Introduction

EventTools is a small online package to provide web-based access to information for model railroading events. It was originally created for the X2011West NMRA convention, and continues to evolve. This document describes using EventTools for a small operating session event such as BayRails or ProRail.

EventTools stores a single copy of information, including:

- Layouts
- Operating Sessions
- Attendees and their operating session requests

From this, EventTools can create web pages, rosters, assign sessions, generate mailings, and in general help the committee do their jobs.

EventTools is installed onto the event's web site. It then provides a series of screens for entering and editing information, and utilities that the even's webmaster can use to present information on the events' web site.

When you first access an EventTools page, you may be asked to identify yourself. Enter your email address (if in doubt, ask the webmaster); you can leave the password field blank for now.

The main page presents options for entering, editing and viewing each type of information:

X2011West Event Tools

Provides access to the X2011West tour and clinic tools.

	General Tours	Layout Tours	Other Events	Layouts	Clinics	Op Sessions	
Enter/Change Content Enter/Change Enter/C		Enter/Change	Enter/Change	Enter/Change	Enter/Change	Enter/Change	
Other Edits		Add Layouts To Tour	Add or remove tags	Quick Entry	Add or remove tags	Enter/Change User Requests	
Review Content	Leview Content List List		List	List	List		
Index Example	ndex Example Index Index		<u>Index</u>	Index	<u>Index</u>	Index	
Format Example Formatted View		Formatted View	Formatted View	Formatted View	Formatted View		
X2011west Test Pages X2011west Table X2011west Index			X2011 west Table X2011 west Index	X2011west Table X2011west Index	X2011west Table X2011west Index	User request	
	Interactive General/Proto Tour	Interactive Layout Tour	Misc Events Grouped by Location Interactive Misc Events Calendar		Interactive Clinics	Request Summary Operating Layout Table	



For more information on using EventTools, please see the most recent draft of the EventTools User Guide.

For small operating-session events, probably only the "Layouts" and "Op Session" sections will appear.

Intended Workflow

- Gather information
- Enter information

- Review and approve listings
- Display to user
- Update as needed

You enter and update (edit) entries on different web pages for each type. There's an entry/edit page for for layouts, another for operating sessions on those layouts, etc. Information can be entered and accumulated using those until it's ready for display, and then marked to be presented to the user.

Each entry can be marked with a status value chosen from:

Internal Name	Shown to User					
(0) Unknown	Proposed					
(1) Some Data Entered	Proposed					
(2) Waiting Approval	Under Construction					
(3) Approved: Under Construction (no links)	Under Construction					
(5) Sold Out	Sold Out					
(6) Cancelled	Cancelled					
(40) Not Available	Not Available					
(50) Offered as a Bonus Session	Bonus Session					
(60) Offering Sessions	Offering Sessions					

(These are typical values; you can provide your own through the index page.) As you enter information for a layout or operating session, you also update the status as appropriate. EventTools is be configured to only who entries with a certain status and above. Normally, only "Offering Sessions" entries aer shown by default, so when the listing is completely ready to display you set the status to that.

Combined Sessions

A "combined session" is one that has involves more than one layout. It might have one layout in the morning and another in the afternoon, for example. Combined sessions are created by adding the 2nd, 3rd or even 4th layout to a regular session. Their names are presented slightly differently, but they otherwise function the same during the selection and assignment process: People request them, and then get assigned by priority. Combined sessions are displayed somewhat differently in the layout and sessions listings to help the attendee understand what they're signing up for.

Reservation by Session or By Layout

Large conventions with a lot of things going on, e.g. a national NMRA convention, might want to let attendees sign up for a specific session of those offered at a layout: "I want to operate on Bill's Tuesday evening, but I can't make Thursday evening". EventTools calls this "reservation by session"

¹ Both layouts and operating sessions have a status field. If you set a layout or session so that it's visible, it will be shown. In a perfect world, they would be set consistently: When the operating session is approved, the layouts would be visible. This area needs some more work.

Smaller events, such as a ProRail, might want to allow people to sign up to operate on a specific layout. The organizers then assign them to sessions as needed to fit everybody in. This is called "reservation by layout".

EventTools works slightly differently during the registration and assignment processes, depending on which mode the events want to use. This is configured during EventTools setup for the event. The mode can be changed later, but you might have to revisit any assignments that have been made.

Bonus Sessions

"Bonus sessions" are typically one or two sessions on the day before and/or after the main event. They may be some distance from the other layouts but on the way for some attendees or have some other specialized character.

EventTools provides some special support for bonus sessions. Instead of requesting them in the same mix as all the other layouts during registration, attendees can request then specifically. They can then be assigned in bulk early in the process so the organizers can let attendees know early whether to include the session(s) in their travel plans.

Bonus sessions are indicated via a special status code for the session, and by specific coding in the registration form.

Entering Information into EventTools

Committees typically have various people responsible for different aspects of the planning. They generate information that needs to be entered into EventTools so that it can do its job. That can be done as a batch process, where spreadsheets or other documents in well-defined formats are inserted directly into the EventTools database. This makes sense for large, already-existing documents. There is no need to create those documents for import, however, because there are web pages that allow you to directly enter and change information.

The usual process is to:

- Enter the layouts
- Define the operating sessions for those layouts
- Create pages that show that information to the attendees and allow them to sign up
- Process the session requests and make assignments
- Providing information to attendees, layout owners and organizers.

What follows is a short tutorial on those.

Adding a Layout

The process for adding a layout is very similar to that for adding a layout tour (see main EventTools manual for now; this will be included here later), except that there are a lot more information fields. You can record the layout address to automatically generate tour maps and bus mileage calculations. You can also record all of the information on the OPSIG questionnaire for operating-session layouts, which saves work when organizing those sessions.

The screens for adding, editing and displaying fill a separate column on the EventTools index page. The top link is to the main "Enter/Change" screen, which provides access to all the information fields. Just below that is the "Quick Entry" link, which consists of just the most common fields to make it easy to enter initial information quickly.

A few fields might require more explanation:

"Access": By default, EventTools presents a layout's handicapped accessibility using a 6 point code:

- Handicapped Hostile
- Several steps and/or duck-under(s)
- Average house (1-2 steps)
- No hazards
- Special adaptations for the handicapped
- Unknown/not entered

For the access item, you just pick one of those

"Short Description": A one-line description that appears in various summaries, in the tour listings, etc.

"Long Description": This can be much larger. Special formatting, including URLs, can be done using HTML tags, but in general you don't have to worry about this. Just enter the text, it will look OK.

"Owner URL": If the owner has provided a URL for a web page describing their layout, it should be entered here starting with the http://prefix.

"Local URL": This is a URL for an event-specific web page that describes the layout, if one exists. The webmaster may have set up a convention for how to fill this out.

Distance: This is the one-way distance from event center (e.g. the hotel) to the layout. Note that there's also a distance field on the op-sessions. This is so that combined sessions or sessions that e.g. start right after another event (a picnic?) can have a custom distance value. You should fill out both.

Number of operators: This is the typical number of people needed to operate the layout. In the layout entry, this should be the total number of people. There's also a number of operators field on the individual operating session. That's the number of people the layout owner wants assigned for that particular session; it might not be the same.

For items like scale, gauge, scenery completion fraction, etc, EventTools can be configured to either allow you to enter free-form text, or to only permit you to select from specific values. Selecting between these two approaches is done on a variable-by-variable basis when EventTools is installed. Consult the Administration Manual for more information on this. If EventTools has been configured to only allow specific values, you can add/edit/delete the acceptable values in the "Constraints" section of the index page.

Editing Layout Information

This is very similar to the process for editing a layout tour described earlier(see main EventTools manual for now; this will be included here later). Note that you can search on any of the fields to find the layout you want to edit, including the description. The starting URL is on the index page as

"Enter/Change" in the "Layouts" column.

Entering Op Sessions

Operation sessions are built on top of the layout information that's separately stored in EventTools. See the preceding sections for instructions on how to enter layout information. Note that modelers interesting in operating are often interested in the optional fields on realism, control systems, card forwarding methods, scheduling, etc, so operating layouts should probably have more complete information than ones that are just included in layout tours.

Once the operating layouts have been defined, you can add operating session information to them. To do that, use the edit/change operating session page, linked from the upper right of the index page:

v	Layout	Location	Distance	Travel Time	Presenting Time	Start date/time	End date/time	Slots	<u>Status</u>	Note	2nd Layout	3rd Layout	4th Layout
<u>X</u>	Sorted By: Layout ascending, Start date/time ascending												
•	0							0	Unknown		0	0	0
0	Adams (D&RGW Durlin Branch)	Advance Section	21 miles	25 minutes	Friday July 1 1900	2011-07- 01 19:00:00	2011-07- 01 23:00:00	8	Waiting Approval		0	0	0
0	Adams (D&RGW Durlin Branch)	Advance Section	21 miles	25 minutes	Sunday July 3 0930	2011-07- 03 09:30:00	2011-07- 04 00:00:00	8	Waiting Approval		0	0	0
0	Bowdidge (SP Vasona Branch)	Advance Section	22 miles	28 minutes	Friday July 1 1900	2011-07- 01 19:00:00	2011-07- 01 23:00:00	4	Incomplete, Some Data Entered		0	0	0
0	Bowdidge (SP Vasona Branch)	Advance Section	22 miles	28 minutes	3 0030	2011-07- 03 09:30:00	2011-07- 04 14:00:00	4	Incomplete, Some Data Entered		0	0	0

Each line represents an operating session. The fields are:

<u>Location</u>: Used for grouping layouts. Typically "Advance Section", "North Bay", "Sacramento" or similar, this label appears on some of the index pages.

<u>Distance and Travel Time</u>: Presented in the operating session listings so attendees can plan how much time to allow to get to the session. Note that the distance might be different from the distance listed for the layout itself, if attendees will be coming from a different place or this is a combined operating session.

<u>Presenting Time</u>: In addition to the precise start and stop times, the operating session organizers originally wanted to generate their own descriptions of layout times so they could say things like "Sometime Thursday" instead of a precise time. This field is displayed where-ever the start time is displayed to the user.

<u>Start Time</u> and <u>End Time</u>: If provided, these will be used to mark operating sessions in the general and attendee-specific calendars.

<u>Slots</u>: Number of people who should be assigned to the session. Not used initially during the request phase, but used as part of assigning people to requested layouts. This can be different from the number of operators field on the layout, which is the total number of people present.

<u>Status</u>: The same status codes as for layouts and layout tours are available for operating sessions. See the first section above for more information on these.

Note: Free form, for use as desired. Not visible to the attendees.

<u>2nd Layout, 3rd Layout, 4th Layout:</u> An op session can be a two-fer, three-fer, four-fer with multiple layouts. These can either be sequential (people operate at one then another) or in parallel (the group of attendees splits across the layouts and operates them at the same time).

To change an operating session, select its radio box and click "Change". You'll get a new screen where the entry can be changed. Layouts are selected from drop-down boxes. The contents of those are in alphabetical order by layout owner last name. Once the box has been selected by tabbing or with the mouse, type a few characters of the name to go directly to a layout. Once the entry has been updated as you'd like, click "Save" to save your changes and go back to the index.

Session Displays

There are several custom pages providing different views of the session information. You can use these for your own work, or use them as models of pages to display to the attendees. They're all accessed from the Op Sessions column of the index page.

- Requests Summary This is a two part page. At the top is a table by session of how many 1st, 2nd, etc priority requests have been made for it. At the bottom is a table of the attendees who have requested layouts.
- Operating Layout Table This is a quick summary of the layout information, suitable for embedding in a public web page
- Operating Sessions vs Day This provides a table of layout versus day, with the session start times indicated on each operating day. It's very useful for planning purposes.

Attendee Information

Before making a registration form, you should understand how EventTools tracks attendee information.

For large conventions, or ones that sell things through an online store, EventTools will integrate with the store's customer database. Zen Cart at X2011 was the original example of this, but EventTools can work with others too. In that case, the attendees will enter and maintain their contact and address information through the stores pages.

In smaller events, EventTools can provide very simple management of attendees information. It can track one email address, a home and cell telephone number, and a single postal address. Users enter this through the registration form (see below). Their primary ID is the email address, so every attendee must have one². EventTools provides a rough edit page that you can make available to attendees to edit their contact information, or you can have them re-enter it through the registration page. The organizers have "View/Edit contact info", "View/Edit addresses" and "Table of contact info" pages available from the attendee info section of the index page to manage this information.

EventTools provides up to eight yes/no questions that can be used to track attendee preferences and capabilities. These appear as checkboxes on the registration page, and are presented to the organziers on the summary and edit pages. Typical uses are "Do you want to go to the Saturday ballgame?", "Would you be willing to dispatch a busy yard?".

² If need be it can be a dummy.

Attendee Groups

Sometimes several attendees will want to be assigned to the same layouts to that e.g. they can travel together. These are called "attendee groups". EventTools provides limited support for attendee groups.

The members of the group must select the exact same operating sessions during their reservation, and must identify their group in the comment field.³ The organizer doing the session assignment then tells EventTools to group those people together. EventTools will take into account that they're a group when trying to fit them into layouts, etc. It knows that a group of three can't fit into a session with only two slots remaining, so it can try moving somebody else at the same priority to another selection to make things fit better, etc.

Attendee Categories

Not all attendees are created equally. EventTools doesn't care why they're different, just that they are. The organizers might want to give session assignment priority do new attendees, or returning attendees, or ones who've come for a long way. Regardless of the policy, it's embodied in a "attendee category code" that each attendee has. Higher numbers result in earlier assignment when doing automated assignments.

This can be edited from various screens, but the "View/Edit attendee category code" page available from the attendee section of the index page is specifically intended for setting & reviewing this.

Timestamps and Registration Order

EventTools uses several kinds of timestamps to tell when users first registered for the event, and when they last updated their registration information. The "first registration" time is taken to be when the attendee's information was first recorded, even if they didn't select sessions or layouts at that point. The "most recent" or "last modified" time is the last time any of the information was changed. Typically this is the session requests, but it could be any of the other information.

Making a Registration Form

You probably don't want to enter the attendee's information and op session requests manually. You can create a web page on your web site that allows them to do this for themselves.

Note: An attendee can only register requests for operating sessions, not for layouts. You should have an operating session defined for each of the active layouts before starting registration. These don't have to have final times or other details defined, but they must exist.

The "sample_ops_reg_form.php" file is a starting point for a registration from. There are many ways to do it, but that page shows one that works reasonably well. It's divided into several parts to make it easier to customize. Note that it's appearance is incredibly basic, so you should embed it in a page presentation structure that makes it look like all your other pages.

- Create the form
 - Create the part that gathers the user name, etc

³ EventTools can't automatically split requests, e.g. "We want to be together on Tuesday, but not Thursday". Those can be handled manually if the organizers want, of course.

- Create the part that asks optional questions
- Create the part that asks for op session preferences
- Process the form on return
 - Parse the returned information
 - Enter it into EventTools
 - If desired, email it to somebody
 - If desired, add it to a sequential file

The registration form can also handle up to eight yes/no questions that can be used to sign up for optional dinners, let the attendee say whether he wants to be a yardmaster or dispatcher, etc. You activate these by defining the name and description of each option at the bottom of the access.php definition file.

Once you've created the registration form, you can test it by entering a few dummy registrations. The "Request Summary" link on the main index page takes you to summary of the op session requests so you can check that it's working. The top part shows the requests for each session by priority, including the total number of requests. The bottom part shows the names that have been entered. Once you're sure the registration form is working, you can delete your test requests.

Editing Op Session Requests

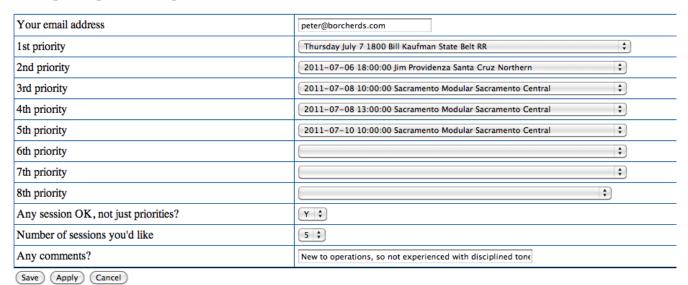
You can view, change, add or delete op session requests via the "Enter/Change User Request" entry in the Op Session column of the index. That leads to a screen that looks like:

v	Your email address	1st priority	2nd priority	3rd priority	4th priority	5th priority	6th priority	7th priority	8th priority	Any session OK, not just priorities?	Number of sessions you'd like	Any comments?
•	harvego@whidbey.net	Friday July 8 1800 Kent Williams Oregon, Washington Navigation & Railway	2011-07-05 18:00:00 Dave Houston Southern Pacific Rocklin Sub	2011-07-07 18:30:00 Phil Gulley Union Pacific & Summit County RR	2011-07-04 09:30:00 David Clemens Idaho- Montana Railway & Navigation Co					N	4	Carpooling with Al Frasch and Rich Thom. Please assign us to the same op sessions.
0	bdmorden@sbceo.org	Monday July 4 0930 David Clemens Idaho- Montana Railway & Navigation Co	2011-07-04 13:30:00 Steve Gust Clay & Mud Point							Y	1	
0	n1stars@xs4all.nl	Monday July 4 1800 Kent Williams Oregon, Washington Navigation & Railway								N	1	I'm coming together with my brother Hans (hans@n-stars.com) and Kent is a friend of us. We'll be at the Portola museum earlier that day (not by bus but on our own)

There are "View", "Change", "Copy", "Delete" and navigation buttons at the bottom of the screen. To

change an entry, for example, select it with the radio button on its left side, and click "Change". That will take you to a screen like:

Edit Operating Session Requests



You change whatever information you'd like, and then click "Save", or click "Cancel" to go back without making any changes.

Assigning Attendees to Op Sessions

Once you have the attendee's information, there's a two-part process for assigning them to sessions.

First, you group attendee's together into groups that will be assigned together. This allows you to handle "Traveling with Bill, please assign us to same layout" requests. Grouping should only be done with identical requests. The "^" indicates requests that match. (If the requests don't ask for the same layout, who do you send them to?)

The second step is the actual assignment, which can be done automatically or manually.

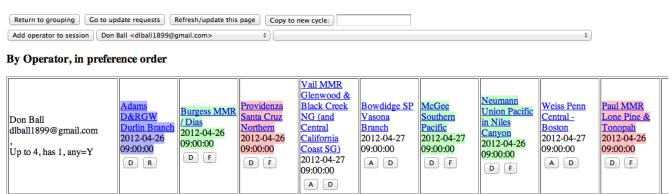
You can have several shots at doing the assignment, called "cycles". This lets you try different ways of doing it, only using the one you like. Cycles have names, which can be whatever you'd like.

Top of window:

Op Session Set Assignments

Back to main page

Cycle: cycle4



First are navigation links and buttons. "Copy to new cycle" lets you make a duplicate of the current assignments into a new named cycle, and continue with that new one. You can use the new one for an experiment, or consider the older one as a backup or whatever you wish.

Next is a table of requests for a given operator. The requested layouts are listed in order. The color means:

- White background requested, not assigned, but could be assigned.
- Blue background assigned
- Light red background can't be assigned due to a current conflict, e.g. another assignment at the same time.
- Dark red background manually disabled, can't be automatically assigned
- Green background Can't be assigned because the layout is full. This is green, instead of red, because it might become available if somebody else's assignment is changed.

The buttons do things. Note that only some possibilities apply.

- A Assign this person to this session
- D Disable the request: Not assigned, and won't be selected by any automatic assignment.
- R Release drop a current assignment
- F Force assignment to the session, even if the session is full or in a conflict.

The label at the left shows how many operating sessions the user wants; how many they have assigned now; and whether they'll take anything or just the ones they requested.

Lower in the page is a listing by operating session:

By Session

Adams D&RGW Durlin Branch 2012-04-26 09:00:00 2/23/8	Don Ball dlball1899@gmail.com , [Pri: 1] D R	Carl Kempkes carl.kempkes@valmont.com , [Pri: 1] D R	Mike Chandler mikado 1@telus.net , [Pri: 2] D F	Andrew Dodge orocity@hotmail.com , [Pri: 2]	Jim Lofland jlof811@att.net , [Pri: 2]
Bowdidge SP Vasona Branch	James Williams james.williams@mcsi.net	Gary Gelzer GNCrailway@cox.net	Jason Hill hilljason@yahoo.com	Keith Jordan ckjordan@kc.rr.com	Bob Willer RHWiller@kc.rr.com
2012-04-27 09:00:00 1/18/4	, [Pri: 1] D R	, [Pri: 3] A D	, [Pri: 3]	[Pri: 3] D F	, [Pri: 3] A D
Burgess MMR / Dias 2012-04-26 09:00:00 4/0/4	ifb99@earthlink.net , [Pri: 1] D R	Bill Darnaby wdarnaby@att.net , [Pri: 1] D R		Jason Hill hilljason@yahoo.com , [Pri: 1] D R	Steve King sking8887@verizon.net , [Pri: 1]

The color coding and buttons are the same, with the addition of the "P" button. The "P" button assigns requests with the next-highest priority to the session. For example, if first and second priorities have been assigned, and there are more spaces in a particular session, "P" will assign anybody who gave 3rd priority to this session.

The number at the left is the number of operators assigned, the number of people still to be assigned (not counting those with conflicts) and the number of spaces remaining. There's a tooltip on this (and most other buttons and fields), so just hover your mouse over it if you can't remember which number is which.

If you have multiple sessions defined for layouts, the bottom of the box contains buttons for moving unassigned requests to other sessions on the same layout. If you have Tuesday and Thursday sessions, for example, these buttons make it easy to move over requests from a full Thursday so they can be assigned to empty slots on Tuesday. They're moved over, but not assigned; you have to do that later.

The assignment buttons take groups into account. If you do something that affects one member of a group, e.g. assign them to a session, that same thing will be done to all the others. You won't be allowed to assign just part of the group to a session. If there's not enough room for all of them, the group will show as blocked on that session.

At the very bottom of the page is a "Fill best priority N" button which tries to do the best it can to assign people to their Nth priority spot. This starts out as "Fill best priority 1", but goes to later request priorities (e.g. "Fill best priority 2", "Fill best priority 3") as assignments are made and the smaller values are no longer relevant. It works with one attendee category (see page 7) at a time, starting at the highest numbered. It assigns people within that group to their next request in registration-update time order (see page 7) at first, but tries a number of alternatives to maximize the number of people getting their first requests. All other things being equal, early registrants within attendee category are more likely to get their requests than later ones, but the program may change that to allow more people from the attendee category to get their top choices.

Changes to assignees and requests

Once you start making assignments, the list of registrants and requests are frozen. Later registrants won't appear until you manually "update requests". This is done so that you can make assignments for people who met the deadline, then later update to include late registrants and assign them. To update, click the "Go to update requests" button. This will give you a new page with all the differences that the program knows about, and buttons to include them. First it will list new & deleted users, with buttons to add and remove them. Then it will list all the specific requests that attendees have changed or added. Click the buttons to make the changes (in the current cycle), and then go back to the assignment page to make any needed assignments. New attendees will have to have assignments made on their requests, and deleted attendees will have made their slots available again.

Displaying Information to the User

Generally, EventTools users don't have to worry about this step. Display on the main web site is automatic once the status has been set to a suitable value.

The session assignments have to be updated manually. It's important that people making changes that will effect those, for example changes to schedules or number of slots in a session, stay in touch with the rest of the organizers.

There are several tools for printing useful information. These are all available from the index page:

Email list for cycle

Session Rosters – You first enter the assignment cycle name you want to see, and then it presents a summary table showing attendees on one line per session. Useful when talking to layout owners.

Printable Session Rosters – Like the above, but the result is formatting for printing signup sheets for each session. Existing assignments are shown, with blank lines to allow people to sign up for any empty slots.

Session by Attendee – Like Session Rosters above, but shows assigned sessions on one line per attendee. Useful when discussing assignments with the attendee.

Updating as Needed

If you update something, the change on the web site is immediate. For example, a change to a description will appear the next time the user displays the page containing it.

As discussed in the previous section, though, the on-line store and printed materials are updated less often. Please notify the appropriate convention committee members when you want those updated.

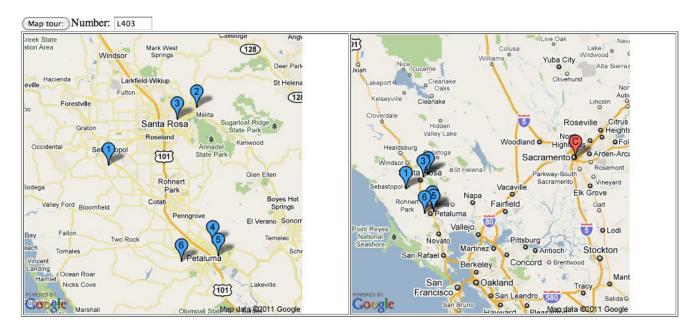
Additional Capabilities

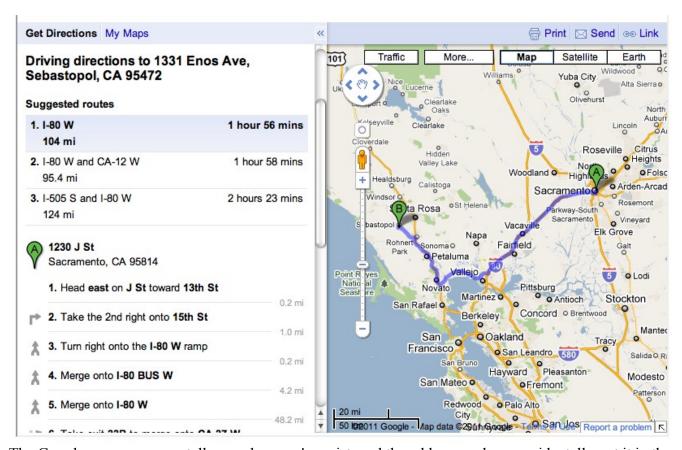
Once EventTools has the data, it can help you do all sorts of things with it. By entering data early, even partial data, you can enlist the help of others to improve the data, check it, etc.

Mapping

For example, it can draw maps of the locations of layouts on a layout tour, show distances and

directions between the layouts, and generally help plan the tour time and cost:





The Google maps can even tell you when you've mistyped the address, or have accidentally put it in the

wrong town.

Tours can be displayed by day and time in a way that makes it easy to tell where buses can be shared, and mileage calculations can be done to ensure that limits are not exceeded.

Distributing the Editing Task

Because everybody is inherently working off the same set of data, you can share out the work as needed without worrying about inconsistent data. Access can also be restricted in whatever way, with some people only being able to enter/edit certain kinds of data or only certain entries.

- Once you have layout owner email addresses entered, you can give them access to update and improve their own layout entry. They can fill in the detailed fields so that you don't have to worry about all that data. They can be asked to improve the entry until they're happy with it and approve it, removing the need to spend time going back and forth.
- Clinicians can be given access to update their clinic descriptions and attached URLs, without giving them the ability to change the schedule.