

LASERS

LEAVE AND SHIFT ELECTRONIC REQUEST SYSTEM



LASERS Administrative Manual Version 2.0.1

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<nicholas.stauffer@ihs.gov>

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1 Software license agreement

This software, by default, sends the following anonymous usage statistics to LT Stauffer whenever LASERS Client is launched: the name of the application, the version of the application, and current date and time. If you would like to opt out of this data collection, please contact LT Stauffer.

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2 Introduction

LASERS, the Leave And Shift Electronic Request System, is a multiuser, networked scheduling and leave request application. It can be adapted to almost any work schedule environment. These instructions will guide you, the LASERS administrator, through the installation and set up process.

3 LASERS Server new install

These instructions are for setting up a new LASERS installation. If you are trying to upgrade your LASERS server, do not follow these steps!

1. Unzip the LASERSNewInstall file that you downloaded. In the unzipped folder, you will see a folder called LASERS.
2. Copy this LASERS folder to the top level of the S drive. In other words, copy and paste that folder to the S drive itself (S:\LASERS) and not a subfolder on the S drive (not S:\NewFolder\LASERS). Do not rename the LASERS folder.

4 Install the first LASERS Client

Users interact with the LASERS server through a client application. Users must install the client on each workstation on which they would like to use LASERS. Installation of the LASERS Client is easy and does not require any administrator privileges. You will need to use the LASERS Client to configure the system. Follow these steps to install the LASERS client to your workstation.

1. Open the LASERS folder on the S drive.
2. Double click the Install LASERS Client shortcut.
3. The system will install the LASERS Client to your workstation. You must have the Microsoft Access Runtime or Microsoft Access Application installed on your workstation prior to installing LASERS Client. Microsoft Access Runtime can be obtained for free from microsoft.com, but it requires administrative privileges to install.
4. The installer will inform you if it has completed successfully. The installer will have placed a shortcut to LASERS on your desktop and in your Start Menu.

5. Double click the LASERS icon to open the application for the first time. You will see the login window. Login using the default administrator username `admin` and password `password`.
6. You will now see the Main Menu. It is highly recommended that you change the default administrator password at this time. You may do so by clicking the Change password button. You should also change the default administrator user profile to match your name and desired login username, which will be described in the next section.

5 Configuring LASERS for your workplace

LASERS can be adapted to just about any required scheduling configuration. These steps will guide you through setting up LASERS for your workplace.

5.1 Editing the default admin user

Let's change the default admin user profile to match your information.

1. Click System configuration, then click Users. You will see the user management menu, with options to browse through all users, search for users based on specific search criteria, and to create new users.
2. Click Browse users.
3. The Add/edit user page appears, displaying the first and only user in the system, which is your admin user. Update the profile with your last name, first name, and desired username. Then click Save. To undo any changes you have made (before navigating Back to the user management menu or to a different user profile using the navigation buttons), click the Undo changes button.
4. Leave the user type as admin. There must be at least one admin. LASERS will not let you inactivate the only admin user or change the only admin to a different user type.
5. Don't worry about setting employee scheduling group membership at this point; that will be set up in the next step.
6. Users that no longer need access to LASERS can be inactivated by checking the Inactivate

user? checkbox. Users cannot be completely deleted from the system, but inactivated users are not able to login and they do not show up on the schedule. As mentioned above, LASERS will not let you inactivate the only admin user.

7. After additional users are added to the system, you can use the navigation buttons to move between user profiles. Adding additional users will be covered in a later section after some additional aspects of the system are configured.
8. When you have finished editing the default admin user for yourself, click the Back to return to the user management menu. Click Back one more time to return to the system configuration menu.

5.2 Configuring scheduling groups

LASERS can keep track of different groups and subgroups of personnel, who are part of completely separate schedules, work completely different shifts, and can have different types of leave. While there may be an unlimited number of scheduling groups, there must be at least one scheduling group, and all staff should be members of that main scheduling group. LASERS comes with this main scheduling group; it is called "Staff". For example, pharmacists and technicians may be grouped and scheduled according to their own shifts and schedules. As a further subdivision, a subgroup for inpatient pharmacists may be created. When creating a subgroup, it is suggested to use the following naming scheme: MainGroup/SubGroup. For example, you can create a Pharmacist scheduling group and then create subgroup for inpatient pharmacists called Pharmacist/Inpatient. This way, you can look at the schedule for all pharmacists together or just the inpatient pharmacists. By associating shifts to specific scheduling groups, as described in the following section, you can also ensure that a staff member is not inadvertently scheduled for a shift that does not apply to their role, such as inadvertently scheduling an outpatient pharmacist for an inpatient shift.

As of LASERS version 2.0, the scheduling group configuration page also allows you to control the request lockout and schedule release features individually for each scheduling group. This section will describe how to create and manage scheduling groups as well as the request lockout and schedule release features.

5.2.1 Creating scheduling groups

You can use the following steps to create additional scheduling groups (and subgroups).

1. Click the Scheduling groups button in the system configuration menu.
2. Click the New button to add a new scheduling group. The cursor will move to the next blank Scheduling group name box. Enter a name for the scheduling group, such as Pharmacist.
3. Press tab to move to the Scheduling group description box. You may enter an optional description for the scheduling group.
4. Click the Save button to save the new scheduling group. Or, click Undo changes to cancel adding or changing the scheduling group.
5. When you have finished adding scheduling groups, click the Back button to return to the system configuration menu.
6. To "delete" a previously added scheduling group, click the Inactivate this scheduling group? checkbox, which will prevent the scheduling group from being used.

5.2.2 Request lockout

It can be useful to lockout the ability for employees to enter requests for certain date ranges. For example, employees might only be able to make requests for dates within the next three months. The request lockout can also be enabled after a deadline for entering requests has passed. In this way, once the requests are finalized, managers can begin working on building the schedule without having to worry employees changing their requests. Request lockout can be configured for each scheduling group independently. As an example, this could allow Technician and Pharmacist scheduling groups to have different request lockout rules. Only admins can configure the request lockout, and it applies to all users in that scheduling group.

Be aware that users who are members of more than one scheduling group will be subject to the least restrictive request lockout associated with any scheduling group of which they are members. Consider the following scenario as an example:

- A user is a member of both the Staff group and the Pharmacist group.

- The Staff group has a request lockout in place that does not allow entry of any requests.
- The Pharmacist group has a request lockout in place that only allows requests to be entered for dates in the next month.
- A third group, Supervisor, has no request lockout in place.

In this case, the user will be able to enter requests for any shift (even a shift associated with the Staff scheduling group) but only for dates in the next month, because the user is subject to the least restrictive request lockout rules associated with any scheduling group of which the user is a member. For this reason, it is recommended that the Staff group be configured to not allow request entry if other additional scheduling groups are being used.

Read the request lockout instructions on the scheduling groups configuration screen. Click the `Allow request entry?` checkbox for a given scheduling group to allow requests to be entered for that scheduling group. Please note that the dates entered in the request lockout configuration are the actual dates that are being requested, not the days on which the request may be entered. For example, if the checkbox is not checked, no requests may be entered for any date. If the checkbox is checked and no dates are entered, employees can enter a request *for any date, on any date*. If the checkbox is checked and the starting date is January 1, 2019 and the ending date is January 31, 2019, that means that employees can, *at any time*, enter requests to have leave or a certain shift *for any day in the month of January 2019*. To reiterate, the request lockout is concerned with the dates being requested themselves, not when an employee is able to enter a request.

Whenever a request lockout is in place, a padlock icon will show on the request calendar page for that scheduling group. Hovering the mouse over the padlock icon will show the range of dates that may be requested. If any employee tries to enter a request on a locked out date, an alert will display with the range of allowed dates.

5.2.3 Schedule release

It is usually desirable to prevent the staff from seeing the schedule until it is completed. Schedule release can also help prevent managers and admins from inadvertently entering requests on the schedule calendar, because when a limited schedule release is configured, those users must enter a special mode

on the schedule calendar view before they can enter schedule blocks for dates that have not yet been released. Schedule release can be configured for each scheduling group independently. As an example, this could allow Technician and Pharmacist scheduling groups to be created and released at different times. Only admins can configure the schedule release, and it applies to all users in that scheduling group.

Be aware that users who are members of more than one scheduling group will be subject to the least restrictive schedule release rules associated with any scheduling group of which they are members. Consider the following scenario as an example:

- A user is a member of both the Staff group and the Pharmacist group.
- The schedule for next month is not finalized for the pharmacist group, so this group has a limited schedule release in place, with the schedule released only up until the end of the current month.
- The Staff group does not have a limited schedule release in place, because an administrator forgot to enable it to correspond with the limited schedule release of the pharmacist group.

In this case, the user will see the limited schedule for the Pharmacist group. However, if the user views the schedule for the Staff group, they will see the entire schedule, including the unreleased parts of the Pharmacist schedule, because they are a member of both groups, and the Staff group did not have a limited schedule release. For this reason, it is recommended that the Staff group be configured to coincide with the schedule release date of the scheduling group that has the earliest release date.

Read the schedule release instructions on the scheduling groups configuration screen. Click the `Enable limited schedule release?` checkbox for a given scheduling group to limit the release of that scheduling group. Enter a date to allow employees to see schedule entries up to but not including that date. For example, if you are working on the schedule for the month of August, you could enter August 1, 2019, to prevent users from seeing any schedule entries on or after that date. If you don't enter a date, none of the schedule will be visible.

As mentioned above, when schedule release is enabled, the schedule calendar view is slightly different for admins and managers: An additional checkbox, `Display unreleased?` will now be visible on the schedule calendar. Managers and admins can

enter and change the part of the schedule that has already been released, i.e., the schedule blocks for dates prior to the date set in the schedule release configuration screen, as normal. However, in order to enter or change schedule blocks that have not yet been released, first the `Display unreleased?` checkbox must be checked. When checked, all unreleased schedule blocks will turn teal color (except the block for today, which will remain light yellow). Now all schedule blocks can be entered or changed. Unchecking the `Display unreleased?` checkbox will hide these teal blocks again, but any entries that were made have been saved. When the schedule is ready to be released to all uses, the schedule release configuration page can be adjusted as appropriate.

5.3 Configuring shifts

You can now begin setting up shifts for your scheduling groups.

1. Click the `Shifts` button from the system configuration menu.
2. Each time you open the `Add/edit shift` page, all shifts are shown by default. You can filter the display to only show shifts for a specific scheduling group by selecting a scheduling group from the drop-down menu.
3. LASERS comes preconfigured with `Test shift 1` as an example. Please change this first shift to suit your needs before adding new shifts.
4. Click the `New` button to add a new shift. The cursor will move to the end of the list of shifts.
5. Enter the shift information.
 - The shift name will only be displayed on the `Add/edit shifts` screen.
 - The shift abbreviation code is used to represent the shift on the schedule calendar. Shift codes must be between 1 and 3 alphanumeric characters, and they should use capital letters. For example, `ACC` could be used for anticoagulation clinic.
 - The shift description is a description of the shift that is displayed to users. It is usually a good idea to include the hours of the shift in the description, for your employees' information.
 - Select the appropriate employee scheduling group from the drop-down menu.
6. When you are finished adding and editing shifts, click `Save` and then click `Back` to return to the `System configuration` screen.

5.4 Configuring leave types

LASERS needs to know about what types of leave employees can request and be scheduled for. Leave types are also configured on a per scheduling group basis. LASERS comes preconfigured with the `OFF` leave type, which is for regularly scheduled time off, and it is available for all `Staff`. The `OFF` leave type is an integral part of LASERS, so *do not change any aspect of or inactivate the OFF leave type!* The only exception to this rule is that you may increase the number of slots to something higher than 99 if needed.

Leave types are configured exactly like shifts. The numbers of request slots and schedule slots limit how many employees may request or be scheduled for that leave type. If you would like different scheduling groups slots to not count against each other, you should create a separate leave type for each scheduling group. For example, you can create a leave type for annual leave for both pharmacists and technicians so that there can be a different number of slots available for each group. In this case, you can even use the same leave abbreviation code, for example `AL` for annual leave, for each group, since they are scheduled separately. As with the shifts, you can filter the `Add/edit leave types` screen with the scheduling group drop-down menu. Some suggested leave types are listed in Table 1.

There are two check boxes at the top of the screen:

Table 1: Suggested leave types

Leave code	Leave type name/description
ADL	Administrative leave
AL	Annual leave
DPL	Deployment
OFF	Regularly scheduled time off
PL	Parental (maternity/paternity) leave
SL	Sick leave
STL	Station leave
TDY	Temporary duty

Auto OFF weekends? and Auto OFF holidays?. Selecting these options will cause the system to automatically schedule everyone OFF on weekends and/or holidays, respectively. This results in less repetitive manual entry for the schedule. In this case, you only need to manually schedule only those individuals who should not be off on a given holiday or weekend.

The following steps outline the process of adding new leave types.

1. Click the Leave types button in the System configuration menu.
2. Click the New button to add a new leave type. The cursor will jump to the leave type name field.
3. Enter the name of the type of leave in the box.
4. Press tab to move to the leave code box. This is the abbreviation that will show up on the schedule when employees are scheduled for this type of leave. Leave codes are limited to 3 characters.
5. Press tab to move to the leave type description box. This description is shown to users so they know what the leave code corresponds to.
6. Choose the scheduling group to associate with this leave type.
7. Enter then number of slots available for this leave type for scheduling and request purposes.
8. Click the Save button to save the leave type, or click Undo changes to cancel adding or changing a leave type.
9. To “delete” a previously added leave type, click the Inactivated? checkbox.
10. Click Save and then Back when you have finished adding leave types.

5.5 Adding additional users

1. To add a new user, click the Users button in the system configuration menu. (Once LASERS is in use, it is recommended to always Search users before adding a new user, just to make sure that another admin has not already entered the user.)
2. Click the New user button in the user management menu.
3. Enter the user’s information. Usernames must be unique; the system will not allow you to create two users with the same username.
4. Select an appropriate user type. The choices are admin, manager, or employee.
 - Admins have full access all parts of the system.
 - Managers are allowed to enter and make changes to the schedule for the scheduling groups of which they are members. They can also enter schedule requests on behalf of employees in their scheduling groups.
 - Employees are regular users.
5. Choose the scheduling group(s) that the user should be a member of.
 - All users should be a member of the the Staff scheduling group.
 - The Display in schedule? checkbox determines if the user should be displayed in the schedule for the corresponding group. Typically, you will always want the user to be displayed in the schedule. The only exception if for managers and admins, to allow them to create schedules for another group without them appearing in the schedule. For example, a pharmacist may be responsible for creating the technician schedule. In this case, they must be a manager and a member of the technician scheduling group; however, it would not be appropriate for them to show up in the technician schedule, so the Display in schedule box should not be checked.
6. When you have finished entering the above information, click Save.
7. When a new user is first created, you must reset their password before they can log in.
 - Click the Reset this user’s password button.

- A dialog will appear asking if you are sure you want to reset the password. Click Yes.
 - You will be prompted to enter a new password for the user, or you may use the default, which is `password`. Click OK when you are done.
 - A notification will alert you that the user's password was successfully changed. Click OK. Any admin may reset any user's password at any time.
8. Click Save when you are done.
 9. The Inactivate user? button is used when a user should be deleted. A inactivated user may not log in and will not show up in the schedule. Users are not permanently deleted; an admin may reactivate an inactivated user at any time.
 10. Click the Back button when you have finished adding users.

5.6 Configuring holidays

In LASERS, holidays and weekends appear as a red color in the schedule. In addition, the schedule may be configured to automatically schedule everyone as OFF on weekends and/or holidays, if desired. Holidays must be manually updated on a yearly basis. In addition, admins may create additional site-specific holidays. The dates of holidays will need to be manually updated every year.

1. In the system configuration menu, click Holidays.
2. By default, the federal holidays will appear. However, depending on the age of the most recent LASERS version you have received, they may be from a previous year. In this case, update the dates as appropriate.
3. To change the date of a holiday, simply click the date field and enter a new date. After clicking in the date field, you can also click the calendar button to display a mini calendar date picker.
4. Click the New button to create a new holiday.
5. To delete a holiday, first click the into the Holiday name field for a holiday. Then, click the Delete button. (Note, holidays really are deleted.)

5.7 Announcements

LASERS can display announcements to staff. All announcements can be accessed from the View announcements button on the main menu. LASERS can also be configured to display the most recent announcement on the main menu. Only admins can create and edit announcements.

1. To manage announcements, click the Announcements button in the system configuration menu.
2. To create a new announcement, click the New announcement button.
3. To edit existing announcements, click the Edit announcements button. Here, you can modify and delete existing announcements. Use the arrow buttons at the top of the screen to move between announcements.
4. To display the most recent announcement on the main menu, make sure that the check box is selected.

5.8 Additional system configuration options

Previous versions of LASERS included two additional items in the system configuration menu: Schedule release and Request lockout. This functionality has been moved to the Scheduling groups configuration menu. The final Server system configuration menu allows administrators to prevent clients from logging into LASERS, which is used to facilitate installing LASERS server upgrades. This process will be described in a later section.

Congratulations, you have finished configuring LASERS for your workplace!

6 Managing requests

6.1 Introduction

As a manager or admin, you can view, enter, and delete requests for any user. On the Main menu, click Requests. Managers and admins will see the Request management menu. Here, you can view the actual schedule of requests for all employees, run a report to see what comments the employees put with their request, and see details of deleted requests.

Having a number of slots available allows managers to set limits on the number of people who may be on leave and work a certain shift at a time. The benefit of an online system such as LASERS is that all employees can see the requests and can request to have off for dates when not as many of their coworkers have also requested off. In addition, when the number of slots have been requested, additional employees who would want off can talk to the employees who also requested off on that day to try to work it out among themselves, preventing management from ever getting involved.

6.2 Entering requests

Let's get familiar with the requests calendar and enter a test request for yourself, using the following instructions.

1. Click the **Requests** button to view the requests calendar.
 - The staff are listed down the left side of the screen.
 - You can filter the staff list using the **Scheduling group** drop-down menu.
 - There is a request schedule block shown for each employee and each day of the month. Employees' requests will show up in these blocks.
 - Blocks are colored red for weekends and holidays; the current date's block is light yellow.
 - You can view by month or by federal pay period using the **View** drop-down menu.
 - The **Print view** button will generate a printable request calendar. This calendar can also be saved as a PDF or XPS file with the Windows virtual PDF and XPS printers in the print dialog.
 - You can adjust the month or federal pay period displayed using the arrow buttons to the right of the wide calendar heading button showing the date range currently being viewed. Click the wide calendar heading button to return to a view including today's date.
2. To enter a request, click the schedule block corresponding to the user and date desired. Users

may only enter requests for themselves, but admins and managers can enter requests for anyone.

3. The **New request** window will appear. Choose the desired **Request type**, i.e. leave or shift.
4. Then select the desired leave type or shift from the drop-down menu.
5. The number of slots available will update. If the number of slots available is zero, the employee will be notified that all available slots have been requested for that date.
6. The employee may enter any relevant comments in the comments box. Note, these comments are visible by all other employees and are not private. Employees may edit the comments they have entered after saving the request by clicking on the schedule block. No other part of the request may be changed. Managers and admins can also edit the comments for any request, not just their own.
7. Click **Save** to finalize the request. The calendar will update and show the request in the appropriate schedule block.

6.3 Deleting requests

Now that you have entered a request, let's pretend that we have entered it incorrectly and would actually like to change it.

1. Click the schedule block that hold the request you would like to change.
2. Here, you can view all the details of the request. Managers and admins have an additional button, **Delete this request**.
3. Click **Delete this request** to delete the request. A dialog will ask you to confirm the deletion.
4. Now, let's check the deleted requests view. Click **Back** to navigate to the **Main** menu.
5. Then, click **Requests** to return to the **Request management** menu.
6. Click **Deleted requests**. You will see the calendar view with deleted requests. This may be useful if there is a dispute among employees. If an employee has entered and deleted more than one request on the same day, only the most recent request will show.

6.4 Viewing request comments

When making the schedule, it can be helpful to see what comments an employee has entered with their request. Let's learn how to view those request comments. First, create a new request and enter some comments in the comments box, then follow the steps below.

1. On the Request management menu, click Request comments.
2. Choose or enter a start date for the report.
3. Choose or enter an end date for the report.
4. Select the scheduling group for which you would like to run the report.
5. Click the Generate button. The report will appear. It can be printed with the Print button.

7 Managing the schedule

7.1 Introduction

Users can view the online schedule at any time by clicking Schedule on the Main menu. The benefit to scheduling in LASERS is that any employee on the network always has an updated copy of the schedule. Although the schedule can be printed (or saved as an XPS or PDF file), a printed schedule defeats the benefits of an online schedule. The date and time that the current view of the schedule was last updated is displayed on the screen and on printed copies of the schedule. When managers and admins click the Schedule button on the Main menu, they are presented with the Schedule management menu. Click the Schedule button on this menu to view the schedule calendar view.

In the schedule calendar view, all users can click a schedule block to view more details, such as the description for the shift or leave for which they are scheduled as well as the comments for the schedule block. The comments field can be useful for cases where deviations from the standard shifts are warranted. For example, it is recommended to have a shift for training, perhaps with shift code T, and then to have the details of the training, e.g., what shift the trainee will be with, in the comments box. It is also recommended to have a shift for exceptional cases, designated by shift code *, e.g., if an employee has to cover an additional shift or will be doing something other than the standard shift. These details can

also be put in the comments box. Using * as the shift code will allow some room to write in the details on a paper copy of the schedule.

Managers and admins enter the schedule in the calendar view. Entering schedule blocks follows the same process as entering requests, with a few differences. For example, although the schedule calendar view is nearly identical to the request calendar view, there are some additional options. The Display schedule? checkbox shows and hides the schedule. The Display requests? checkbox shows and hides the requests, which display in blue text. When both checkboxes are checked, the actual schedule is underlined and displays over top of the requests. This way, you can easily spot where a schedule block is not in agreement with a request.

Another difference from requests is that schedule blocks may be changed. Unlike requests, which may not be edited (except for comments), schedule blocks may be changed (by a manager or admin) to a different shift or leave type without deleting the schedule block first.

As mentioned in the schedule release section, if a limited schedule release is in place, managers and admins must first click the Display unreleased? checkbox before they can use the bulk entry feature or enter schedule blocks for dates that have not been released.

7.2 Bulk entry

As of LASERS 2.0, managers and admins can use the bulk entry feature to quickly enter multiple schedule blocks for an employee. For example, if an employee is to be scheduled for the same shift or leave for every day in a given week, the bulk entry feature will schedule the employee for those dates at once instead of needing to enter each day individually. Please use caution when using the bulk entry feature: Although new schedule blocks can be entered using the bulk entry feature, in the event of a mistake, the schedule blocks must be edited or deleted individually. There is no bulk delete feature, and the bulk entry feature will not overwrite schedule blocks that already exist.

Use the bulk entry feature as follows:

1. Open the schedule for the desired scheduling group.
2. If a limited schedule release is enabled for that scheduling group, click the Display

unreleased? checkbox to display unreleased blocks.

3. Click the Bulk enter button.
4. Click in the Employee box and start typing the desired employee's name. Alternatively, you can select the employee's name from the drop-down menu. Note that you will only be able to select employees who are members of the scheduling group that is currently displayed on the schedule.
5. Enter the desired start and end dates for desired date range of blocks to be scheduled. Both the start and end dates will be included in the range of blocks to be scheduled. Use caution when selecting your date range, as each block will need to individually changed or deleted if it was bulk entered in error. There is no bulk delete feature, and the bulk entry feature will not overwrite pre-existing schedule blocks.
6. Select Leave or Work as desired and then select the desired leave or shift to be scheduled.
7. Enter any comments as desired. These comments will be included on the individual schedule blocks for each day in the entered date range.
8. Double check that the bulk entry dialog is filled out correctly and then click Save to submit the bulk entry command to LASERS for adjudication, or click Cancel to discard your changes.
9. LASERS will adjudicate each day in the submitted date range. In the event that the submitted shift or leave exceeds the number of available schedule slots on that day, LASERS will display a message explaining that all of the slots for that leave/shift on that particular day have already been scheduled. LASERS will also display a message if a schedule block already exists on a date that was included in the submitted bulk entry date range; LASERS bulk entry will not overwrite any pre-existing schedule blocks. In the event of these errors, make a note of the erroneous date(s) in question and manually edit those schedule blocks as appropriate.

7.3 Keyboard shortcuts

Managers and admins also will see a blue outline around the date and record selectors on the left side of the screen. These visual cues are used for keyboard entry of the schedule, which can be much faster than

using the mouse. The currently selected date can be moved left and right with the arrow keys, for example. Pressing enter will open the schedule block that corresponds to the date and employee selected. The details for the schedule block can all be entered using the arrow keys and space bar to select leave or work, tab moves between fields, and the leave or shift code can be typed in the combo box. Tab to the Save button and press enter to save, or press the escape key at any time to cancel.

7.4 Quality assurance

Managers and admins can run two quality assurance reports to ensure that the schedule has been entered correctly. These reports the Shifts scheduled report and the Missing shifts report, both of which are available on the Schedule management menu. The shifts scheduled report provides a listing of each shift, and the number of employees scheduled for that shift on each day of the month. The missing shifts report also provides a listing of each shift, but subtracts the number of employees scheduled each day from the number of slots that the shift is configured for. To run these reports, click the report's button and enter the desired month and scheduling group. Then click the Generate button. To facilitate schedule creation, these reports include all schedule blocks, including those that have not been released yet. However, any unreleased schedule blocks will have a teal background.

8 Upgrading LASERS

From time to time, newer versions of LASERS are released to fix bugs or add new features. You can upgrade your LASERS to subsequent versions by following these steps. Please pay very close attention to file name extensions! LASERS uses a patching system for upgrades. That means that you must install each patch in sequential order. For example, if your version is 1.4 and the latest version is 1.6, you must install patch 1.5 before you install patch 1.6. If you try to install patch files out of order, the Server will simply inform you that the patch you're trying to install is not compatible.

8.1 Preparation

- Obtain the upgrade files from a trusted source, such as <https://ihs.verdegraphics.com>. Especially if you obtain your upgrade files from another source, such as a colleague, always check the hash of the file against what is listed on <https://ihs.verdegraphics.com> to ensure that the file has not been corrupted or tampered with. Instructions for how to check the hash of the file can be found at the same website.
- Before beginning the upgrade process, *it is absolutely critical that you make sure that no one is logged into or using LASERS to prevent data corruption during the upgrade*. You can check this by going to the S:\LASERS \LASERS_server folder and checking if a file called LASERS_server.**.laccdb** exists. If it does, that means that users are logged in. You can find out the hostnames of the workstations that logged in users are using by opening the **.laccdb** file with a text editor.
- Starting with LASERS 2.0, admins can disconnect current clients and prevent users from logging in to facilitate system upgrades. Click the Server button on the System configuration menu, and then click the Disable client login checkbox before starting the upgrade process.

8.2 Upgrading the Server

1. Download the required patches and unzip.
2. When all users have logged out of LASERS by using the disable client login feature described above, *make a copy* of the LASERS_server.**.accdb** as a backup if something goes wrong. Put this file somewhere safe. *if you do not make a backup of the Server, you could lose your data if something goes wrong with the upgrade!*
3. Double click the LASERS_server.**.accdb** file to launch the LASERS server console.
4. You will see a password prompt to decrypt the database. Type the password LASERS_admin and then click OK.
5. You will now see the LASERS Server login window. The LASERS logo has a red background to remind you that you are logging into the server. Use your normal LASERS login information to log in. Note that only admins can log into LASERS Server.

6. Note your version on the left side. Click the Load and install patch button to navigate to the LASERSpatch file to install. Then click OK. The patch will either successfully install or warn you that it is not compatible if you try to install a patch out of sequential order and then return to the Server main menu. However, if the installer does not install successfully, you will be left with a blank white screen and your server will be in an inconsistent state. This could happen if you attempt to install the upgrade while users are logged into LASERS. In this case, make sure that no one is using LASERS and try again using another copy of your backup Server.
7. Follow any additional patch-specific instructions. For example, if a patch provides a new feature, it might load a default setting that would need to be customized for your work environment.
8. When you install a patch to the Server, you must also load a new version of the Client installer to the S drive, as described below.
9. If you run into problems upgrading, please contact LT Stauffer.

8.3 Upgrading the Client Installer

1. Download the current LASERS Client Installer file and unzip.
2. Replace the S:\LASERS\Installer_data folder with the one in that was contained in the LASERS_Client_Installer.zip file that you downloaded.
3. Users will need to update their LASERS Client application as outlined below.

8.4 Updating LASERS Clients

1. When users try to run LASERS on their workstation, they will receive an alert that a required update is available.
2. Inform users that if they see this alert, they should navigate to the S:\LASERS folder and double click the Install LASERS client icon to install the update.
3. Remember to re-enable client login in the Server system configuration menu after the server upgrade is complete or users will not be able to login.