

Verifying Data Backups

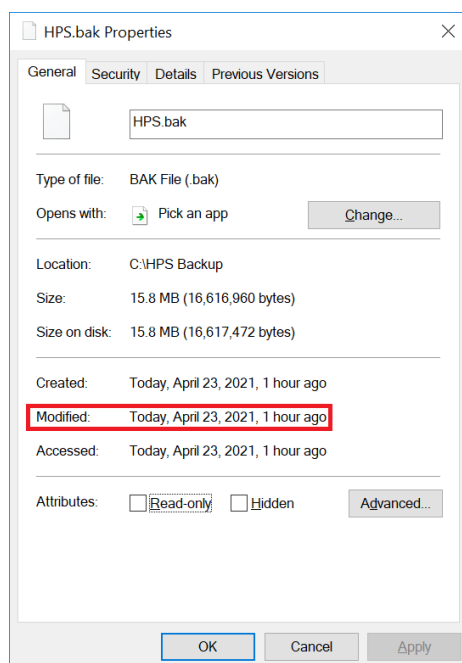
Data back-ups are crucial to quickly restore the Arial system to working order should there be a server failure or loss of data. Arial automatically creates back-ups of the database to a default directory located at C:\HPS Backup

It is strongly recommended that a back-up be created in a location that is not on the same disk drive where Arial is installed. Instructions for backing up the database are provided in the chapter of this document entitled **Backing Up and Restoring**.

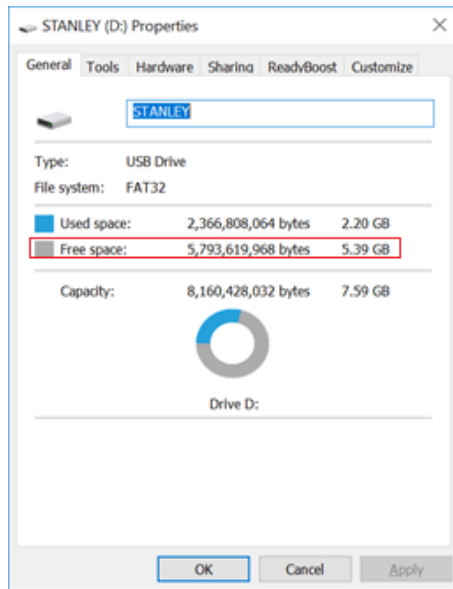
Periodically it is a best practice to confirm these backups are occurring.

1. In Arial, go to **System > System > Server**.
2. In the **Database Backup** section, make note of the path in **Server Backup Directory** and the drive name saved in the **Removable Name** field.

3. Using Windows Explorer, navigate to the directory listed in the **Server Backup Directory** field.
4. Right-Click on the HPS.bak file, select **Properties** then confirm the **Modified date** is within the last 24 hours.

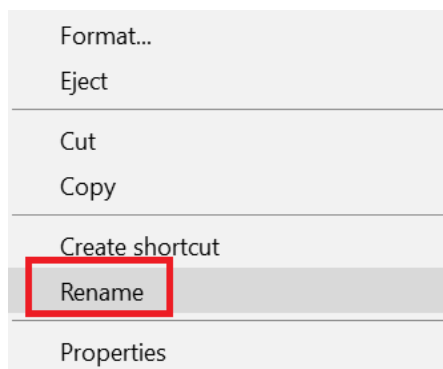


5. Use Windows Explorer and navigate to the USB drive listed in the Removable Name field. If the drive is not there, it the USB drive has likely been removed from the computer. See instructions later in this section to replace the drive.
6. In the root directory of this drive, locate then right-click on the HPS.bak file, select **Properties**, then confirm the **Modified date** is within the last 24 hours.
7. Use Windows Explorer to navigate to **My PC**. Individually right-click on the drive locations for the **Removable Drive** and **Server Backup Directory** and select **Properties**. Confirm you have at least **5 GB** of **Free space** remaining. If you need additional storage either remove unneeded files or replace with a larger drive. See **Replacing Removable Drive** later in this section for instructions.

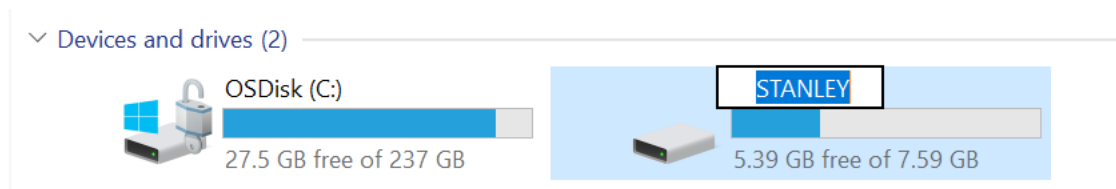


Replacing a Removable Drive

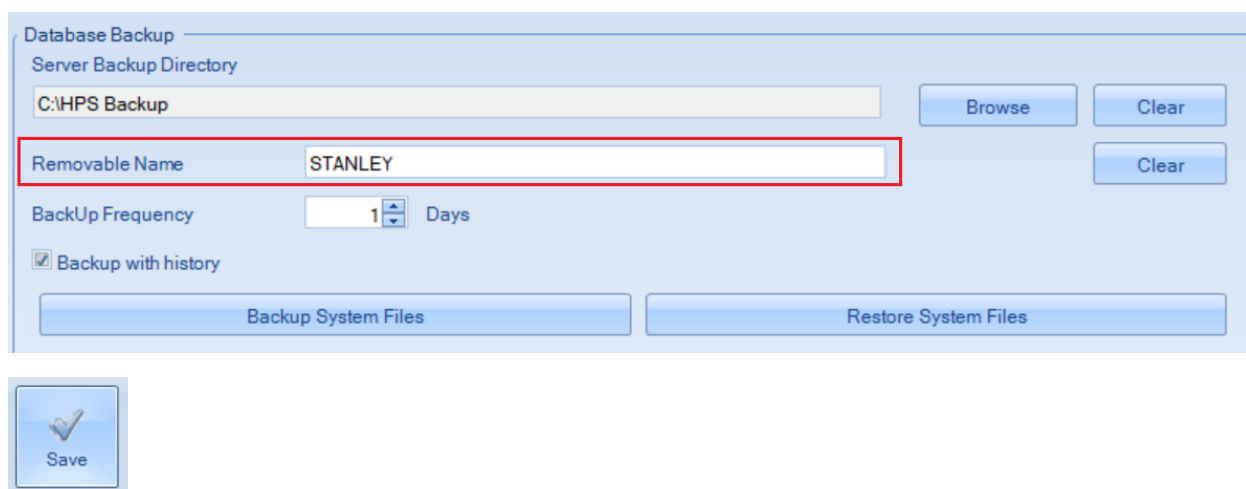
1. If the original USB drive has been lost or is full, insert a new USB drive into one of the USB ports on the computer (ports on the back are less likely to have the drive removed).
2. From Windows Explorer go to **My PC**, right-click on the USB drive, then select **Rename**.



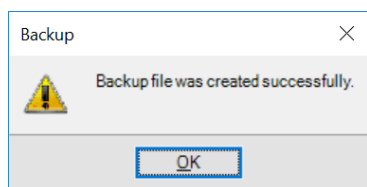
3. Copy this name, then click somewhere on the screen to deselect.



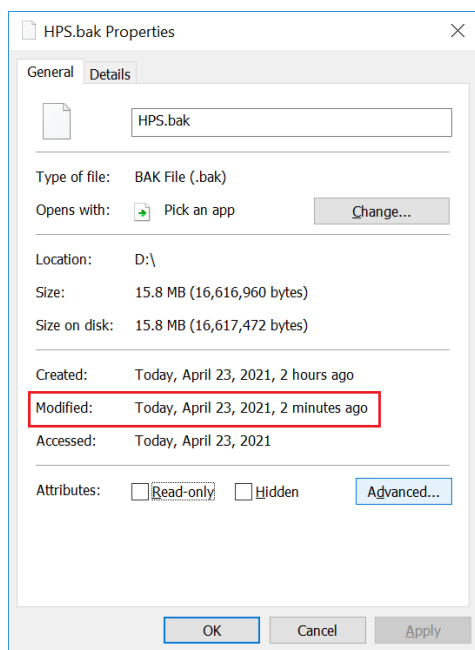
4. Go to **System > System > Server** in Arial and paste this new name into the **Removable Name** field. Click **Save**.



5. Create a back-up file by clicking the **Backup System Files** button. A confirmation window appears showing that the backup was **created successfully**. Click **OK**.



6. Use Windows Explorer and navigate to the **root directory** of your **backup drive**. Locate a file called **HPS.bak**. Right-click and select **Properties**. Confirm the **Modified** time is from just a moment ago when you clicked the **Backup Files** button, then click **OK** to close the Properties window.

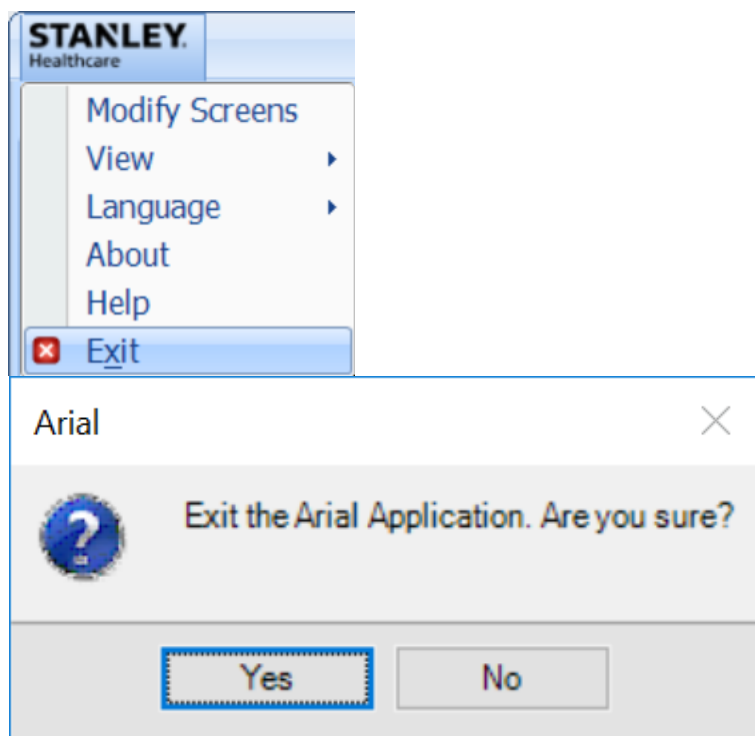


Cleaning the PC Fan

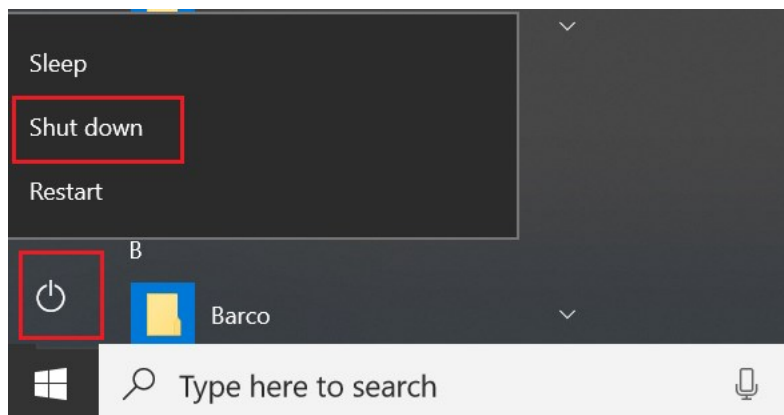
Over time, the cooling fans on a computer that runs constantly can cause dust and lint to build up and eventually stall the fan or limit air flow needed to properly cool the electronic components in the computer, and can lead to computer failures due to overheating. This is preventable by clearing the dust from the fans and air openings on the computer. Clean the fan annually or whenever dust build-up is noticed on the computer's fans and air openings.

NOTE: It is recommended that you perform this procedure at a time when resident calls are expected to be unlikely or when residents are gathered and are easily seen by caregivers (such as mealtimes).

1. Refer to the backup procedure in the previous section for steps to **create a database backup** before proceeding.
2. **Close** the Arial program. Log into Arial with an Admin password as necessary, then go to the **STANLEY Healthcare Menu** and select **Exit**. Click **Yes** on the dialog window that appears.



3. **Safely turn off the computer** by going to the **Start Menu** in the lower left corner of the screen then select **Shutdown** from the Power options. Wait for the computer to completely power off.



4. After the PC turns off, **turn off the power switch** on the Uninterruptable Power Supply (UPS) and **disconnect the power cord** of the computer from the outlet on the back of the UPS to help prevent injury to yourself or damage to the computer.



5. Use a **can of compressed air** (available from most office supply stores) to **blow the dust out of the fans** on the back of the PC and any vent openings on the back or front cover of the computer.
6. **Open the computer case.** Usually there is a latch on the back and/or a couple screws that can be removed that allows one side of the computer case to be taken off. Sometimes the case side must be slid towards the back of the computer before it can be lifted off.
7. Inside of the PC, look for fans on the circuit boards. There is generally at least one fan on the main processor. **Blow the dust out of the processor fan** and any others you see.



8. Look for any other **fans on the case** and blow them out with the can of compressed air. Look at the **inside of the case** and **blow out any remaining dust** that has accumulated in the case.



9. **Reinstall the side cover** you removed in the early step back on by reversing the steps you used to remove the cover.
10. **Connect the power cord** of the computer back to the same **battery backed up outlet** on the back of the UPS.
11. Turn the **power switch** of the UPS on.
12. Press the **Power button** on the front of the computer. Wait for Arial to boot.
13. Use a pendant or call station to place a test call and verify the alarm appears on the correct computers and message devices. Confirm no Warning flags persist in Arial after 5 minutes.

NOTE: The steps above for cleaning the fans should also be performed on any computers running the Arial client software that are located at nurses' stations.

Arial Software Updates

STANLEY Healthcare releases updates to the Arial software to help add additional capabilities to the system, maintain security and compatibility with hardware, and address recent software issues.

IMPORTANT: Contact STANLEY Healthcare Technical Support at 800-380-8883 before attempting a software update. They will work with you to ensure the proper upgrade steps are followed and that your hardware will be compatible with the new version of software.

Computer Operating System Updates

The Arial system uses computers that run on approved versions of Microsoft's Windows Operating System. See the Arial Software Installation Guide for operating system requirements for your version of Arial.

Periodically Microsoft and other companies that manufacture hardware used in your computer will release updates to their software. These updates help to address

security vulnerabilities and other issues that have been discovered with the software or hardware on your system. STANLEY Healthcare recommends installing these updates to help maintain your system. Microsoft and other companies regularly release updates monthly. Microsoft has established the second Tuesday of every month as Patch Tuesday. The latest patches and updates to anti-malware programs are available during this time.

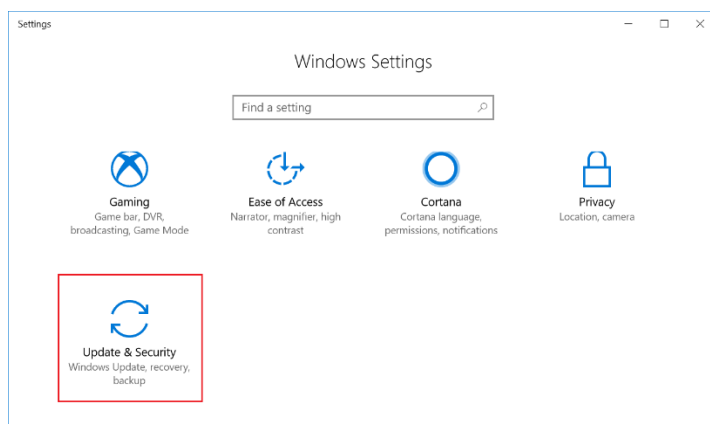
Choose a day within the week following Patch Tuesday to look for and install the latest system updates.

NOTE: Some system updates are critical, and Microsoft will eventually force these to install.

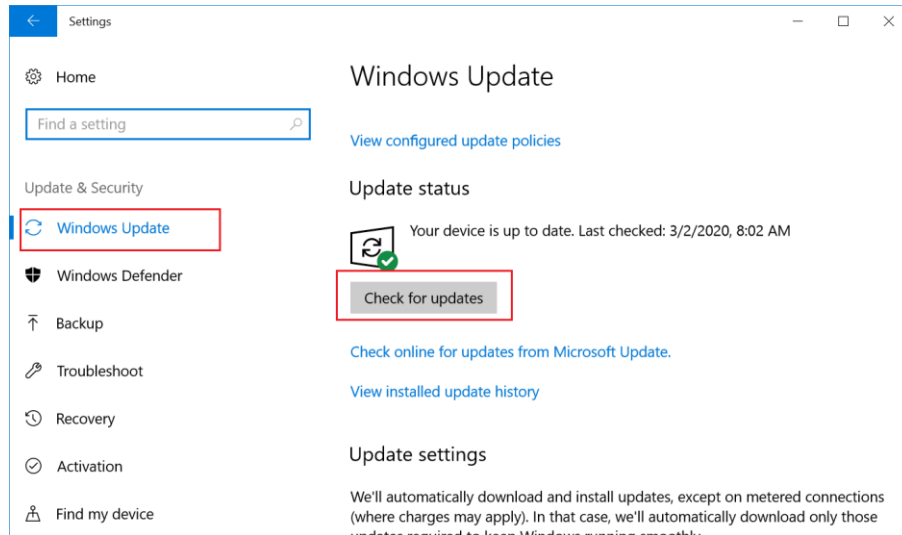
IMPORTANT: Windows updates and similar software updates from other companies often require the computer to reboot. Arial will not receive calls from residents while the computer is rebooting.

Some of these updates can take as long as an hour or more to load. It is recommended that you perform these updates at a time when resident calls are expected to be unlikely or when residents are gathered where they are easily observed by caregivers (such as mealtimes).

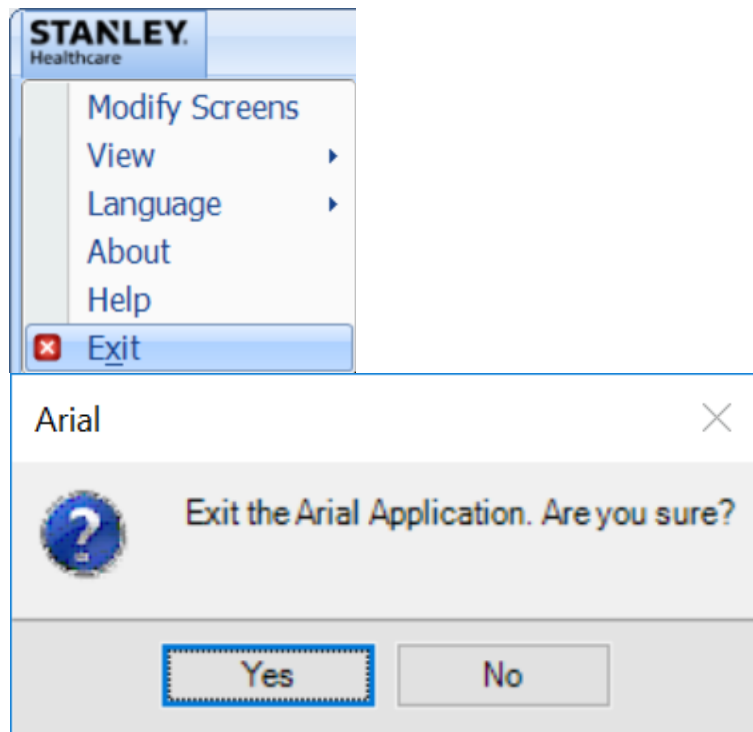
1. Refer to the backup section for steps to **create a database backup** before proceeding.
2. Press **Windows Key + I**, to open the **Windows Setting** screen.
3. Choose **Update & Security**.



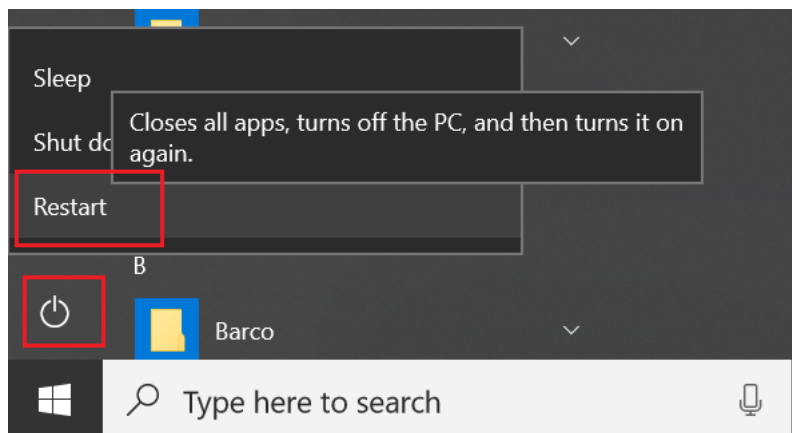
4. Select the **Windows Update** option along the left side, then click the **Check for Updates** button.



5. If updates are available, you will have the option to download and install them. Follow the onscreen prompts.
6. After all updates have been downloaded and installed, it is recommended that you reboot the computer to be sure that everything is fully installed, and the computer will not reboot by itself later.
7. **Close the Arial program** by logging into Arial with an Admin password as necessary, then go to the **STANLEY Healthcare Menu** and select **Exit**. Click **Yes** on the dialog window that appears.



8. **Safely turn off the computer** by going to the **Start Menu** in the lower left corner of the screen then select **Restart** from the Power options.



9. Wait for the computer to completely power off, then power on again.
10. Wait for Arial to launch.
11. Use a pendant or call station to **place a test call** and **verify the alarm appears** on the correct computers and message devices. Confirm **no Warning flags** persist in Arial after 5 minutes.

Operation Testing

NOTE: It is recommended that Operation Testing is performed annually or after any Arial software update.

1. Use pendant or call station to place a test call in each zone.
2. Verify the alarm appears on the computer at the nurse station that responds to the alarms.
3. If the Arial Mobile Application or Pagers are being used, confirm the alarm appears on the staff-carried devices for caregivers responsible for responding to the alarms.
4. If optional LED signs are installed, confirm the alarms appear on all LED signs where the call should appear.
5. Cancel the alarm from the device you used to create the alarm. Confirm the alarm is cleared on all appropriate devices described in the steps above.
6. Repeat the steps above for each zoned area of the community where different caregivers view alarms from a limited number of apartments.

Coverage Testing

NOTE: It is recommended that Coverage Testing is performed at least once a year or whenever there have been remodels, building additions, network upgrades, or other work that could have changed how wireless signals are received by the system.

Using a pendant and a pager or phone with Arial Mobile app is recommended for the following test.

- Walk to the ends of the hallways on each floor of each building and place a test alarm and verify the alarm appears on the system. Clear the alarm after each test.
- For campus settings where there are smaller homes located outside of the main building, test alarms from outside the furthest homes in each neighborhood.
- If alarms are missed, confirm whether the alarm was missed only on the staff-carried device or if the alarm was not received by the system at all. Contact Technical Support at 800-380-8883 for additional troubleshooting assistance.

Recommended Maintenance Schedule

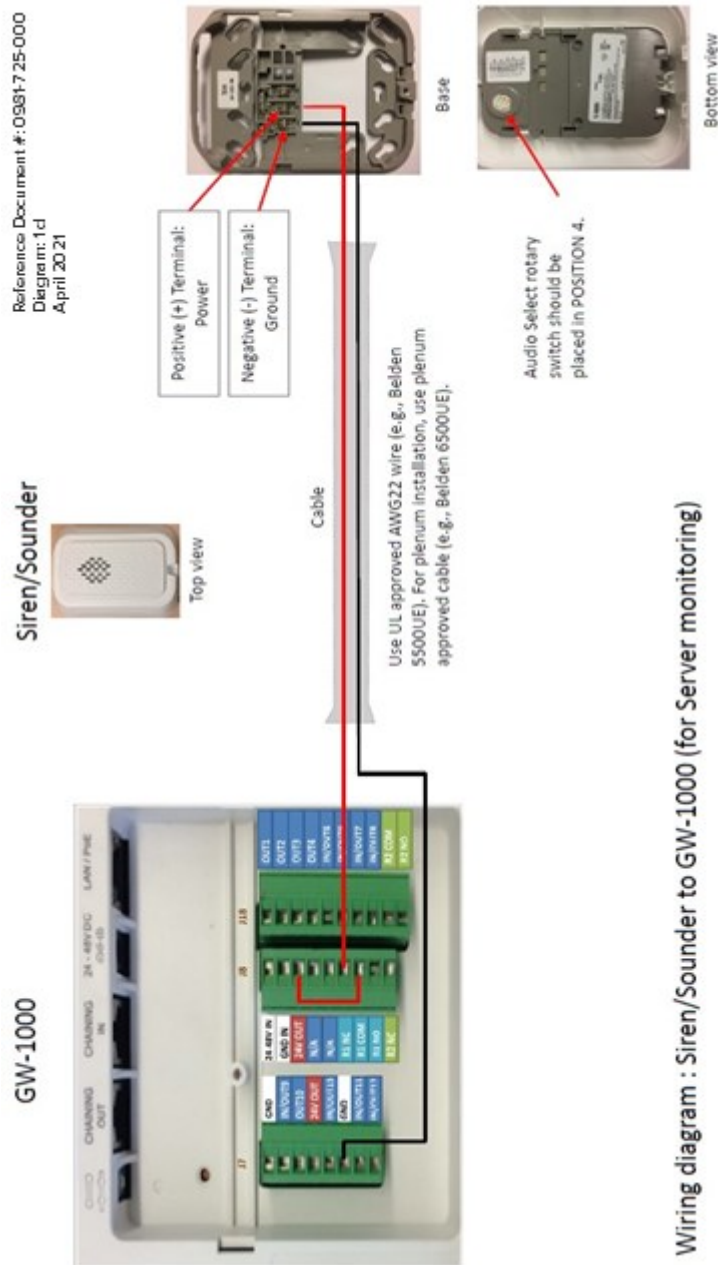
Task	Minimum Interval
Data Backups	Daily - Automatic Backup, Quarterly - Verify Drive Integrity
Computer Operating System Updates	Monthly
Arial Software Updates	Yearly
Power Backup	Annually
UPS Battery Replacement	3 Years
Fan Cleaning	Yearly
Operation Testing	Following Operating System or Arial Software Update
Coverage Testing	Yearly

Appendix

Wiring Diagram

GW1000 to Siren (Chime) – Server

The following diagram shows the wiring configuration between the GW1000 and a chime for server monitoring:



Wiring diagram : Siren/Sounder to GW-1000 (for Server monitoring)

Troubleshooting

ALE SNMP Communication Failure

Arial has an SNMP Agent that monitors the status of all connected Gateway GW1000 devices from the ALE. Gateway faults and issues are reported via the SNMP Agent in Arial. The SNMP IP address must be the same as the Arial/HPS Server to prevent communication errors.

If an incorrect SNMP IP address is entered (in Arial under System>System), the SNMP agent will fail to communicate with the ALE and the following error message will appear:



To resolve the above issue, perform the following:

1. Check the SNMP IP address and make sure it is the same as the Arial/HPS Server.
2. Restart the HPS Server (psService from Services).

Safety, FCC Warnings and Warranty

FCC STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- a) Reorient or relocate the receiving antenna.
- b) Increase the separation between the equipment and receiver.
- c) Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- d) Consult the dealer or an experienced radio/TV technician.

Operation is subject to the following two conditions:

- a) This device may not cause harmful interference
- b) This device must accept any interference received, including interference that may cause undesired operation.

FCC Warning

Modifications not expressly approved by the manufacturer could void the user authority to operate the equipment under FCC Rules.

WARNING: This device complies with Part 15 of the FCC Rules and RSS-210 of Industry and Science Canada. 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.

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

STANLEY Healthcare (“STANLEY”) Standard Warranty and Disclaimer For Arial® Products (“Products”)

Warranty and Disclaimer. Products consisting of the Arial® Communications System (not including the Software which is covered by STANLEY’s separate warranty contained in the Software Licensing Agreement) is warranted to the Owner to be free of manufacturing defects for a period of one year from the date installation is completed. EXCEPTION: Certain portable pagers and accessory Products are warranted to be free from manufacturing defects for periods ranging from thirty (30) days to one (1) year as specified to Customer. EXCEPTION: WanderGuard® and Signaling Devices and RoamAlert® Tags (if used as part of an Arial system) are warranted to be free of manufacturing defects at the time they are put in service as set out in the operating instructions. Because signaling devices and tags are battery

powered, NO SPECIFIC LIFE IS GUARANTEED. If any defects covered by this warranty appear within the above stated one year period, upon delivery of the defective unit to STANLEY, STANLEY will, at its sole option, repair or replace the defective component on an exchange basis with new or rebuilt parts at its expense, without charge. On-site warranty service will be provided by STANLEY only if a reported problem is deemed by STANLEY to be not otherwise solvable through the exchange of defective components, the remote troubleshooting and diagnostics capabilities of the System or consultation with an STANLEY technician by phone. STANLEY is not responsible for warranty service should the STANLEY logo or the serial number be removed or should the Arial Communications System fail to be properly maintained or fail to function properly as a result of misuse, abuse, neglect, improper shipping, incorrect wiring not our own, damage caused by disasters, such as fire, flood and lightning, damage caused by faulty or leaking batteries not supplied by STANLEY, service other than by STANLEY or units in use in violation of instructions furnished by STANLEY. Travel expenses to and from the Facility and on-site labor charges will be the Owner's responsibility during the warranty period if a reported problem is the result of any of the aforementioned circumstances, a change in repeater locations not otherwise authorized by STANLEY, or a change in the Facility, e.g. removal of a wall or other remodel or structural change or the presence of a new interference source in the environment not present at the time of the Facility walkthrough, review of site plans, or during system installation, etc. Owner must obtain a return authorization number from STANLEY prior to returning equipment to STANLEY for warranty service. Postage, insurance, or shipping costs incurred in presenting the Arial Communications System for warranty service are Owner's responsibility. Because each radio system is unique, STANLEY disclaims liability for range, coverage, or operation of the Arial Communications System as a whole under this warranty. This warranty shall not be enlarged, and no obligation or liability shall arise out of STANLEY rendering of technical advice, facilities, or service in connection with Purchaser's purchase of the Arial Communications System. Owner recognizes that a properly installed and maintained Arial Communications System may only permit residents to seek assistance. It does not ensure or guarantee that there will be no death, personal injury and/or damage to property. As a result, STANLEY does not claim that the Arial Communications System may not be compromised and/or circumvented, or that the Arial Communications System will prevent any death, personal injury and/or damage to property in circumstances which might prompt the use of the Arial® Communications System, or that the Arial Communications System will in all cases provide adequate warning or protection. Except for the foregoing warranties, which shall be the exclusive warranties with respect to any Products, STANLEY MAKES NO WARRANTY OR REPRESENTATION OF ANY KIND, EXPRESS OR IMPLIED, WRITTEN OR ORAL, REGARDING INFORMATION GIVEN OR THE PRODUCTS OR SERVICES SUPPLIED AND EXPRESSLY DISCLAIMS ALL EXPRESS AND IMPLIED WARRANTIES, REPRESENTATIONS AND CONDITIONS, INCLUDING WITHOUT LIMITATION ALL WARRANTIES AND CONDITIONS OF QUALITY, NONINFRINGEMENT, MERCHANTABILITY AND SUITABILITY OR FITNESS FOR A PARTICULAR PURPOSE TO THE EXTENT PERMITTED BY LAW. STANLEY WILL NOT BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, INDIRECT OR PUNITIVE DAMAGES FOR ANY CAUSE OF ACTION, WHETHER IN CONTRACT, TORT OR OTHERWISE. Consequential, incidental, and indirect damages include, but are not limited to, lost profits, lost revenue and loss of business opportunity, whether or not Stanley was aware or should have been aware of the possibility of these damages.

About STANLEY Healthcare

Over 15,000 hospitals and senior living communities rely on STANLEY Healthcare solutions to empower caregivers to deliver better care. STANLEY Healthcare is a part of Stanley Black & Decker and a proud supporter of the Alzheimer's Association®. Learn more at stanleyhealthcare.com.

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