enable API.



6. From the menu on the left, select APIs & auth > Credentials. The Credentials pane appears.



7. From the Add credentials menu, select Service account type and enter the account name. Then select the role type.

APIs

Credentials

You need credentials to access APIs. [Enable the APIs you plan to use](#) and then create the credentials they require. Depending on the API, you need an API key, a service account, or an OAuth 2.0 client ID. [Refer to the API documentation](#) for details.

Create credentials ▾

API key
Identifies your project using a simple API key to check quota and access.
For APIs like Google Translate.

OAuth client ID
Requests user consent so your app can access the user's data.
For APIs like Google Calendar.

Service account key
Enables server-to-server, app-level authentication using robot accounts.
For use with Google Cloud APIs.

Help me choose
Asks a few questions to help you decide which type of credential to use

Google APIs Google Calendar Connec...

API Credentials

←

Create service account key

Service account

New service account

Service account name [?] Role [?]

Service account ID

Key type

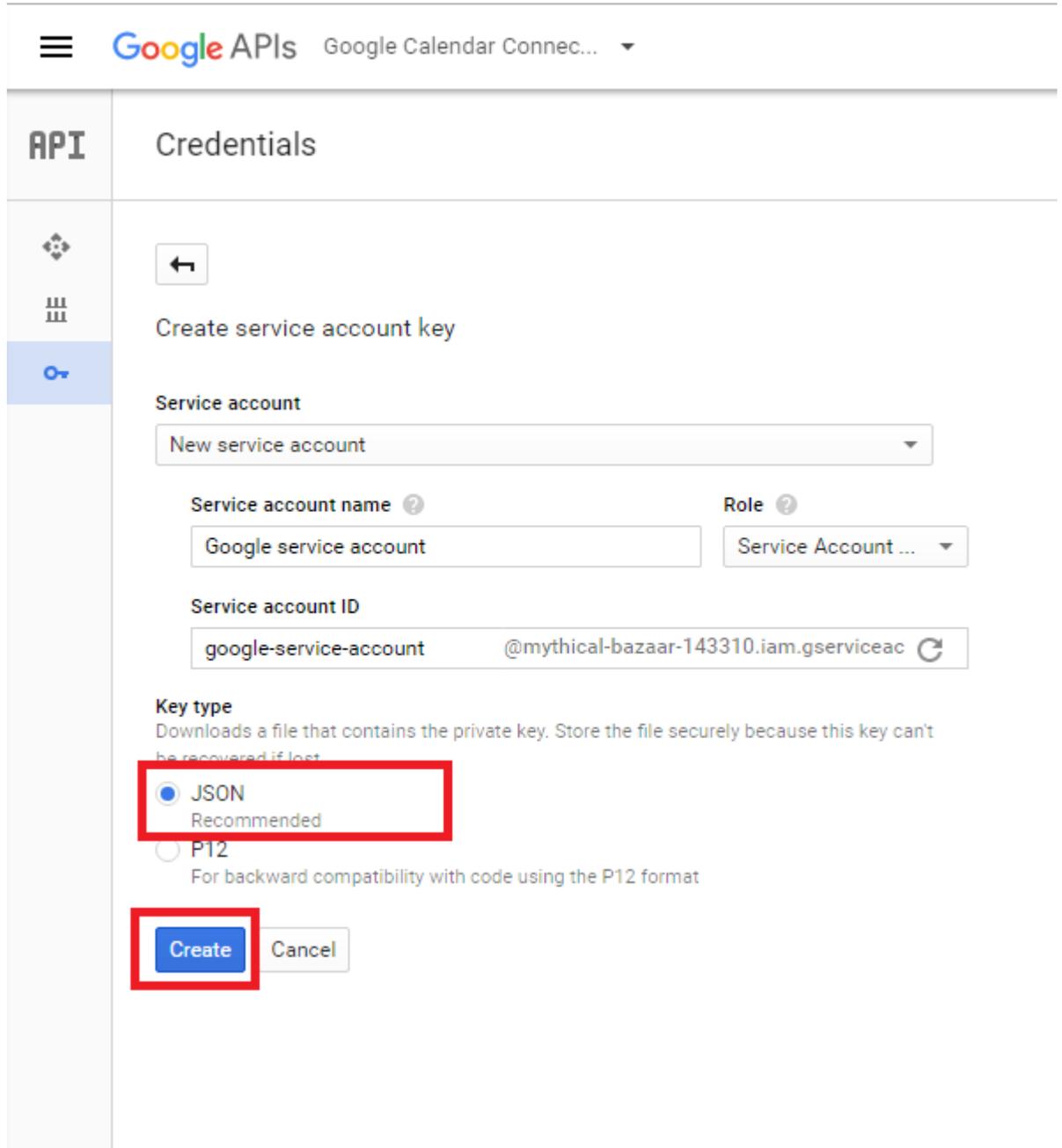
Downloads a file that contains the private key. Store the file securely because this key can't be recovered if lost.

JSON
Recommended

P12
For backward compatibility with code using the P12 format

The screenshot shows the 'Create service account key' form in the Google APIs console. The form includes fields for 'Service account name' (set to 'Google service account'), 'Service account ID' (set to 'google-service-account'), and 'Key type' (set to 'JSON'). The 'Role' dropdown menu is open, showing 'Project' and 'Service Account Actor' selected with red boxes. A tooltip for 'Service Account Actor' is visible, stating 'Access to obtain credentials for a service account.' The 'Create' button is highlighted in blue.

8. Ensure the Create service account JSON option is selected and click Create. A new service account entry is created, together with the corresponding Service Account JSON file.



The screenshot shows the 'Create service account key' dialog in the Google APIs console. The 'Service account' dropdown is set to 'New service account'. The 'Service account name' is 'Google service account' and the 'Role' is 'Service Account ...'. The 'Service account ID' is 'google-service-account@mythical-bazaar-143310.iam.gserviceac'. Under 'Key type', the 'JSON' option is selected and highlighted with a red box. Below it, the 'P12' option is unselected. At the bottom, the 'Create' button is highlighted with a red box, and the 'Cancel' button is visible to its right.

9. After the account is created and the JSON file is prepared, you are prompted to save the file. Save the file and note the location and details. You need this file to share Google Calendars with the Google Service Account.
10. On the New public/private key pair dialog, click Close.

New private key

Google Calendar Connector-1265454a8828.json has been saved on your computer. This is the only copy of the key, so store it securely.

Close

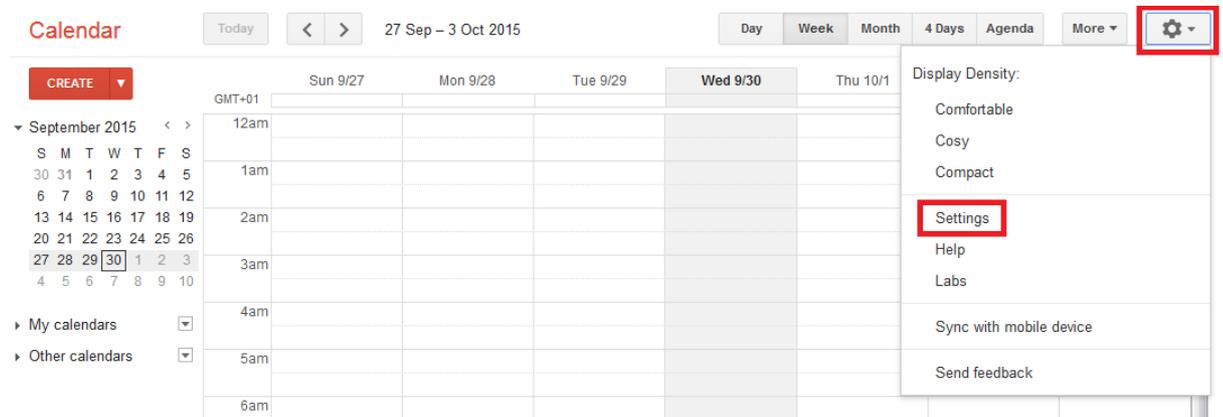
7.2 Share Google Calendar with Google Service Account

To deploy a Shared Google Calendar, the calendar must be shared with a Google Service Account. The Google Service Account is used by Reserva to authenticate and interact with the Google Calendar.

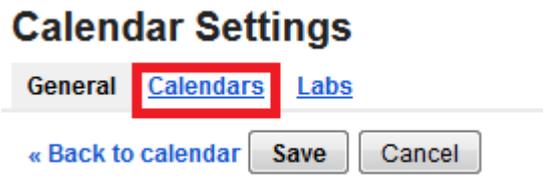
To share a Google Calendar with a Google Service Account.

You require the Google Service Account email address and corresponding JSON file (see [Appendix B: Google Service Account](#)).

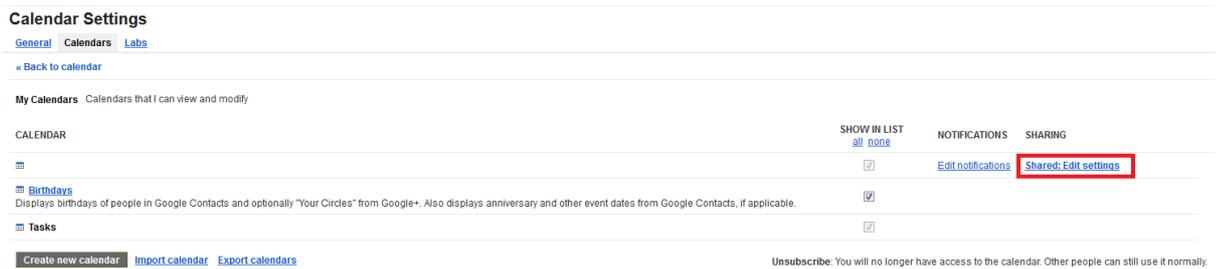
1. Log on to the required Google account and open the Google Calendar App. Click **Settings**.



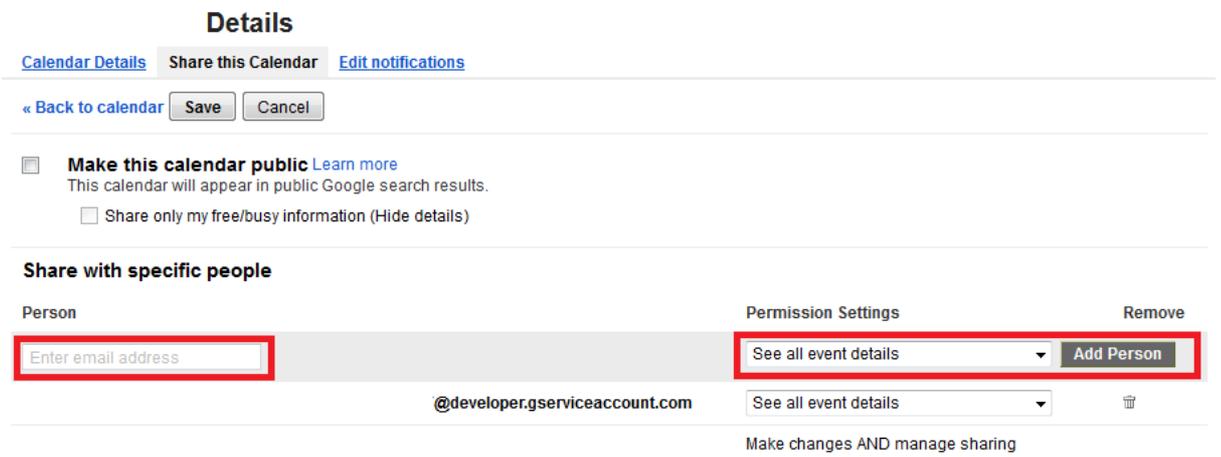
2. On the Calendar Settings page, click **Calendars**.



- Click **Shared: Edit Settings** for the calendar you want to share with the Google Service Account. The Calendar Details page appears.



- On the Calendar Details page, enter the Google Service Account email address in the Enter email address field. Select the required Permission Settings from the drop down menu, and click **Add Person**.



- Click **Save**.

Tip: Sharing with co-workers?

Companies can move to Google Calendar to make sharing easier. [Learn how](#)

« [Back to calendar](#)

The Google Service Account must be added to Reserva Connection Manager, before configuring Shared Google Calendar Connections. See [Configure Google Service Account](#).

Part



Appendix C: Scientia
Database

8 Appendix C: Scientia Database

This section provides more information regarding the requirements and configuration of the database for Scientia Calendar Connections.

Open Database Connectivity (ODBC) driver and Data Source Name (DSN)

You must ensure the Open Database Connectivity (ODBC) driver is installed on Reserva Connection Manager. You also require the Data Source Name (DSN) details to configure and connect to the Scientia database. The DSN information and ODBC driver allow Reserva to connect to and query the Scientia database.

Note that you require a DSN for each database, if integrating with multiple databases.

ODBC Driver Installation

ODBC functionality is supported and built in to Microsoft Windows. A suitable driver may be installed on the server running Reserva Connection Manager by default. If not, you can download the required ODBC driver and installation instructions from Microsoft.

ODBC Connection Details

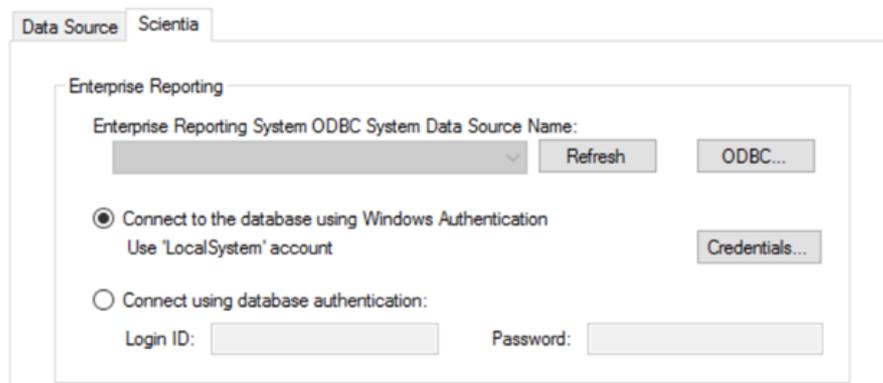
Reserva Connection Manager requires an ODBC *System* DSN that is configured to allow connection and communication with the Scientia database. The DSN includes the details required by the ODBC driver to allow Reserva to connect to and query the Scientia database.

The DSN details are specific to your database. You must ensure the DSN is configured correctly. You can use the DSN test function to check the configuration. We recommend you test the DSN before configuring and testing your Reserva Connection.

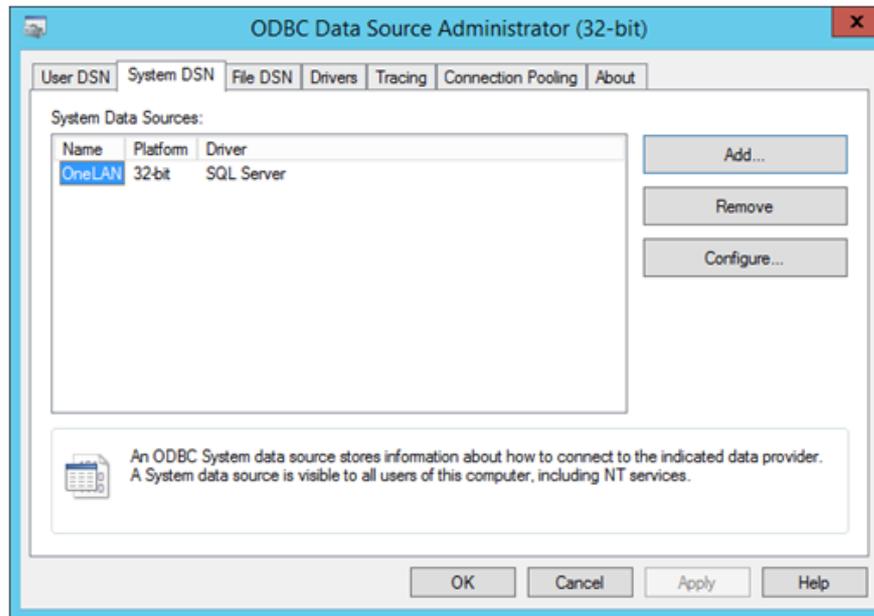
Managing ODBC System Data Source

You use the Data Source Administrator tool to manage and create ODBC DSNs. An example of the process to configure a DSN for Microsoft SQL Server is shown below.

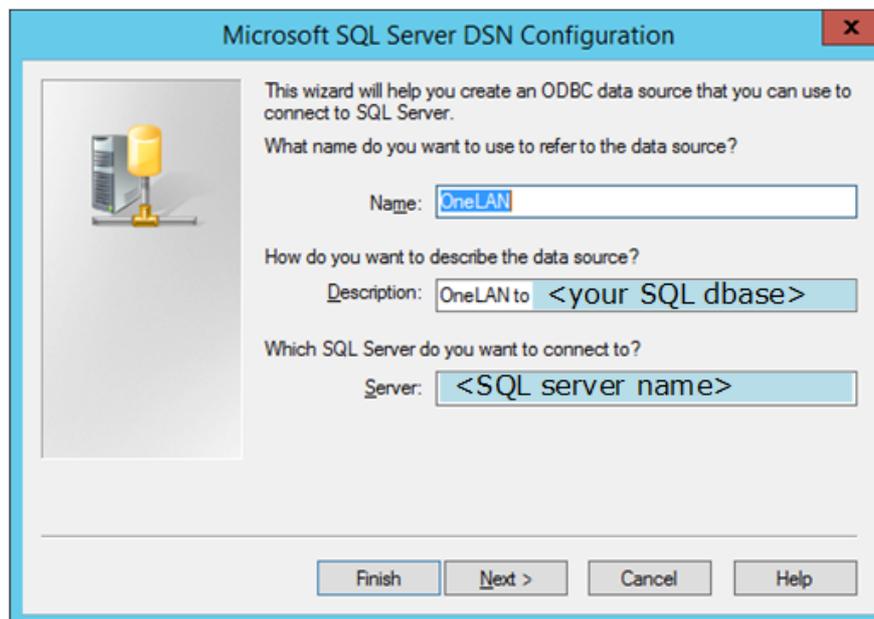
1. From Reserva Connection Manager, click **ODBC** to launch the ODBC Data Source Administrator tool.



2. You require a System DSN as shown in the example below.



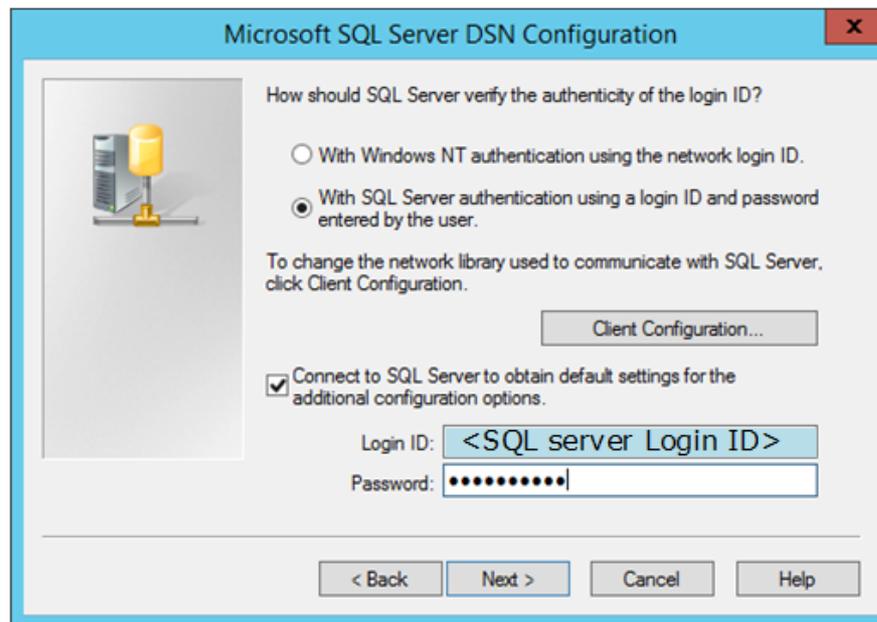
3. You can create a data source as shown in the example below. Click **Add** to start the Wizard.



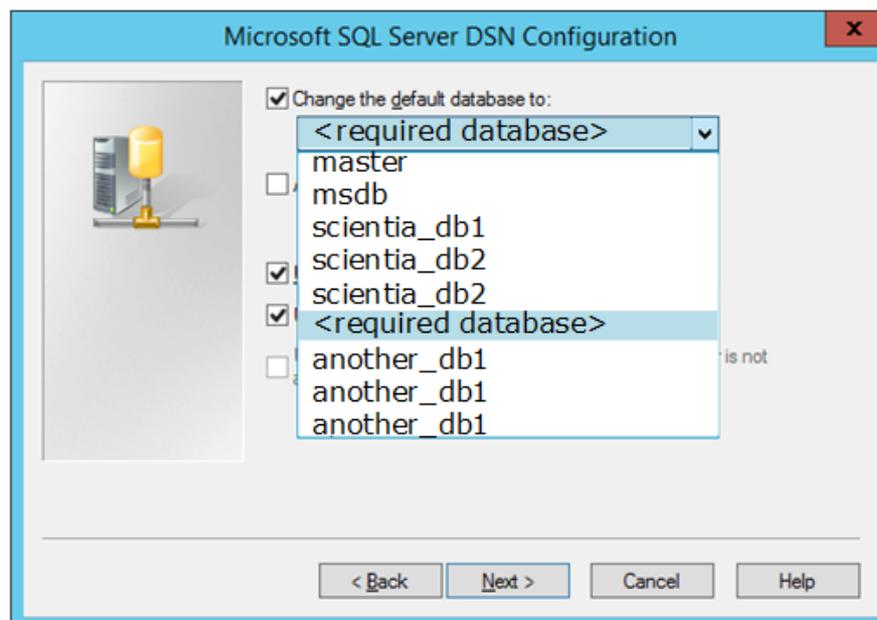
Enter the Name, Description and select the SQL Server you want to connect to.

Click Next.

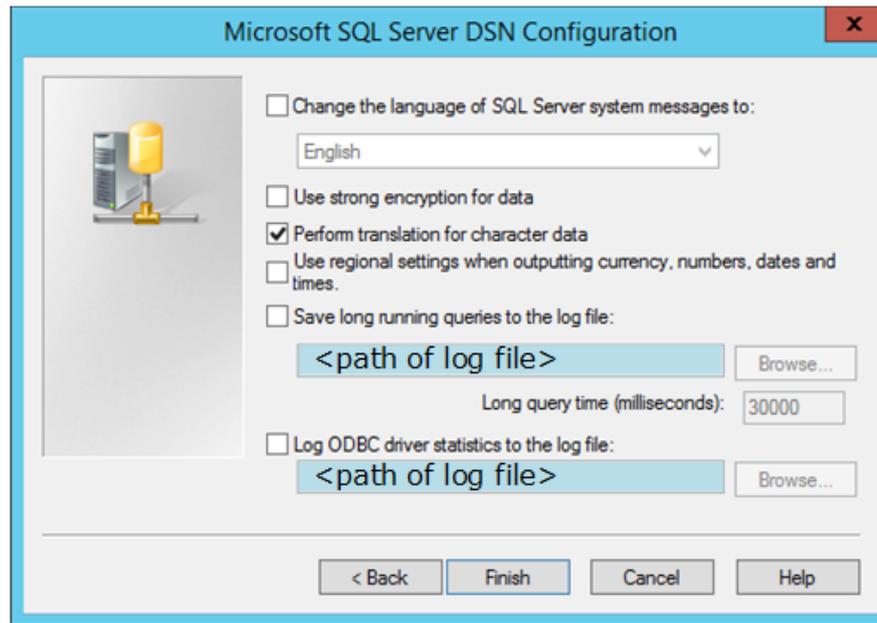
4. Enter the authentication credentials used to access the SQL Server. Click **Next**.



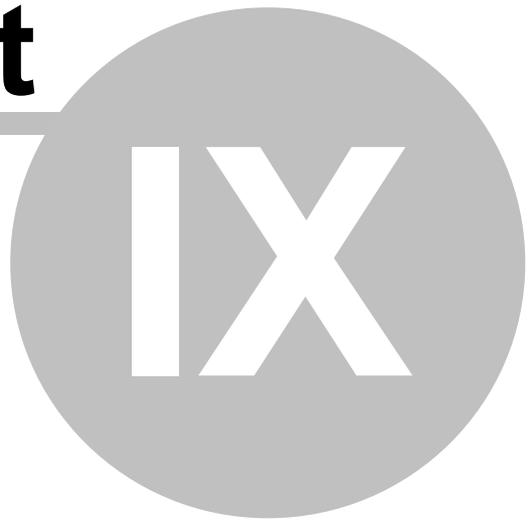
5. Select the required database. Click **Next**.



6. Click **Finish**.



Part



Glossary

9 Glossary

Appointment

Reserva Room Signage is designed for use in academic and corporate environments. The term 'appointment' is used generically to describe a meeting, seminar, lecture, conference, tutorial session, etc., booked in the calendar system.

Book Appointment

If configured, users can book appointment using Reserva room signs. This adds an appointment to the calendar system.

Note that you can configure the maximum number of days in advance that users can book appointments. For example, you might allow users to book appointments up to 30 days in advance. You can change this setting per Connection for Exchange and Office 365 (on the Connection dialog, select **Exchange > Advanced Settings** and modify the Date Range as required).

Confirm Appointment

If enabled, users are prompted to confirm their appointments before they start. If an appointment is not confirmed ahead of the meeting, users are reminded to confirm the appointment once the meeting starts. Provided they confirm, the meeting room is reserved. If the appointment is not confirmed, the appointment is removed from the calendar automatically and the meeting room is shown as available. This ensures rooms are not shown as busy when attendees are unable make the meeting.

Note that you can configure the timing for confirming appointments. For example, you might prompt users to confirm appointments 5 minutes before the scheduled start time and allow users up to 10 minutes (from the scheduled start time) to confirm their appointment. This is configurable per Connection (navigate to 'Advanced Settings' option on the 'Destination' tab).

Cancel Appointment

If enabled, users can cancel an appointment during the meeting. For example, if other attendees are unable to join the meeting and the room is no longer needed, the appointment can be cancelled. This removes the appointment from the calendar and the meeting room is shown as available.

Note that if this feature is enabled, any user has the ability to cancel meetings regardless of whether or not they booked the appointment. For many implementations, this may not be appropriate.

Connection

A Connection specifies the room information to present to Reserva room sign(s), how often the information is updated and the options available to the end users. Each Reserva room sign is configured to display the information for a specific Connection, linking the room sign to a specific room (or rooms) within your calendar system.

Extend (or Shorten) Appointment

If enabled, users can extend or shorten appointments during the meeting. For example, if more time is needed the meeting can be extended (provided it is not booked already) and the room reservation is updated accordingly.

Interactive Feature



Interactive features are the features that can be made available on Reserva room signs. These include:

- Appointments must be confirmed
- Appointments may be created
- Appointments may be deleted
- Allow appointment end time to be changed
- Show settings icon

These features are enabled and disabled, per Connection, on the Connection 'Destination' tab.

Reserva Room Sign

Reserva room signs comprise the device running the Reserva outside room media.

Reserva room signs are available in a range of sizes to suit your environment and space considerations. Room signs are identified with the product code 'ROOM-x(T)', where 'x' denotes the screen size and the suffix '(T)' denotes the device has a touch screen. For example, 'ROOM-15T' is a room sign with a 15.6" interactive touch screen.

Reserva Connection Manager

The Reserva Connection Manager application, installed on a domain joined PC or server, allows you to setup, manage and monitor your Reserva deployment.

Outside room media

Linked to a single room within your calendar system, the media shows the status of the meeting room and a list of upcoming appointments. It allows users to book and manage their appointments.

Room

The term room (and in some cases, resource) is used generically to describe a meeting room, conference room, lecture theatre, auditorium, etc., that can be booked in your calendar system. The equivalent term varies across calendar systems. For example, the term Location is used in a Scientia calendar system.

Room Sign

Interactive room sign, showing the current status of a meeting room along with a summary of upcoming appointments. Using the interactive touchscreen users can book, confirm, extend/shorten and cancel appointments.

Room Summary

Provides a clear summary of appointments across a collection of meeting rooms. Typical deployment of room summary displays include reception areas and foyers, helping guide staff, students and guests to the correct meeting room and collaboration spaces. The room summary content can be displayed in full screen or within a 'zone' within a screen layout with multiple 'zones'.

Room Summary Media



Provides summary of appointments for a number of rooms within your calendar system. The media runs on an NTB and can be displayed in full screen mode or within a specified zone in a multi zone layout. The media is read-only.

Settings icon

If enabled, the settings icon appears on the main Reserva room sign screen. It allows access to the room sign connection settings, linking the room sign with a specific Connection and room (or rooms) within your calendar system. If enabled, all users are able to view and change connection details. You can disable the icon per Connection (on the 'Destination' tab, Allowed Media Action).

Part



Contact ONELAN

10 Contact ONELAN

If you have any questions about Reserva Room Signage please contact ONELAN Support:

Name	Contact
Email:	support@onelan.com
Telephone:	+44 (0) 1491 845282

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