

System Galaxy Quick Guide

CONFIGURATION AND OPERATION



Salto Sallis with Office Mode

INTEGRATES WITH THE GALAXY 635-DSI BOARD

JAN 2021

SG 11.7.0

to

Current

System Galaxy

Salto Sallis Wireless
Readers

Integrating with Galaxy 635-DSI Board

1st Edition

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Galaxy Support of Salto Office Mode

This **help center & guide** covers the Office Mode feature for Salto wireless readers.

Help Center Topics include ...

- [System Specifications & Compatibility](#) (inclu. Component Specs, Versions, Notifications ...)
- [Wiring & Communication Specifications](#) (inclu. CPU Ethernet Specifications, DSI RS485-Network Specs, Wireless Signal Range, ...)
- [Controller Device-Count Guides](#) (inclu. 635-Panel Device Count Guide, 600-Panel Device Count Guide ...)
- [Hardware and Software Requirements](#), (that pertain to Office Mode with Salto)
- [System Configuration & Diagrams for Salto Office Mode](#) (inclu. Hardware Configuration, Software Configuration ...)
- [User Instructions for Office Mode](#) (inclu. Instructions to Enter and Exit office mode, Event & Behavior Guides for both phases of the Door Schedule ...)

SYSTEM SPECIFICATIONS & COMPATIBILITY



IMPORTANT: Salto Locks, Routers, Nodes must be installed and configured by a Salto-Certified Technician.

1. Minimum* System Galaxy software: v**10.5.1**
2. Minimum* Galaxy hardware s28-Flash: v**10.5.3**
3. Minimum* Hardware: 635-Control Panel (i.e. 635-CPU and 635-DSI Boards)
 - a. supports one Salto Router per RS485 Section (with 2 Sections/2 Routers per DSI Board)
 - b. up to 16 max. Salto Nodes per RS485 Section (with 2 Channels/up to 32 Nodes per DSI Board). (Note that a Salto Node supports a max of 8 Readers, so you need at least 2 Nodes if you have more than 8 readers on a DSI section)
 - c. up to 16 Wireless Locks** per RS485 Section (with 2 Channels/ up to 32 Locks per DSI Board).
4. WIRELESS-Range for Salto Locks may be **up to 30 feet** – based on clear/unimpeded signal.

* See *Minimum Required Version Statement* in the **Release Version Information** section below.

** Max Device Count for a 635-Series controller = up to 64 Max Device per panel. Each Wireless Lock/Reader counts as 1 device, regardless of which board it is connected to. Other types of boards/devices also count if included in the panel. See the Controller **Max Device Count** table for full details.

RELEASE VERSION INFORMATION

OFFICE MODE COMPATIBILITY VERSION

This info pertains to supporting the Office Mode Feature of the Salto integration for System Galaxy.

- Office Mode Minimum Required Version: **SG 10.5.1** *

- Office Mode Minimum Required Flash Version: **SG 10.5.1** or see the [Flash Version Release Table](#) on SG Dashboard
- Office Mode Minimum Hardware Model: **635-CPU & 635-DSI**
- Office Mode Original Release Version: **System Galaxy v10.5.1 (June 2017)** **

(Note: this information is updated as soon as possible. To see the latest [Product / Feature Compatibility Chart](#) on the main SG Help Dashboard.)

* The **Minimum Required Version** (MRV) is the lowest compatible version that is currently acceptable to support the specified feature or product. Because development is ongoing, the MRV might not match the Original Release Version (ORV). Whenever a new SDK or major enhancement is required to continue supporting a product/feature, the MRV will be newer/higher than the ORV. The help center documentation is updated when the new minimum version becomes available.
See the [Product / Feature Compatibility Chart](#) for the latest details on Product / Feature Compatibility.

** The **Original Release Version** (ORV) is stated for informational purposes. Installer should always be using the MRV.



IMPORTANT: Contact Galaxy Technical Support Team to confirm the correct/current compatibility versions and satisfactory hardware models. Do this before upgrading existing systems, or installing new systems!



WARNING: Always back up all data and asset files BEFORE upgrading or expanding any system or equipment, software, or database. This includes but is not limited to Galaxy databases, activity records, system reports, graphic symbols, and other assets such as photos, signatures, fingerprint/biometric data, badge design templates and graphics, logos, etc.).

Failure to backup your data and all assets could lead to the loss or damage of important data and assets in the case of a catastrophic failure during the upgrade process.



IMPORTANT: Contact Technical Support of assistance with upgrades and archival. Never perform a database upgrade on the only copy of your databases. When you upgrade the SysGal or SysGalArc databases, always maintain an untouched copy for safe keeping. It may be advisable to purge and archival the database before you do the system upgrade. Keep a copy of the pre-upgraded / pre-archived database as well as copies of the purged and archived databases in a safe place.

SALTO INTEGRATION ORIGINAL RELEASE INFO

*The original release of Salto integration does **not** support Office Mode. To use Office Mode you must upgrade your **System Galaxy Software and Flash all your panels** to the Minimum Required Version – see [Office Mode Compatibility](#) .*

- Salto Integration Original Release Version: **SG v10.2**
- Salto Integration Original Release Date: **April 2013**

NOTIFICATIONS & EXCEPTIONS

This section provides information and links pertaining to product and safety.

- Salto Products (Locks, Routers, and Nodes) must be installed and configured by an authorized, Salto-certified Technician.
- Galaxy Hardware and Software must be installed and configured by an authorized Galaxy Technician.

- Always follow standard safety practices when installing and configuring Galaxy hardware & system components. See [Product Safety Notifications](#) for details.
- Galaxy documentation/help guide does not necessarily supersede the manufacturer's product requirements or specifications. Be sure to follow the correct information pertaining to products. Galaxy includes known 3rd Party requirements for conceptual information.
- Information in this documentation is subject to change. Every effort is made to make documentation accurate at the time of publication. However, Galaxy makes no claims to the accuracy of the documentation.

WIRING & COMMUNICATION SPECIFICATIONS

This section covers the communication and wiring specifications for the CPU and DSI as they pertain to the Salto integration.

RF SIGNAL RANGE (by Manufacturer)

This table lists the RF Signal Ranges for manufacturers for products integrated with Galaxy 635-Series Controllers, as are known at the time of this documentation.

[Printer-friendly Format](#) (PDF opens in browser).

Table 1 : **RF SIGNAL RANGE** (based on clear/unimpeded signal/strength)

MANUFACTURER	RF SIGNAL RANGE	SIGNAL MODULATION	FREQUENCY RANGE	ENCRYPT.	WAKE-ON RF	OFFICE MODE
Salto Wireless	Up to 30 ft. radius ⁽¹⁾	(see MFG's documentation)	(see MFG docs)	(see MFG docs)		YES

635-CPU COMMUNICATIONS & ETHERNET NETWORK

! **IMPORTANT:** Use the correct Cat5e (UTP) unshielded, twisted-pair cable. Always use best industry practices.

- 635 CPU = Auto-sensing 10/100 MB, Full Duplex at the port side.
- 600 CPU = (not supported for Salto)

Table 2: ETHERNET WIRING SPECIFICATIONS

Connection Type	Max Distance	Wire Specifications
635 CPU to IP Switch: (TCP/IP)	100 meters (328 ft.) <i>port to port on local LAN side</i>	Cat 5e Unshielded, twisted-pair (UTP)

635-DSI WIRING SPECIFICATIONS (Type, Gauge, Distance)

! **IMPORTANT:** All maximum distance limits are estimates based on clear/unimpaired communication. If interference exists, wiring should be re-routed to get clear communication. Failure to correct installation issues can result in undesired hardware/system operation.


! **IMPORTANT:** Use overall-shielded wiring for all device wiring. Failure to use overall-shielded wiring may result in equipment operating poorly or incorrectly. If a site has not used proper wiring techniques, you may need to install new wiring.

! **IMPORTANT- General Info on Grounding the Drain-Wire on Shielded Cable:**

For RS-485 nodes/devices* on a DSI Board: land the drain-wire of the first segment of RS485-run at the DC Neg/GND of the DSI Board (thus, grounding only one end of the drain-wire). For the 2nd segment of RS485-run, connect the drain-wire to the DC Neg/GND of the first node/device* (again, grounding only one end of the drain-wire). Continue grounding one end of the drain-wire on each subsequent segment of RS485-run to the DC NEG/GND on the prior node/device, working in a daisy-chain fashion. **Never ground both ends of the drain-wire in a segment of line.**

Failure to ground drain-wire correctly results in undesirable equipment operation.

Table 3: **DSI WIRING SPECIFICATIONS FOR RS485 NETWORK**

Connection Type	Max Distance	Wire Gauge & Specifications
RS-485 Wireless NODE/HUB	4,000 ft. to last node*	22 AWG, shielded, twisted pair, min. 4-Conductor
* Note: 4,000 ft. = total line distance from a DSI Board to the last device/node (e.g. Salto Hub/Wireless Router, ...) on the RS-485 Multi-drop.		
 [WARNING] Observe Fire and Electrical Codes for wire insulation jackets (i.e. PVC-rated vs. Plenum-rated). Use Plenum-rated when appropriate.		



ALSO SEE: Chapter-1 of the [635/600-Series Hardware Installation Guide](#) for complete list of wiring guidelines for all boards and devices - - OR - - reference the [Main Wiring Guide](#) on the *SG-Help Dashboard Procedures Menu*.

Table 4: **CPU WIRING SPECIFICATIONS ETHERNET NETWORK (Repeat)**

Connection Type	Max Distance	Wire Specifications
Controller to IP Switch: (TCP/IP)	100 meters (328 ft.) <i>port to port on local LAN side</i>	Cat 5e Unshielded, twisted-pair (UTP) <i>635-CPU is Full Duplex 10/100 MB auto-sensing, at the port side</i>



SUPPORT: Consult Galaxy Technical Support if you any questions.

MAX DEVICE COUNT GUIDE - for 635-PANEL

This table helps you correctly calculate the Max Device Count for 635-Series Control Panels.

[Printer-friendly Template](#) (PDF opens in browser) - print one guide for each panel to help with calculations.

Table 5 : **Max Device Count - 635 Panel** (supports up to 64 devices in a panel)

635 Panel #	CPU IP Address	Location/Room	Blg No.
635-BOARDS	I2C & RS-485 DEVICES	MAX DEVICE NUMBER ⁽¹⁾	FORMULA
DRM Board	Standard Readers (I2C)	Max. 2 Readers (1 Reader per section)	(TL no. of DRMs on I2C) x 2
DSI Board	Wi-Fi Locks/Readers ⁽³⁾	Up to 32 Locks/Readers (up to 16 per section)	Enter TL Wireless Lock count in the
DSI Board	Salto Locks ⁽³⁾	Up to 32 Locks/Readers (up to 16 per section)	Enter TL AD300/400 Locks in the
DSI Board	Remote DRM Modules	Max 32 Readers (max 16 per section)	Enter TL Remote Readers in the
DSI Board	635-Input Module	Max. 32 Input Modules (max 16 per section)	Enter TL no. of Input Modules in the
DSI Board	635-Output Module ORM	Max. 6 Output Modules (max 3 per section)	Enter TL no. of Output Modules in the
DSI Board	635-Elevator Module ERM	Max. 30 Output Modules (max 15 per section)	Enter TL no. of Output Modules in the
DIO Board	4/8 Outputs & Inputs (I2C)	<i>DIO board always counts as 1 device.</i>	Enter total No. of DIOs in the
			Total Device Count

(1) **Max Device Number** (Wired or Wireless) is ultimately determined by considering the RS-485 line distance and when applicable the RF Signal Range. The DSI board is designed to support up to 16 multi-drop devices per 485-Channel, unless otherwise stated. The **Max Device Number** is determined by the following factors that are unique to the installation site, such as: card types, 485 line distance, RF Signal Range, reliable RF signal strength, signal interferences that are present. All Readers on the same 485-Channel must use the same Card Type (ex: Wiegand vs. ABA). Reliable signal strength can be maintained and wiring specifications are met when installing Wi-Fi Locks and RS-485 Readers/devices.

(2) **Actual Device Count** is the exact number of devices you are installing, based on formulas provided above. DSI boards may not therefore, count only the number of RS485-Devices actually installed. For DRMs on I2C buss, always count 2 devices. Each DIO always counts as 1 device.

Galaxy Requirements for Salto “Office Mode”

This section covers the known FAQs, Requirements and Specifications for using the Office Mode Feature with Salto Wireless Locks.

FAQs & REQUIREMENTS

In all cases the Wireless Locks are installed with a traditional 635-DSI Board interface.



IMPORTANT: all readers on the same **DSI RS485-Section** must be using the same reader/card technology. If you have different technologies/card types among the Wireless Locks, they must be placed on separate RS485-Sections of the DSI Board. [FIG 2.](#)

HARDWARE FAQs & REQUIREMENTS

1. The **Wireless Lock installation** and configuration must be done by a Salto-certified technician.
2. The following hardware supports the **Wireless Lock** using the traditional *RS-485 Interface* on a **635-DSI Board**.
 - a. Must use a **635- CPU** (600-Series not supported).
 - b. Must use a **635-DSI Board** (600-DSI not supported).
 - c. Hardware programming in the SG software must be completed – see Software FAQs & Requirements below.
3. **Galaxy Install Specifications:**
 - a. use **4-wire insulated cable** to connect the Salto Router to a 635-DSI Board’s RS-485 Serial Channel. Use 2-wires for RS-485 communication, and 2-wires for power (12VDC Power & Ground).
 - b. a **635-DSI Board supports up to 16 Locks per RS485-Channel** (up to 32 locks per board).
NOTE: the exact number of locks supported on any 485-channel is dictated by RF signal strength, placement of nodes, and impact by stationary and mobile physical structures and objects. Each site is different. Always test and take precautions to ensure the integrity of communications and minimize interference as far as possible. Wireless Locks may not be a suitable solution for every situation or security need.
 - c. **1 Salto Router is required on a RS-485 Section of the DSI Board (or 2 Routers per board).**
 - d. **1 Salto Router can support up to 16 Salto Nodes – the max 16 would mean your installing one lock on each Node.** Salto-certified technician must distribute the appropriate number of Nodes needed to provide reliable RF signal strength.
 - e. **1 Salto Node can support up to 8 Locks –** this means at least 2 Nodes are needed if there are more than 8 locks installed on the same DSI-485 Section.
 - f. **The reported RF Range of a Salto Node is up to 30ft.** This is based on clear/unimpeded wireless signal strength.

SOFTWARE FAQs & REQUIREMENTS

4. Hardware programming must be completed in the System Galaxy Software, including these specific settings ...
 - a. **Loop/Cluster Properties screen:** the *Controller Type field* must be “**600**” (which also covers 635-model) .

- b. **Controller Properties screen:** the *CPU Type field (Tab2)* must be “635 CPU”
- c. **Controller Properties screen:** the DSI Board must be added to the 635-Controller’s board list on the first tab, and you must choose a default reader technology. **IMPORTANT:** all readers on the same 485-channel must be using the same technology. If you have different technologies/card types among the readers, they must be on separate 485-channels.
- d. **Serial Channel Properties screen:** the *DSI Mode* must be “Salto Wi-Fi” on each DSI RS-485 Section to support Salto locks.
- e. **Serial Channel Programming:** on each DSI RS-485 Section, the exact Lock ID number must be checked. Unused Lock numbers should be unchecked.
- f. **Time Schedules:** you must make a unique time schedule that is exclusively used for office mode. You may need more than one office mode schedule depending on how many doors will need it and whether they will need different times. This schedule should be used exclusively for the Office Mode feature and not co-opted or shared for other features to prevent inadvertent changes that other features could need.

5. **Reader Properties screen:**

- a. in the General tab, the **Office Mode feature** must be enabled for each Wi-Fi Lock that is expected to support Office Mode. Office Mode becomes available during the active (green) phase of an assigned door unlock schedule. Office Mode is unavailable during the inactive (red) phase of the time schedule.
- b. in the Schedules tab, a **Door Unlock Schedule** must be assigned to each Wi-Fi Lock using Office Mode. The Door Unlock Schedule is of the Reader Properties screen. A schedule must be assigned to support Office Mode operation. Do not share or coopt schedules for your office mode Locks with other features or with card authorization or other types of doors. Always make distinct Office Mode schedules for the selected locks. Sharing, coopting, or reusing schedules with other devices or features are subject to change without notice, which can interfere with your office mode function.
 - Office Mode is **available for use** when the assigned door schedule is “green/ON” (i.e. during green time periods). At this point valid cards are required for entry. Door remains locked until office mode is entered/engaged.
 - User can enter and exit Office Mode at any during the active/green phase of door schedule. When office mode is engaged, door will be open/unlocked and access card is not required.
 - **It will take 15 - 30 seconds for office mode to physically engage or disengage at the Wireless Lock.**
 - User cannot enter/engage Office Mode during the inactive/red phase of the door schedule. Reader will produce an error beep to alert user.
 - If the schedule changes to “inactive” (red) phase while Office Mode is engaged, the door will lock and office mode will be canceled.
 - Assigning a Door Unlock Schedule assigned to a Wireless Lock that is not configured for office mode will operate like the unlock schedule on any other standard door.

6. **Cardholder screen:** the person who engages or disengages office mode must use a valid access control card.

- a. **Credentialing:** You do not need to make a special “office mode card”. A Cardholder’s own access card can be used for office mode.
- b. **Access Group (Door & Schedule):** a valid Access Group must be assigned to the access card used at the “office mode” door. The “office mode” door must be assigned to the Access Group. The card cannot be expired, inactive, or invalid for any reason. Also, a valid time schedule must be assigned to the Access Group that is active (green) at the same time that the “office mode schedule” is active. Do not share / co-opt a schedule. Always keep the “office mode door schedule” separate and unique from any other schedules such as Access Groups, etc.

7. **Event Logging** is suspended while office mode is entered/engaged. Logging resumes as normal when office mode is exited (OFF/disengaged). An “office mode entered” or “office mode exited” event is logged whenever the user enters/exits office.

HARDWARE INSTALL/CONFIG & DIAGRAMS FOR OFFICE MODE

This topic covers the Hardware Installation, Configuration, and Diagrams for Salto Wireless Lock integration using Office Mode.

WIRING 2-PIECE ORANGE CONNECTORS

*This section is about installing the **2-piece orange power connectors** to the wiring harness inside the Galaxy Control Panel.*



SEE: Chapter-2 of the [635-Hardware Guide](#) for complete instructions and diagrams for the CPU and all boards and devices.

The 635-CPU and each Daughter board must connect to the Controller's main power harness using the 2-piece orange connectors that are supplied with the boards. Some of the CPU connectors may already be installed from the factory.

REMOVING HEAT SHRINK FROM CONTROLLER POWER HARNESS

This section briefly covers removing the factory-installed heat-shrink from a single pair of power wires where the DSI Board will be installed.

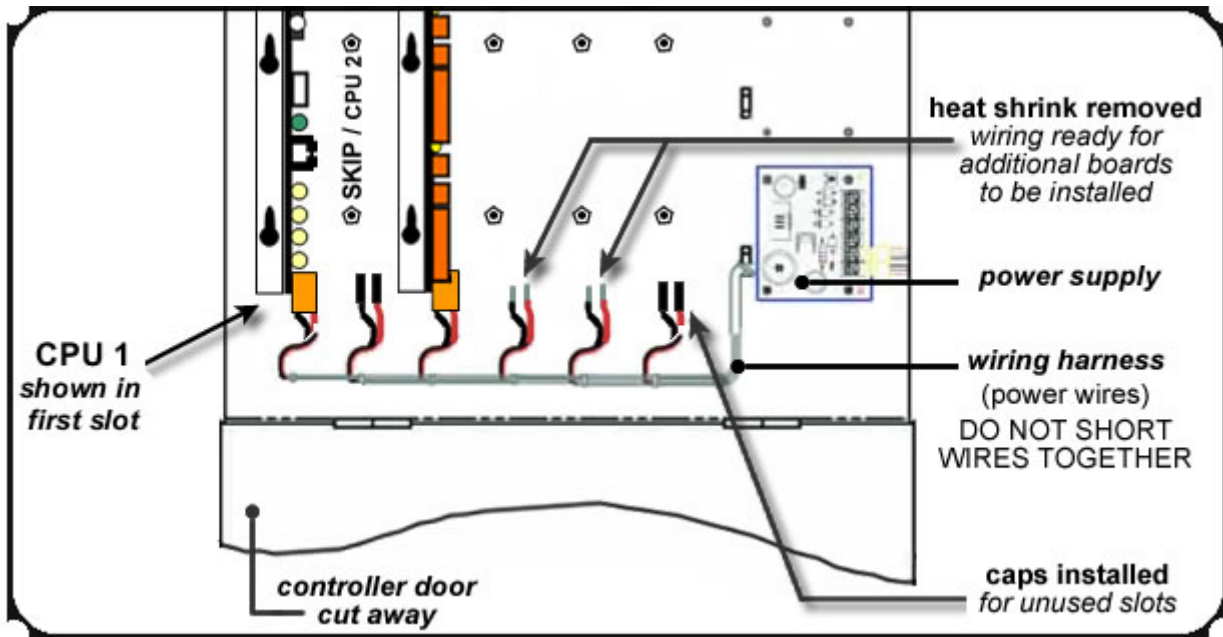
! **WARNING: DO NOT short the power wires together.** Failure to properly insulate wires could result in damage to the equipment or electrical shocks.

Remove Heat Shrink (only from wires to be used)

1. **Remove the heat shrink ONLY from the wires for the slots you will use.** The wiring harness inside the controller is designed to be modular and flexible. Installer can use some or all of the available slots.
2. **Leave the heat/shrink on the unused wire-tips where no board is installed** or place the proper end-caps according to your local codes. **DO NOT SHORT POWER WIRES.**

Figure 1 - Controller Wiring Harness:

This diagram shows the wiring harness inside the Controller prepped for installing boards.



SEE: Chapter-2 of the [635/600-Series Hardware Installation Guide](#) for complete installation steps for all boards and devices.

SEE: the [635-Panel Device Count Guide](#) for a table that helps you count your max devices within a panel. The 635-CPU has a 64-max. device limit. Other boards and devices are included in the max. count.

Wiring from 635 DSI to Salto 485 Router & Nodes

DSI BOARD	SALTO DEVICE
635 DSI + 12vdc	Salto Router Host Terminal +
635 DSI Gnd	Salto Router Host Terminal -
635 DSI A	Salto Router Host Terminal A
635 DSI B	Salto Router Host Terminal B

SALTO ROUTER	NODE 1	NODE 2	NODE 3	...
Salto Router Node Terminal +	Node 1 +	Node 2 +	Node 3 +	etc
Salto Router Node Terminal -	Node 1 -	Node 2 -	Node 3 -	etc
Salto Router Node Terminal A	Node 1 A	Node 2 A	Node 3 A	etc
Salto Router Node Terminal B	Node 1 B	Node 2 B	Node 3 B	etc

Important: The Salto hardware must be configured using Sallis software prior to programming SG. Install Sallis version 3.9 software on any PC or laptop. It is only used to configure the Salto and is not needed after, with the exception of expanding, or maintaining the Salto equipment. A dealer would likely need to keep this for future customer support.

SOFTWARE CONFIGURATION & SCREENSHOTS FOR OFFICE MODE

This topic covers the Software Installation, Configuration, and Screenshots for Salto Wireless Lock integration using Office Mode.

Important: The Salto hardware must be configured using Sallis software prior to programming SG. Install Sallis version 3.9 software on any PC or laptop. It is only used to configure the Salto and is not needed after, with the exception of expanding, or maintaining the Salto equipment. A dealer would likely need to keep this for future customer support.

[See the Salto Config Guide for details.](#)

SOFTWARE CONFIGURATION & SCREENSHOTS FOR OFFICE MODE

This topic covers the Software Installation, Configuration for Salto Wireless Lock integration using Office Mode.

CONFIGURE THE DOOR PROPERTIES

After installing and configuring the hardware you must give the Salto Reader a Door Unlock Schedule and set the Office Mode option.

1. Open the **Reader Properties** screen for the Salto Reader as desired.
2. On the **General Tab** set the office mode field to “Office Mode”.
3. On the **Schedules Tab** set the Door Lock/Unlock Schedule to the appropriate schedule. *Office Mode is available during the unlocked portion of the schedule.*
 - a. Office Mode is **available for use** when the assigned door schedule is “green/ON” (i.e. during green time periods). At this point valid cards are required for entry. Door remains locked until office mode is entered/engaged.
 - b. User can enter and exit Office Mode at any during the active/green phase of door schedule. When office mode is engaged, door will be open/unlocked and access card is not required.
 - c. **It will take 15 - 30 seconds for office mode to physically engage or disengage at the WiFi Lock.**
 - d. User cannot enter/engage Office Mode during the inactive/red phase of the door schedule. Reader will produce an error beep to alert user.
 - e. If the schedule changes to “inactive” (red) phase while Office Mode is engaged, the door will lock and office mode will be canceled.
 - f. Assigning a Door Unlock Schedule assigned to a Wifi Lock that is not configured for office mode will operate like the unlock schedule on any other standard door.

ENROLL THE CARD FOR OFFICE MODE

You do not need to make a special “office mode card”. A Cardholder’s own access card can be used for office mode.

1. Open the **Cardholder screen** for the card that will use office mode.
2. On the **Access group field** assign an access group that gives the card access to the “Office Mode” door.
 - a. You must have already made the schedule and assigned it to the access group that includes the “office Mode” door.
 - b. Note the schedule that is assigned to the access group must be active (green) during the same time as the door unlock schedule.

3. On the **Apply** or save the cardholder changes.
4. The card should work to engage office mode at the Office Mode door.

USER INSTRUCTIONS FOR OFFICE MODE

This topic covers the known FAQs, Requirements and Specifications for Wireless Lock integration using Office Mode.

HOW TO ENGAGE OFFICE MODE

To engage office mode the Door Schedule has to be active/green, as well as the user's access group schedule.

1. To enter office mode the user must present the access card after the Door Schedule is active/green.
2. Present the card and enter the office
3. From the inside of the door, open the door and hold the door handle in the open position, while presenting the card to the reader on the outside of the door.
4. An Office Mode Entered event is logged in the system and office mode will stay "on" until it expires or the user disengages it.

HOW TO DIS ENGAGE OFFICE MODE

1. To exit office mode the user must present the access card while the door is open and the Door Schedule is active/green.
2. From the inside of the door, open the door and hold the door handle in the open position, while presenting the card to the reader on the outside of the door.
3. An Office Mode Exited event is logged in the system and office mode will stay "on" until it expires or the user disengages it.
4. The office mode will stay on until it expires or the user disengages it.

EVENTS & OPERATION OF OFFICE MODE (by State of the Door Schedule)

This table shows the Events and Operation of the Wireless Locks when the Office Mode feature is enabled/selected in the Reader Properties screen.

NOTES ...

- The Office Mode option must be selected (enabled) in the Reader Properties screen.
- a Door Unlock Schedule must be selected (assigned) in the Reader Properties screen.
- Office Mode becomes "available" when the assigned Door Schedule is "green" or ON, but it remains "disengaged" until a valid user manually enters office mode.
- A valid cardholder/user must manually "enter" or "engage" office mode while the schedule is green/ON. Office mode does not automatically engage when the Door Schedule goes ON/green.
- Office Mode can be manually "disengaged" by the Cardholder/user while the assigned Unlock Schedule is "green" or ON.
- There is a delay of up to 15-30 seconds between when the user enters/exits office mode and when the door actually engages/disengages office mode.
- Office Mode becomes "unavailable" when the assigned Door Schedule goes "red" or OFF. Cardholder/user cannot manual engage office mode while the door schedule is "red" or OFF.

- If office mode is still engaged when the Door Schedule goes “red” or OFF, then office mode is automatically exited. It may take up to 15-30 seconds for the door to actually disengages from office mode.

Table 6 : **SALTO OFFICE MODE - STATES, EVENTS, & BEHAVIOR** (when Door Schedule is ON and OFF)

System Galaxy provides schedule-driven control of the Office Mode availability. This means that a door schedule determines when Office Mode is available vs. unavailable. Office Mode is only available when the door schedule is in the active (green) phase of the time periods. Office Mode becomes unavailable when the schedule is in the inactive (red) phase of the time periods. Office Mode is canceled when the user Exits Office Mode or when the schedule changes to the inactive/red phase.

	State of Door, Schedule, & Office Mode	Events	Operational Behavior
1a	<p>Valid Access while Office Mode is available/but disengaged: Lock is configured to use Office Mode. The assigned Door Schedule is ON (green). <i>(OM and Schedules are assigned in Reader Properties)</i></p>	<p>Valid Access (presented a valid card)</p>	<p>User presents a valid card while Office Mode is available/but disengaged. Behavior ...</p> <ul style="list-style-type: none"> • Presenting a valid card generates a Valid Access • Door will unlock (for the duration of the schedule) • Door will relock after unlock
1b	<p>Invalid Access while Office Mode is available/but disengaged: Lock is configured to use Office Mode. The assigned Door Schedule is ON (green). <i>(OM and Schedules are assigned in Reader Properties)</i></p>	<p>Invalid Access Attempt (presented invalid card)</p>	<p>User presents an invalid card while Office Mode is available/but disengaged. Behavior ...</p> <ul style="list-style-type: none"> • Presenting an invalid card generates an Invalid Access • Door Remains Locked.
1c	<p>Invoking Office Mode (user): (User enters office mode) Lock is configured to use Office Mode. The assigned Door Schedule is ON (green). <i>(OM and Schedules are assigned in Reader Properties)</i></p>	<p>Office Mode Entered Valid Access (Valid Card + Handle)</p>	<p>User enters Office Mode while mode is available/but disengaged. Behavior ...</p> <ul style="list-style-type: none"> • Presenting a valid card while Office Mode is available/but disengaged generates a Valid Access • Office Mode will engage. • Door will unlock in about 1 second
1d	<p>Door access during Office Mode: (User has already entered office mode) Lock is configured to use Office Mode. The assigned Door Schedule is ON (green). <i>(OM and Schedules are assigned in Reader Properties)</i></p>	<p>No events reported (Door is unlocked)</p>	<p>While Office Mode is engaged, the door remains unlocked. Behavior ...</p> <ul style="list-style-type: none"> • Door remains unlocked while Office Mode is engaged • Office Mode remains engaged until the door schedule changes to inactive/red • No events are logged while Office Mode is engaged • Event logging resumes when Office Mode is disengaged by door schedule change
1e	<p>Exiting Office Mode (user): (User exits office mode) Lock is configured to use Office Mode. The assigned Door Schedule is ON (green). <i>(OM and Schedules are assigned in Reader Properties)</i></p>	<p>Office Mode Exited Valid Access (Valid Card + Handle)</p>	<p>User exits Office Mode (schedule is still ON). Behavior ...</p> <ul style="list-style-type: none"> • Presenting a valid card while Office Mode is available/but disengaged generates a Valid Access • Office Mode will disengage • Door will lock in about 15 seconds • Event logging will resume
1e	<p>Exit Office Mode (schedule): (Door schedule cancels office mode) Lock is configured to use Office Mode. The assigned Door Schedule is OFF (red). <i>(OM and Schedules are assigned in Reader Properties)</i></p>	<p>Office Mode Exited (Schedule = inactive)</p>	<p>Schedule disengages Office Mode. Behavior ...</p> <ul style="list-style-type: none"> • Assigned door schedule changes to inactive/red • Office Mode will disengage • Door will lock in about 15 seconds • Event logging will resume

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Table 7 : **SALTO EXCEPTIONS - STATES, EVENTS, & BEHAVIOR** (Traditional Door Schedule / No Office Mode)

TABLE-2 States, Events, & Functional Behavior of Locks with traditional Door Schedule (no office mode)

This table describes the Events and Functional behavior of Locks while Office Mode is disabled/inactive in the door properties. In this setting the door schedule will provide traditional schedule-driven door locking and unlocking.

	State of Door, Schedule, & Office Mode	Events	Functional Behavior
2a	<p>Valid Access while Office Mode is NOT available: Lock is configured to use Office Mode. The assigned Door Schedule is OFF (red). <i>(OM and Schedules are assigned in Reader Properties)</i></p>	<p>Valid Access (present valid card)</p>	<p>User presents a valid card while Office Mode is disabled/inactive. Behavior ...</p> <ul style="list-style-type: none"> • Presenting a valid card generates an Invalid Access event. • Door will unlock (for the duration of the door schedule). • Door will relock after unlock.
2b	<p>Invalid Access while Office Mode is NOT available: Lock is configured to use Office Mode. The assigned Door Schedule is OFF (red). <i>(OM and Schedules are assigned in Reader Properties)</i></p>	<p>Invalid Access Attempt (present invalid card)</p>	<p>User presents an invalid card while Office Mode is disabled/inactive. Behavior ...</p> <ul style="list-style-type: none"> • Presenting an invalid card generates an Invalid Access event. • Door will remain locked.
2c	<p>Invoke office mode while Office Mode is NOT available: Lock is configured to use Office Mode. The assigned Door Schedule is OFF (red). <i>(OM and Schedules are assigned in Reader Properties)</i></p>	<p>Invalid Access Attempt (engage office mode)</p>	<p>User tries to enter office mode while Office Mode is disabled/inactive. Behavior ...</p> <ul style="list-style-type: none"> • Presenting a valid card while Office Mode is disabled/inactive generates an Invalid Access event. • Office Mode will not engage. • Door remains locked.
1c	<p>Invoking office mode while Office Mode is NOT available: (Attempt to engage office mode is unsuccessful) Lock is configured to use Office Mode. The assigned Door Schedule is ON (green). <i>(OM and Schedules are assigned in Reader Properties)</i></p>	<p>Invalid Access Attempt (Valid Card + Handle)</p>	<p>If user tries to enter office mode while Office Mode is disabled/inactive. Behavior ...</p> <ul style="list-style-type: none"> • Presenting a valid card while Office Mode is disabled/inactive generates an Invalid Access event. • Office Mode will not engage. • Door remains locked.