



RBS Panel, RBS Configurator & Access Inspector

ATEN Room Booking System
User Manual

Compliance Statements

FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

The device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Warning

Operation of this equipment in a residential environment could cause radio interference.

Achtung

Der Gebrauch dieses Geräts in Wohnumgebung kann Funkstörungen verursachen.



KCC Statement

유선 제품용 / A 급 기기 (업무용 방송 통신 기기)
이 기기는 업무용 (A 급) 전자파적합기기로서 판매자 또는 사용자는 이
점을 주의하시기 바라며, 가정 외의 지역에서 사용하는 것을 목적으로
합니다.

Industry Canada Statement

This Class A digital apparatus complies with Canadian ICES-003.

CAN ICES-003 (A) / NMB-003 (A)

RoHS

This product is RoHS compliant.

User Information

Online Registration

Be sure to register your product at our online support center:

International	http://eservice.aten.com
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Telephone Support

For telephone support, call this number:

International	886-2-8692-699
China	86-400-810-0-810
Japan	81-3-61-811
Korea	82-2-467-6789
North America	1-888-999-ATEN ext 4988 1-949-428-1111

User Notice

All information, documentation, and specifications contained in this manual are subject to change without prior notification by the manufacturer. The manufacturer makes no representations or warranties, either expressed or implied, with respect to the contents hereof and specifically disclaims any warranties as to merchantability or fitness for any particular purpose. Any of the manufacturer's software described in this manual is sold or licensed *as is*. Should the programs prove defective following their purchase, the buyer (and not the manufacturer, its distributor, or its dealer), assumes the entire cost of all necessary servicing, repair and any incidental or consequential damages resulting from any defect in the software.

The manufacturer of this system is not responsible for any radio and/or TV interference caused by unauthorized modifications to this device. It is the responsibility of the user to correct such interference.

The manufacturer is not responsible for any damage incurred in the operation of this system if the correct operational voltage setting was not selected prior to operation. PLEASE VERIFY THAT THE VOLTAGE SETTING IS CORRECT BEFORE USE.

Product Information

For information about all ATEN products and how they can help you connect without limits, visit ATEN on the Web or contact an ATEN Authorized Reseller. Visit ATEN on the Web for a list of locations and telephone numbers:

International	http://www.aten.com
North America	http://www.aten-usa.com

Package Contents

Check to make sure that all components are in working order. If you encounter any problem, please contact your dealer.

VK401

- ◆ VK401 Access Inspector
- ◆ 2 screws
- ◆ 1 user instructions

VK430

Due to a package contents change, you may receive one of the following package editions:

Latest Package Edition

- ◆ 1 VK430 10.1" RBS Panel with wall mount
- ◆ 1 wall mount kit
- ◆ 2 3M glass mount tape
- ◆ 1 90° RJ-45 cable adapter
- ◆ 1 user instructions

Previous Package Edition

- ◆ 1 VK430 10.1" RBS Panel with wall mount
- ◆ 2 LED bars
- ◆ 4 LED bar screws
- ◆ 4 hard wall mount screws + screw anchors
- ◆ 2 3M glass mount tape 1 user instructions

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About this Manual

This user manual is provided to help you get the most out of your ATEN Room Booking System. It covers all aspects of the system, including RBS Panel, Access Inspector, and RBS Configurator installation, configuration, and operation:

Devices and software covered in this manual include:

Models	Product Names
VK401	Access Inspector
VK430	10.1" Room Booking System (RBS) Panel
RBS Configurator	Room Booking System (RBS) Configurator

An overview of the information found in the manual is provided below.

Chapter 1, Introduction

Introduces you to the ATEN Room Booking System, its purpose, features, and components.

Chapter 2, Hardware Setup

Provides the necessary steps to set up the ATEN Room Booking System, along with some basic operations.

Chapter 3, RBS Configurator

Provides the basic information and installation instructions of the ATEN RBS Configurator. Guides you through how to configure and customize layout design profiles to be applied to the ATEN RBS Panels managed.

Chapter 4, Calendar Server

Guides you through the implementation of your ATEN Room Booking System to calendar servers, such as Microsoft 365 Calendar, for convenient scheduling management of all conference rooms in the system.

Chapter 5, Panel Management

Covers how to upload projects to and configure the ATEN RBS Panels managed.

Chapter 6, Panel Password

Guides you through how to define and change the passwords of your ATEN RBS Panels.

Chapter 7, Panel Operation

Guides you through the operations that can be done on ATEN RBS Panels, including booking or checking into rooms.

Appendix


Provides specifications and other technical information regarding the ATEN Room Booking System.

Note:

- ◆ Read this manual thoroughly and follow the installation and operation procedures carefully to prevent any damage to the unit or connected devices.
 - ◆ ATEN regularly updates its product documentation for new features and fixes. For an up-to-date ATEN RBS documentation, visit <http://www.aten.com/global/en/>
-

Conventions

This manual uses the following conventions:

- | | |
|---|--|
| Monospaced | Indicates text that you should key in. |
| [] | Indicates keys you should press. For example, [Enter] means to press the Enter key. If keys need to be chorded, they appear together in the same bracket with a plus sign between them: [Ctrl+Alt]. |
| 1. | Numbered lists represent procedures with sequential steps. |
| ◆ | Bullet lists provide information, but do not involve sequential steps. |
| > | Indicates consecutive selecting options (such as on a menu or dialog box). For example, Start > Run means to open the <i>Start</i> menu, and then select <i>Run</i> . |
|  | Indicates critical information. |

Chapter 1

Introduction

Overview

Room Booking System and RBS Panels

The ATEN Room Booking System is an Ethernet-based room management system that works in conjunction with a calendar server, such as Microsoft 365 Calendar and Google Workspace, to provide convenient scheduling, availability allocation, reservation, and status indication for all of the rooms managed in your organization.

ATEN Room Booking System consists of VK430 RBS Panels, 1 for each room managed, and an RBS Configurator used to configure the RBS Panels and calendar server.

Through ATEN Room Booking System, users can check for the availability of every room, book the desired rooms while scheduling meetings, as well as cancel or extend their room booking.

On each VK430 RBS Panel, you can check the time slots the corresponding room is available for and reserve immediately or for a desired time with a few simple taps.

Using RBS Configurator, the administrator can adjust the theme style and setting profiles of each VK430 RBS Panel.

The ATEN Room Booking System is the perfect solution for any meeting and conference room, boardroom, classroom, and any other room booking management through streamlined Ethernet-based management system in conjunction with a calendar server for optimum efficiency and performance.

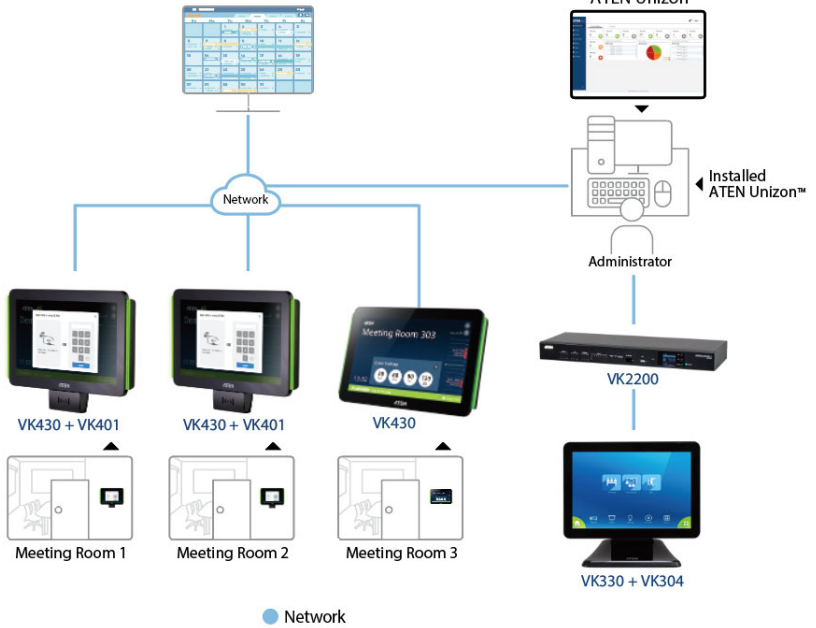
Access Inspector (VK401)

As an add-on accessory designed to complement ATEN 's touch panel series (VK430 10.1" RBS Panel and VK330 10.1" Touch Panel), the VK401 Access Inspector enhances security and prevents unauthorized usage for credential-based applications. Operating at a frequency 13.56 MHz, this compact access control unit supports multiple standards such as ISO 14443A/B and ISO 15693 and reads smart cards including Mifare and Felica.

When user profiles are being created by administrators on ATEN Unizon, the data will be used as a basis to authenticate users scanning cards via the VK401 attached to the VK430 / VK330, and thereby allow authorized personnel to check in. In addition, the authorized users are allowed to lock / unlock meeting rooms and facilitate conference room automation solutions when the space management ecosystem is integrated with the VK control system. Meanwhile, the VK401 helps the collection of valuable data, including meeting attendance list and meeting duration. Consequently, meeting records can be tracked for centralized management, and the reports can be sent to designated users on a daily / weekly / monthly / quarterly basis, elevating overall operational efficiency.

The VK401 is a critical role in maintaining high levels of security and hygiene and operational excellence when it comes to meeting room management solutions in a post-pandemic era where contactless access control is in essential. It also serves as an extension of the existing access control system to your meeting room management to complete the security coverage.

Calendar Server
(Microsoft 365, Google Workspace, and Microsoft Exchange)



Features

VK430 10.1” RBS Panel

- ◆ 10.1” capacitive touch-screen panel
- ◆ Supports integration with calendar servers, such as Microsoft 365 Calendar, Google Workspace Calendar, and Microsoft Exchange Server
- ◆ Supports RBS Configurator for batch upgrade, customizable booking options, and calendar settings.
- ◆ Supports central management through ATEN Unizon to allow administrators to monitor managed devices in real time, generate room usage analyses, and update app in batch
- ◆ Supports TCP for third-party system integration
- ◆ Supports Power over Ethernet (PoE), which allows the RBS panel to receive power and communication over a single Ethernet cable
- ◆ LED light bars illuminating user-defined colors to indicate the room’s availability at a glance
- ◆ Pre-installed with a wall mount kit and provided with 3M VHB™ Tape for easy mounting onto a hard or glass wall
- ◆ 75*75 mm VESA-compliant for flexible mounting across various installation scenarios
- ◆ TCP CLI compliant

Note:

- ◆ To manage RBS panels using ATEN Unizon™, make sure to update the RBS App to v1.3.123 or later.
 - ◆ For more information on ATEN Unizon™, refer to *ATEN Unizon™ User Manual*.
-

RBS Configurator

- ◆ Easy RBS panel configuration via intuitive GUI
 - ◆ Profile setup (logo, background, calendar layout, etc.)
 - ◆ System settings (language, sleep mode, brightness, volume, etc.)
 - ◆ Panel management (firmware upgrades and profile uploads)
- ◆ Simulator to simulate and preview the customized GUI before uploading
- ◆ Flexible booking options for different application scenarios and user preferences
- ◆ Supports mainstream calendar servers, including Microsoft 365 Calendar and Google Workspace Calendar, and Microsoft Exchange Server

Access Inspector

- ◆ An add-on compact accessory that works with ATEN VK430 10.1” RBS Panel and VK330 10.1” Touch Panel
- ◆ Operates at 13.56 MHz
- ◆ Supports multiple standards — ISO 14443A/B and ISO 15693
- ◆ Reads smart cards — Mifare and Felica
- ◆ Contactless access control with high levels of security and hygiene
 - ◆ Only authorized users can scan cards to book, check in, lock, or unlock meeting rooms and facilitate conference room automation
 - ◆ Helps collect valuable data, including meeting attendance list and meeting duration
 - ◆ Keeps track of meeting records for centralized management
 - ◆ Reports can be sent to designated users regularly on a daily, weekly, monthly, or quarterly basis

Requirements

Prepare the following equipment and make sure your equipment meets the minimum requirements specified below.

- ◆ **Rooms to be managed by your ATEN Room Booking System, with the following equipment**
 - ◆ 1 VK430 ATEN 10.1” RBS Panel per room
 - ◆ 1 available PoE+ port per room, from a PoE switch / injector or 1 power adapter (available for purchase, see *Accessories*, page 10)
- ◆ **A computer (for running ATEN RBS Configurator), with the following spec**
 - ◆ OS: Windows 7 / 8 / 10 (32/64-bit)
 - ◆ Processor: 1 GHz
 - ◆ Memory: 1 GB RAM
 - ◆ Storage: 500 MB available hard disk space

Getting Started

Setting Up ATEN RBS Panels and Calendar Servers

Complete the following tasks to start setting up your ATEN Room Booking System and managing your room resources.

No.	Getting Started Tasks	Detailed Procedure
1	Install an ATEN RBS Panel, using the pre-installed wall mount (and 3M mount tape), for each of the room to be managed by your ATEN Room Booking System.	<i>Installing an RBS Panel</i> , page 16
2	Install a configuration tool, ATEN RBS Configurator to a computer that has network access to the installed RBS panel(s).	<i>Installing/Updating RBS Configurator</i> , page 19
3	Define a desired layout and theme style to for the installed ATEN RBS Panels.	<i>Panel Profiles</i> , page 23
4	By default, the RBS panel is DHCP-enabled. Configure the network settings if needed.	<i>Configuring Network Settings</i> , page 128
5	Set up the calendar server for ATEN Room Booking System.	Chapter 4, <i>Calendar Server</i>
6	Upload the configured profiles and settings to the ATEN RBS Panels.	<i>Uploading Profiles and Setting Changes to ATEN RBS Panels</i> , page 107

Setting Up Access Inspector to Room Booking System

Complete the following tasks to start setting up your Access Inspector (VK401) to your ATEN Room Booking System.

No.	Getting Started Tasks	Detailed Procedure
Preparation		
1	Make sure you have set up ATEN Unizon and added RBS panels into the Unizon platform.	<i>ATEN Unizon User Manual</i>
2	Make sure the following systems and devices have been updated to a supported version.	-
	◆ RBS panel firmware (v1.11.17k or later)	<i>Upgrading the RBS Panel Firmware, page 111 in this user manual</i>
	◆ RBS panel app (v1.6.152 or later)	<i>Updating the RBS Panel App, page 113 in this user manual</i>
	◆ RBS Configurator (v1.6 or later)	<i>Installing/Updating RBS Configurator, page 19</i>
	◆ ATEN Touch Panel firmware (v.1.1.17n or later)	<i>Chapter 2 Hardware Setup, ATEN Control System User Manual</i>
	◆ ATEN Touch Panel app (v.3.7.362 or later)	
	◆ ATEN Unizon (v2.4 or later)	<i>ATEN Unizon User Manual</i>
	◆ ATEN Control System (v3.7 or later)	<i>ATEN Control System User Manual</i>
Hardware Install		
4	Install RBS panels.	<i>Installing an RBS Panel, page 16</i>
5	To rooms that require access inspection via access cards , install an Access Inspector to each RBS panel of these rooms.	<i>Installing an Access Inspector to an RBS Panel, page 12</i>
System Configuration		
6	On ATEN Unizon, add users and groups.	<i>ATEN Unizon User Manual</i>

No.	Getting Started Tasks	Detailed Procedure
7	In RBS Configurator, configure the following settings for each room. <ul style="list-style-type: none">◆ Select a method for identity inspection◆ Configure check-in privilege◆ Enable or disable sign-on notification	<i>Panel Management Options, page 104.</i>
8	Upload the configured profile to RBS panels.	<i>Uploading Profiles and Setting Changes to ATEN RBS Panels, page 107</i>

Accessories

Optionally purchase any compatible power adapter and/or power cord if needed, as listed below. Contact your ATEN dealer for details.

Model	Description	Region
0AD8-8012-33MG	power adapter	all
LIN2-418K-D12G	power cord	A
LIN2-418K-E12G	power cord	E
LIN2-418K-D16G	power cord	J
LIN2-418K-F11G	power cord	U
LIN2-418K-N12G	power cord	I
LIN2-418K-G11G	power cord	G
LIN2-418K-Z11G	power cord	Z
LIN2-418K-K11G	power cord	K

Chapter 2

Hardware Setup



Important safety information regarding the placement of this device is provided on *Safety Instructions*, page 133. Please review it before proceeding.

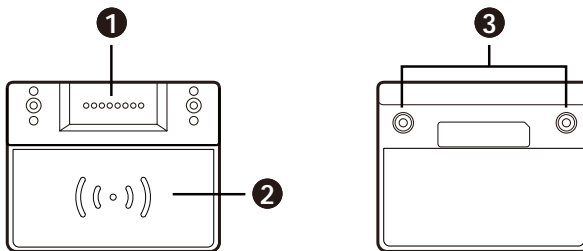
This chapter guides you through the hardware setup of ATEN RBS device as well as cover some of its basic configurations.

The RBS device covered includes:

Model	Product Name	Page
VK401	Access Inspector	p.11
VK430	10.1" RBS Panel	p.12

ATEN Access Inspector

Components

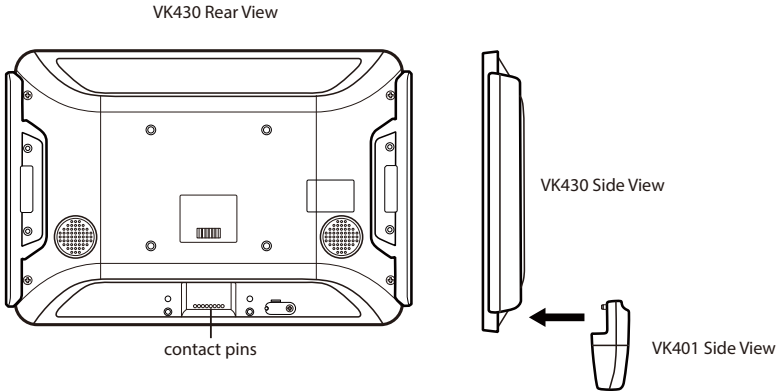


No.	Component	Description
1	contact pins	The contact pins transmit detected data to an RBS panel.
2	detection area	Detects access cards.
3	screw holes	Use these screw holes and the provided screws to secure an Access Inspector to an RBS panel.

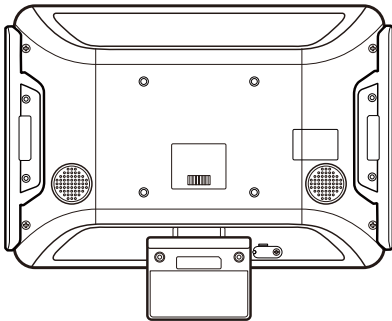
Installing an Access Inspector to an RBS Panel

Make sure that you power off the RBS Panel and disconnect it from the power source before installing the Access Inspector.

1. Attach the VK401 Access Inspector to the VK430 RBS Panel with the VK401's contact pins facing the contact pins of VK430 RBS Panel.




2. Fasten the VK401 to the VK430 using the 2 supplied screws.

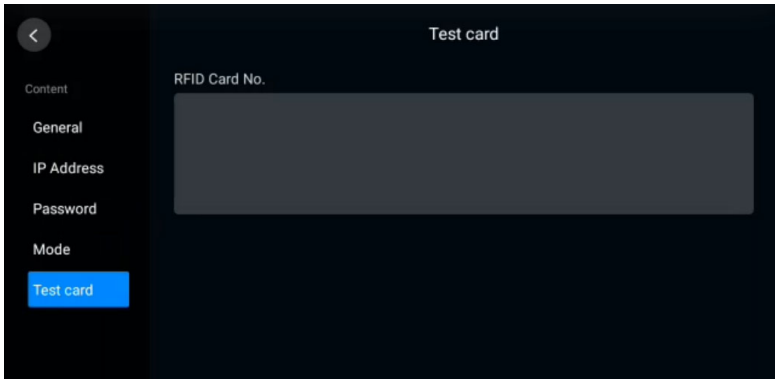


3. Connect the VK430 RBS Panel to the power source and then switch its power switch to turn it on.

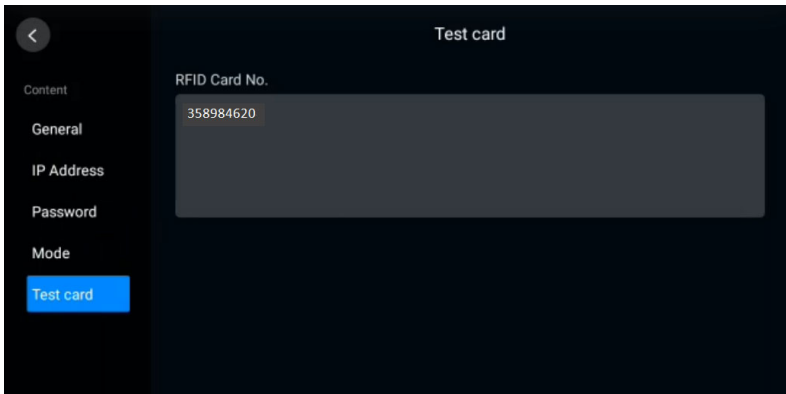
Obtaining Card Numbers

To find out a card number, as detected by ATEN Access Inspector or to test if a pre-existing card is supported by ATEN Access Inspector, use the Test Card function.

1. Make sure you have installed at least one RBS panel with an Access Inspector. For details, see *Installing an Access Inspector to an RBS Panel*, page 12.
2. On the RBS panel, tap  and enter the administrator password to log in.
3. Tap **Test Card** from the left panel. This screen appears.

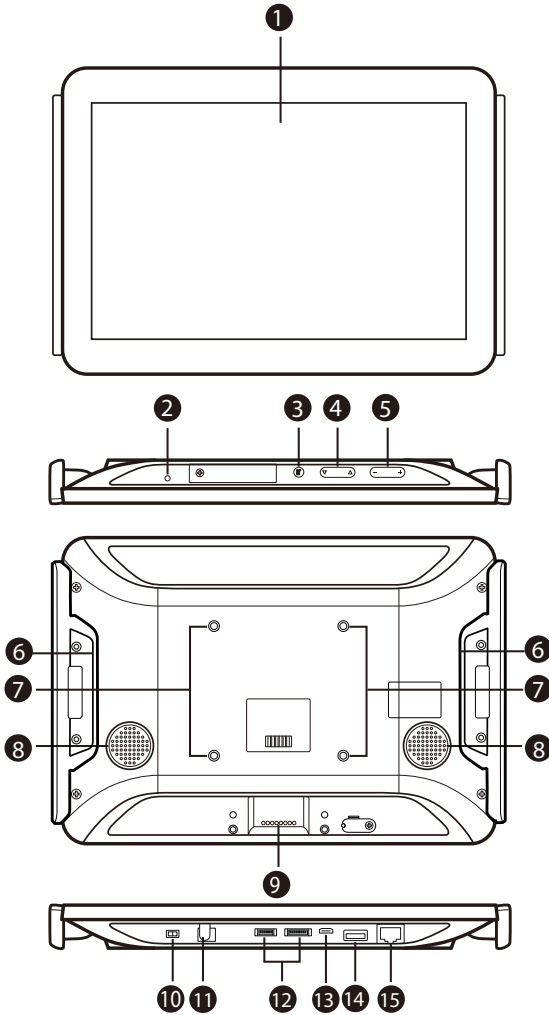


4. Scan an access card on the Access Inspector. If a series of numbers appears, the card is supported by ATEN Access Inspector.



RBS Panel

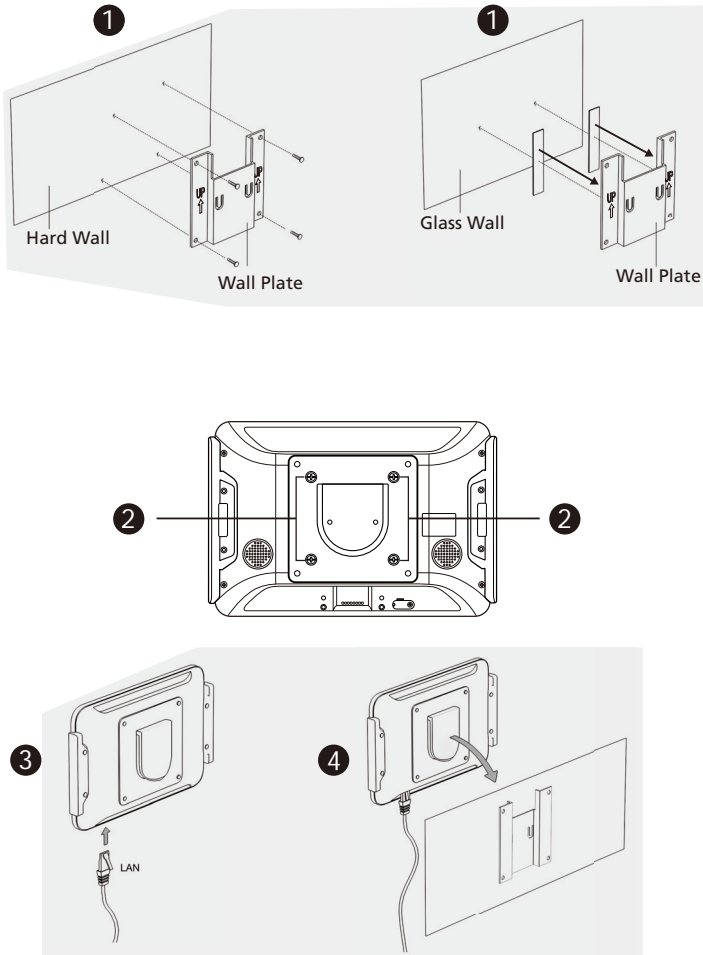
Components



No.	Component	Description
1	touch screen	Tap to configure or reserve the corresponding room.
2	status LED	Lights on when the touch panel is powered on.
3	function button	Press to access the <i>Settings</i> page.
4	brightness + / -	Press to adjust the display brightness.
5	volume + / -	Press to adjust the volume of the touch panel.
6	stereo audio out	Connects to a stereo audio output.
7	screw holes for panel plate	Used to secure the panel plate.
8	speakers	Plays beep sounds to indicate operation actions.
9	contact pins	Connect to an Access Inspector to receive and transmit data.
10	power switch	Turns the touch panel on or off.
11	power jack	Connects to power.
12	reserved for debugging purposes	These ports are reserved for debugging.
13	USB Micro-B port	Reserved for debugging.
14	USB type-A port	Used to update the ATEN RBS app and/or firmware.
15	LAN port with PoE	Connects to the network, while receiving power via PoE.

Installing an RBS Panel

The ATEN VK430 RBS Panel comes pre-installed with two light bars. The RBS panel is also compatible with any VESA-compliant (75 x 75 mm) mounting accessory. Follow the steps below to install and mount the VK430 onto a wall.



1. Secure the wall plate onto a (a) hard or (b) glass wall.

- ◆ *Hard Wall*: Using the 4 screws provided (also use the 4 screw anchors if necessary), secure the wall plate onto the hard wall with the arrows on the plate pointing upward.
- ◆ *Glass Wall*: Stick the 2 strips of tape provided to the back of the wall plate, and then press the wall plate onto the glass wall, with the arrows on the plate pointing upward.

IMPORTANT: For optimal adhesive results, make sure to firmly press the taped mounting plate against the wall for 3 ~ 5 seconds and wait for it to dry for at least 24 hours.

2. Secure the provided panel plate to the back of the RBS panel using the short screws provided.
3. Using the 90° RJ-45 cable adapter provided and an Ethernet cable, connect the RBS panel to a PoE switch / injector to provide power and access to network.

Note: Make sure that the RBS panel receives adequate power supply (DC12V, 17.8W, 60.70BTU or PoE 20W, 68.24BTU). With inadequate power supply, processes such as firmware updates and app updates may fail.

4. Place the RBS panel onto the wall by sliding and attaching it to the wall plate.
5. Turn on the RBS panel by switching its power switch to **ON**.

Upon first-time startup, the VK430 shall be offline and not connected to any calendar server.

To set up the VK430, you shall use the ATEN RBS Configurator software to create the necessary setting profiles to be uploaded to it. See *RBS Configurator*, page 19.

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Chapter 3

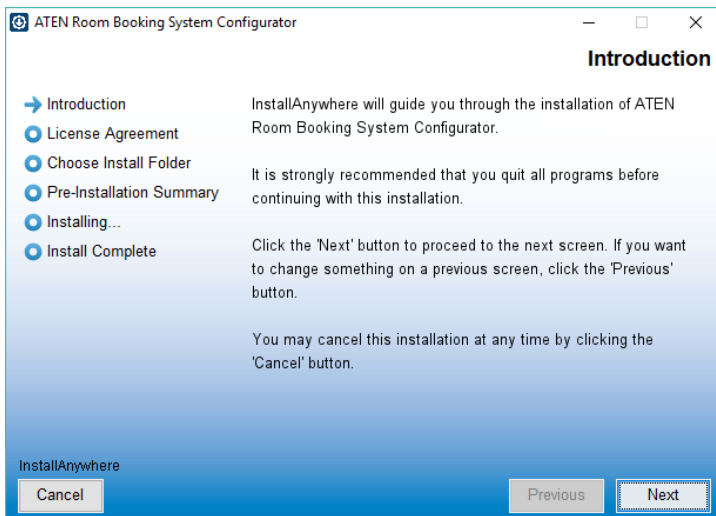
RBS Configurator

The ATEN RBS Configurator is a GUI-based management software that helps you configure mass RBS panels for convenient management of your conference room resources against a calendar server, including Microsoft 365 Calendar and Google Workspace.

Installing/Updating RBS Configurator

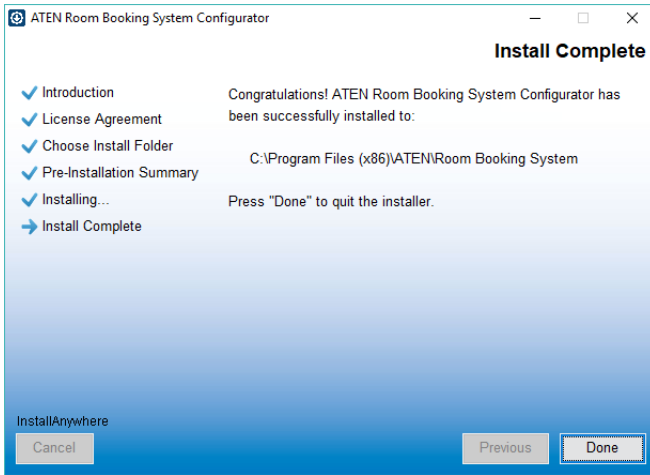
To install or update the RBS Configurator software, do the following:

1. Download RBS Configurator.
 - a) Visit the ATEN download page.
<http://www.aten.com/global/en/support-and-downloads/downloads/>
 - b) Search for “RBS Configurator.” A list of downloads for RBS Configurator appears.
 - c) Download **RBS_Configurator_Setup_vx.x.xxx.exe**.
2. Execute the setup file. Then follow the on-screen instructions to install the RBS Configurator.



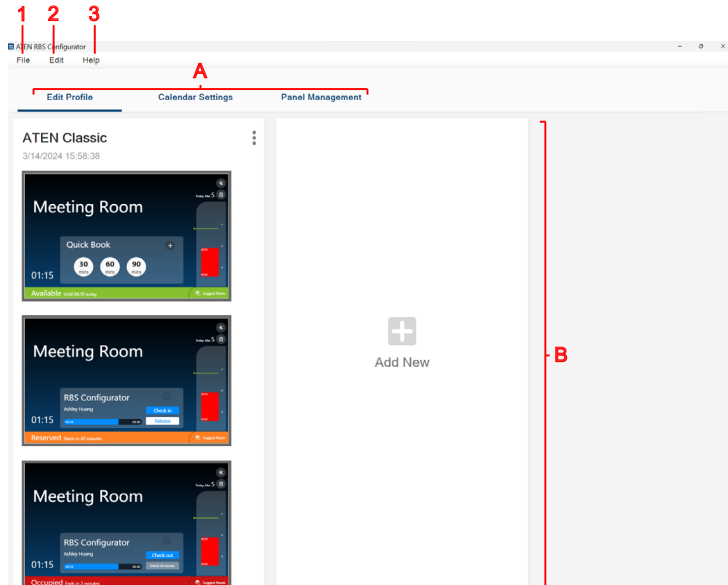
Note: On the *License Agreement* page, thoroughly read through and accept the terms of the license agreement before proceeding.

3. Once the installation is completed, click **Done** to finish.



The Main Page of RBS Configurator

Launch the software to start configuring your ATEN Room Booking System. Below is the general interface of RBS Configurator and its components.



No.	Item	Description
A	Tab Menu	<p>Use the main selection menu for switching views between the following:</p> <ul style="list-style-type: none"> ◆ Edit Profile: Defines layout designs to be applied to the RBS panels managed. ◆ Calendar Settings: Contains the required calendar server settings for integration with ATEN Room Booking System. ◆ Panel Management: Upload and/or edit setting profiles to ATEN RBS Panels via network.
B	Interactive Display	This section is your main work area, which reflects the tab menu item selected.

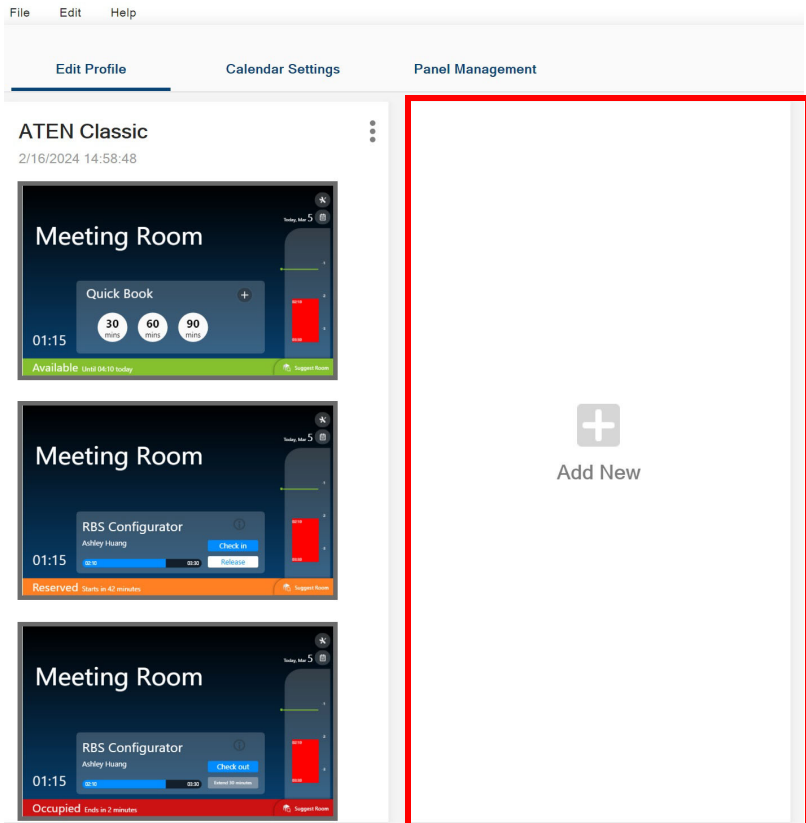
No.	Item	Description
1	File	<ul style="list-style-type: none"> ◆ New Project: Clears the current project and start a new one. ◆ Open Project: Opens a previously-saved project file. ◆ Save: Saves the current project. ◆ Save as: Saves the current project as a new project file. ◆ Exit: Exits and closes RBS Configurator.
2	Edit	<ul style="list-style-type: none"> ◆ Language: Changes the <i>language</i> of the RBS Configurator.
3	Help	<ul style="list-style-type: none"> ◆ About: Displays the information of the RBS Configurator.

Panel Profiles


The **Edit Profile** tab, in ATEN RBS Configurator, allows you to customize layout design profiles and define booking settings to be applied to any ATEN RBS Panels managed.

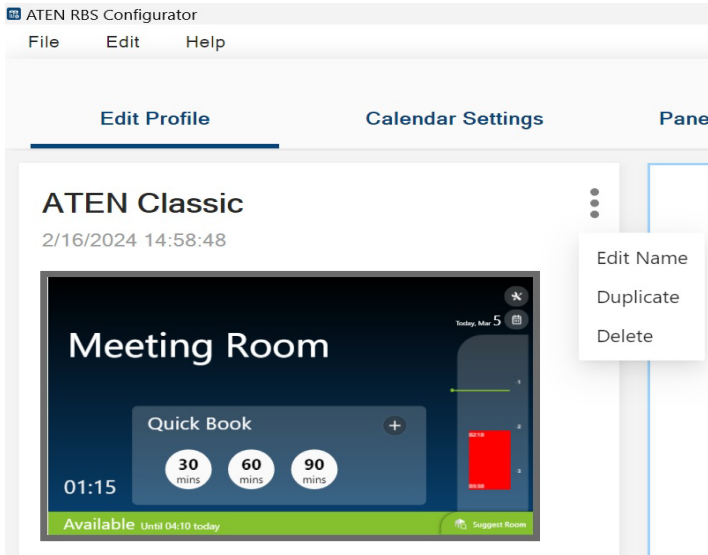
Adding New Profiles

In RBS Configurator, click **Add New** to create a new profile, as illustrated below.



Editing Profile Names, Duplicating and Deleting Profiles

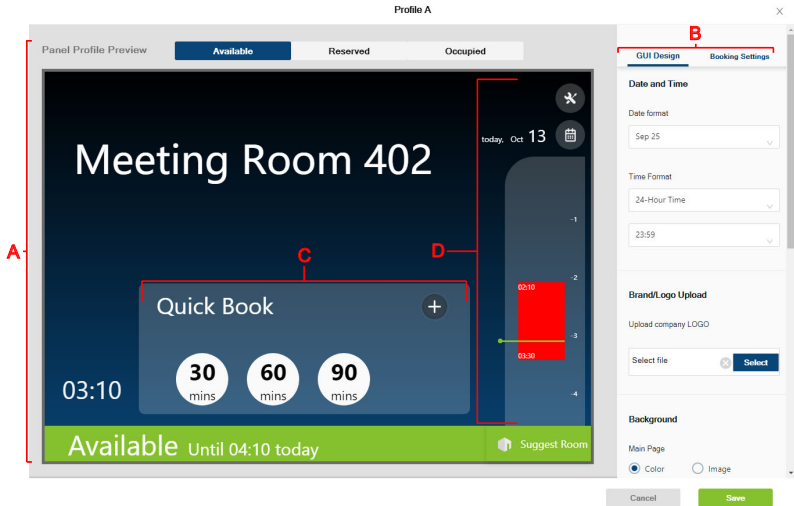
In RBS Configurator, click the  button of a panel profile to access the following options:



Item	Description
Edit Name	Edits the name of the profile.
Duplicate	Creates a duplicate of the profile.
Delete	Deletes the profile.

Configuring Profiles

In RBS Configurator, click on a desired profile to start. The following page appears.



No.	Item	Description
A	Panel Profile Preview	Displays an example of how the panel layout would look like once the profile is applied.
B	Interactive Display	Contains the following: <ul style="list-style-type: none"> ◆ GUI Design: Defines the profile's layout design related settings. ◆ Booking Settings: Sets the profile's booking-related settings
C	Check-in Panel	Used for checking-in to a meeting room and quick booking.
D	Daily Schedule Area	Displays the room's reservation schedule for the day.

GUI Design

Overview

Item	Sub-Item	Description
Date and Time	Date Format	Sets the format in which date is displayed on the RBS Panel.
	Time Format	Sets the format in which time is displayed on the RBS Panel.
Brand/Logo Upload	Upload Company Logo	Uploads a brand logo image (.jpg, .jpeg, .png, or .bmp), up to 140*970 pixels, to be displayed on the upper-left of the RBS Panel.
Background	Main Page	Defines the background of the RBS Panel's main page, either by selecting a color or uploading an image (.jpg, .jpeg, .png, or .bmp), up to 1280*732 pixels.
	Blur Background	Enable to show the background shown in gradient color. For more details, see <i>Blurring the Background</i> , page 28.
	Sub Page	Sets the display style of the RBS Panel's sub page.
Time Color		Sets the color in which time is displayed on the RBS Panel.
Check-in Panel Color		Sets the color of the RBS Panel's check-in panel.
Daily Schedule Area	Icon Color	Sets the color of icons on the RBS Panel's daily schedule area.
	Display Style	Sets the display style and color of the RBS Panel's daily schedule area.
Status Color	Available	Sets the color of the LED bars of the RBS Panel, and its status color, when it is available for use.
	Reserved	Sets the color of the LED bars of the RBS Panel, and its status color, when it is reserved for a meeting.
	Occupied	Sets the color of the LED bars of the RBS Panel, and its status color, when it is occupied.
Meeting Information		<ul style="list-style-type: none"> ◆ Displays a summary of the currently ongoing meeting with an information icon on the top-right corner of the check-in panel. ◆ Allows you to cancel a meeting (using a Delete Meeting button) if the meeting was booked through the panel.

Item	Sub-Item	Description
Display countdown for status change		<p>Displays the remaining time (in minutes) for the next room status on the meeting status bar. Depending on the current room status, different information is shown. For example:</p> <ul style="list-style-type: none">◆ Available until 15:00 today◆ Reserved Starts in 2 minutes◆ Occupied Ends in 13 minutes
Screen Saver	Show screen saver after	Select an idle time to display the screen saver when the RBS panel has idled for the selected duration. By default, the screen saver is enabled and set to display when RBS panel has idled for 5 minutes.
	Text Color	Sets the text color of the screen saver.

Blurring the Background

Use the **blur background** function to have the Quick Book controls stand out by applying color gradient to the background, as show below.



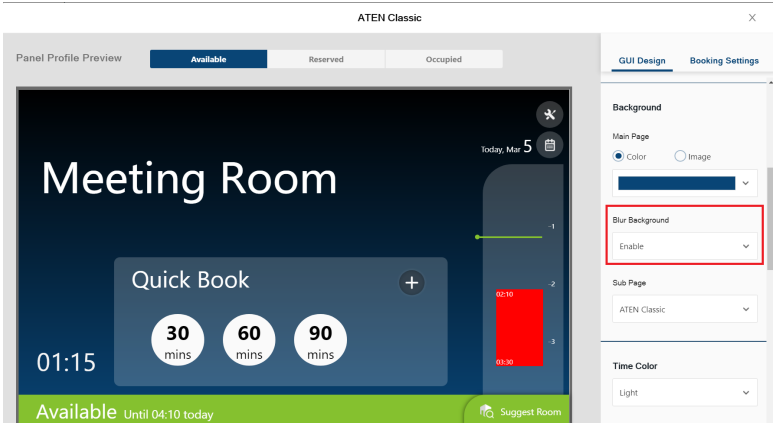
Disable the blur background function to use the chosen background without the gradient effect, as shown below.



To access the blur background setting:

1. In RBS Configurator, open the profile file.
2. Click on the target template. The configuration page appears.

3. Under GUI Design, scroll down to find **Blur Background**.



4. Configure the setting and click **Save** to apply the change.

Booking Settings

Item	Sub-Item	Description
Quick Booking, Suggest Room, Calendar Bookings		Enable to allow quick booking options to be available on the RBS Panel's check-in panel.
Room Utilization Optimization	Room will be released if not checked in within the time set.	<p>Enable to:</p> <ul style="list-style-type: none"> ◆ optimize room usage by releasing the room when not checked in within the defined time frame. ◆ allow meeting extension, early check-in, and delayed check-in. <p>When disabled, a room will not be released if not checked in, and will not support early/ delayed check-in and reservation extension.</p>
	Extend meeting	Enable to allow meeting extension.
	Allow check-in before the scheduled time by	Sets the amount of time allowed for early check-in.
	Hold for	Sets the amount of time allowed for late check-in before being released.
Under meeting subject, display		Display meeting host or meeting details under subject of the meeting, or select disable to leave it blank.
Working Hours	Calendar Server	Adopt the working hours as specified in the connected calendar server.
	Manual	Set up the working hours for the room booking system.
	Brightness	Sets the brightness of the RBS Panel during off-duty hours.

Click **Save** for changes to take effect.

Chapter 4

Calendar Server

This chapter guides you through the implementation of your ATEN Room Booking System to calendar servers supported, including Microsoft 365 Calendar, Microsoft Exchange Server, and Google Workspace, for convenient scheduling management of all conference rooms in the system.

Microsoft 365

Setup Overview

To set up a Microsoft 365 Calendar for managing your ATEN Room Booking System, follow the steps below.

1. Using the Microsoft 365's administrator account, do the following:
 - a) Add a user account for every person who is allowed to book room resources through the Microsoft 365 calendar server.
For a detailed procedure, see *Adding User Accounts*, page 32.
 - b) Decide an authentication method to use.
For more information, see *Deciding the Authentication Method*, page 33.
 - c) Add a resource account, while setting a password, for every conference room to be managed by the Room Booking System.
For a detailed procedure, see *Deciding the Authentication Method*, page 33.
 - d) To use account credentials to authenticate, add a user account as delegate.
For a detailed procedure, see *Adding a Room (Resource) Account*, page 34.
 - e) To use account credentials to authenticate, turn off multifactor authentication (MFA).
For a detailed procedure, see *Adding a Room (Resource) Account*, page 34.

- ♦ *Configuring Microsoft Entra (for using Account Credentials)*, page 39.
 - ♦ *Configuring Microsoft Entra (for using Client Secret Keys)*, page 44.
2. On your ATEN RBS Configurator:
 - a) Configure the account settings. For details, see *Account Settings*, page 51.
 - a) Configure room grouping. This is a setting that helps refine the list of available rooms that appear when using the Suggest Room function on RBS panels. For details, see *Configuring Room Grouping*, page 52.

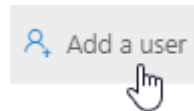
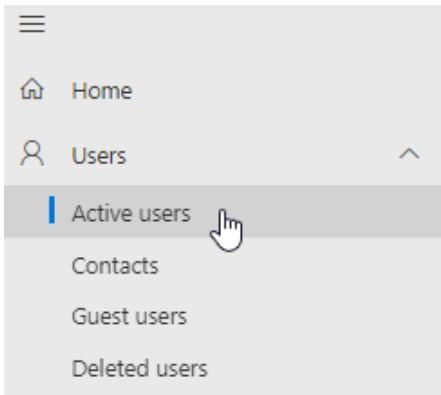
Microsoft 365 Admin Center

To start, log into <https://admin.microsoft.com/> using the Microsoft 365's administrator account credentials.

Adding User Accounts

Add a user account for every person who is allowed to book room resources through the Microsoft 365 calendar server, by doing the following:

1. In the Microsoft 365 admin center, go to **Navigation Menu > Users > Active Users** and click **Add a user**.



2. Fill in the basic information for the user and click **Next**.

Add a user

Basics

Product licenses

Optional settings

Finish

Set up the basics

To get started, fill out some basic information about who you're adding as a user.

First name

Last name

Display name *

Username *

Domains

Automatically create a password

Next Cancel

3. Based on the purchased license types, different options may be available. Select a one that supports Exchange Online.
4. Follow the on-screen instructions to create the user account.

Deciding the Authentication Method

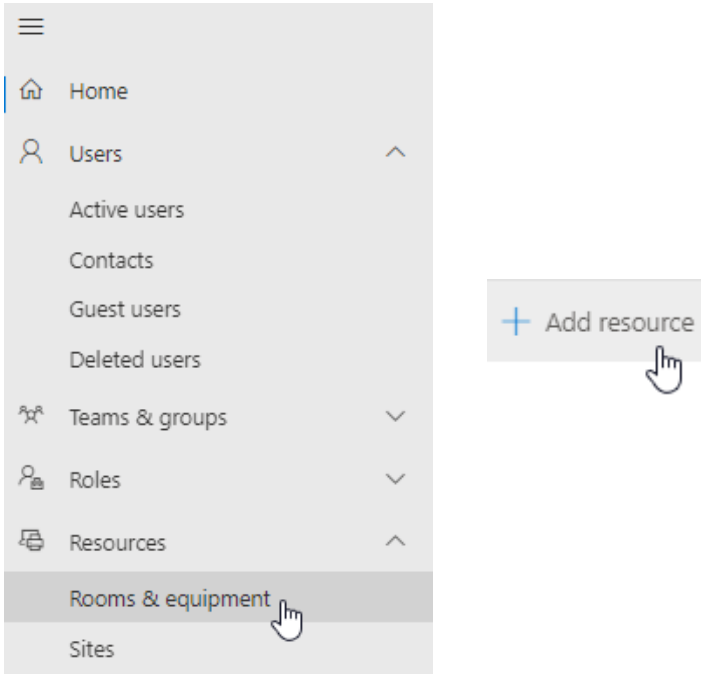
Decide the authentication method for the calendar server, either through account credentials or a client secret key. For a comparison of the pros and cons of the two methods, take a look of the following table.

	Using Account Credentials	Using Client Secret Key
Pros	No need to regularly upload the credentials as long as the account credentials stay the unchanged	<ul style="list-style-type: none"> ◆ No need to turn off multifactor authentication ◆ Flexible for different network environment
Cons	Need to turn off multifactor authentication. This may not be approved for some companies due to security concerns	Regular upload of the client secret key to RBS Configurator every (3 to 24 months, as configured on Microsoft 365) is needed

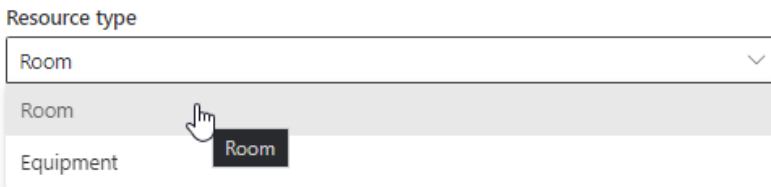
Adding a Room (Resource) Account

Add a room account, and set a required password for every conference room to be managed by ATEN RBS, by doing the following:

1. In the Microsoft 365 admin center, go to **Navigation Menu > Resources > Rooms & equipment** and click **Add resource**



2. Select **Room** from the *Resource type* drop-down list and then follow the on-screen instructions to create the room account.



3. If you use account credentials for authentication, right-click on the created room and then click **Edit** to add delegates. To ensure booking rights for all delegate in all rooms, make sure to add the delegates to each room.

The screenshot shows the 'Rooms & equipment' management interface. On the left, a table lists several rooms, with 'UK-Room1' selected. On the right, a detailed view for 'UK-Room1' is shown, including contact information and a 'Delegates (0)' section which is highlighted with a red box.

Name	Email
<input type="checkbox"/> JP-Room1	JP-Room1@...
<input type="checkbox"/> KR-Room1	KR-Room1@...
<input type="checkbox"/> KR-Room2	KR-Room2@...
<input type="checkbox"/> TW-Room1	TW-Room1@...
<input checked="" type="checkbox"/> UK-Room1	UK-Room1@...

UK-Room1
Room

Contact information

Name	Email
UK-Room1	UK-Room1@rbspm.onmicrosoft.com
Capacity	Location
Phone number	

[Edit](#)

Delegates (0)
[Edit](#)

[Exchange settings](#)
[Edit Exchange settings](#)

4. Go to **Navigation Menu > Users > Active Users**, click **Reset a password** next to the room account created from step 2 and follow the on-screen instructions to define its password.

Note: Make sure a password has been set for every room account created.

Adding a User Account as Delegate

To use account credentials for authentication, follow the procedure below to add a user account as delegate.

1. In the Microsoft 365 admin center, go to **Navigation Menu > Users > Active Users** and click **Add a user**.
2. Fill in the basic information for the user and click **Next**.

Add a user

- Basics
- Product licenses
- Optional settings
- Finish

Set up the basics

To get started, fill out some basic information about who you're adding as a user.

First name

Last name

Display name *

Username *

Domains

Automatically create a password

Next
Cancel


3. Based on the purchased license types, different options may be available. Select a one that supports Exchange Online.
4. Follow the on-screen instructions to create the user account.
5. Assign the delegate to **All Company Group**.

Home > Active users

Active users

[Add a user](#) [Multi-factor authentication](#) [Refresh](#) ...

<input type="checkbox"/>	Display name ↑	Username
<input type="checkbox"/>	book room	bookroom@...
<input type="checkbox"/>	JP-Room1	JP-Room1@...
<input type="checkbox"/>	KR-Room1	KR-Room1@...
<input type="checkbox"/>	KR-Room2	KR-Room2@...
<input type="checkbox"/>	MR	mr@rbspm.c...
<input type="checkbox"/>	PL-Room	PL-Room@r...
<input type="checkbox"/>	Ted Wang	admin@rbsp...



Tiffany

[Reset password](#) [Block sign-in](#) [Delete user](#)

Account
Devices
Licenses and apps
Mail
OneDrive

Username and email
 Tiffany@rbspm.onmicrosoft.com
[Manage username and email](#)

Last sign-in
 February 14, 2022, 4:20 PM
[View last 30 days](#)

Alternate email address
 None provided
[Add address](#)

Aliases
[Manage username and email](#)

Sign-out [Sign out](#)
 Sign this user out of all Office 365 sessions.
[Sign out of all sessions](#)

Groups
 All Company
[Manage groups](#)

Turning Off Multifactor Authentication (MFA)

To use account credentials for authentication, follow the procedure below to turn off multifactor authentication (MFA).

1. In the Microsoft 365 admin center, go to **Navigation Menu > Users > Active users > Multi-factor authentication**.

The screenshot shows the Microsoft 365 admin center interface. On the left, the navigation menu is visible with 'Active users' highlighted in a red box. The main content area shows the 'Active users' page. At the top right of the main content area, there is a search bar and a dropdown menu. The dropdown menu is open, showing 'Multi-factor authentication' highlighted in a red box. Below the dropdown menu, there is a table of users with columns for 'Display name', 'User type', and 'Email address'. The table lists several users, including 'BE-Room', 'BE-User', 'book room', 'demo_uk', and 'FAE Meeting Room'. A red box highlights the 'Multi-factor authentication' link in the dropdown menu.

2. Click **Legacy per-user MFA**.

Configure multifactor authentication (MFA)

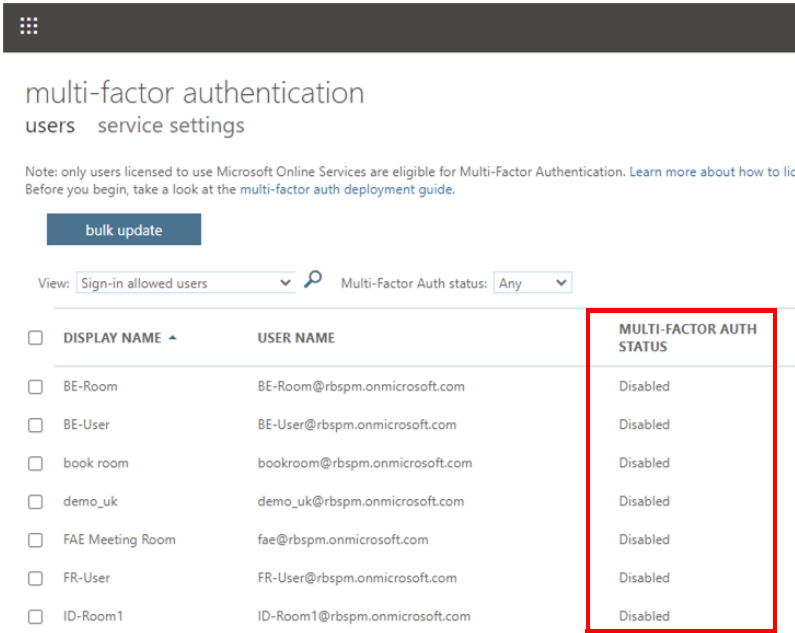
Secure your organization against breaches due to lost or stolen credentials. MFA immediately increases account security by prompting for multiple forms of verification to prove a user's identity when they sign in to an app or other company resource. This prompt could be to enter a code on the user's mobile device or to provide a fingerprint scan. MFA is enabled through Conditional Access, security defaults, or per-user MFA. This guide will provide the recommended MFA option for your org, based on your licenses and existing configuration.

Conditional Access policies detected, select **Manage** to edit the policies. Not what you're looking for? To configure MFA on a individual per-users level, select **Legacy per-user MFA**.

[Manage](#)

✔ Completed

3. Disable MFA for both the delegate and resource accounts.



multi-factor authentication

users service settings

Note: only users licensed to use Microsoft Online Services are eligible for Multi-Factor Authentication. [Learn more about how to lic](#)
Before you begin, take a look at the [multi-factor auth deployment guide](#).

bulk update

View: Sign-in allowed users Multi-Factor Auth status: Any

<input type="checkbox"/>	DISPLAY NAME ^	USER NAME	MULTI-FACTOR AUTH STATUS
<input type="checkbox"/>	BE-Room	BE-Room@rbspm.onmicrosoft.com	Disabled
<input type="checkbox"/>	BE-User	BE-User@rbspm.onmicrosoft.com	Disabled
<input type="checkbox"/>	book room	bookroom@rbspm.onmicrosoft.com	Disabled
<input type="checkbox"/>	demo_uk	demo_uk@rbspm.onmicrosoft.com	Disabled
<input type="checkbox"/>	FAE Meeting Room	fae@rbspm.onmicrosoft.com	Disabled
<input type="checkbox"/>	FR-User	FR-User@rbspm.onmicrosoft.com	Disabled
<input type="checkbox"/>	ID-Room1	ID-Room1@rbspm.onmicrosoft.com	Disabled

Configuring Microsoft Entra (for using Account Credentials)

Registering Application

Register to obtain an Application ID for the ATEN Room Booking System, by doing the following:

1. In the Microsoft 365 admin center, go to **Navigation Menu > All admin centers** and select **Microsoft Entra**.

The screenshot shows the Microsoft 365 admin center interface. The left-hand navigation menu is expanded to show 'All admin centers', which is highlighted with a red box. The main content area displays a table of admin centers:

Name	Description
Azure ATP	Identify, detect, and investigate advanced threat organization.
Compliance	Use the Microsoft Purview compliance portal to help protect sensitive info, manage data lifecycle
Dynamics 365 Apps	Use the Dynamics 365 admin center to manage operations.
Endpoint Manager	A single management experience for the End User are secured, managed, and current.
Exchange	Manage advanced email settings, such as quarant
Microsoft Entra	Use the Microsoft Entra admin center to manage for Azure Active Directory.

The 'Microsoft Entra' row is highlighted with a red box.

2. Go to **Microsoft Entra admin center > Applications > App registrations** and click **New Registration**.

The screenshot shows the Microsoft Entra admin center interface. The breadcrumb 'Microsoft Entra admin center' is highlighted with a red box. The left-hand navigation menu is expanded to show 'Applications', which is also highlighted with a red box. The main content area displays the 'App registrations' page with a '+ New registration' button highlighted by a red box. Below the button, there is a notification about feature updates and a search bar for filtering applications.

3. Enter a desired name, select **Accounts in this organizational directory only** under *Supported account types*, and click **Register**.

Register an application ...

* Name
The user-facing display name for this application (this can be changed later).

RBS_APP ✓

Supported account types
Who can use this application or access this API?

- Accounts in this organizational directory only (rbspm only - Single tenant)
- Accounts in any organizational directory (Any Azure AD directory - Multitenant)
- Accounts in any organizational directory (Any Azure AD directory - Multitenant) and personal Microsoft accounts (e.g. Skype, Xbox)
- Personal Microsoft accounts only

[Help me choose...](#)

By proceeding, you agree to the [Microsoft Platform Policies](#) ☞

Register

4. Once registered successfully, the **Application ID** is displayed, which shall later be entered on your ATEN RBS Configurator.

^ Essentials

Display name
RBS_APP

Application (client) ID
015d25f07500

Object ID
d0d70b35-6fbc-4bf4-9e2e-dd494d50e557

Directory (tenant) ID
71e111b20-2063-4d2e-86cd-c3c29f0e77c1

Supported account types
My organization only

- Go to **Authentication**, enable **Allow public client flows** by selecting **Yes**, and then click **Save** for the changes to take effect.

The screenshot shows the Microsoft Entra admin center interface. On the left, the 'App registrations' menu item is highlighted with a red box. The main content area shows the 'Authentication' settings for 'RBS_APP (NEW)'. A warning message at the top states: 'Due to temporary differences in supported functionality, we don't recommend enabling personal Microsoft accounts for an existing registration. If you need to enable personal accounts, you can do so using the manifest editor. Learn more about these restrictions.' Below this, the 'Advanced settings' section has 'Allow public client flows' set to 'Yes' (highlighted with a red box). At the bottom, the 'Save' button is also highlighted with a red box.

Adding API Permissions

After registering the application, also make sure the required API permissions have been applied to it, by doing the following:

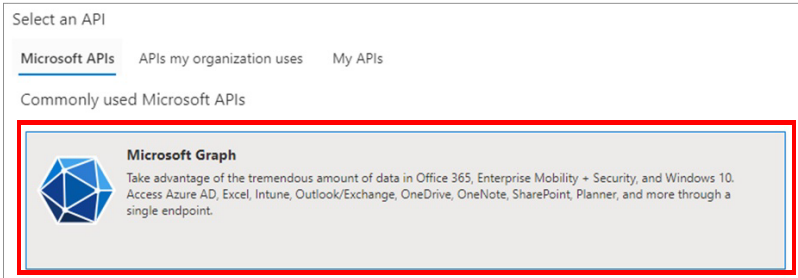
- Click **API permissions** > **Add a permission**, and select **Microsoft Graph** > **Delegated permissions**

Dashboard > rbspm > RBS_APP

RBS_APP | API permissions

The screenshot shows the 'API permissions' page for 'RBS_APP'. The 'API permissions' menu item in the left sidebar is highlighted with a red box. A blue information message states: 'The "Admin consent required" column shows the default user, or app. This column may not reflect the value in your o'. Below this, the 'Configured permissions' section shows a table with one entry: 'Microsoft Graph (1)'. The 'Add a permission' button is highlighted with a red box.

API / Permissions name	Type	Description
Microsoft Graph (1)		



Request API permissions ×

[← All APIs](#)



Microsoft Graph

<https://graph.microsoft.com/> [Docs](#) [↗](#)

What type of permissions does your application require?

Delegated permissions

Your application needs to access the API as the signed-in user.

Application permissions

Your application runs as a background service or daemon without a signed-in user.

2. Select the following 7 permissions.

- ◆ 4 Calendar permissions:
 - ◆ Calendars.Read
 - ◆ Calendars.Read.Shared
 - ◆ Calendars.ReadWrite
 - ◆ Calendars.ReadWrite. Shared
- ◆ 1 Place permission:
 - ◆ Place.Read.All
- ◆ 2 User permissions:
 - ◆ User.Read
 - ◆ User.Read.All

3. Select permissions and click Add permissions.

Request API permissions ×

Delegated permissions
Your application needs to access the API as the signed-in user.

Application permissions
Your application runs as a background service or daemon without a signed-in user.

Select permissions [collapse all](#)

calendar ×

Permission	Admin consent required
<p>▼ Calendars (3)</p>	
<input checked="" type="checkbox"/> Calendars.Read ⓘ Read calendars in all mailboxes	Yes
<input checked="" type="checkbox"/> Calendars.ReadBasic.All ⓘ Read basic details of calendars in all mailboxes	Yes
<input checked="" type="checkbox"/> Calendars.ReadWrite ⓘ Read and write calendars in all mailboxes	Yes

Add permissions

Discard

4. Click **Grant admin consent for your account**, as illustrated below, and then click **Yes** to finish.

+ Add a permission ✔ Grant admin consent for rbspm

API / Permissions na...	Type	Description	Admin consent req...	Status
▼ Microsoft Graph (7)				
Calendars.Read	Delegated	Read user calendars	No	✔ Granted for rbspm
Calendars.Read.Sha	Delegated	Read user and shared calendars	No	✔ Granted for rbspm

Grant admin consent confirmation.

Do you want to grant consent for the requested permissions for all accounts in aten3562? This will update any existing admin consent records this below.

Yes

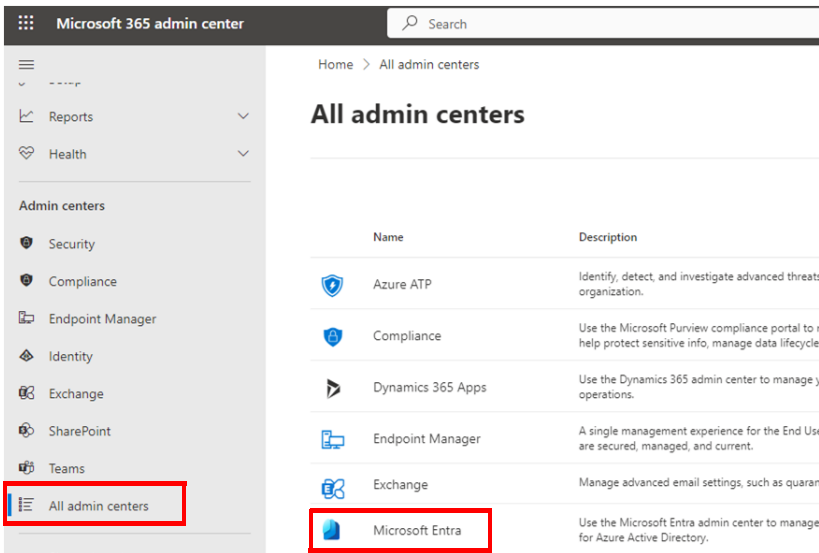
No

Configuring Microsoft Entra (for using Client Secret Keys)

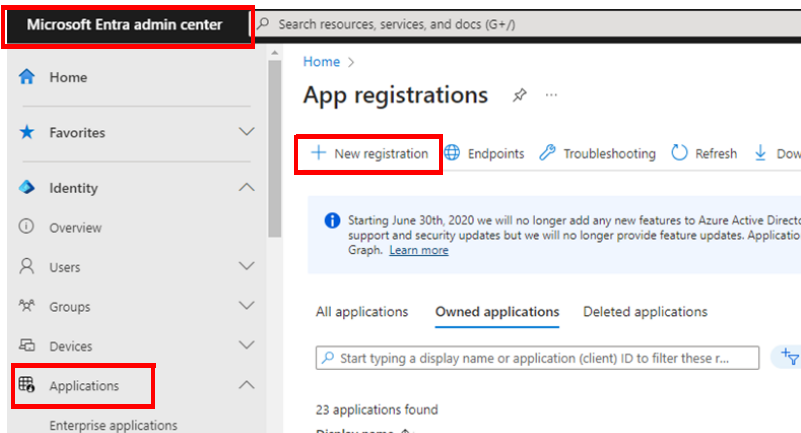
Registering the Application

Register to obtain an Application ID for the ATEN Room Booking System, by doing the following:

1. In the Microsoft 365 admin center, go to **Navigation Menu > All admin centers** and select **Microsoft Entra**.



2. Go to **Microsoft Entra admin center > Applications > App registrations** and click **New Registration**.



3. Enter a desired name, select **Accounts in this organizational directory only** under *Supported account types*, and click **Register**.

Register an application

*** Name**
The user-facing display name for this application (this can be changed later).

Supported account types
Who can use this application or access this API?

Accounts in this organizational directory only (rbspm only - Single tenant)

Accounts in any organizational directory (Any Azure AD directory - Multitenant)

Accounts in any organizational directory (Any Azure AD directory - Multitenant) and personal Microsoft accounts (e.g. Skype, Xbox)

Personal Microsoft accounts only

[Help me choose...](#)

By proceeding, you agree to the [Microsoft Platform Policies](#)

Register

4. Once registered successfully, the **Application (Client) ID** and Directory (tenant) ID are displayed. Save these IDs, which shall later be entered on your ATEN RBS Configurator.

^ Essentials

Display name
RBS_APP

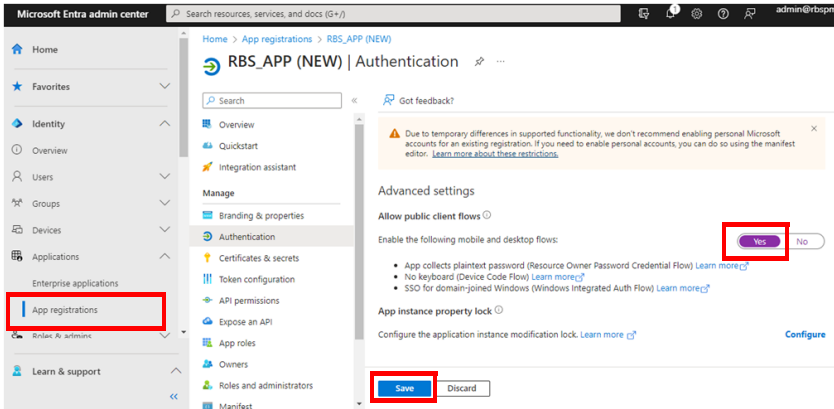
Application (client) ID
01d9e10e0-e076-40e0-9e7b-d15d25f07500

Object ID
d0d70b35-6fbc-4b64-8e2e-dd494d50e557

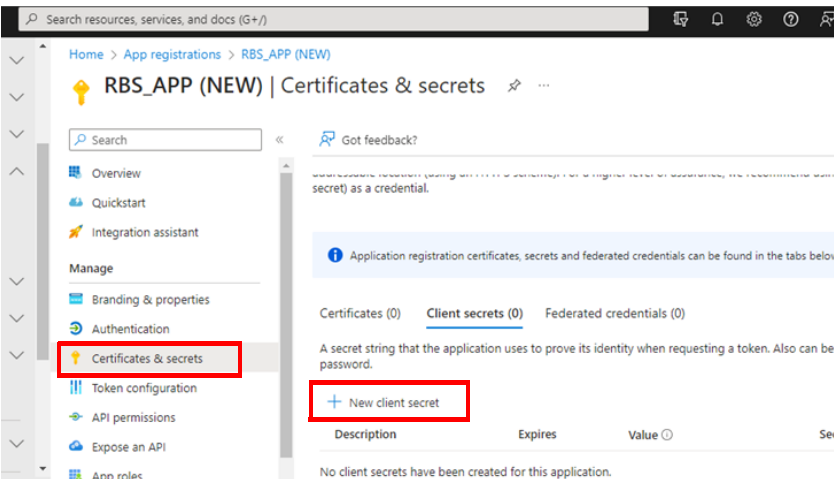
Directory (tenant) ID
71e-111e-02e-02e0-4d2e-80ed-c2c2e7a07511

Supported account types
My organization only

5. Go to **Authentication**, enable *Allow public client flows* by selecting **Yes**. Then click **Save** for the changes to take effect.



6. Go to **Certificates & secrets** > **New client secret**.



- In the pop-up dialog box, fill in a description and days of expiration for the new client secret. Click **Add**.

Note: If the client secret expires, create a new one and upload the renewed profile to RBS Configurator.

- A client secret is created. Copy and save the key for use later in RBS Configurator.

Important: Make sure to copy the key now. This key will not be visible or accessible once leaving the page.

Home > App registrations > RBS_APP (NEW)

RBS_APP (NEW) | Certificates & secrets

Overview
Quickstart
Integration assistant

Manage

- Branding & properties
- Authentication
- Certificates & secrets**
- Token configuration
- API permissions
- Expose an API
- App roles

secret) as a credential.

Application registration certificates, secrets and federated credentials can be found in the tabs below.

Certificates (0) **Client secrets (1)** Federated credentials (0)

A secret string that the application uses to prove its identity when requesting a token. Also can be password.

+ New client secret

Description	Expires	Value
RBS_secret code	7/27/2024	86q8Q~PIRtI5oKpXrSJa982...

Adding API Permissions

After registering the application, also make sure the required API permissions have been applied to it, by doing the following:

1. Click **API permissions** > **Add a permission**, and select **Microsoft Graph** > **Application permissions**.

Dashboard > rbspm > RBS_APP

RBS_APP | API permissions

Search (Ctrl+/)

Refresh

Got feedback?

Overview

Quickstart

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Branding & properties

Authentication

Certificates & secrets

Token configuration

API permissions

The "Admin consent required" column shows the default value for the user, or app. This column may not reflect the value in your organization.

Configured permissions

Applications are authorized to call APIs when they are granted permissions. Applications should include all the permissions the application uses.

+ Add a permission ✓ Grant admin consent for rbspm

API / Permissions name	Type	Description
Microsoft Graph (1)		

Microsoft Graph (1)

Select an API

Microsoft APIs

APIs my organization uses

My APIs

Commonly used Microsoft APIs



Microsoft Graph

Take advantage of the tremendous amount of data in Office 365, Enterprise Mobility + Security, and Windows 10. Access Azure AD, Excel, Intune, Outlook/Exchange, OneDrive, OneNote, SharePoint, Planner, and more through a single endpoint.

Request API permissions

×

< All APIs



Microsoft Graph

<https://graph.microsoft.com/> Docs

What type of permissions does your application require?

Delegated permissions

Your application needs to access the API as the signed-in user.

Application permissions

Your application runs as a background service or daemon without a signed-in user.

Select the following 5 permissions.

- ◆ Calendar permissions:
 - ◆ Calendars.Read
 - ◆ Calendars.ReabBasic.All
 - ◆ Calendars.ReadWrite
- ◆ Place permission:
 - ◆ Place.Read.All
- ◆ User permission:
 - ◆ User.Read.All

And then click **Add permissions**.

Request API permissions ×

Delegated permissions
Your application needs to access the API as the signed-in user.

Application permissions
Your application runs as a background service or daemon without a signed-in user.

Select permissions collapse all

calendar

Permission	Admin consent required
<p>▼ Calendars (3)</p>	
<input checked="" type="checkbox"/> Calendars.Read ⓘ Read calendars in all mailboxes	Yes
<input checked="" type="checkbox"/> Calendars.ReadBasic.All ⓘ Read basic details of calendars in all mailboxes	Yes
<input checked="" type="checkbox"/> Calendars.ReadWrite ⓘ Read and write calendars in all mailboxes	Yes

Add permissions

Discard

Click **Grant admin consent for your account**, as illustrated below, and then click **Yes** to finish.

+ Add a permission ✔ Grant admin consent for rbspm

API / Permissions na...	Type	Description	Admin consent req...	Status
▼ Microsoft Graph (7)				
Calendars.Read	Delegated	Read user calendars	No	✔ Granted for rbspm
Calendars.Read.Sha	Delegated	Read user and shared calendars	No	✔ Granted for rbspm

Grant admin consent confirmation.

Do you want to grant consent for the requested permissions for all accounts in aten3562? This will update any existing admin consent records this below.

Setting Up Microsoft 365 in ATEN RBS Configurator

Account Settings

1. On your RBS Configurator, go to **Calendar Settings > Microsoft 365** and enter the Microsoft 365 Calendar related settings, as below.

Microsoft 365
Specify the delegated account you created for the resource rooms.

Authentication Method

Delegate Account

Delegate Password

Application ID

Room Grouping

2. Select an authentication method.
3. Fill in the following fields. Depending on the selected authentication method, different information needs to be provided.
 - ◆ **Account Credentials**
 - ◆ **Delegate Account:** Enter the name of the delegate assign to resource account created the Microsoft 365 Calendar's delegate account.
 - ◆ **Delegate Password:** Enter the password of the Microsoft 365 Calendar's delegate account.
 - ◆ **Application ID:** Enter the application ID of the ATEN Room Booking System as registered in the Microsoft Entra (page 39).
 - ◆ **Client Secret Key**

The following information is obtained by registering the application in Microsoft Entra. For full details, see *Registering the Application*, page 44.

- ◆ **Application ID:** Enter the application ID of the ATEN Room Booking System.
- ◆ **Tenant ID:** Enter the tenant (directory) ID.
- ◆ **Secret Code:** Enter the client secret code.

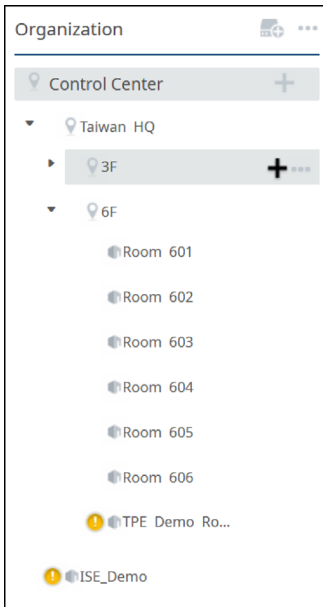
Configuring Room Grouping

Enable this function to refine the list of available rooms (shows up by tapping Suggest Room on RBS panels) by only showing rooms within a distribution group or domain.

1. Select a room grouping option.
 - a) On RBS Configurator, go to **Calendar Settings > Microsoft 365**.
 - b) Select **Display based on calendar server's settings** or **Display based on Unizon deployment tree's settings**.
 - ◆ **Room Grouping:** Enable this function to refine the list of available rooms (shows up by tapping Suggest Room on RBS panels) by only showing rooms within a distribution group or domain.
 - ◆ **Disable:** This is the default setting. With this setting, all available rooms can be shown, disregarding their physical location or distribution group.
 - ◆ **Display based on calendar server's settings:** displays available rooms that are in the same distribution group.
 - ◆ **Display based on Unizon deployment tree's settings:** displays available rooms within the third last level (e.g. building) and groups these rooms by the locations from the second last level (e.g. floor).

For example, the image below illustrates a Unizon deployment tree, the last level being the rooms, the second last are floors, and the third last are the cities. When operating an RBS panel in Taiwan HQ to search for available rooms (using the Suggest Room function), all the available rooms in Taiwan HQ (third last level) will be listed by

floor (second last level), and a drop-down list of floors will be available for users to switch.



2. If you have selected **Display based on Unizon's deployment tree's settings**, go to Unizon and make sure the second and third last levels are clearly named.
3. If you have selected **Display based on calendar server's settings**, create and/or configure distribution groups using PowerShell.
 - a) Connect to **PowerShell**.
 - b) Create distribution groups and put rooms into distribution groups using the following commands.

Configuration Action	Command
To create a new distribution group	<pre>New-DistributionGroup roomlist -RoomList</pre> <p>Note: <code>roomlist</code> is an example name of the new distribution group.</p>

Configuration Action	Command
To remove a distribution group	<p>Remove-DistributionGroup "roomlist"</p> <p>Note: Put the name of the distribution group in the quotation marks. "roomlist" is used as an example here.</p>
To see created distribution groups	<p>Get-DistributionGroup</p>
To put rooms into a distribution group	<p>Add-DistributionGroupMember -Identity "roomlist" -Member room account</p> <p>Note: roomlist and room account are example names of the target distribution group and room account.</p>
To see created rooms in a distribution group	<p>Get-DistributionGroupMember -Identity "roomlist"</p> <p>Note: Put the name of the distribution group in the quotation marks. "roomlist" is used as an example here.</p>
To remove a room account from a distribution group	<p>Remove-DistributionGroupMember -Identity "roomlist" -Member room account</p> <p>Note: roomlist and room account are example names of the target distribution group and room account.</p>

c) Add floor information to each room.

Configuration Action	Command
To add floor information to a room	<p>Set-Place room account -Floor x -FloorLabel "characters and numbers"</p> <p>Note: Put the name of the floor label in the quotation marks. "characters and numbers" is used as an example here.</p>
To check floor information	<p>Get-Place room account FL</p>

Note: The calendar server may take up to 24 hours for the changes to take effect.

Microsoft Exchange Server

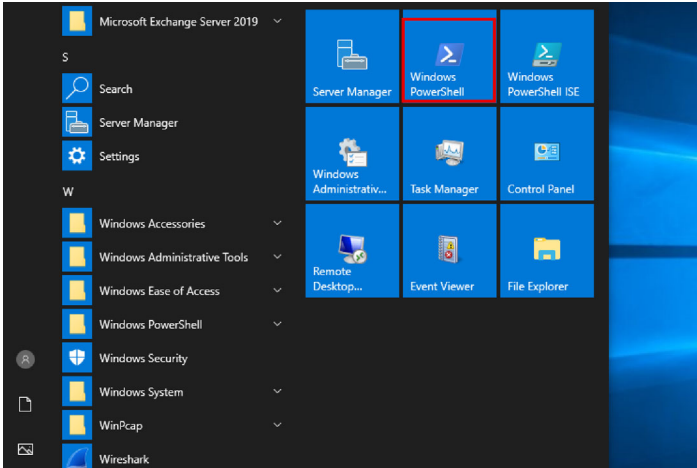
Setup Overview

To use Microsoft Exchange Server to manage ATEN room booking system, complete the following setup.

No.	Microsoft Exchange Server	
	2013, 2016, 2019 Version	2010 Version
1	Check the version of your Microsoft Exchange server (page 56).	
2	Find the host name (page 57).	Find the host name (page 71).
3	Create a room mailbox (page 60).	Create a room mailbox (page 74).
4	Add the room mailbox to a distribution group (page 62).	Add the room mailbox to a distribution group (page 76).
5	Decide an authentication method and complete the required setup (page 66).	Decide an authentication method and complete the required setup (page 79).
6	To use account credentials for authentication, create a delegate mailbox (page 67).	To use account credentials for authentication, create a delegate mailbox (page 79).
7	<ul style="list-style-type: none"> ◆ To use <i>account credentials</i> for authentication, reset the room password (page 66). ◆ To <i>impersonate account rights</i>, configure impersonation rights (page 69). 	<ul style="list-style-type: none"> ◆ To use <i>account credentials</i> for authentication, reset the room password (page 81). ◆ To <i>impersonate account rights</i>, configure impersonation rights (page 84).
8	Configure the account settings and room grouping in ATEN RBS Configurator (page 85).	

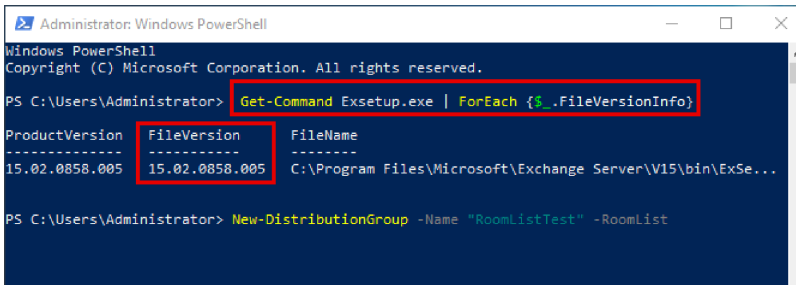
Checking the Version of Your Microsoft Exchange Server

1. Open **Windows PowerShell** from the Start menu.



2. Input the command below to check the returned **FileVersion** number:

```
Get-Command Exsetup.exe | ForEach {$_.FileVersionInfo}
```



The number associated with “FileVersion” from the output (e.g. “15.02.0858.005” in the figure) is the build version of your Microsoft Exchange server. Determine which Microsoft Exchange version is installed on your computer from the table below.

Microsoft Exchange Version	Build Number
2010	14.03.xxxx.xxx
2013	15.00.xxxx.xxx
2016	15.01.xxxx.xxx
2019	15.02.xxxx.xxx

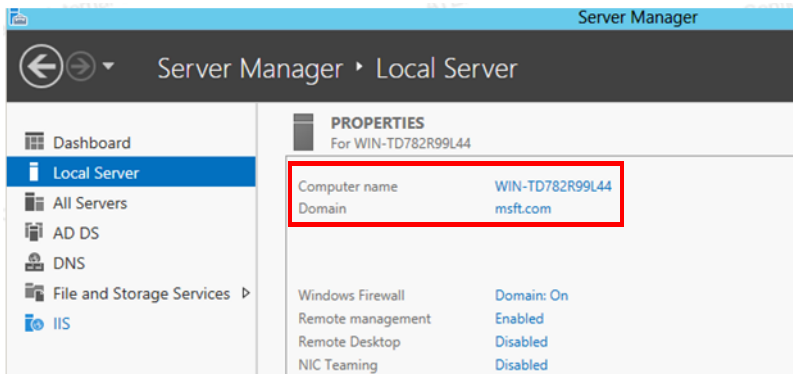
Microsoft Exchange 2013 / 2016 / 2019

Follow the steps to set up your **Microsoft Exchange 2010** for managing your ATEN Room Booking System.

Finding the Host Name

- ◆ If you have *identical* computer name and certificate name, look up the host name as follows. If not, proceed to the next step.

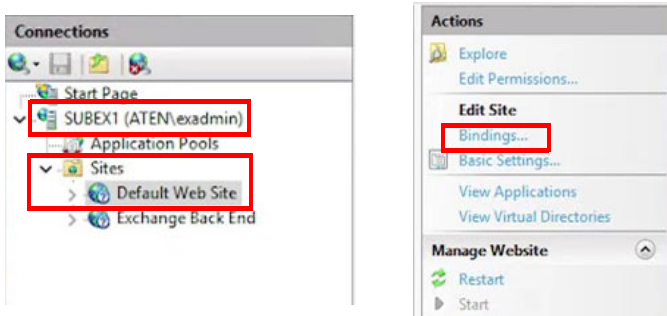
(1) In Server Manager, go to **Local Server** > **Properties**. This screen appears. Note down the *host name* and *domain* to be used later for setting up the calendar server in RBS Configurator.



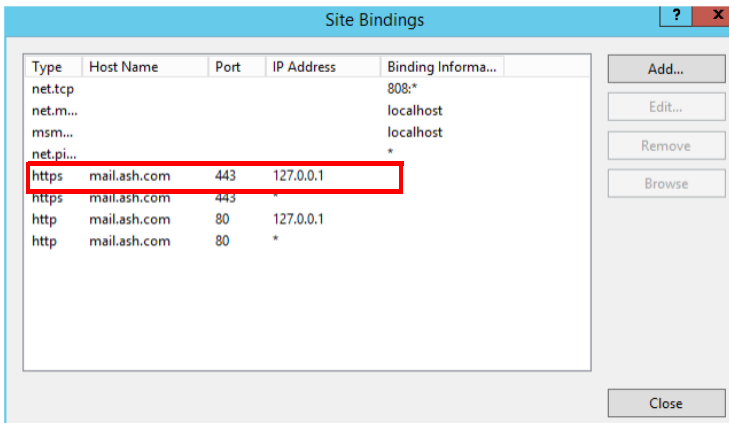
(2) In Windows PowerShell, execute the `ipconfig` command to look up the IP address of the Exchange server. Note down this IP address which will be needed when assigning a static IP address to RBS panels in RBS Configurator.

- ◆ If you have *different* computer name and certificate name, look up the host name as follows.
 - (1) In Server Manager, go to **Tools** > **Internet Information Service (IIS) Manager**.

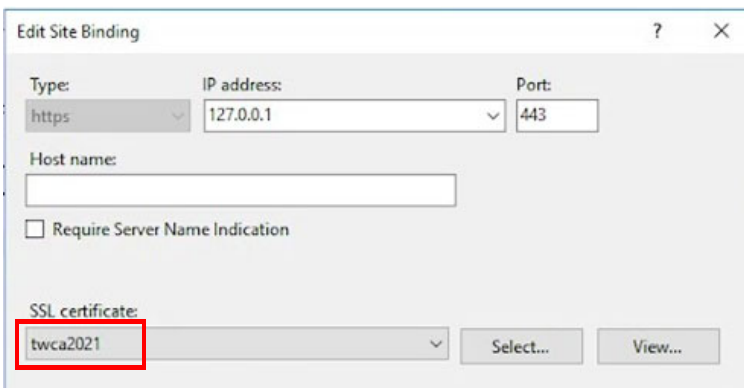
(2) Under the Connections panel, click the computer name and **Default Web Site**, and in the Actions column, click **Bindings**.



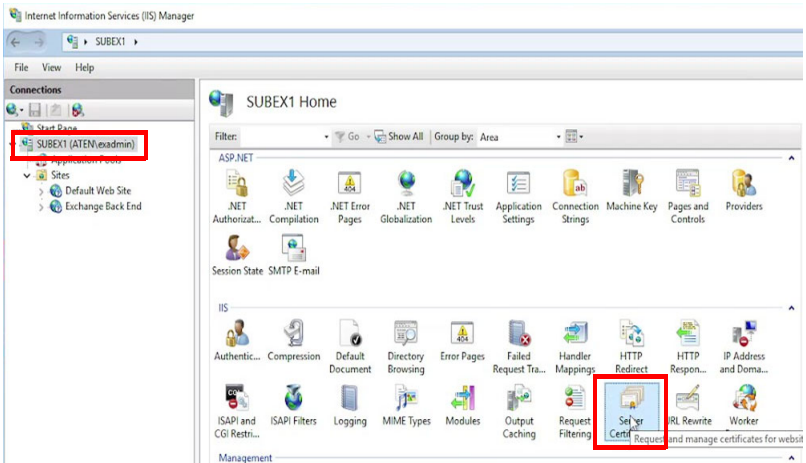
(3) In the pop-up dialog box, double-click https 443 for the local computer to find out the SSL certificate.



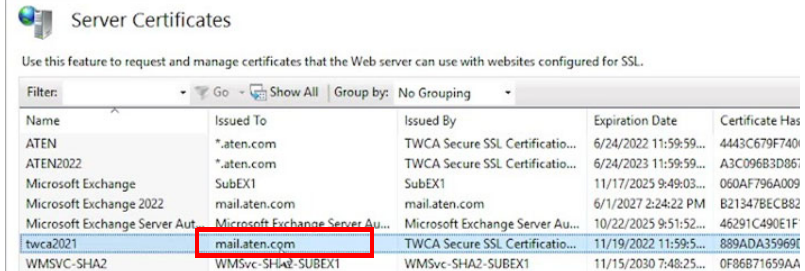
In this example, the SSL certificate is **twca2021**.



(4) In the Internet Information Service screen, click the computer name from the Connections panel. and then double-click **Server Certificate**.



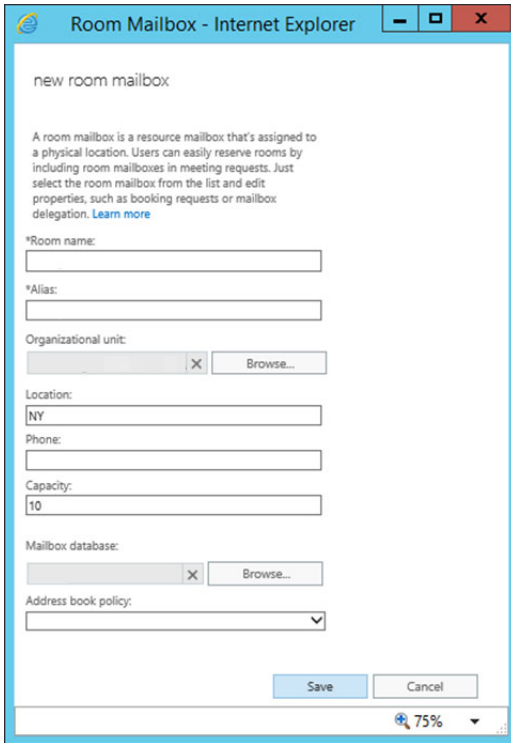
All host names are listed in the Issued To column. In this example, the host name for **twca2021** is **mail.aten.com**.



(5) Note down the host name to be used later for setting up the calendar server in RBS Configurator.

Creating a Room Mailbox

1. In **EAC**, go to **recipients > resources** and click **+**. This screen appears.



The screenshot shows a web browser window titled "Room Mailbox - Internet Explorer". The page content is as follows:

new room mailbox

A room mailbox is a resource mailbox that's assigned to a physical location. Users can easily reserve rooms by including room mailboxes in meeting requests. Just select the room mailbox from the list and edit properties, such as booking requests or mailbox delegation. [Learn more](#)

*Room name:

*Alias:

Organizational unit: X

Location:

Phone:

Capacity:

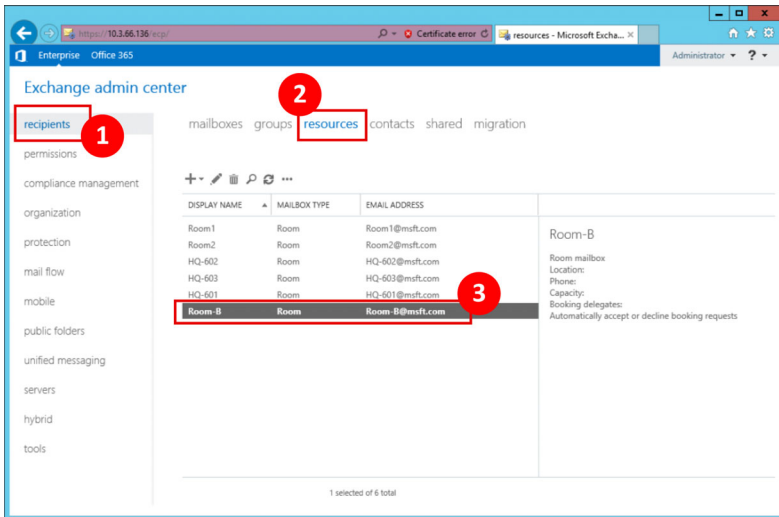
Mailbox database: X

Address book policy:

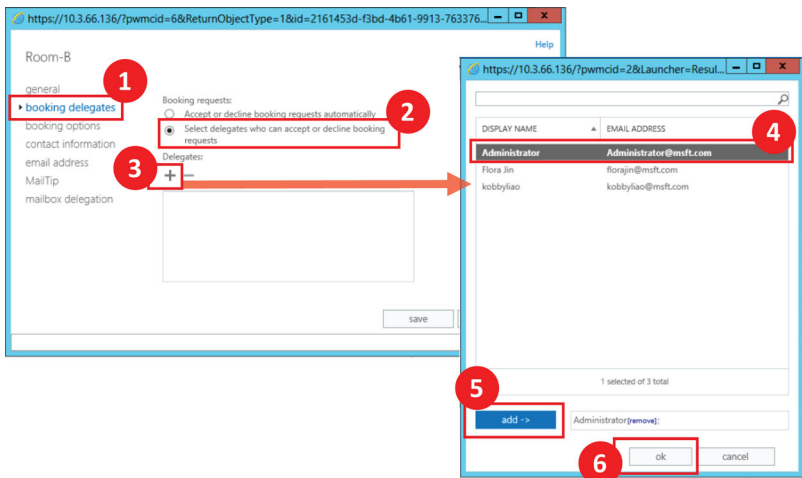
75%

2. Fill in the room name and alias.
3. Click **Save** to create the room mailbox.

- Double-click on the created room mailbox to set the delegates for accepting or declining the room booking requests.

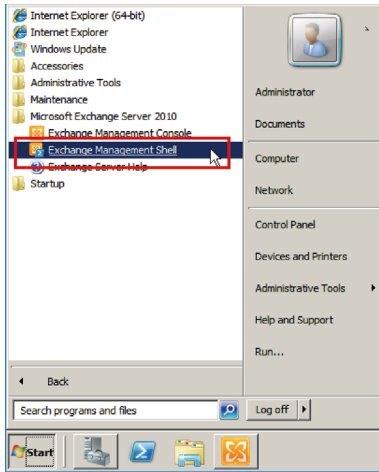


- In the pop-up, click the delegate to be added and then click the add button. Finish your configuration by clicking the **ok** button.



Adding the Room Mailbox to a Room List (Distribution Group)

1. Launch **Exchange Management Shell** from the **Start** menu.



2. Run the command below to create a distribution group:
New-DistributionGroup -Name "ROOM LIST" -RoomList

```

Machine: WIN-IH09SQ13L03.msft.com
Only Exchange cmdlets:      get-excommand
Cmdlets for a specific role: get-help -role *UM* or *Mailbox*
Get general help:          help
Get help for a cmdlet:     help <cmdlet-name> or <cmdlet-name> -?
Show quick reference guide: quickref
Exchange team blog:       get-exblog
Show full output for a cmd: <cmd> ; format-list

Tip of the day #46:

Want to control the properties of e-mail messages sent to a specific domain? Use
the RemoteDomain cmdlets. Create a new remote domain by using the New-RemoteDomain
cmdlet. Type:

New-RemoteDomain -Name "Contoso.com Configuration" -DomainName contoso.com

Then modify the properties that you want for this remote domain by using the Set
-RemoteDomain cmdlet:

Set-RemoteDomain "Contoso.com Configuration" -AutoReplyEnabled $True -AutoForwardEnabled $True

VERBOSE: Connecting to WIN-IH09SQ13L03.msft.com
VERBOSE: Connected to WIN-IH09SQ13L03.msft.com.
[PS] C:\Windows\system32>New-DistributionGroup -Name "forTesting" -RoomList
    
```

Note:

- ♦ **ROOM LIST** in the command is the name for the room list to be created, e.g., **forTesting** as the figure shows.
- ♦ Room lists can also be used as filters when searching for available rooms using the Suggest Room function on RBS panels, that is, only rooms within the same room list (distribution group) appear are suggested by the Room Booking System. For full setup information, see *Setting Up Room Grouping*, page 86.

The room list (distribution group) is successfully created.

```

Machine: WIN-IH09SQ13L03.msft.com
Tip of the day #46:
Want to control the properties of e-mail messages sent to a specific domain? Use
the RemoteDomain cmdlets. Create a new remote domain by using the New-RemoteDom
ain cmdlet. Type:

New-RemoteDomain -Name "Contoso.com Configuration" -DomainName contoso.com

Then modify the properties that you want for this remote domain by using the Set
-RemoteDomain cmdlet:

Set-RemoteDomain "Contoso.com Configuration" -AutoReplyEnabled $True -AutoForwa
rdEnabled $True

VERBOSE: Connecting to WIN-IH09SQ13L03.msft.com
VERBOSE: Connected to WIN-IH09SQ13L03.msft.com.
[PS] C:\Windows\system32>New-DistributionGroup -Name "forTesting" -RoomList

Name                DisplayName          GroupType            PrimarySmtppAddress
-----
forTesting          forTesting          Universal            forTesting@msft.com

[PS] C:\Windows\system32>

```

3. Use the cmdlet below to add your room mailbox to this room list:
 Add-DistributionGroupMember -Identity "ROOM LIST" -Member
 ROOM ACCOUNT

The screenshot shows a Windows command prompt window titled "Machine: WIN-IH09SQ13L03.msft.com". It displays a "Tip of the day #46:" about RemoteDomain cmdlets. The user has entered the following commands:

```
New-RemoteDomain -Name "Contoso.com Configuration" -DomainName contoso.com
```

Then modify the properties that you want for this remote domain by using the Set-RemoteDomain cmdlet:

```
Set-RemoteDomain "Contoso.com Configuration" -AutoReplyEnabled $True -AutoForwardEnabled $True
```

VERBOSE: Connecting to WIN-IH09SQ13L03.msft.com
 VERBOSE: Connected to WIN-IH09SQ13L03.msft.com.

```
[PS] C:\Windows\system32>New-DistributionGroup -Name "forTesting" -RoomList
```

Name	DisplayName	GroupType	PrimarySmtpAddress
forTesting	forTesting	Universal	forTesting@msft.com

```
[PS] C:\Windows\system32>Add-DistributionGroupMember -Identity "forTesting" -Member Room-A
```

Note:

- ◆ **Member ROOM ACCOUNT** here indicates the name of your room mailbox to be added, e.g., **Room-A** as the figure shows.
 - ◆ Repeat Step 4 to add more room mailboxes to the room list.
 - ◆ Each room list can contain up to 100 rooms.
-

4. To check whether the room mailbox(es) is successfully added to the room list, use the cmdlet below and see the returned room list member(s).

```
Get-DistributionGroupMember -Identity "ROOM LIST"
```

```
Machine: WIN-IH09SQ13L03.msft.com
Then modify the properties that you want for this remote domain by using the Set-RemoteDomain cmdlet:

Set-RemoteDomain "Contoso.com Configuration" -AutoReplyEnabled $True -AutoForwardEnabled $True

VERBOSE: Connecting to WIN-IH09SQ13L03.msft.com
VERBOSE: Connected to WIN-IH09SQ13L03.msft.com.
[PS] C:\Windows\system32>New-DistributionGroup -Name "forTesting" -RoomList

Name                DisplayName          GroupType            PrimarySmtpAddress
-----                -
forTesting           forTesting           Universal            forTesting@msft.com

[PS] C:\Windows\system32>Add-DistributionGroupMember -Identity "forTesting" -Member Room-A
[PS] C:\Windows\system32>Get-DistributionGroupMember -Identity "forTesting"

Name                RecipientType
-----                -
Room-A              UserMailbox

[PS] C:\Windows\system32>
```

You may use the following commands to check the current setup:

- ◆ To see the created distribution groups:

```
Get-DistributionGroup
```

For example, a list similar to the following appears:

```
PS C:\Users\tiffanywang> Get-DistributionGroup

Name                DisplayName          GroupType            PrimarySmtpAddress
-----                -
-NameTW-Room List  -NameTW-Room List  Universal            -NameTW-RoomList@rbspm.onmicrosoft.com
-NameTW-RoomList   -NameTW-RoomList   Universal            -NameTW-RoomList1@rbspm.onmicrosoft.com
TW-Room20230705040127 TW-Room            Universal            TW-Room@rbspm.onmicrosoft.com
TW-RoomList        TW-RoomList        Universal            TW-RoomList@rbspm.onmicrosoft.com
```

- ◆ To remove a certain distribution group:

```
Remove-DistributionGroup "Meeting Rooms"
```

Press [Y] to confirm the change. The distribution group named **Meeting Rooms** will be removed.

- ◆ To see all rooms within a distribution group:

```
Get-DistributionGroupMemeber -Identity "TW-RoomList"
```

For example:

```
PS C:\Users\tiffanywang> Get-DistributionGroupMember -Identity "TW-RoomList"
Name      RecipientType
-----
TW-Room1  UserMailbox
TW-Room3  UserMailbox
TW-Room2  UserMailbox
```

The rooms in the distribution group named **TW-RoomList** are listed.

- ◆ To remove a certain room account from a distribution group:
 Remove-DistributionGroupMembr -Identity "**distributiongroup**"
 -Member **Room account**
 Press [Y] to confirm the change. The room named **Room account** will be removed.

Deciding the Authentication Method

Decide how you wish to authenticate the calendar server, either through account credentials, or to impersonate account rights to the delegate. For a comparison of the pros and cons of the two methods, take a look of the following table.

	Using Account Credentials	Impersonate Account Rights
Pros	Flexible setup on different delegates for different resource accounts	<ul style="list-style-type: none"> ◆ No need to provide the resource account password ◆ Flexible for different network environment
Cons	Resource account password is needed for each room.	Limited number of simultaneous connections to RBS panels

Creating a Delegate Mailbox

To use account credentials for authentication, follow the procedure below to create a delegate mailbox.

1. Log in the Exchange Admin Center (EAC) with administrator credentials. You can use any of the following URL format to access EAC:

https://<IP address of your Exchange server>/ecp

https://<host name of your Exchange server>/ecp

For details on obtaining the URL of your EAC, see *ATEN Standard Warranty Policy*, page 138.

2. Go to **Recipients > mailboxes**, and click **+**. This screen appears.

The screenshot shows the 'new user mailbox' form in a Google Chrome browser window. The URL is `mail.aten.com/ecp/UsersGroups/NewMailboxOnPremises.aspx?p...`. The form fields are as follows:

- Initials: KR-RB\$setup
- Last name: (empty)
- *Display name: KR-RB\$setup
- *Name: KR-RB\$setup
- Organizational unit: (empty) with a 'Browse...' button
- *User logon name: KR-RB\$setup @ aten.co.kr
- *New password: (masked with dots)
- *Confirm password: (masked with dots)
- Require password change on next logon
- Buttons: Save, Cancel

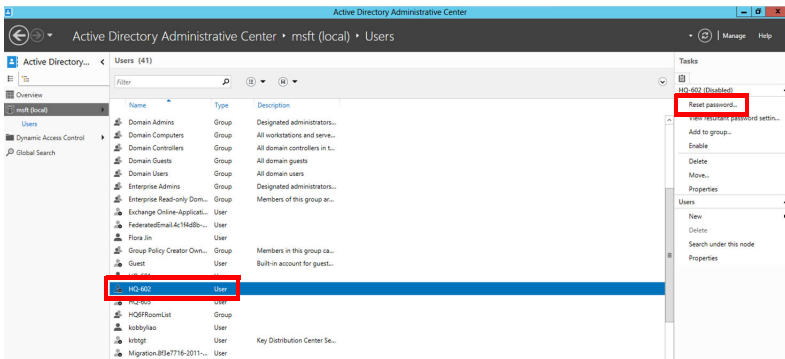
A tooltip is visible over the confirm password field, stating: 'Retype the password to verify that you typed it correctly.'

3. Fill in the information to create a delegate mailbox.
4. Note down this mailbox address and the password to be used later for setting up the calendar server in RBS Configurator.

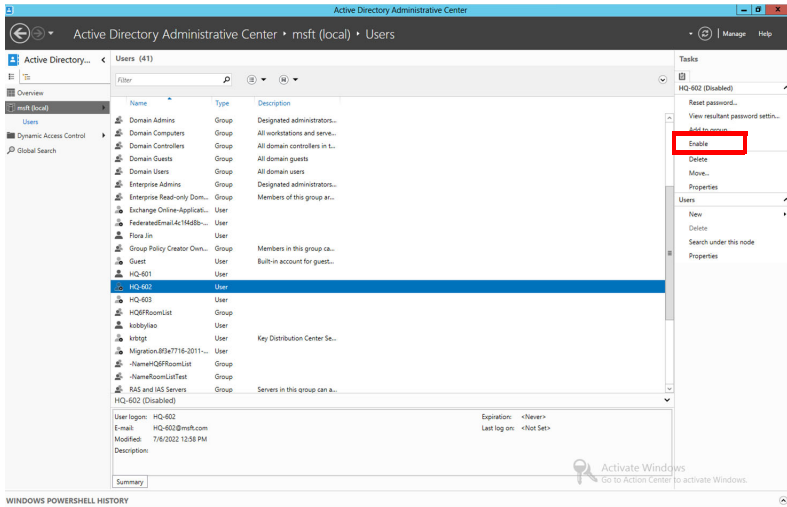
Resetting Room Password

If you would like to use account credentials for authentication, follow the procedure below to reset the room password. If you choose to grant account rights, skip this procedure and proceed directly to configure impersonation rights instead. For a suggested procedure, see *Configuring Impersonation Rights*, page 69.

1. In Server Manager, go to **Tools > Active Directory Administrator Center**.
2. In the pop-up screen, click **Users** from the left column.
3. Click on the room mailbox you created, click **Reset password**, and then follow the on-screen instructions to reset the password.



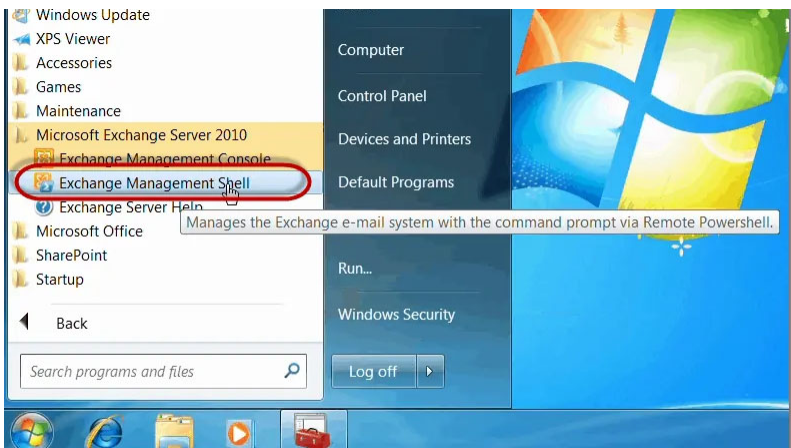
4. Click **Enable** to apply the configuration.



Configuring Impersonation Rights

If you would like to impersonate account rights, follow the procedure below. If you choose to use account credentials for authentication, reset the room password. For full details, see *Deciding the Authentication Method*, page 66.

1. Launch Exchange Management Shell. The Start screen and the way to open the program may differ for different OS versions.



- Execute the following command to create a management scope.

Note: Put the name of the resource mailbox in the quotation marks.
"ResourceMailboxes" is used as an example here.

```
New-ManagementScope -Name "ResourceMailboxes" -
RecipientRestrictionFilter { RecipientTypeDetails -eq
"RoomMailbox" -or RecipientTypeDetails -eq
"EquipmentMailbox" }
```

- Execute the following command to grant impersonation rights.

Note:

- ◆ Put the name of the resource impersonation in the quotation marks.
"ResourceImpersonation" is used as an example here.
 - ◆ delegate@xxxx.com is the delegate account that you have created.
-

```
New-ManagementRoleAssignment -Name "ResourceImpersonation"
-Role ApplicationImpersonation -User delegate@xxxx.com -
CustomRecipientWriteScope "ResourceMailboxes"
```

- Check if impersonation rights are successfully given by executing the following command.

```
Get-ManagementRoleAssignment -Role
"ApplicationImpersonation" -GetEffectiveUsers
```

The role column should be indicated with ApplicationImpersonation, and EffectiveUsername column should indicate the name of the delegate account.

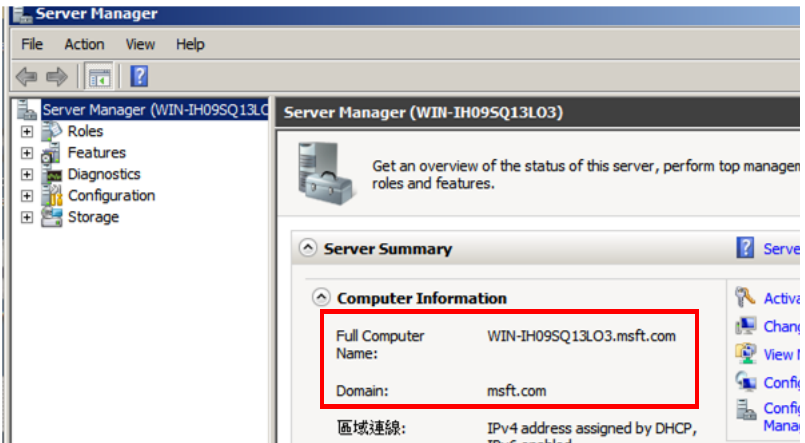
Microsoft Exchange 2010

Follow the steps to set up your **Microsoft Exchange 2010** for managing your ATEN Room Booking System.

Finding the Host Name

- ◆ If you have *identical* computer name and certificate name, look up the host name as follows. If not, proceed to the next step.

(1) In Server Manager, go to **Local Server > Properties**. Note down the *host name* and *domain* to be used later for setting up the calendar server in RBS Configurator.



(2) In Windows PowerShell, execute the `ipconfig` command to look up the IP address of the Exchange server. Note down this IP address when you need to assign a static IP address to RBS panels in RBS Configurator.

```
Administrator: Windows PowerShell
Windows PowerShell
Copyright (C) 2009 Microsoft Corporation. All rights reserved.

PS C:\Users\administrator> ipconfig

Windows IP Configuration

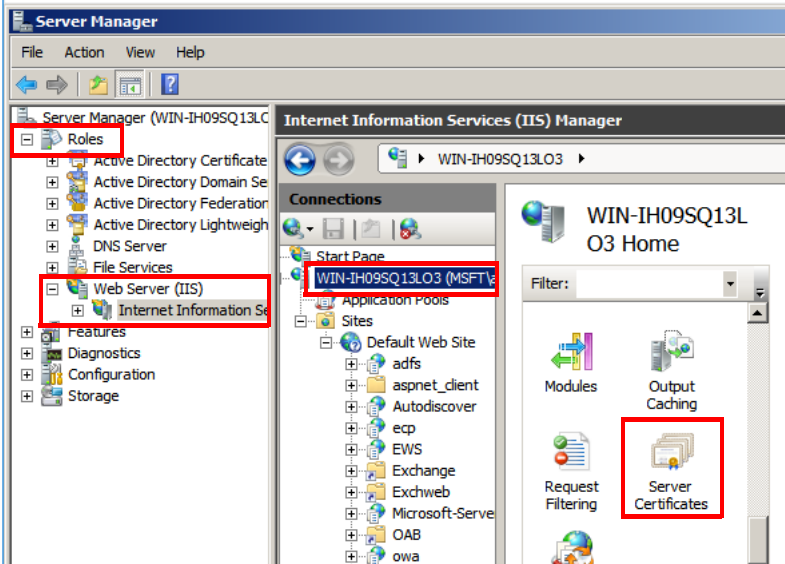
Ethernet adapter 區域連線:

    Connection-specific DNS Suffix . : aten.com
    Link-local IPv6 Address . . . . . : fe80::c812:c4b6:a159:f66a%11
    IPv4 Address. . . . . : 10.3.66.114
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 10.3.66.254

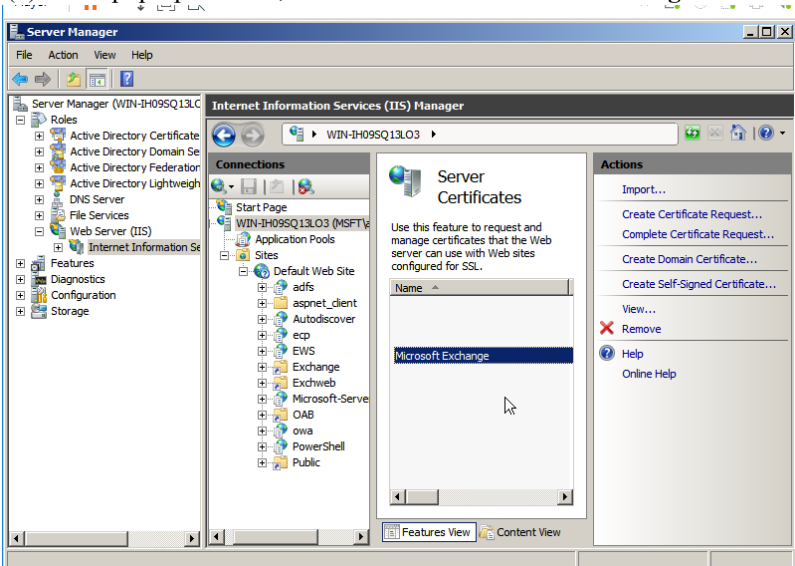
Tunnel adapter isatap.aten.com:
```

- ♦ If you have *different* computer name and certificate name, look up the host name as follows.

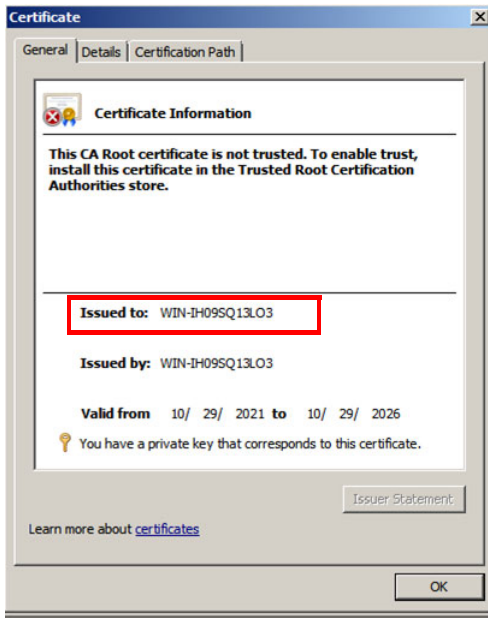
(1) In Server Manager, go to **Roles > Web Server (IIS) > Internet Information Service > computer name**, and double-click on Server Certificates.



(2) In the pop-up window, double-click on Microsoft Exchange.



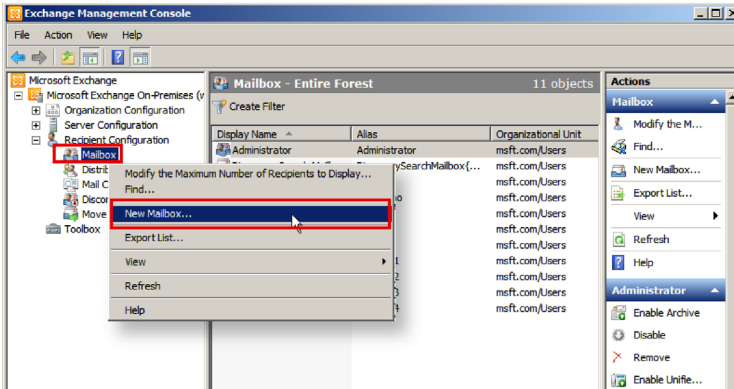
The following screen appears. The host name is indicated under the Issued to field.



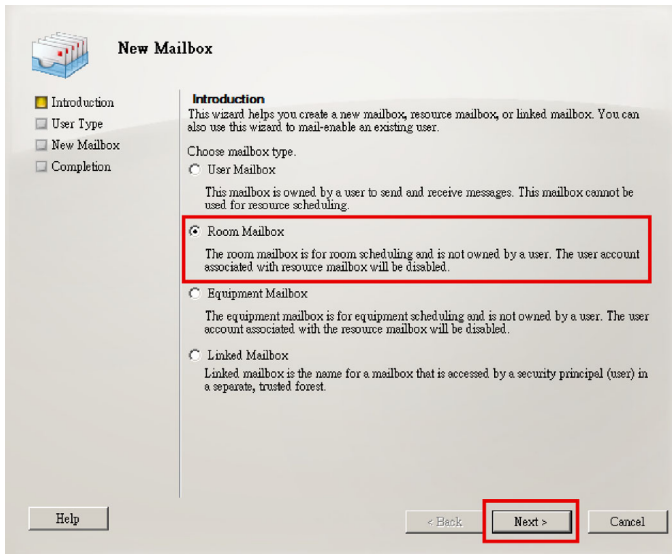
(3) Note down the *host name* to be used later for setting up the calendar server in RBS Configurator.

Creating a Room Mailbox

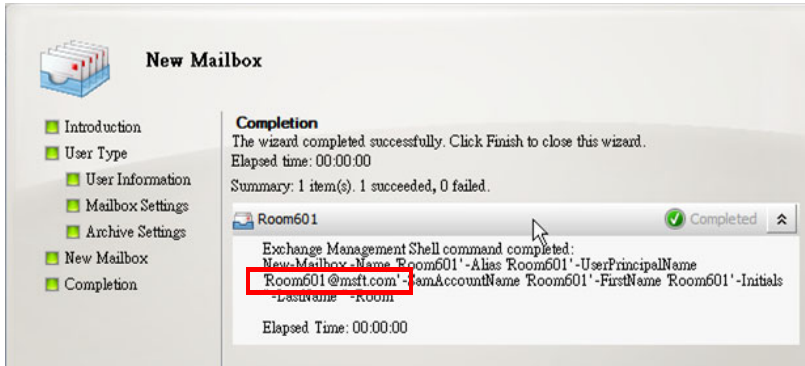
1. In Exchange Management Console, navigate to **Recipient Configuration** > **Mailboxes**, right-click on **Mailboxes** to open the context menu, and select **New Mailbox**.



2. In the pop-up window, select **Room Mailbox** and click **Next**.



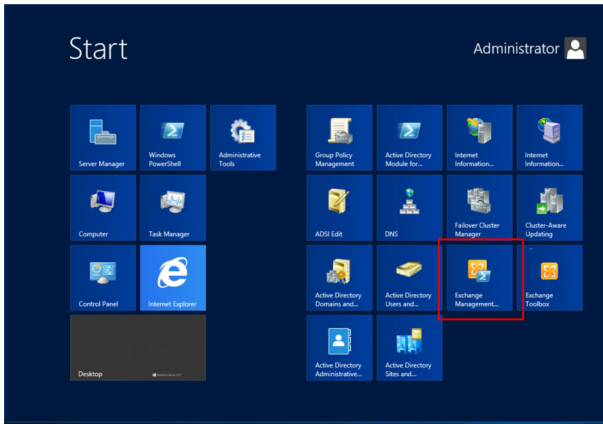
This screen appears. Note down the indicated mailbox address to be used for configuration later.



3. In the mailbox list, right-click on the created mailbox, and click **Properties**.
4. Click the **Resource Policy** tab, click **+Add**, and follow the on-screen instructions to add a delegate.
5. In Server Manager, go to **Roles > Active Directory Domain Services > Active Directory Users and Computers > Domain > Users**.
6. From the listed users, locate and right-click on the room, and then select **Enable Account**.
7. This created mailbox address and password are the resource account credentials for the Room Booking System. Save this information to be used later when configuring RBS panel settings in RBS Configurator.

Adding the Room Mailbox to a Room Distribution Group

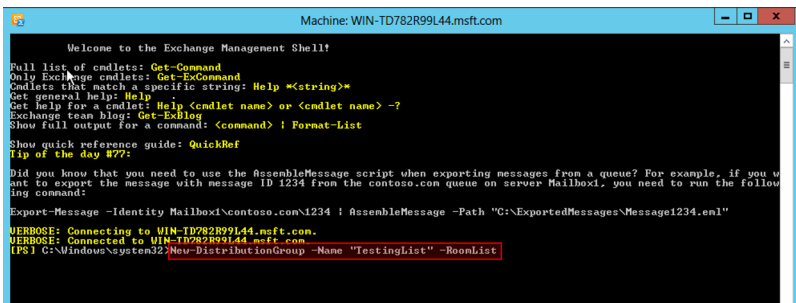
1. Launch the **Exchange Management Shell** from the **Start** menu.



Note: The appearance of the Start menu is different with each Windows version.

2. Use the cmdlet below to create a new distribution group.

`New-DistributionGroup -Name "ROOM LIST" -RoomList`



Note:

- ◆ **Room List** in the cmdlet indicates the name for the room list you are going to create. Please configure your own room list name.
- ◆ Room lists can also used as filters when searching for available rooms using the Suggest Room function on RBS panels, that is, only rooms within the same room list (distribution group) appear are suggested by the Room Booking System. For full setup information, see *Setting Up Room Grouping*, page 86.

3. Enter the cmdlet below to add the room mailbox into the room list:

```
Add-DistributionGroupMember -Identity "ROOM LIST" -Member
ROOM ACCOUNT
```

```
Machine: WIN-TD782R99L44.msft.com

Welcome to the Exchange Management Shell

Full list of cmdlets: Get-Command
Only Exchange cmdlets: Get-ExCommand
Cmdlets that match a specific string: Help *string*
Get general help: Help
Get help for a cmdlet: Help <cmdlet name> or <cmdlet name> -?
Exchange team blog: Get-ExBlog
Show full output for a command: <command> | Format-List

Show quick reference guide: QuickRef
Tip of the day #77:
Did you know that you need to use the AssembleMessage script when exporting messages from a queue? For example, if
you want to export the message with message ID 1234 from the contoso.com queue on server Mailbox1, you need to run the f
ollowing command:
Export-Message -Identity Mailbox1\contoso.com\1234 | AssembleMessage -Path "C:\ExportedMessages\Message1234.en1"

VERBOSE: Connecting to WIN-TD782R99L44.msft.com.
VERBOSE: Connected to WIN-TD782R99L44.msft.com.
[PS] C:\Windows\system32>New-DistributionGroup -Name "TestingList" -RoomList

Name                DisplayName                GroupType                PrimarySmtpAddress
-----                -
TestingList          TestingList                Universal                TestingList@msft.com

[PS] C:\Windows\system32>Add-DistributionGroupMember -Identity "TestingList" -Member Room-B
```

Note:

- ◆ **ROOM LIST** in the cmdlet indicates the name of your room list, and **ROOM ACCOUNT** means the room mailbox to be added to the aforementioned room list.
 - ◆ Repeat this step to add more room mailboxes into the room list.
 - ◆ Each room list can contain up to 100 rooms.
4. To check which room mailbox(es) is in the room list, enter the cmdlet below to get the output list:

```
Get-DistributionGroupMember -Identity "ROOM LIST"
```

```
Machine: WIN-TD782R99L44.msft.com

[PS] C:\Windows\system32>Get-DistributionGroupMember -Identity "TestingList"

Name                RecipientType
-----                -
Room-B              UserMailbox

[PS] C:\Windows\system32>
```

Note: **ROOM LIST** in the cmdlet indicates the name of the room list you are going to check.

You may use the following commands to check the current setup:

- ◆ To see the created distribution groups:

`Get-DistributionGroup`

For example, a list similar to the following appears:

```
PS C:\Users\tiffanywang> Get-DistributionGroup
Name                DisplayName          GroupType PrimarySmtAddress
-----
-NameTW-Room List  -NameTW-Room List  Universal -NameTW-RoomList@rbspm.onmicrosoft.com
-NameTW-RoomList   -NameTW-RoomList   Universal -NameTW-RoomList1@rbspm.onmicrosoft.com
TW-Room20230705040127 TW-Room             Universal TW-Room@rbspm.onmicrosoft.com
TW-RoomList        TW-RoomList         Universal TW-RoomList@rbspm.onmicrosoft.com
```

- ◆ To remove a certain distribution group:

`Remove-DistributionGroup "Meeting Rooms"`

Press [Y] to confirm the change. The distribution group named **Meeting Rooms** will be removed.

- ◆ To see all rooms within a distribution group:

`Get-DistributionGroupMemeber -Identity "TW-RoomList"`

For example:

```
PS C:\Users\tiffanywang> Get-DistributionGroupMember -Identity "TW-RoomList"
Name      RecipientType
-----
TW-Room1  UserMailbox
TW-Room3  UserMailbox
TW-Room2  UserMailbox
```

The rooms in the distribution group named **TW-RoomList** are listed.

- ◆ To remove a certain room account from a distribution group:

`Remove-DistributionGroupMembr -Identity "distributiongroup" -Member Room account`

Press [Y] to confirm the change. The room named **Room account** will be removed.

5. Enter the cmdlet below to give full permission of the rooms to the delegate. Repeat this step for all rooms.

`Add-MailboxPermission -accessRights FullAccess -Identity ROOM NAME -User DELEGATE`


Deciding the Authentication Method

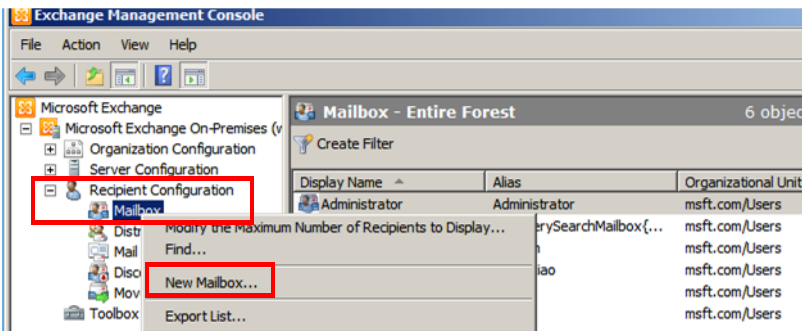
Decide how you wish to authenticate the calendar server, either through account credentials, or to impersonate account rights to the delegate. For a comparison of the pros and cons of the two methods, take a look of the following table.

	Using Account Credentials	Impersonate Account Rights
Pros	Flexible setup on different delegates for different resource accounts	<ul style="list-style-type: none"> ◆ No need to provide the resource account password ◆ Flexible for different network environment
Cons	Resource account password is needed for each room.	Limited number of simultaneous connections to RBS panels

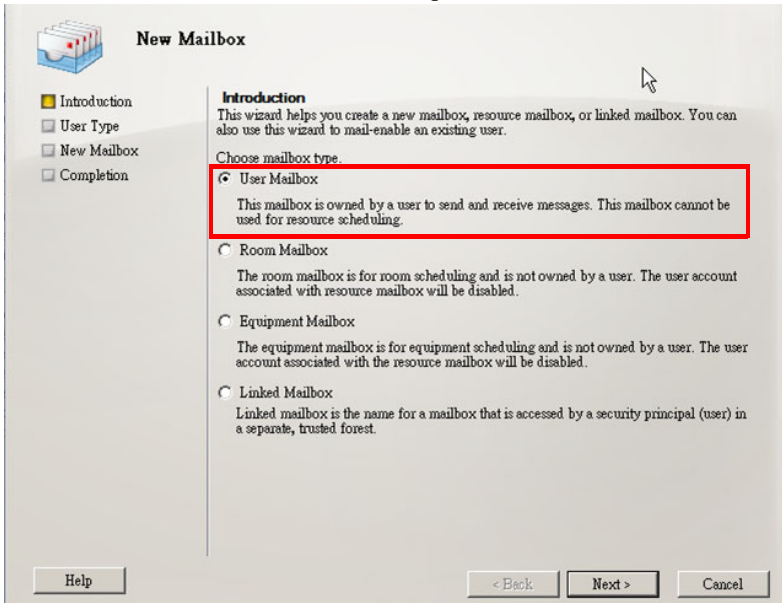
Creating a Delegate Mailbox

To use account credentials for authentication, follow the procedure below to create a delegate mailbox.

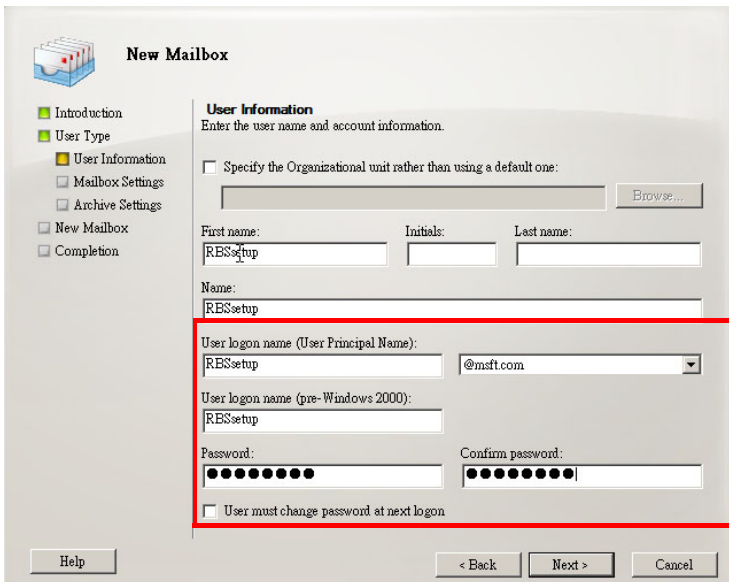
1. Launch Exchange Management Console  from the **Start** menu.
2. Under Recipient Configuration, right-click on **Mailbox** and then select **New Mailbox...**



3. Select **User Mailbox**, and click **Next** to proceed.



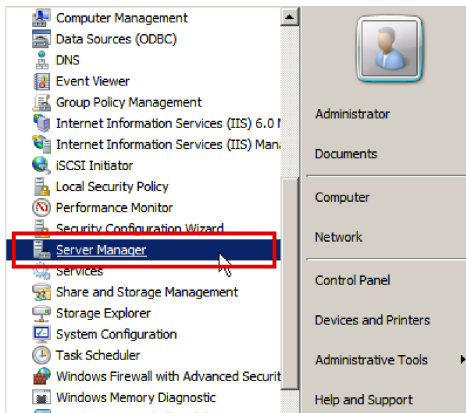
4. In the New Mailbox dialog box, fill in the information as indicated below.
5. Note down the *mailbox address* and the *password* to be used later for setting up the calendar server in RBS Configurator.



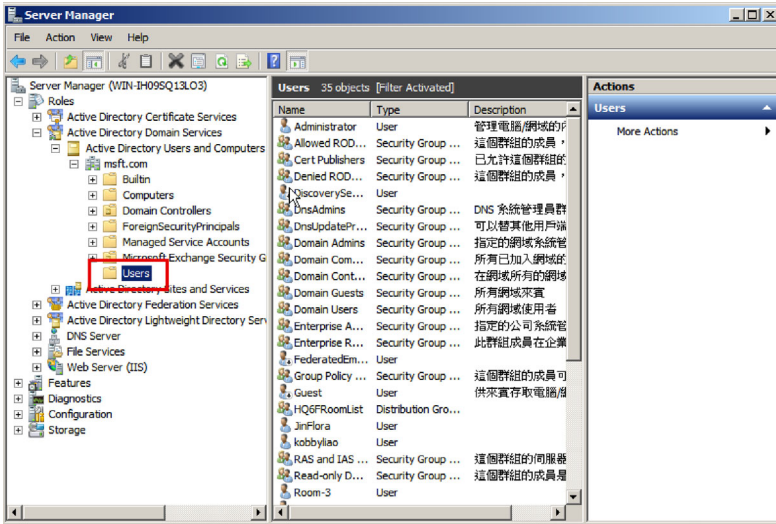
Setting up a Password for the Room Mailbox

If you would like to use account credentials for authentication, follow the procedure below to set up the password for the room mailbox. If you choose to grant account rights, skip this procedure and proceed directly to configure impersonation rights. For a detailed procedure, see *Configuring Impersonation Rights*, page 84.

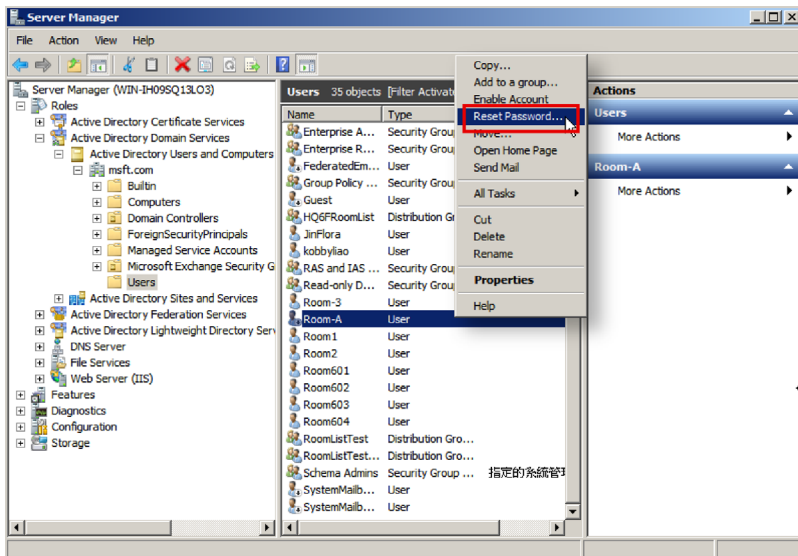
1. Go to the **Start** menu > **All Programs** > **Administrative Tools** > **Server Manager**.



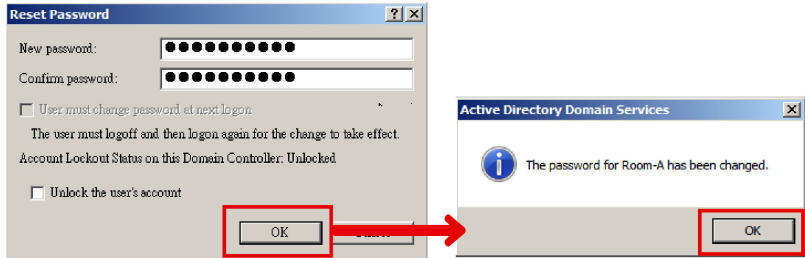
- In **Server Manager**, navigate to **Roles > Active Directory Domain Services > Active Directory Users and Computers > Domain > Users**.



- Scroll to find the room mailbox you just created, right-click on it to open the context menu, and select the option **"Reset Password"**.




4. Enter and confirm the new password, and then click **OK** to reset it.



Note: Note down the new password that will be used for setting your ATEN RBS Configurator Panel Management. See the description about *Calendar Account*, page 104 in the section *Panel Management Options*, page 104.

Configuring Impersonation Rights

1. Launch Exchange Management Console  from the **Start** menu.
2. Use the cmdlet below to create a manage scope.

```
New-ManagementScope -Name "ResourceMailboxes" -  
RecipientRestrictionFilter { RecipientTypeDetails -eq "RoomMailbox"  
-or RecipientTypeDetails -eq "EquipmentMailbox" }
```

Note: `ResourceMailboxes` is an example name for the management scope.

3. Use the cmdlet below to grant impersonation rights.

```
New-ManagementRoleAssignment -Name "ResourceImpersonation" -  
Role ApplicationImpersonation -User delegate@xxxx.com -  
CustomRecipientWriteScope "ResourceMailboxes"
```

Note: `ResourceImpersonation` is an example name for the management role assignment.

4. Execute the cmdlet below to check if impersonation rights are granted successfully.

```
Get-ManagementRoleAssignment -Role "ApplicationImpersonation" -  
GetEffectiveUsers
```

Note: Please make sure that in the Role column the value is ApplicationImpersonation, and in that same row under the EffectiveUsername is the name of delegate account.

Setting Up Microsoft Exchange in ATEN RBS Configurator

Account Settings

1. In RBS Configurator, go to **Calendar Settings > Exchange**. This page appears.

Exchange

Specify the delegated account you created for the resource rooms.

Authentication Method

Host Name

Delegate Account

Delegate Password

Domain

Room Grouping

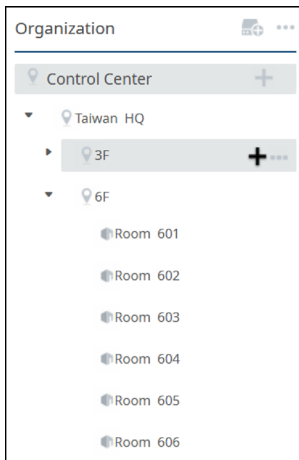
2. Select an authentication method.
3. Configure the following settings.
 - ♦ **Host Name:** Enter the Full Computer Name or Computer Name of your Exchange server. Check the computer name shown on **Server Manager**.
 - ♦ **Delegate Account:** Enter the address of the delegate mailbox that you created.
 - ♦ **Delegate Password:** Enter the password of your delegate account.
 - ♦ **Domain:** If your computer name and certificate name are the same, enter the Domain which can be checked in **Server Manager**. If you have different computer name and certificate name (for Microsoft Exchange 2013, 2016, 2019), or that your exchange server is of version 2010, leave this field blank.

Setting Up Room Grouping

Enable this function to refine the list of available rooms (shows up by tapping Suggest Room on RBS panels) by only showing rooms within a distribution group or domain.

1. Select a room grouping option.
 - a) On RBS Configurator, go to **Calendar Settings > Exchange**.
 - b) Select **Display based on calendar server's settings** or **Display based on Unizon deployment tree's settings**.
 - ◆ **Room Grouping:** Enable this function to refine the list of available rooms (shows up by tapping Suggest Room on RBS panels) by only showing rooms within a distribution group or domain.
 - ◆ **Disable:** This is the default setting.
 - ◆ **Display based on calendar server's settings:** displays available rooms that are in the same distribution group.
 - ◆ **Display based on Unizon deployment tree's settings:** displays available rooms within the third last level and groups these rooms by the locations from the second last level.

For example, the image below illustrates a Unizon deployment tree, the last level being the rooms, the second last are floors, and the third last are the cities. When operating an RBS panel in Taiwan HQ to search for available rooms (using the Suggest Room function), all the available rooms in Taiwan HQ (third last level) will be listed by floor (second last level), and a drop-down list of floors will be available for uses to switch.



2. If you have selected **Display based on Unizon's deployment tree's settings**, go to Unizon and make sure the second and third last levels are clearly named.
3. If you have selected **Display based on calendar server's settings**, no further configuration is required.

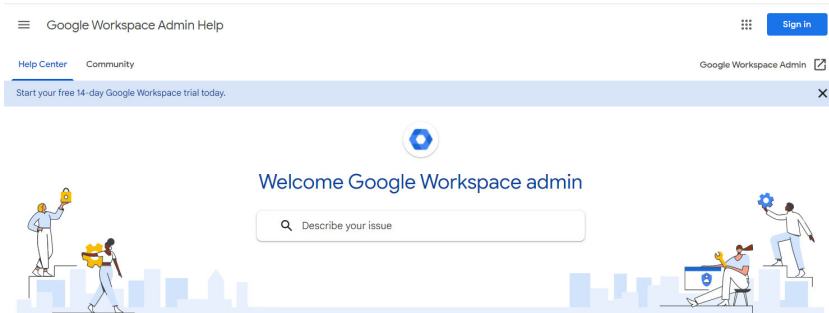
Google Workspace

This section provides guidance on setting up Google Workspace for managing rooms via the ATEN room booking system.

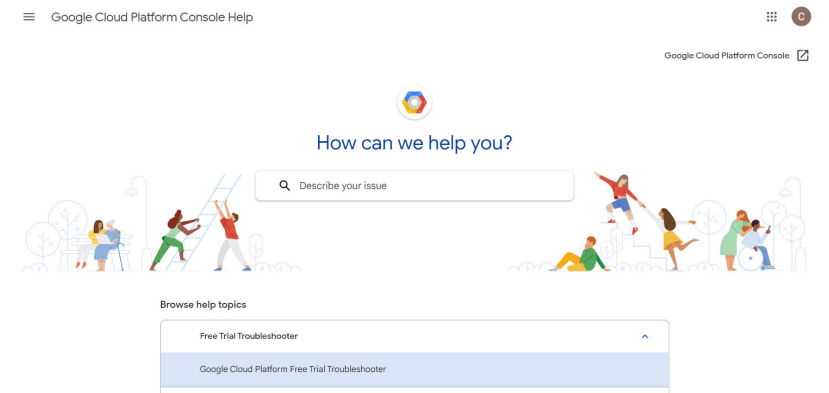
Note:

The information and illustrations in this section are prone to change by the service provider, Google. For full and up-to-date information on Google Workspace, visit the corresponding online help for assistance.

Google Workspace Admin Help



Google Cloud Platform Help

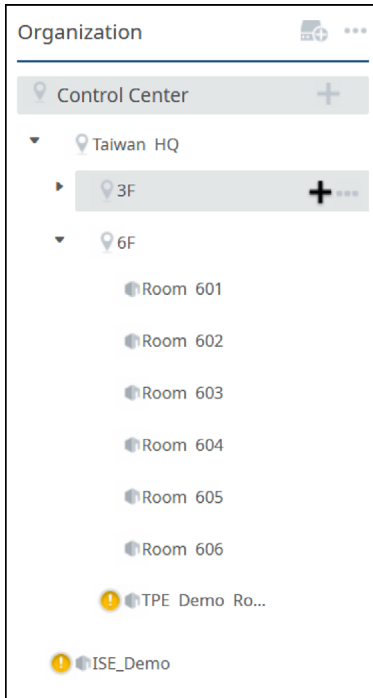


Setting Up Google Workspace for Room Management

1. Configure Google Workspace and the Cloud console.
 - a) On Google Admin console, add rooms and buildings you wish to manage via ATEN room booking system.
For a details, see *Adding Rooms, Buildings, and Users*, page 91.
 - b) Enable Google Calendar API and Admin API.
For details, see *Enabling Google Calendar and Admin API*, page 95.
 - c) Create a service account.
For details, see *Creating a Service Account*, page 97.
 - d) Allow access from third-party applications.
For details, see *Authorizing Access from Third-party Applications*, page 98.
2. Configure the RBS project via RBS Configurator.
 - a) In RBS Configurator, go to **Calendar Settings > Calendar > Google Workspace**.
 - b) Configure the following fields.
 - ◆ **Domain:** type the domain of your admin account.
 - ◆ **Admin Account:** type the admin account (email address) of Google Workspace.
 - ◆ **Project Name:** type the project name you saved from the previous step.
 - ◆ **Service Account:** type the project name you saved from the previous step.
 - ◆ **Room Grouping:** enable this function to refine the list of available rooms (shows up by tapping Suggest Room on RBS panels) by only showing rooms in the same location.
 - **Disable:** This is the default setting.
 - **Display based on calendar server's settings:** displays available rooms that are in the same building and groups these rooms by floor.
 - **Display based on Unizon deployment tree's settings:** displays available rooms within the third last level and groups these rooms by the locations from the second last level.

For example, the image below illustrates a Unizon deployment tree, the last level being the rooms, the second last are floors, and the third

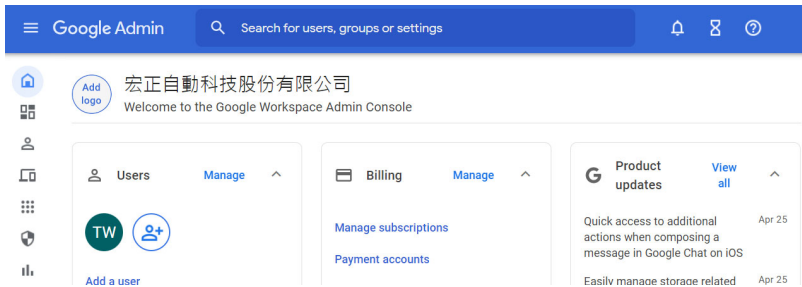
last are the cities. When operating an RBS panel in Taiwan HQ to search for available rooms (using the Suggest Room function), all the available rooms in Taiwan HQ (third last level) will be listed by floor (second last level), and a drop-down list of floors will be available for users to switch.



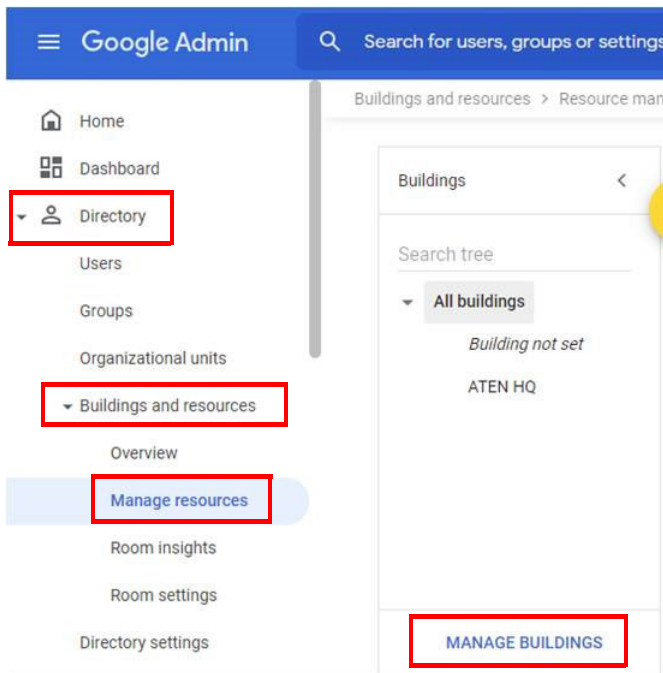
- ◆ **Certification File:** upload the certification file you generated for the service account.
- 3. Upload the project file to RBS panels to apply the setup.
For details, see *Uploading Profiles and Setting Changes to ATEN RBS Panels*, page 107.

Adding Rooms, Buildings, and Users

1. Sign in to Google Admin console via admin.google.com

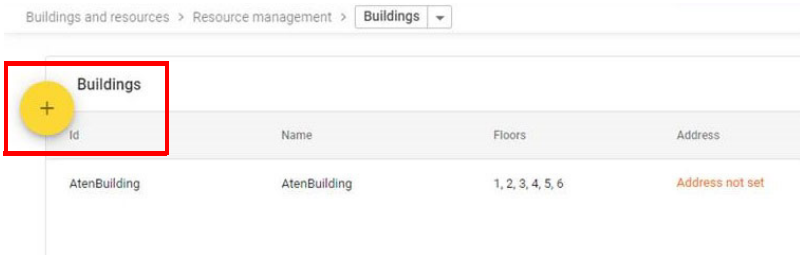


2. (Optional) Add accounts for people who will need to sign in to use Google Workspace services or configure its settings.
3. Add buildings.
 - a) Mouse over to the left to expand the toolbar, and then go to **Directory > Buildings and resources > Manage resources > Manage Buildings**.



- b) Click + to add buildings.

Note: It is important to create buildings because buildings are used as a search filter when searching for available rooms on RBS panels using the Suggest Room function.



c) In the pop-up dialog, enter the required information.

Note: Since floor names are used as search filters when searching for available rooms on RBS panels using the Suggest Room function, be sure to use names that are easy to understand.

Edit building

Id *
 ATEN-HQ

Name *
 ATEN HQ

Description

Floors *
 3F, 4F, 5F, 6F

Address
 No No, No. 125大同路二段智慧里, 汐止區, 新北市, 2
 21, Taiwan

CANCEL UPDATE BUILDING

4. Add rooms.

a) From the drop-down list, select **Resources**, and then click +.

The screenshot shows the Google Admin console interface. The left sidebar contains the 'Directory' menu with 'Manage resources' selected. The main content area is titled 'Buildings and resources > Resource management'. A dropdown menu is open, showing 'Resources' selected. Below this, a table lists resources:

Resources	Building	Flo
Project 1	AtenBuilding	1
Room1	AtenBuilding	3
Room2	AtenBuilding	3
Room3	AtenBuilding	2

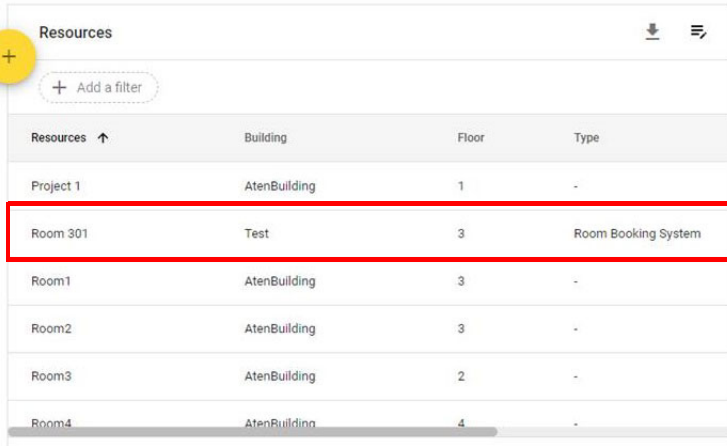
b) In the pop-up dialog box, select **Meeting space** for Category, the correct floor for the resource, and fill in other information as needed.

The 'Add resource' dialog box is shown. The 'Category' dropdown is highlighted with a red box and set to 'Meeting space (room, phone booth,...)'. The 'Type' is 'Room Booking System'. Other fields are filled as follows:

Auto-generated resource name	Test-3-301-Room 301 (5)	
Category *	Meeting space (room, phone booth,...)	
Type	Room Booking System	
Building *	Floor *	Floor section
Test	3	301
Resource name *	Capacity *	
Room 301	5	
Features	Define features first to add them.	
User visible description		

Buttons: CANCEL ADD RESOURCE

c) Click **Add Resource**. The room added to the Resources list.



The screenshot shows a table titled "Resources" with a yellow plus sign in a circle on the left and a download icon and menu icon on the right. Below the title is a search bar with a plus sign and the text "Add a filter". The table has four columns: "Resources", "Building", "Floor", and "Type". The rows are: "Project 1" (AtenBuilding, 1, -), "Room 301" (Test, 3, Room Booking System), "Room1" (AtenBuilding, 3, -), "Room2" (AtenBuilding, 3, -), "Room3" (AtenBuilding, 2, -), and "Room4" (AtenBuilding, 4, -). The "Room 301" row is highlighted with a red border.

Resources ↑	Building	Floor	Type
Project 1	AtenBuilding	1	-
Room 301	Test	3	Room Booking System
Room1	AtenBuilding	3	-
Room2	AtenBuilding	3	-
Room3	AtenBuilding	2	-
Room4	AtenBuilding	4	-

5. Save the resource email of each added meeting space.

a) Go to the Resources list and click an added meeting space.

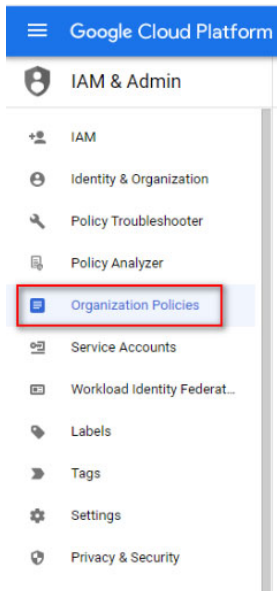
b) Copy and paste the resource email to a notepad to be used in RBS Configurator.

Enabling Google Calendar and Admin API

1. Sign in to Google Cloud console using administrator credentials.
2. Create a new project.
 - a) If you have pre-existing projects, click the **Select from** drop-down list, select an organization and click **NEW PROJECT**.



- b) If no project has not been created, go to **Organization Policies**, and then click **Add Project**.



c) Configure the project details.

Project name *
CalendarTestv2

Project ID: utopian-bonito-301402. After the project ID is set, it cannot be changed.
[EDIT](#)

mechanism *
gtest.aten.com.tw

Please select an organization to link to the project. Remind you that once the organization is selected, it cannot be changed.

position *
gtest.aten.com.tw [BROWSE](#)

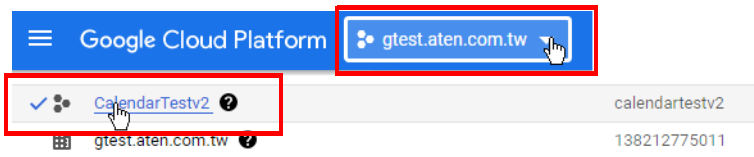
Parent organization or folder

[SFT UP](#) [CANCEL](#)

d) Copy and paste the project name to a notepad for later use in the RBS Configurator.

3. Add the required APIs.

a) Select an organization and a project.



b) Go to **APIs and services > ENABLE APIs AND SERVICES**.

c) In the API Library window, search for and enable **Google Calendar API**.

d) In the API Library window, search for and enable **Admin SDK API**.

Creating a Service Account

1. On Google Cloud console, create a service account.
 - a) From the IAM and management list, go to **Service Accounts** > + **CREATE SERVICE ACCOUNT**.
 - b) Configure the service account. For role, select **Owner**. For example:

1 Service account details

Service account name

The display name of this service account

Service account ID @calendarstestv2.iam.gserviceaccount.com X ↺

Service account description

Please describe the purpose of this service account

SET UP

2 Grant project access to this service account (Optional)


Grant the "CalendarTestv2" access right to this service account so that the service account has the authority to perform specific actions on the resources in the project. [Learn more](#)

Please choose a role

Type to filter

Project	Access Context Ma...	owner	Viewer
		owner	Viewer

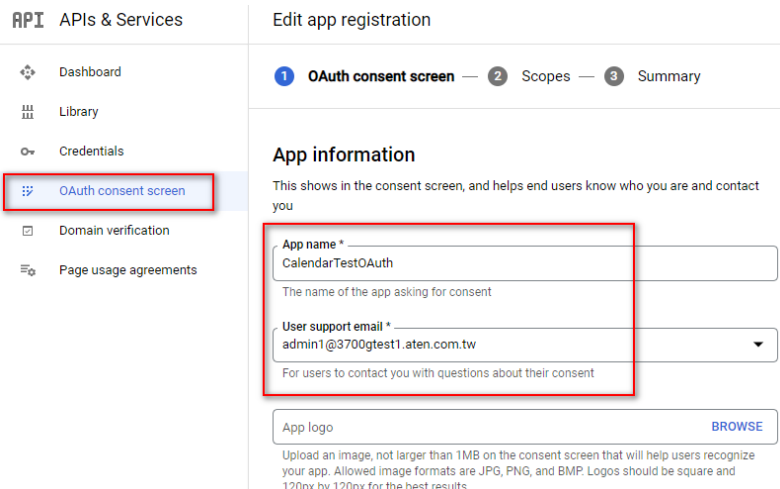
owner
Full access to all resources.

2. Generate a certificate key for the service account.
 - a) From the service accounts list, click the settings  button of the newly created service account, and click **Manage keys**.
 - b) From the Add Key drop-down list, select **Create new key**.
 - c) In the pop-up screen, select **JSON** as the key format, and click **CREATE**. The key is created and automatically downloaded to the computer.

- d) Know where the key is saved in the computer, you will need to upload the key to RBS Configurator later.

Authorizing Access from Third-party Applications

1. Set up Google Workspace Marketplace OAuth client.
 - a) Open the console left side menu and go to **APIs & Services > OAuth consent screen**.
 - b) For user type, select **Internal** and click **CREATE**.
 - c) Configure the OAuth consent.

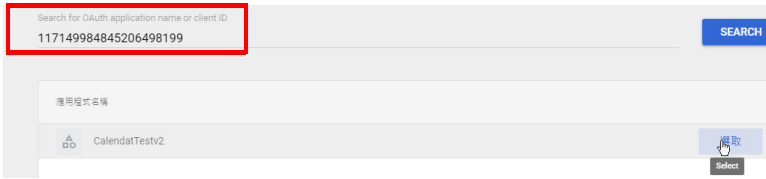


- d) From the service accounts list, click **View client ID**.
- e) Copy the client ID.

Client ID	117149984845206498199
Service account	CalendarService calendarservice@calendartestv2.iam.gserviceaccount.com
Creation date	January 12, 2021

2. Enable third-party application access.
 - a) Sign in to Google Admin console via admin.google.com
 - b) Go to **Security > Access and Data Control > API Controls > MANAGE ACCESS TO THIRD-PARTY APPLICATIONS**.

- c) Click **Add app** and then select **OAuth app**.
- d) Search for the client ID of the service account which you have obtained when setting up the service account. For example:



- e) Select **Trust** from the pop-up dialog.
3. Enable domain-wide delegation.
 - a) Go to **Security > Access and Data Control > API Controls > MANAGE DOMAIN-WIDE DELEGATION SETTINGS**.
 - b) For API client, click **Add New**.
 - c) In the pop-up screen, configure the following fields.
 - ◆ Client ID: paste the ID you copied in step 8.
 - ◆ Scope: fill in the following URLs separated by half-spaced commas
 - <https://www.googleapis.com/auth/calendar.events>
 - <https://www.googleapis.com/auth/calendar>
 - <https://www.googleapis.com/auth/admin.directory.user>
 - <https://www.googleapis.com/auth/admin.directory.group>
 - <https://www.googleapis.com/auth/admin.directory.resource.calendar>

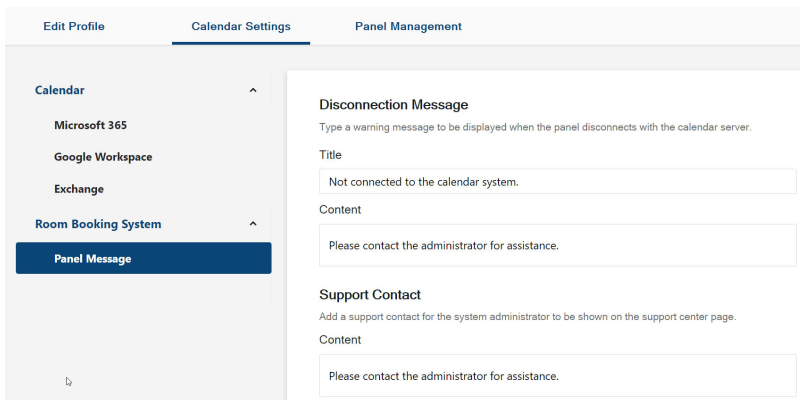
Panel Message

The *Panel Message* settings allow users to define the disconnection message to be displayed on the RBS Panels managed when they are not connected to the calendar server, as well as the contact info to be displayed on the RBS Panels' settings page.

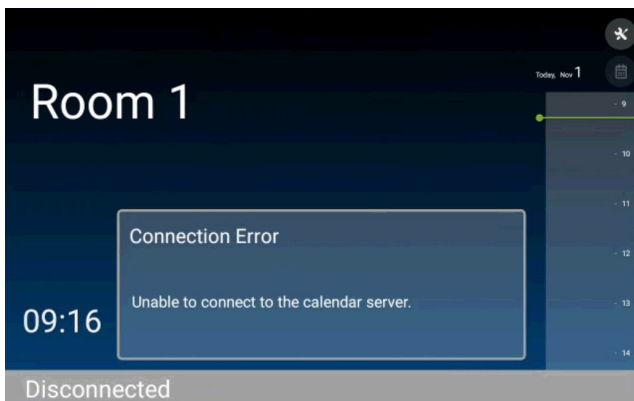
To access the Panel Message settings, select **Calendar Settings > Panel Message** on your RBS Configurator.

Disconnection Message

Define the title and content of the disconnection message, as exemplified below.



Once applied, the message will be displayed on the RBS Panels when they are not connected to the calendar server.



Support Contact

Define the contact info, for support or assistance, to be displayed on the RBS Panels' settings page, as exemplified below.

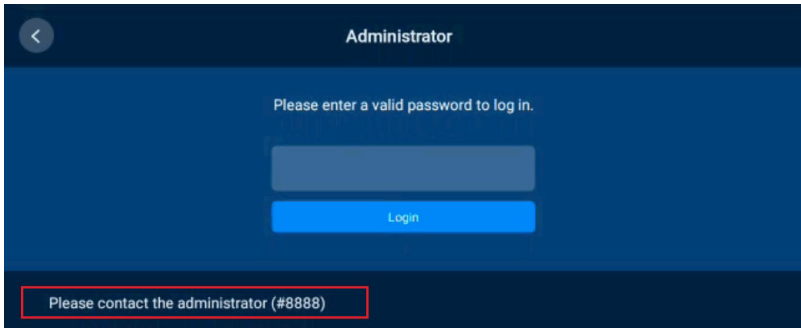
Support Contact

Add a support contact for the system administrator to be shown on the support center page.

Content

Please contact the administrator (#8888)

Once applied, the contact info is displayed on the RBS Panels' settings page.



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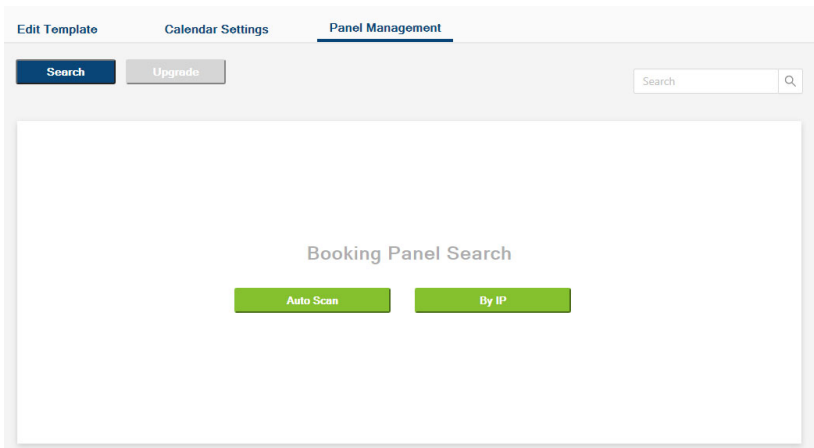
Chapter 5

Panel Management

The **Panel Management** tab, in ATEN RBS Configurator, allows you to upload setting profiles to and configure the ATEN RBS Panels managed.

RBS Panel Search

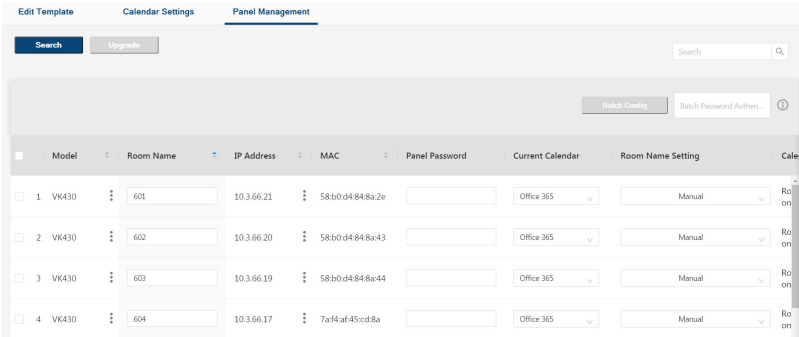
To start, you can search for the RBS Panels you want to manage by 1 of the 2 following methods:






- ◆ **Auto Scan:** Automatically searches for all RBS Panels within the same subnet.
- ◆ **By IP:** Searches for RBS Panels within the LAN by entering an IP range or a specific IP address.


Panel Management Options

After at least 1 RBS Panel has been found by the RBS Configurator, its related information and configuration options are displayed, as exemplified below.



Item	Description
Model	Displays the model of the RBS Panel. ◆ Click  to optionally reset the RBS app to default settings.
Room Name	Displays and defines the name of the meeting room managed.
IP Address	Displays the IP address of the RBS Panel. ◆ Click  to optionally adjust the network settings of the RBS Panel.
MAC	Displays the MAC address of the RBS Panel.
Panel Password	Type the password of the RBS Panel for the required authentication prior to uploading setting changes to the RBS Panel. (default password: <i>password</i>)
Current Calendar	Displays the calendar server currently used to manage the RBS Panel.
Room Name Setting	Selects how the RBS Panel is named, either manually or synchronized from the calendar server.
Calendar Account	Displays or assigns the calendar server resource account used to manage the RBS Panel. Click  to re-assign the sever resource account. Note: Make sure that all RBS Panels installed in the same Unizon room use the same resource account for their managing calendar server.

Item	Description
Calendar Connection	Displays the connection status of the panel to the selected calendar server.
Profile	Displays or uploads the setting profile used by or to the RBS Panel.
Identity Checkup	<p>Displays or changes the identity checkup method for room check-in.</p> <ul style="list-style-type: none"> ◆ None: No identity checkup is needed to check in the room. ◆ PIN: A PIN is required (via the RBS panel) to check in the room. ◆ Scan: A valid access card is required to check in the room. ◆ Scan + PIN: Both a valid access card and a PIN are needed to check in the room.
Sign-on Confirmation	<ul style="list-style-type: none"> ◆ This function is only available when the identity checkup setting (see above) is enabled. ◆ Displays or disables/enables the sign-on confirmation setting. Sign-on confirmation is a post-meeting, system generated attendance record (e-mail) sent to meeting attendees who have signed on (with the required identity checkup action). A sign-on confirmation contains a list of attendees' names, e-mail addresses, and the check-in time.
Allow Check-in From	<ul style="list-style-type: none"> ◆ This function is only available when identity checkup is enabled. ◆ Displays or configures the privilege for room check-in. <ul style="list-style-type: none"> ◆ meeting host: The person who sends the meeting invite has privilege to check in the room. ◆ meeting host & invitees: The person who sends the meeting invite and the people who receive the invite have privilege to check in the room. ◆ anyone with entry privilege to the room: The people that are added as a group have privilege to check in the room, configured through ATEN Unizon. For more information, see <i>ATEN Unizon User Manual</i>.
Volume	Displays or adjusts the volume setting of the RBS Panel.
Brightness	Displays or adjusts the brightness of the RBS Panel.
Language	Displays or adjusts the language setting of the RBS Panel.
Time Zone	Displays or adjusts the time zone of the RBS Panel.

Item	Description
FW / APP Version	Respectively displays the firmware and app version of the RBS Panel.
Change Password	Click  to change the password of the RBS Panel.
Automation	Provides access to start a reboot or sets scheduled reboots of the RBS panel.
Last Update	Displays the time at which the RBS Panel was last updated.

Uploading Profiles and Setting Changes to ATEN RBS Panels

Users can upload profiles and/or setting changes to any RBS Panel managed by doing the following:

1. First, check the RBS Panels to which you want to upload profiles and/or setting changes.

<input type="checkbox"/>	Model	Room Name	IP Address
<input checked="" type="checkbox"/>	1 VK430	601 Conference Room	10.3.66.21
<input type="checkbox"/>	2 VK430	602 Conference Room	10.3.66.20
<input checked="" type="checkbox"/>	3 VK430	605 Conference Room	10.3.66.18

2. To upload profiles, select the desired profile(s) from the drop-down list in the **Profile** column, as illustrated below.

Profile

Keep Original

Keep Original

ATEN Classic

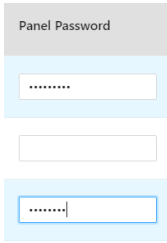
Profile A

Keep Original

Note: Select **Keep Original** only when you don't want to replace the RBS Panel's current profile with another.

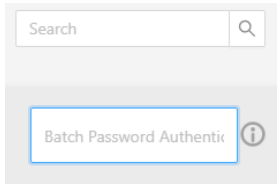
3. Make all of the setting changes you want to apply to the RBS Panels selected.

4. Type the login passwords of the RBS Panels selected in the **Panel Password** column, as illustrated below.



A screenshot of a web form. At the top, there is a grey header box labeled "Panel Password". Below it is a white input field with a light blue border containing seven dots. Underneath that is another empty white input field. At the bottom is a third white input field with a light blue border containing seven dots and a vertical cursor on the right side.

Note: If the RBS Panels to which you want to upload profiles and/or setting changes share the same panel password, you can simply type that common password in the Batch Password Authentication field instead of having to type the same password repeatedly.



A screenshot of a web interface. At the top is a search bar with the text "Search" and a magnifying glass icon. Below it is a larger grey box containing a white input field with the text "Batch Password Authentic" and an information icon (i) to its right.

5. Click **Upload**.

Batch Configure

The *Batch Config* function allows you to upload the same profile or same setting changes to multiple RBS Panels all at once, instead of having to make the same setting changes individually and repeatedly.

1. First, check the RBS Panels to which you want to batch configure.

<input type="checkbox"/>	Model	Room Name	IP Address
<input checked="" type="checkbox"/>	1 VK430	601 Conference Room	10.3.66.21
<input type="checkbox"/>	2 VK430	602 Conference Room	10.3.66.20
<input checked="" type="checkbox"/>	3 VK430	605 Conference Room	10.3.66.18

2. Type the login passwords of the RBS Panels selected in the **Panel Password** column, as illustrated below.

Panel Password

.....

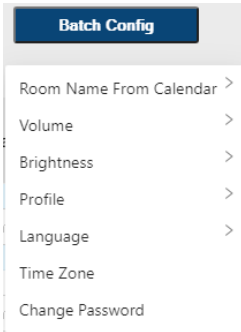
.....|

Note: If the RBS Panels to which you want to upload profiles and/or setting changes share the same panel password, you can simply type that common password in the **Batch Password Authentication** field instead of having to type the same password repeatedly.

Search 🔍

Batch Password Authentic ℹ️

3. Select the same setting changes and/or profile you want to apply to the RBS Panels selected in **Batch Config**.



4. After all of the desired setting changes have been made, click **Upload** for them to be applied to the RBS Panels selected.

Upgrading the RBS Panel Firmware

To upgrade the RBS panel firmware, follow the steps below.

Note: Make sure that the RBS panel receives adequate power supply (DC12V,17.8W, 60.70BTU or PoE 20W, 68.24BTU). With inadequate power supply, processes such as firmware upgrades and app updates may fail.

1. Download the firmware package from the VK430 product page.
2. Unzip the downloaded firmware package.
3. Upgrade using a USB drive or through the RBS Configurator.

◆ **Using a USB drive**

(a) In the unzipped package, locate the *update.zip* file in the SD_Upgrade folder and save it to the root directory of a USB drive, e.g. E:/.

(b) Insert the USB drive to the USB Type-A port of the RBS Panel.

(c) Press the **Function** button to access the **Settings** page.

(d) Tap **System > System Updates**.

(e) Follow the on-screen instructions to upgrade the firmware.

◆ **Via RBS Configurator**

(a) In RBS Configurator, go to **Panel Management** and select the RBS Panels for which you want to upgrade firmware.

<input type="checkbox"/>	Model	Room Name	IP Address
<input checked="" type="checkbox"/>	1 VK430	601 Conference Room	10.3.66.21
<input type="checkbox"/>	2 VK430	602 Conference Room	10.3.66.20
<input checked="" type="checkbox"/>	3 VK430	605 Conference Room	10.3.66.18
<input type="checkbox"/>	4 VK430	603 Conference Room	10.3.66.19

(b) Type the login passwords of the selected RBS Panels in the Panel Password column, as illustrated below.

Panel Password

.....

.....|

Note: If the RBS Panels share the same panel password, you can simply type that common password in the **Batch Password Authentication** field instead of having to type the same password repeatedly.

Search

Batch Password Authentication

(d) Click **Upgrade**, select **FW Upgrade** and browse for the firmware file, *update.zip*.

(e) Click **Upgrade** to finish.

Updating the RBS Panel App

To update RBS panel app, follow the steps below.

Note: Make sure that the RBS panel receives adequate power supply (DC12V,17.8W, 60.70BTU or PoE 20W, 68.24BTU). With inadequate power supply, processes such as firmware upgrades and app updates may fail.

1. Download the RBS app package from the VK430 product page.
2. Unzip the downloaded package.
3. In RBS Configurator, go to **Panel Management** and select the RBS Panels for which you want to update the app.

<input type="checkbox"/>	Model	Room Name	IP Address
<input checked="" type="checkbox"/>	1 VK430	601 Conference Room	10.3.66.21
<input type="checkbox"/>	2 VK430	602 Conference Room	10.3.66.20

4. Type the login passwords of the RBS Panels selected in the Panel Password column, as illustrated below.

Panel Password

.....

.....|

Note: If the RBS Panels share the same panel password, you can simply type that common password in the **Batch Password Authentication** field instead of having to type the same password repeatedly.

Search

Batch Password Authentir

5. Click **Upgrade**, select **App Upgrade**, and browse for the app file, *RoomBookingSystem_V.x.x.xxx.apk*.
6. Click **Upgrade** to finish.

Chapter 6

Panel Password


This chapter guides you through how to define and change the passwords of your ATEN RBS Panels.

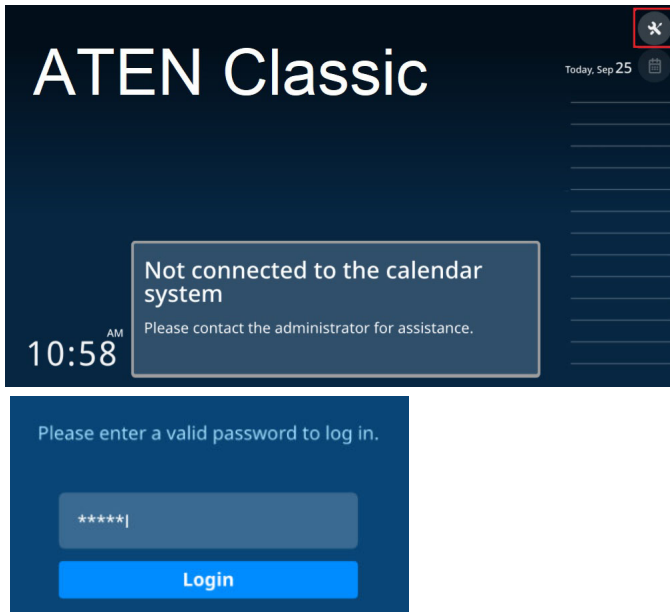
You can define your RBS Panels' passwords using one of the following methods:

- ◆ Defining the passwords directly on the RBS Panels, see page 115.
- ◆ Changing the passwords of multiple RBS Panels simultaneously, see page 116.

Defining Passwords Directly on the Panels

To start, make sure the RBS Panel is connected to the network and turned on.

1. From its main page, tap . The login page appears.



2. Log into the RBS Panel by entering its password and tapping **Login**.


Note: For first-time login, use the default password *password* to log in, and you're required to change the password.

3. Once logged in, you can change the panel's password by tapping **Change Password** and following the on-screen instructions.
4. Tap **Save** to finish.

Changing the Passwords of RBS Panels

You can change the password of one RBS panel or multiples by batch.

Changing the Password of One RBS Panel via the Panel

1. On the main page of the RBS panel, tap . The General settings page appears.
2. Tap **Password** on the left to change the password.
3. Clive **Save** to apply the change.

Changing the Passwords of Multiple RBS Panels by Batch

To start, make sure all of the RBS Panels to be configured are connected within the same network as your ATEN RBS Configurator and turned on.

1. On your RBS Configurator, go to the **Panel Management** tab and search for the RBS Panels you want to change passwords for by 1 of the 2 following methods.
 - ♦ **Auto Scan:** Automatically searches for all RBS Panels within the same subnet.
 - ♦ **By IP:** Searches for RBS Panels within the LAN by entering an IP range or a specific IP address.

2. Check the RBS Panels for which you want to change passwords.

<input type="checkbox"/>	Model	Room Name	IP Address
<input checked="" type="checkbox"/>	1 VK430	601 Conference Room	10.3.66.21
<input type="checkbox"/>	2 VK430	602 Conference Room	10.3.66.20
<input checked="" type="checkbox"/>	3 VK430	605 Conference Room	10.3.66.18

3. Type the login passwords of the RBS Panels selected in the **Panel Password** column, as illustrated below.


Panel Password

.....

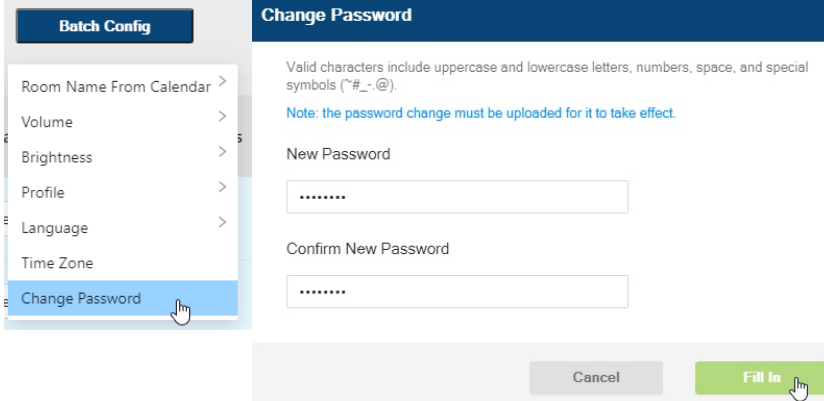
.....|

Note: If the RBS Panels to which you want to upload profiles and/or setting changes share the same panel password, you can simply type that common password in the **Batch Password Authentication** field instead of having to type the same password repeatedly.

Search

Batch Password Authentik 

4. Click **Batch Config** > **Change Password**, set a password, and click **Fill in**



Click **Upload** to apply the password change to the RBS Panels selected.

Chapter 7

Panel Operation

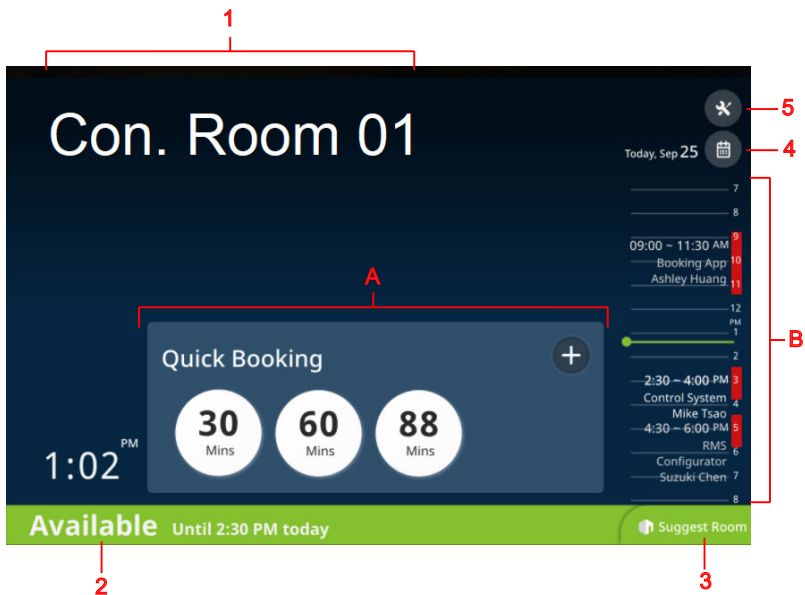
This chapter guides you through the operations that can be done on ATEN RBS Panels, including booking or checking into rooms.

Note:


- ◆ Before operating any of your RBS Panels, make sure the necessary configurations and profiles have been uploaded and applied to them.
- ◆ In highly humid environment, it is advised that you keep the touch panel powered on and in operation to prevent fogging inside the touch panel.

Panel Main Page

The components of the RBS Panel's main page are described below:



Note: To customize the display style of your RBS Panels, or add a brand / logo or background image via RBS Configurator, see *GUI Design*, page 26.

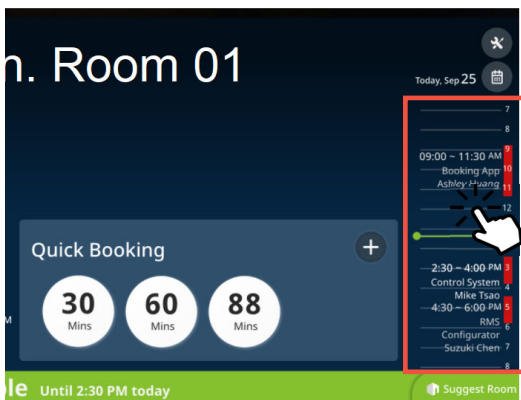
No.	Item	Description	
A	Quick Booking / Check-in	Provides varying functions based on the current status of the conference room: <i>Available</i> , <i>Reserved</i> , or <i>Occupied</i> .	
		Available	<ul style="list-style-type: none"> ◆ Quick Booking: Lets users start or schedule a meeting using the conference room through one of the following options: <ul style="list-style-type: none"> ◆ 30 / 60 / 90 / X: Immediately starts a meeting for 30 / 60 / 90 / X minutes, where X is the number of minutes the room is available for until the next scheduled meeting or the end of the working hour. <p>Note: Since the maximum duration allowed for each booking is 120 minutes, X can only be 120 minutes at most.</p> ◆  : Tap to schedule a meeting. See <i>Booking a Room</i>, page 123, for details.
		Reserved	<ul style="list-style-type: none"> ◆ Check In: During a meeting's scheduled time, lets users to check in to the room and start the meeting. ◆ Release: During a meeting's scheduled time, lets users to cancel it and release the room for others to use. ◆ Meeting information: Tap the information icon at the top-right corner to see meeting details or remove the meeting record from the system by tapping the Delete Meeting button. This button only appears if the meeting was booked from the panel.
Occupied	<ul style="list-style-type: none"> ◆ Check Out: During an ongoing meeting, lets users to check out of the room and end the meeting. ◆ Extend: During an ongoing meeting, lets users to extend the meeting time if the conference room is available for further use. ◆ Meeting information: Tap the information icon at the top-right corner to see meeting details or remove the meeting record from the system by tapping the Delete Meeting button. This button only appears if the meeting was booked from the panel. 		
B	Today's Scheduled Meetings	Displays all meetings the conference room has scheduled during the day.	

No.	Item	Description
1	Room Display Name	Displays the name of the conference room.
2	Room Status	Displays the status of the conference room. <ul style="list-style-type: none"> ◆ Available: Indicates the room is available for use. ◆ Reserved: Indicates the room is reserved for a meeting, but not yet checked into. ◆ Occupied: Indicates the room is currently hosting an ongoing meeting.
3	Suggest Room	Suggests conference rooms currently available for hosting a meeting. See <i>Using the Suggest Room Function</i> , page 124, for details.
4	Other Dates	Displays all meetings scheduled within the Room Booking System, see <i>Viewing Meeting Schedule</i> , page 121.
5	Settings	Accesses administrator settings, see <i>Administrator Settings</i> , page 127.


Viewing Meeting Schedule

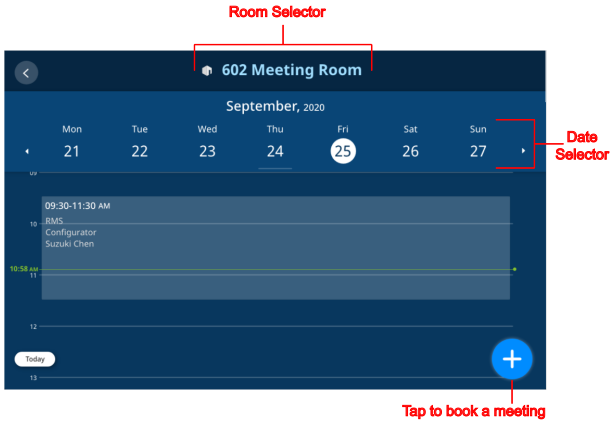
Today's Scheduled Meetings

To view meetings scheduled throughout the day, simply tap and drag on the ATEN RBS Panel's *Daily Schedule Area*.




Meetings Scheduled on Other Dates / for Other Rooms

To view meeting schedules for other dates or for other conference rooms, tap the calendar icon . The following page appears.






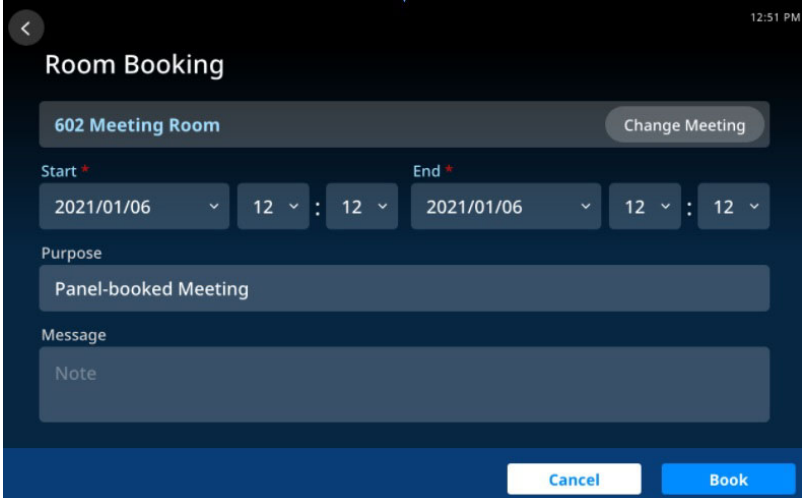
Select the desired conference room and date to view the corresponding meeting schedule.

To book a room and schedule a meeting, tap  and see *Booking a Room*, page 123 for details.

Booking a Room

Using the Calendar

To book a room and schedule a meeting, tap  from an RBS panel's main page, and then tap  or  from the pop-up page. The following page appears.



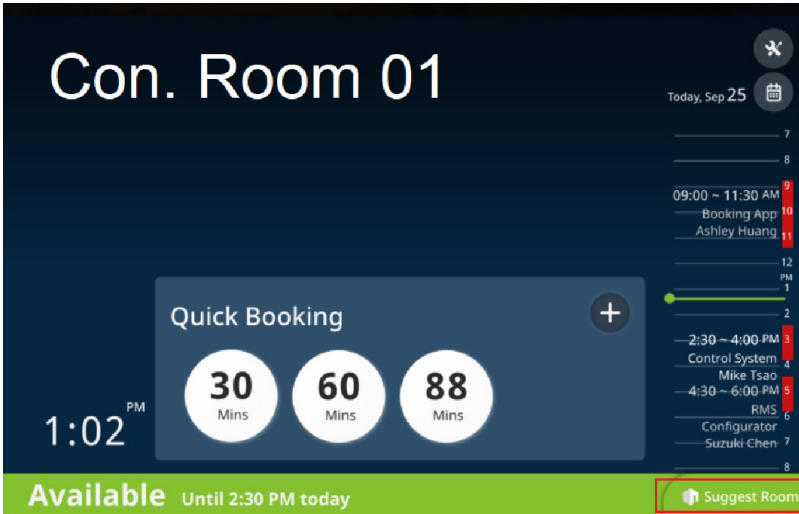
The screenshot shows a 'Room Booking' dialog box. At the top left is a back arrow, and at the top right is the time '12:51 PM'. The title 'Room Booking' is centered. Below the title is a text field containing '602 Meeting Room' and a 'Change Meeting' button. The 'Start' and 'End' fields are marked with an asterisk. The 'Start' field shows '2021/01/06' with a dropdown arrow, followed by '12' and a dropdown arrow, then a colon, '12', and a dropdown arrow. The 'End' field shows '2021/01/06' with a dropdown arrow, followed by '12' and a dropdown arrow, then a colon, '12', and a dropdown arrow. Below the time fields is a 'Purpose' field with the text 'Panel-booked Meeting'. Below that is a 'Message' field with the placeholder text 'Note'. At the bottom are two buttons: 'Cancel' and 'Book'.

1. Select the desired conference room.
2. Specify the meeting's start and end times.
3. Fill in other desired fields.
4. Tap **Book** to finish.

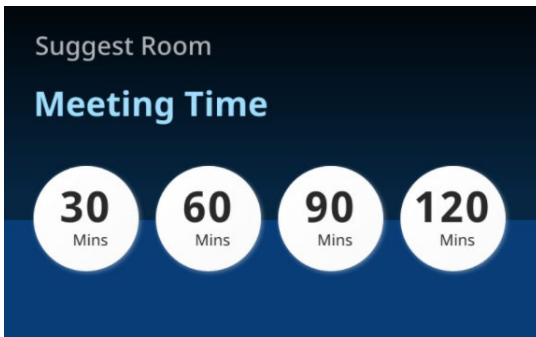
Using the Suggest Room Function

The *Suggest Room* function suggests conference rooms, currently available for use within the Room Booking System, to users for convenient meeting hosting.

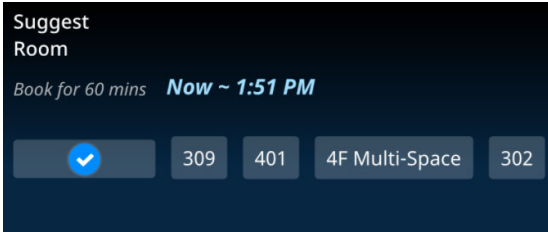
1. From the main page of a RBS Panel, tap **Suggest Room**.



2. Select the desired meeting time.



- Based on your meeting time, the Room Booking System displays the conference rooms that are currently available for use, as exemplified below.

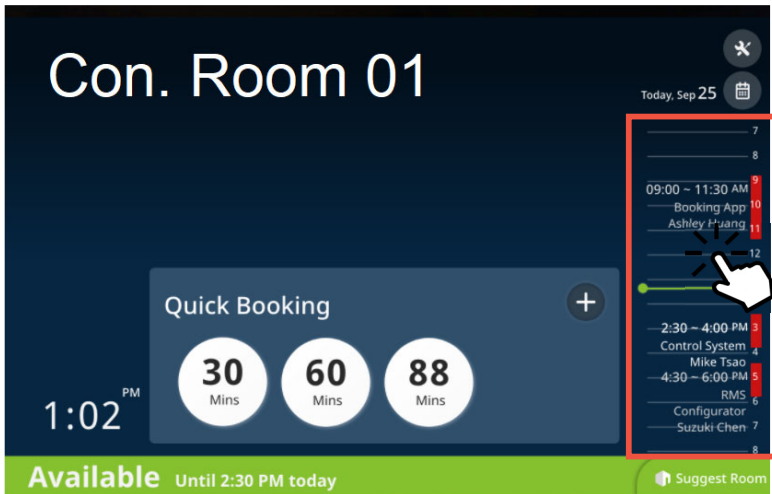


- Select the desired room to finish. The conference room selected is now hosting a meeting for the time specified. You can now go to that conference and check in to start your meeting.

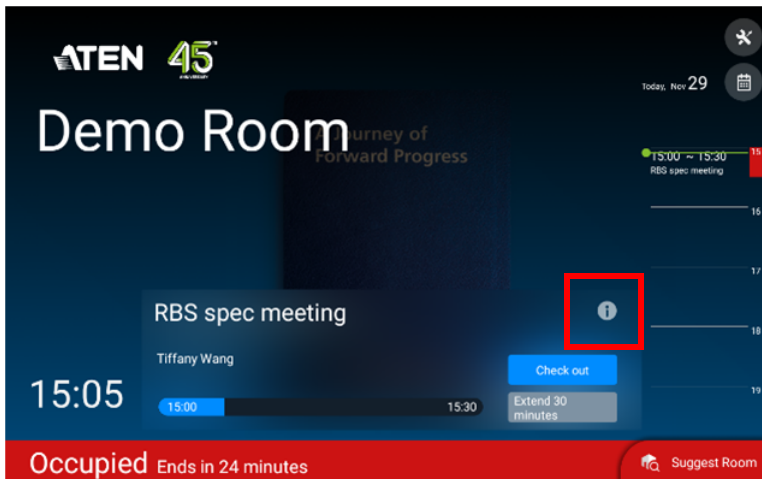
Canceling a Reservation

If a room has been booked from an RBS panel, you can cancel the reservation from the panel.

1. Tap the meeting from the list of scheduled meetings.




Or tap the information icon from the check-in panel:



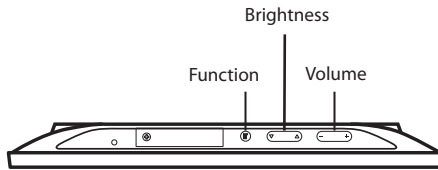
2. Tap the **Delete Meeting** icon and then tap **OK** to cancel the meeting.

Administrator Settings

The *Settings* page of RBS Panels contains its network and password settings. To access, tap  from the RBS Panel's main page and enter the required password.


Enabling / Disabling Access to Basic Panel Settings

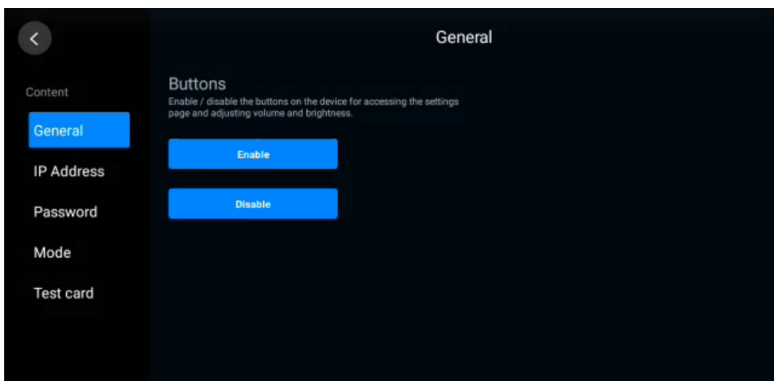
To prevent alteration of basic panel settings, such as volume, display settings, network configuration, and password setup, you can disable the Brightness, Volume, and Function buttons, as illustrated below.



RBS Panel Top View

To disable the Function, Brightness, and Volume buttons, follow the steps below.

1. From the RBS panel, tap .
2. Log in with valid credentials. This screen appears.

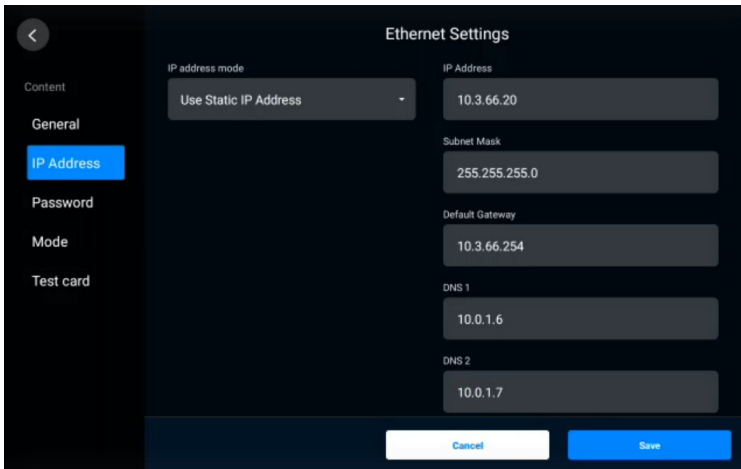


3. Tap **Disable**. A confirmation message appears.
4. Tap **Yes** to confirm the setting and restart the device.

Configuring Network Settings

To configure the IP address of an RBS panel to a dynamic or fixed IP address, follow the steps below to access the settings.


1. From the main page of the RBS panel, tap .
2. Log in with valid credentials. This settings page appears.
3. Tap **IP Address** from the left sidebar. The Ethernet Settings page appears.

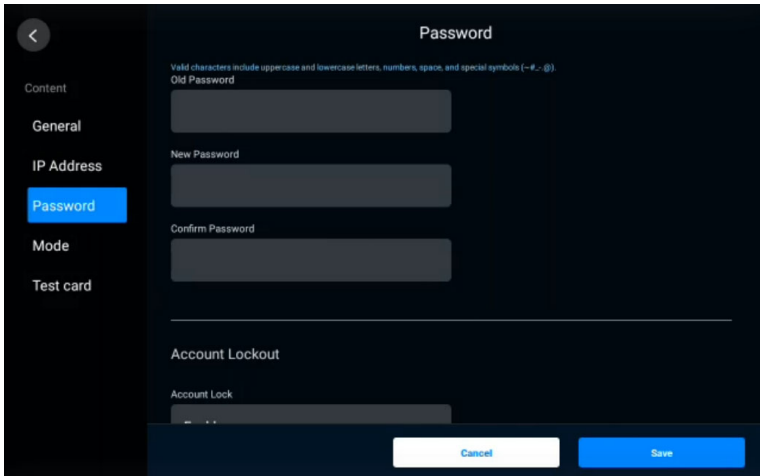


4. Configure the settings as required.
5. Tap **Save** to applied the configuration.

Setting the Password

To change the panel password,


1. From the RSB panel, tap .
2. Log in with valid credentials. This settings page appears.
3. Tap **Password** to access the password settings.

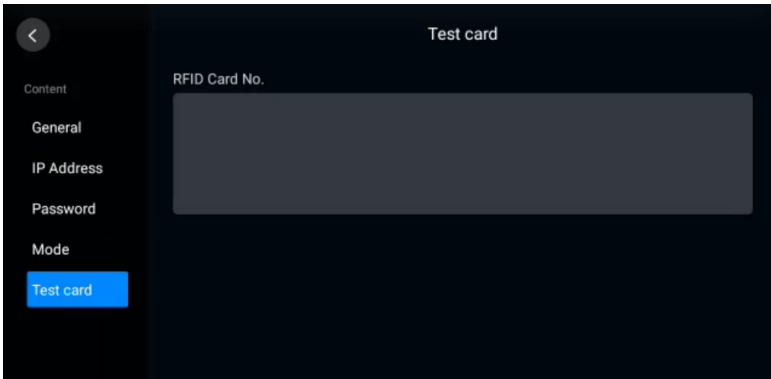


The screenshot shows the 'Password' settings page. On the left is a dark sidebar with a back arrow at the top and a menu with options: 'Content', 'General', 'IP Address', 'Password' (highlighted in blue), 'Mode', and 'Test card'. The main area has a title 'Password' and a subtitle 'Valid characters include uppercase and lowercase letters, numbers, space, and special symbols (~ !, @, #, %).' Below this are three input fields: 'Old Password', 'New Password', and 'Confirm Password'. At the bottom, there is an 'Account Lockout' section with an 'Account Lock' input field. At the very bottom are two buttons: 'Cancel' (white) and 'Save' (blue).

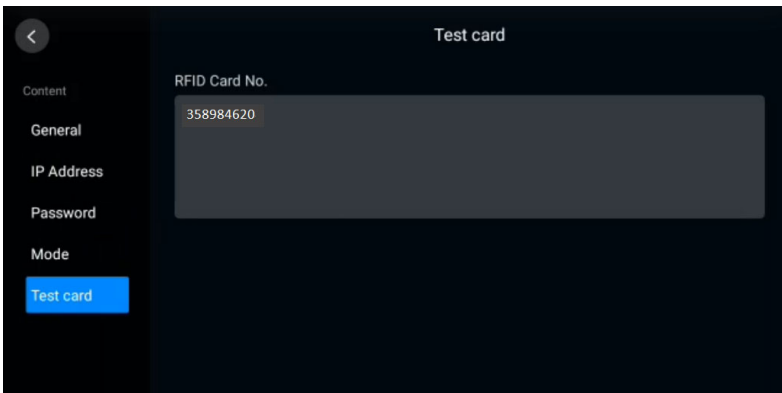
Obtaining Card Numbers

To find out a card number, as detected by ATEN Access Inspector or to test if a pre-existing card is supported by ATEN Access Inspector, use the Test Card function.

1. Make sure you have installed at least one RBS panel with an Access Inspector. For details, see *Installing an Access Inspector to an RBS Panel*, page 12.
2. On the RBS panel, tap  and enter the administrator password to log in.
3. Tap **Test Card** from the left panel. This screen appears.



4. Scan an access card on the Access Inspector. If a series of numbers appears, the card is supported by ATEN Access Inspector.




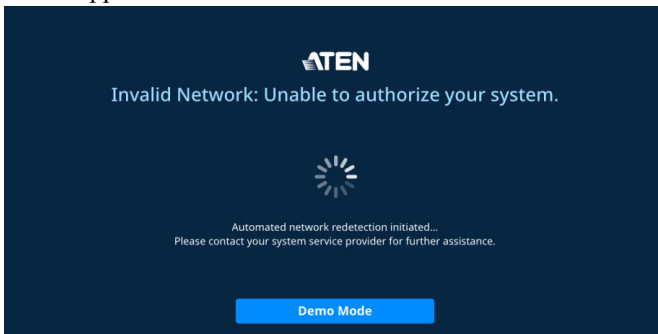
Demo Mode

Demo mode is an offline mode in which you can demo and try out different settings on the RBS panel without having the configurations sent and saved to the connected calendar server.

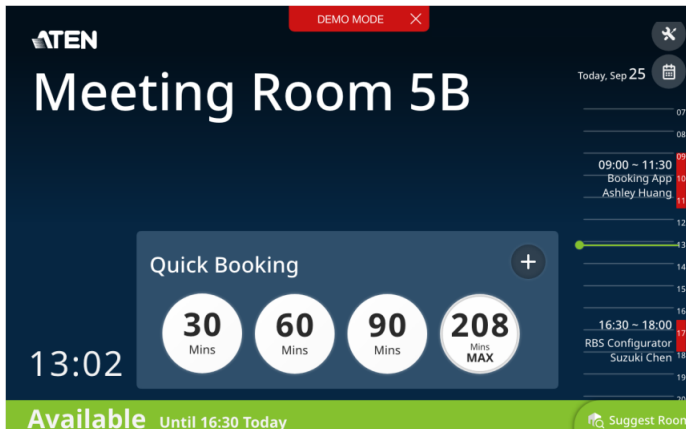
Enabling Demo Mode

Use one of the following methods to enable demo mode.

- ◆ From the panel's settings page (), enter the password and then tap **Demo Mode > Enable Demo Mode**.
- ◆ *Disconnect the RBS panel from the network*
 1. Power on the RBS panel and disconnect it from the network. This screen appears.




2. Tap the **Demo Mode** button, and then tap **Yes** to enter demo mode. When enabled, a red **Demo Mode** button appears on the top, as illustrated below.



Disabling Demo Mode

Use one of the following methods to disable demo mode.

- ♦ From the panel's main page, tap the **Demo Mode** button on the top and tap **Yes** to confirm the action.
- ♦ From the panel's settings page (), enter the password and then tap **Mode > Exit Demo Mode**.

Appendix

Safety Instructions

General

- ◆ Read all of these instructions. Save them for future reference.
- ◆ Follow all warnings and instructions marked on the device.
- ◆ This product is for indoor use only.
- ◆ Do not place the device on any unstable surface (cart, stand, table, etc.). If the device falls, serious damage will result.
- ◆ Caution: Risk of explosion if the battery is replaced by an incorrect type. Always dispose of used batteries according to the proper instructions.
- ◆ Do not use the device near water.
- ◆ Do not place the device near, or over, radiators or heat registers.
- ◆ The device cabinet is provided with slots and openings to allow for adequate ventilation. To ensure reliable operation, and to protect against overheating, these openings must never be blocked or covered.
- ◆ The device should never be placed on a soft surface (bed, sofa, rug, etc.) as this will block its ventilation openings. Likewise, the device should not be placed in a built in enclosure unless adequate ventilation has been provided.
- ◆ Never spill liquid of any kind on the device.
- ◆ Unplug the device from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.
- ◆ The device should be operated from the type of power source indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
- ◆ To prevent damage to your installation it is important that all devices are properly grounded.
- ◆ Do not allow anything to rest on the power cord or cables. Route the power cord and cables so that they cannot be stepped on or tripped over.
- ◆ Position system cables and power cables carefully; Be sure that nothing rests on any cables.
- ◆ Never push objects of any kind into or through cabinet slots. They may touch dangerous voltage points or short out parts resulting in a risk of fire or electrical shock.

- ◆ Do not attempt to service the device yourself. Refer all servicing to qualified service personnel.
- ◆ If the following conditions occur, unplug the device from the wall outlet and bring it to qualified service personnel for repair.
 - ◆ The power cord or plug has become damaged or frayed.
 - ◆ Liquid has been spilled into the device.
 - ◆ The device has been exposed to rain or water.
 - ◆ The device has been dropped, or the cabinet has been damaged.
 - ◆ The device exhibits a distinct change in performance, indicating a need for service.
 - ◆ The device does not operate normally when the operating instructions are followed.
- ◆ Only adjust those controls that are covered in the operating instructions. Improper adjustment of other controls may result in damage that will require extensive work by a qualified technician to repair.
- ◆ Avoid circuit overloads. Before connecting equipment to a circuit, know the power supply's limit and never exceed it. Always review the electrical specifications of a circuit to ensure that you are not creating a dangerous condition or that one doesn't already exist. Circuit overloads can cause a fire and destroy equipment.

Specifications

VK401

Mode of Operation (Frequency)	
13.56 MHz	
Interface	
Connector Type	Pogo pin
Industrial Protocols	
ISO 14443A/B, ISO 15693, Mifare, Felica (Card UID)	
Sensing Distance	
Up to 30 mm (depends on the tag type)	
Environmental	
Operational Temperature	0 – 40 °C
Physical Properties	
Housing	Plastic
Weight	36 g
Dimensions (L x W x H)	5.60 x 7.00 x 2.33 cm

VK430

Processor	
Quad-core	
Memory	
SDRAM	2 GB
Flash	8 GB
Panel Specifications	
Display Type	TFT-LCD
Size	10.1"
Touch Screen	Capacitive
Resolution	1280 x 800
Aspect Ratio	16:10

Color Depth	8 bit
Contrast Ratio	800:1
Backlight	LED
Viewing Angle	±85° (H), ±85° (V)
Luminance	500 cd/m ²
Interfaces	
Ethernet	1 x RJ-45 Female, 10/100/1000 BaseT
USB	1 x USB Type-A
Power	
Power over Ethernet (PoE)	802.3 at PoE+
Power Consumption	DC12V:17.8W:60.70BTU PoE: 20 W : 68.24 BTU
Environmental	
Operating Temperature	0 – 40 °C
Storage Temperature	-10 – 55 °C
Humidity	10–80% RH, Non-condensing
Physical Properties	
Housing	Plastic
Weight	0.68 kg (1.5 lb)
Dimensions (L x W x H)	26.30 x 17.78 x 2.45 cm (10.35 x 7.00 x 0.96 in.)

Note:

No license is required for running ATEN Room Booking System. However, additional costs may be charged for the resource accounts by the calendar service provider.

Technical Support

International

- ◆ For online technical support – including troubleshooting, documentation, and software updates: <http://eservice.aten.com>
- ◆ For telephone support, see *Telephone Support*, page iii:

North America

Email Support		support@aten-usa.com
Online Technical Support	Troubleshooting Documentation Software Updates	https://eservice.aten.com
Telephone Support		1-888-999-ATEN ext 4988

When you contact us, please have the following information ready beforehand:

- ◆ Product model number, serial number, and date of purchase.
- ◆ Your computer configuration, including operating system, revision level, expansion cards, and software.
- ◆ Any error messages displayed at the time the error occurred.
- ◆ The sequence of operations that led up to the error.
- ◆ Any other information you feel may be of help.

ATEN Standard Warranty Policy

Limited Hardware Warranty

ATEN warrants its hardware in the country of purchase against flaws in materials and workmanship for a Warranty Period of two [2] years (warranty period may vary in certain regions/countries) commencing on the date of original purchase. This warranty period includes the [LCD panel of ATEN LCD KVM switches](#). Select products are warranted for an additional year (see [A+ Warranty](#) for further details). Cables and accessories are not covered by the Standard Warranty.

What is covered by the Limited Hardware Warranty

ATEN will provide a repair service, without charge, during the Warranty Period. If a product is defective, ATEN will, at its discretion, have the option to (1) repair said product with new or repaired components, or (2) replace the entire product with an identical product or with a similar product which fulfills the same function as the defective product. Replaced products assume the warranty of the original product for the remaining period or a period of 90 days, whichever is longer. When the products or components are replaced, the replacing articles shall become customer property and the replaced articles shall become the property of ATEN.

To learn more about our warranty policies, please visit our website:

<http://www.aten.com/global/en/legal/policies/warranty-policy/>