# Gallagher Controller 7000 Single Door vCR9.40.251031b

## Release Note


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# 1 Introduction

The Gallagher Controller 7000 Single Door is a processing board for a security access system, which can have one door assigned to it. It is built using the Linux Kernel 6.1.141.

All variants of the Controller 7000 Single Door can operate on their own or operate alongside Gallagher Controller 6000s.

**Note:** The Controller 7000 Single Door can be configured to use 802.1x authentication. Refer to the topic *"Configuring a Controller 7000 or 7000 Single Door for 802.1x"* in the Command Centre Configuration Client online help for further detail.

# 2 Reason for version

This version of Gallagher Controller 7000 Single Door code (vCR9.40.251031b) contains a number of enhancements for vEL9.40 of Gallagher Command Centre. For further information refer to the *Gallagher Version 9.40 Feature Summary* and the *Gallagher Controller 6000 and 7000 Hardening Guide* (both located in the 'Documentation' directory of the Command Centre installation files).

# 3 Compatibility

This version of Gallagher Controller code is compatible with the Gallagher Controller 6000, 7000 and 7000 Single Door.

## 3.1 Gallagher Command Centre compatibility

This version of Controller code can be used in conjunction with version vEL9.40 (or later) of Gallagher Command Centre.

## 3.2 Component compatibility

The most recent code versions are as follows:

| | | |
|---|---|---|
| Gallagher Command Centre | - | vEL9.40 |
| Gallagher F31/32/41/42 Fence Controller | - | vHC5.00.003 |
| Gallagher HBUS Reader STM (small flash) | - | vHM4.50.017 |
| Gallagher HBUS Reader STM | - | vHN5.00.037 |
| Gallagher HBUS Reader Renesas | - | vHMA5.00.037 |
| Gallagher HBUS Keypad Reader STM | - | vHK5.00.007 |
| Gallagher HBUS Keypad Reader Renesas | - | vHKA5.00.007 |
| Gallagher Z10 Tension Sensor | - | vTW5.00.002 |
| Gallagher T20 Terminal | - | vHT5.70.040 |
| Gallagher HBUS IO STM | - | vHI5.00.007 |
| Gallagher HBUS IO Renesas | - | vHIA5.00.007 |
| Gallagher Reader Bluetooth® BGM111 | - | vHBT1.00.010 |
| Gallagher Reader Bluetooth® BGM220 | - | vHBTA1.02.050 |

# 4 Upgrading the Gallagher Controller

Ensure you have upgraded Gallagher Command Centre before upgrading your Controller(s).

**Note:** Please make sure that the Gallagher Controller does not lose power during an upgrade as this may result in a Controller that no longer functions. In this scenario you would need to return the unit to the Field Service department.

Go to the **Software** tab of the Controller Property Pages and assign the latest software package, (e.g. vCR9.40.251031b), click **Apply** and then the **Upgrade Now** button.

The upgrade should happen. You can monitor the upgrade via the progress bar on the **Software** tab and then a Controller version event in the Event Viewer reporting that the Controller is running the new version.

**Notes:**

- If you are upgrading multiple Controllers, to simplify the process, the Controller Upgrade feature can be used instead. For further detail refer to "Upgrading Multiple Controllers" in v9.40 of the *Gallagher Command Centre Configuration Client User Guide* (part number C209000).
- During a Controller upgrade it is normal for the Run LEDs to turn off intermittently, for approximately 5 seconds at a time.


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- Following an upgrade, it is safe to remove power from a Controller once the Run LED is functioning normally, (i.e. 1 Hz flash mode).

### 4.1 Before you begin

Before you begin an upgrade to vCR9.40.251031b, ensure you do the following:

- Turn DIP switch 3 OFF.
- Remove any customisations installed.

### 4.2 Procedure

1. Upgrade to v9.40.
2. Click **OK** to continue with the upgrade.
3. Does a warning message display?

| **If…** | **then…** |
|---|---|
| no, | the upgrade will complete. |
| yes, | a customisation DLL is detected as being installed.<br>a) Click **Cancel** on the warning message.<br>b) Remove the DLL and initiate the upgrade again.<br>The upgrade will complete. |

## 5 DIP switch/Networking

- DIP switch 2 is used for BootP and DHCP configuration.
- DIP switch 3 is used for Default IP configuration.
- From v8.90, the Controller will accept IP address offers from standard DHCP servers by default. You can use DIP switch 4 to disable the behaviour, which may be necessary if you want to use BootP to set up a Controller and there is a DHCP server on the network.
- Router configuration is a must if Controllers are configured to use IPv6.
- If you are using pure IPv6 configuration, you need to perform a **Push Configuration** (via the Controller context menu in Command Centre) to get the Controller online.

## 6 Recommendations

It is recommended that all components related to doors, (e.g. sensors, readers, etc.), are hosted by the same Gallagher Controller as the door. Splitting components over several Controllers is unsupported configuration.

If components are split over several Controllers then a network failure may result in incorrect door status, door open too long alarms, etc. Also, when one Controller restarts some parts of doors may report incorrect status.

Performance of access control will also be poor in this case.


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# Appendix A: Upgrading Site / Controller Database Re-sync

## Background

This appendix is intended to highlight when a Controller Database Re-sync is required. It is also intended to highlight the need for care and planning ahead when re-syncing controllers on large sites.

There are a number of reasons why you would perform a database re-sync, (e.g. a new controller has been installed, there have been cardholder database changes).

It is always required for you to read the release notes before upgrading a site as additional information may be posted on this process.

## Planning and managing a Controller Database Re-Sync using Status and Overrides window

1. When any controller is brought online for the first time or after upgrade, ('Card.edb - rebuild' or 'Card.edb - delete' are shown), the cardholder database will be empty. As cardholders badge at a door the controller will query the server for the cardholder records, and the controller will then hold that record if indeed the cardholder is allowed through the door. If the controller was not able to contact the server it will deny access if it does not have the cardholder record.

   A Database Re-sync will need to be completed to avoid this situation where the controller cannot contact the server, and to populate the cardholder database. If the server later goes offline it will not matter.

2. On a large site it is recommended to re-sync one controller at a time.
   The reason for this is because on large sites a re-sync can make the server very busy, too many re-syncs at once can cause the server to be so busy it is not able to respond to controllers that are requiring access information for cardholders in a timely manner and this can result in unauthorised cardholder alarms and access denied at the door.

3. To monitor when a controller has finished the re-sync you can use the Controllers Status and Overrides window to report how many messages (updates) are pending for the controller.
   **Note:** It takes about a minute to destroy and recreate a blank card database on Controller 7000 Single Door. During this time, no access attempts can be processed. Once the database has been created, access attempts perform normally, whilst the resync continues in the background.

4. When a Database Re-sync is requested the messages pending count will gradually increase until all cardholder information the controller needs to know about is queued up, this information will start flowing down to the controller. It is important to note the amount of messages pending does not directly represent the amount of cardholders being sent to the controller. Depending on the amount of messages pending the controller can take between a few minutes to over an hour to re-sync.

5. Do not perform a Database Re-sync on the same controller twice; within a short time, this will duplicate the amount of work at the server and controller.

If you require additional information or advice then please contact Gallagher Security Technical Support.


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**mmc-utils (v73d6c59af8d1bcedf5de4aa1f5d5b7f765f545f5)** uses GPL-2.0
**nftables (v0.9.6)** uses GPL-2.0
**ntp (v4.2.8p15)** uses NTP
**openssh (v8.6p1)** uses BSD-4-Clause, BSD-3-Clause, BSD-2-Clause, Public Domain
**optee-client (3.17.0)** uses BSD-2-Clause
**optee-os (v3.17.0)** uses BSD-2-Clause
**pcre (v8.44)** uses BSD-3-Clause
**pcsc-lite (v1.9.1)** uses BSD-2-Clause (auth), BSD-3-Clause, ISC (simclist)
**poco (v1.10.1)** uses BSL-1.0
**popt (v1.18**) uses MIT
**syslog-ng (v 3.33.1)** uses LGPL-2.1+ (syslog-ng core), GPL-2.0+ (modules)
**TrustedFirmware-A (v2.6)** uses BSD-3-Clause
**U-Boot (v2022.07-rc5)** uses GPL-2.0


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