1.0 System Overview

The LSS-100P Database is a served web application that is available to users, managers, and system administrators to review performance data collected from auditoriums. The data contains limits and measurements available for review. When the media server executes a test show, the LSS-100P is provided with commands that execute various types of measurements that are then reported to the LSS-100P Database Web Server. When the data arrives (a report is received) at the server, it is then processed and logged into the database. The data contains an organization identifier and theater number that is used to identify and generate notifications to designated users assigned or part of the company's personnel. The data is kept private to the organization's users and managers. It is only the system administrator that has visibility of the world and access privileges to install the web application on server hardware that will be hosting the site (LSS-DB Database Web Application).
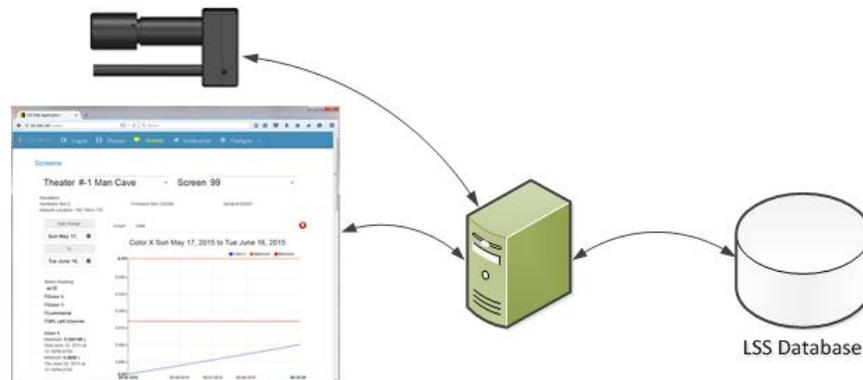
LSS-100P Database Web Server System Overview

1.1 User Levels

The default database contains an administrator, manager, and user accounts. Each account type has a respective access level that enables a list of available options such as creating a new company, and adding new users. As shown below, the three login levels with configuration options. For more information about the configuration see the LSS-DB User Manual.

LSS Database User Levels

1.2 New Company

Each company is required to have a manager that will be able to add theaters, users, and define groups. A user group is formed to create a pool of users that are notified when the reported data contains measurement that are out of limits. Adding a manager requires system administrator privileges. The administrator is reminded of the existing companies in the list shown in the left side of the view. In this example we are adding a company called "USL-TQM."

LSS Database Add Company

1.3 LSS-100P Configuration

The LSS-100P has a configuration web page that is accessible via a computer's browser such as Fire Fox or Chrome. As a note, access may be limited to within the theater complex's location and is typically not available on the web (intranet restricted). As shown in the screen capture the Organization Key and Theater Number are used to identify the users that are to receive notification emails. The organization is basically a company identifier and the theater number identifies the user group that is selected to receive notifications. Once the LSS-100P reports measurements to the LSS Database, it is logged and available in the Groups Management settings. It's important that the LSS-100P is configured with the correct Organization Key and Theater Number to identify the data source. Without the LSS-100P report, group management is not available.

LSS-100P Configuration

1.4 Group Management

When the LSS-100P report data is received, the organization key (company) and theater number identify its source and will be available for group assignment. By assigning a user to a group and then a theater to a group, the notifications generated will be emailed to those designated in the respective group that is set to receive notifications. User notification control is an option available in the modify user and new user screens. As shown below, a case where the theater is assigned to a group.
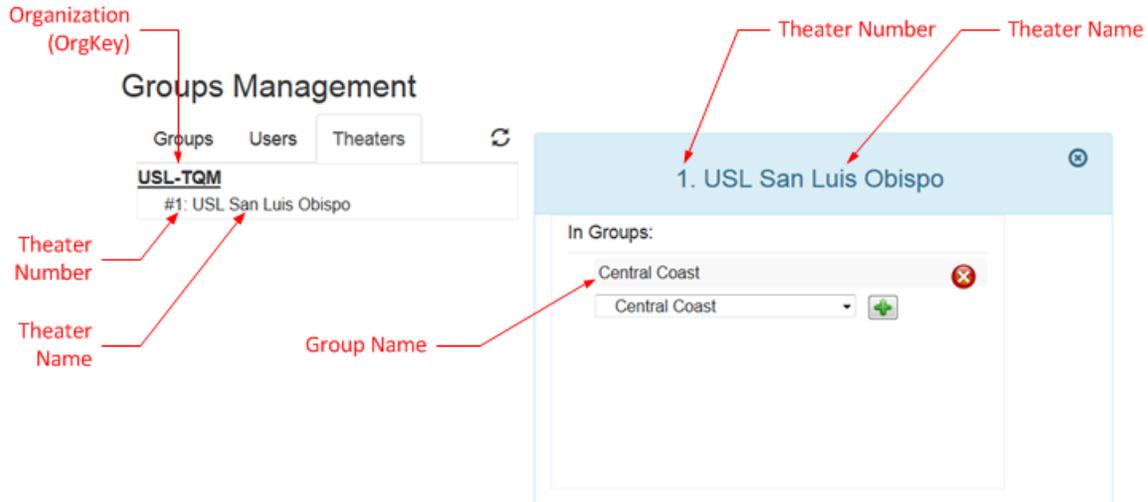
LSS Database Group Management

As previously described Harold H is the manager for company USL-TQM and an LSS-100P report was received from the theater. The database logs the report and will use it in the group management.

The manager will access the Group Management screen via the Configure drop down menu in the navigation bar. When the drop down is visible the item called "Modify Groups" will access the Group Management view.


When a company is created, the manager will need to define regional groups that are created by activating the Choose a Group add button (green +). A dialog box will appear prompting the user to enter a new group name that is then added with the + button activation. Cancellation and deletions are done by activating the red x button. In this example USL-TQM has theaters that are to be assigned to the Central Coast region.

The Users tab will be used to assign a selected user to a group. In this example Harold H was selected and the group assignment box appears in the right side of the view. Using the Select a Group drop down menu the Central Coast region was selected. As shown in this example Harold H is assigned to the Central Coast.
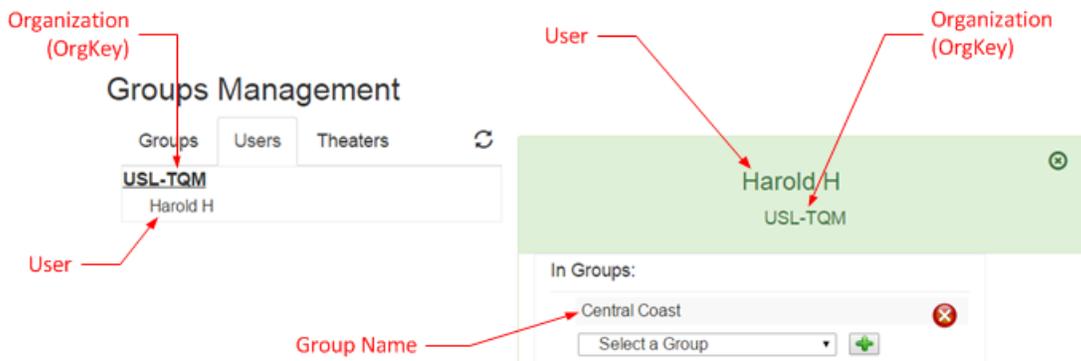
User Group Management

Next a theater is added to the group. This operation requires data from the same organization be received and is stored in the database before seeing the items (theaters) for selection.
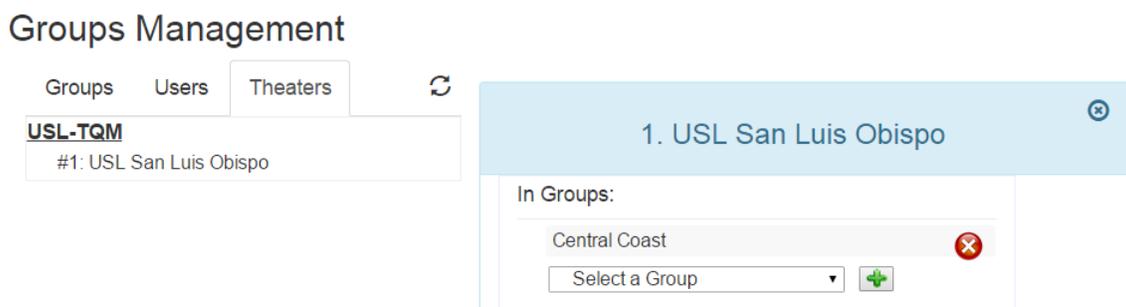
Theater Group Management

When the Theaters tab is selected, a list of theaters for the organization (company) will appear. The # indicates the theater number followed by its name. When the theater number/name is selected an input selection box appears on the right. Again to assign it to a group, use the drop down and chose a regional group. Since the assignment has already been made, the current group assignment it appears as Central Coast with the delete red x button.

1.5 Add User

After the manager has created the groups including theater assignments, the system is ready to set up additional user accounts. In the example shown, information about the new user is being provided. When complete, the Add User button will update the database with the Current Users list including the newly added user. The LSS Database supports the concept of a service company handling multiple organizations and when defined via the group management a list of them will be available via the Company drop down list. For simplicity a single organization is the focus here. The Notification Type is a drop down selector for None, Errors Only, and All. When an LSS-100P report is received, the users assigned to the theater with the respective notification type will get emailed accordingly. A selection of 'None' will result in no notification emails for that user.

Add New User

Be sure to assign users to a group. Otherwise there will be no data available and the user will not receive notifications. In the example below, the new user Tom A has not been assigned. Use the drop down to select a group followed by the add button activation.

Users Group Management

1.6 User Access

When the user logs into the LSS Database, the user is restricted to data within his/her groups. As shown below, a theater in the central coast region has a problem with the center audio channel.

To see a reports timeline, a single mouse click on the item will display a graph. As the user moves the mouse over the graph, measurements for a sample period are displayed. In the Screens view, the user can view a group of measurements for a selected auditorium.

1.7 User Notifications

Users are notified once a day of all the issues discovered by the LSS Database. Notifications are collected prior to being sent. Each notification will have a status of pending, sent, or error. The error indicates that the email could not be delivered. As shown below, a summary of the notifications is presented to the user. By selecting the item a graph view will be shown for review.

The notification email contains both text and HTML formats. They can be viewed on a cell phone or computer's email application. The screen capture below is a desktop version of the notification.

For additional details see LSS-DB User Manual.