

Hut Registration System

Integration within the current VOC website structure

This document describes one possible implementation of a Hut Registration System within the current structure of the VOC website. The VOC is open to adjustment as someone may see fit in order for implementation. Our intents behind a new Hut Registration include:

- » Automatic record keeping and statistics.
- » VOC members can sign up without having to create a second account elsewhere (like the VOC wiki)
- » Public members can continue to sign up.
- » VOC trips can be linked to a Hut Registration.
- » Members cannot edit other registrations that are not their own (except Admins).
- » Members have the ability to communicate with active registrants and bulletin posters.
- » Registrations are automatically retired from the active registration board at the end of their registration. Keep a record of retired registrations for admins.
- » Automated emails can be set up to solicit hut registration updates before their trip occurs, bulletins on the Hut/Trail condition after they return and reminders for Hut fee donations including automatic calculations for the recommended donation amount.
- » A public bulletin board can be used to post important hut information from both the Exec, members and the public; Pinned post feature to bring important information to the top of the bulletin.
- » Future capability to receive payments for the registrations.

(1) Project Milestones

Software projects do best when they are broken up into a series of milestones and smaller projects, where the end result of each milestone is some sort of viable product. That way, feedback can begin to be gathered early on and the project can have course-corrections if necessary. The following list below is the general milestones envisioned:

Base System

The base system is the most basic elements needed for a functional publishable system. This includes where and how the information in the system is stored, how that information is accessed, and how users interact with the system. If it is easier to skip straight to the complete system on certain issues, it should be done to the complete system standard immediately rather than as two more difficult or redundant steps.

1. Hut Database
2. Website User Registration (Facebook/Google/Email)
3. Hut Registration Board & Form
4. Hut Bulletin Board & Form
5. Simple Archive
6. Quick Links

Complete System

For a complete system that can accomplish the core objectives of the project. This includes, what different users can see/access on the site, statistics for the admins, user interaction and communication, and a “hub” page of some sort as an entry into the system. For project completion at a minimum, all are required.

7. User permissions (admin, VOC, registered user, non-registered user)
8. Admin System Settings (hut capacity, days hut not available to register, fee, ect)
9. Registration Statistics

10. Improvements to the Archive into a table form with filtering capabilities.
11. User inter-communication (Email/Blind Email System/Direct Messaging?)
12. Automatic Emails (Managed within the Admin System Settings)
13. Summary Page ([link](#))
14. Donation calculation, display and interaction (but not so far as payment)

Robust System

To completely realize all the objectives of this project, users need to be able to easily interpret the information coming from the system and then be able to easily make decisions based on the information. Both aesthetic robustness and aesthetic simplicity are paramount. Donation

15. The Mini Calendars (examples shown below and at [link](#))
16. API for Trip Agenda integration
17. Other user interaction improvements

Portable System

Way down the road it is envisioned that such a system can have the ability to direct online payments. Which online payment vendor this might be is unknown at this point (and will be up to the AMS). Future consideration can also be given to how a mobile app may be built in the future.

18. Online Donation Payment
19. Interactive Calendars
20. Publicly viewable summary statistics
21. Portability to a mobile app

(2) Hut Database

Much of the VOC website functionality relies on the fact that those who are in the members database are, in fact, members (even though there's a "not activated" category). Mixing the hut system users in with the membership database could create headaches further down the road. With that in mind, users should be stored in a database entirely separate from the VOC members database.

Having the hut system as a separate system has additional benefits in terms of portability, troubleshooting and longevity; Portability benefits are such that the system could be used by other clubs/NPOs maintaining donation-funded backcountry shelters; Troubleshooting is simpler in an isolated system, and; Longevity is increased as the system will be independent of other systems that may be required to change over time when the hut system may not.

To prevent VOC users from being required to register separately for the hut system, VOC members should be able to login to the system using their VOC member login. If possible, they additionally should not have to re-login if they have already logged in to the secure portion of the VOC site.

Trip agenda integration would be a highly valued resource for VOC user, however, it shouldn't be done at the database level and the hut registration modules should not know about the VOC members database. Instead the hut registration should provide an API through which the trip agenda would update hut registrations.

(3) User Registration

The method of user registration to use the hut system has had many suggestions through this project. We would like to proceed with an authentication system that can use identity providers (Facebook/Google/VOC Account) to quickly register users with one click.

Information ported from the identity provide should include the users full name, age, and email. Name and email are both important for user-intercommunication. Email is additionally important for automated email functions from the system. Age is less important and would be used for statistical purposes only by admins.

For users who do not have an affiliation with any of the identity providers we list, including the VOC, a simple form should allow users to register using their email only. Short form should include fields for the user's full name, email, age, and password creation, VOC alumni yes/no.

Protection from duplicate registration needs to be enacted such that one user does not one day create an account with Google and then the next day create a duplicate account with Facebook because they happened to forget which identity provider they initially used. This can be done through a name and email check. If either name or email appear to be duplicated, the user should be re-directed to login through the method they initially used. On their profile they should have the opportunity to link their account to multiple identify providers such that they can log on with which ever they choose.

(4) User Profile

All user profiles are **private** except to admins.

After first registration a user should be directed to their user profile which will only be viewable to admins and themselves. In that profile they will be able to edit the information they have provided us. An alert at the top of their profile should ask user to confirm that their email ported from the identity provider is indeed the email they would like to use for communications with the system. It is of critical important that the user confirm the email they would like to use because user-intercommunication is a core principle behind registration and not reservation based hut systems. This alert should disappear after they leave the page and shouldn't ever show up again.

In addition, on every user profile each user should be able to:

- View a list of their Hut Registrations and Bulletins with direct links to view or edit the entry. Discuss this with developer.
- Link to subscribe to the VOCene.
- Easy mailto links to connect with the Hut & Trails Coordinators, Peer Support Group Leader and President.

An option to delete their account should be easily accessible and should require a "are you sure?" page before removing all account data. They may only delete their account if that account has no future or current hut registrations.

(5) Hut Registration Board

Each Hut should have its own Registration Board and should have 4 snapshot calendars like the one on the summary page; one for each of the upcoming months. They can be shown on the right side in a similar fashion to as was done in the summary page. On the left at the top will be a location to add a new registration. The form should ask for:

- » Arrival Date
- » Departure Date
- » Total Group Size:
- » Number of Active VOC members in Group:
- » Number in your group that will sleep outside the Hut:
- » VOC Trip ID: (*Drop down list that could fetch trip ID's from the VOC website and that user's trip list*)
- » Additional comments:

After the form, there should be a chronological list of all registrations with the nearest registrations at the top of the page. The registrations should display the name of the person who posted the registration in the form of a link to his profile and then all of the above, except the number of active VOC members in a group. For example:

- » **2017 September 27-28** [John Doe](#): Group of 23 (2 outside) Bachelor Party [Official VOC Trip](#)

If two registrations have the same dates, the one posted first should be higher on the list.

When a user confirms the registration, the page could be refreshed and at the top a message can be shown saying “Your registration was posted successfully! *Message here about donating to the VOC and the VOC's recommended donation level for this Hut and what trip calculates out to.*” The money should be a friendly reminder and should not sound like a fee, but a donation that we would appreciate. The message also needs to be super extra clear that a registration is not a reservation.

A user can edit his registrations through an [EDIT](#) button added onto the end of their registrations (only theirs) They can also access this button through their profile as discussed in (1). The edit registration should have three buttons; one that says Save, the second that says Donate (see 6), and the last says Delete. Beside the donate button should be a checkbox that says “I donated!” The Edit page should also have a friendly reminder about what the recommended donation for that specific trip is.

(6) Hut Bulletin Board

Each Hut should have its own Bulletin Board. At the top of the board should be a place for a person to add their own bulletin. The Bulletin form should ask for:

- » Date
- » Description
- » Link to Trip Report shown at the end of the bulletin description as [Trip Report](#)
- » Link to a Photo Gallery shown at the end of the bulletin as [Photos](#)

The page should then have Pinned Bulletins followed by non-pinned bulletins with each section listed from newest to oldest. Bulletins should be no greater than 500 characters. If they are greater it should redirect with “please consider writing your *epic* as a trip report here, then link it to this bulletin”

(7) Archive

To keep the system clean and organized for users, hut registrations should be archived 5 days after the last day of the registration. Registrations should not be archived immediately because if problems arise/people want to exchange photos with each other/ect. they will be able to get in touch with the people who were at the Hut with them. They archive will only be visible to admins. The archive should be a singular table that can be filtered by hut, date, user, age, nights, VOC member, workhike, ect.

(8) Quick Links

At the top-right side of the VOC main website there is a black translucent bar that contains "quick-links" to parts of the website. There should be On the top right there are drop down bars: "Trips", "Wiki", "About VOC". There should be a new one added: "Huts". Dropping down from Huts should be:

- » Registrations & Bulletins
- » Brew Hut
- » Brian Waddington Hut
- » Roland Burton Hut
- » Julian Harrison Hut
- » Lizzie Creek Cabin
- » Statistics

(9) User Permissions

Non-Registered User (Public)

- » Limited viewing the Hut Registration: Only date and group size should be visible. A link to email the user should be visible, but if the user selects it, they should be re-directed to login/sign-up.
- » Limited viewing of Hut Bulletins: All bulletins fully visible.
- » No capability to submit a Hut Registration; should redirect to login.
- » No capability to submit a Hut Bulletin; should redirect to login.
- » No access to admin settings.
- » No access to statistics.
- » Limited viewing of public statistics.

Registered User (Non-VOC Member)

- » Complete viewing of Hut Registration. Can edit their own registration.
- » Complete viewing of Hut Bulletins. Can edit their own bulletin.
- » Can submit a Hut Registration.
- » Can submit a Hut Bulletin.
- » No access to admin settings.
- » No access to statistics.
- » Complete viewing of public statistics.

Registered User (VOC Member)

- » Complete viewing of Hut Registration. Can edit their own registration.

- » Complete viewing of Hut Bulletins. Can edit their own bulletin.
- » Can submit a Hut Registrations and classify that registration as a workhike. Can link to VOC Trip.
- » Can submit a Hut Bulletin.
- » No access to admin settings.
- » No access to statistics.
- » Complete viewing of public statistics.

Registered User (Admin)

- » Complete viewing of Hut Registration. Can edit anyone's registration. Can directly email user.
- » Complete viewing of Hut Bulletins. Can edit and pin anyone's bulletin. Can directly email user.
- » Can submit a Hut Registrations and classify that registration as a workhike. Can link to VOC Trip.
- » Can submit a Hut Bulletin and pin bulletins
- » Full access to admin settings.
- » Full access to statistics.
- » Full access to public statistics.

(10) Admin System Settings

The admin system settings page is where admins can change the parameters of the system functions. This includes Hut capacity, the days the hut is not available for registrations, recommended donations for each of the Hut, the email settings and messages, and other settings necessary.

(11) Registration Statistics

The registration statistics are available only to admins and should show information in content similar to what the current registration archive is doing: http://www.ubc-voc.com/wiki/VOC_Hut_Registration_Archive

Ideally the statistics page is somewhat interactive allowing admins to selectively summarize the information that is most important for their work.

Additional information that can be captured is from the "I donated!" button. It would also be useful for there to be a location for the Treasurer to report income received and the date it was received. In this way, we can track the income received from the Huts better than has been done previously. This information is needed for political conversations, tenure applications, grants, and planning of Hut and Trail maintenance work.

(12) User inter-communication

User inter-communication is one of the primary purpose of the current message board and ensuring that it stays easy for other registrants to talk to each other before they go is a key reason behind why we have a registration board in the first place. Communication reduces conflicts between users at the Huts and by providing a facility for communication we have an opportunity to reduce these conflicts.

On the current wiki page emails are shown broken up and in a sort of code to prevent bots from harvesting emails from the page. The issue is solved through two measures. First, Non-Registered users cannot email registered users; they first must sign-in. Second, users of the system should be prompted on each hut

registration they create on whether they would like for other users to contact them via a Blind Email System or their real email.

Other suggestions for communication systems are welcome.

(13) Automated System Emails

There should be an automatic email system related to the Hut Registration System:

- » One month and two weeks out checkup reminders.
- » Reminder that your “registration” is # days away. Invite the user to re-edit their registration to reflect changes that may have occurred in their plans since their original posting. This edit re-invite should only go out to those who registered more than 1 week in advance of the registration date.
- » # days after the last day of the registration pass, a follow up email asking the user to post a bulletin, to consider donating the recommended amount (calculated for them).
- » Settings required for the functioning of an email system should be handled through the admin system settings page.

(14) Hut Registration Summary Page

The goal of this page is to quickly show all the registrations and bulletins for all the Huts in one place. There is a drawn up a sample of what this page might look like here: <http://www.ubc-voc.com/voc-hut-registration>

The following image shows the envisioned interactions that users will be able to have with each of the Hut sections shown on that page.

Link to VOC Wiki Page

Link to full Brew Bulletin Board

Link to full Brew Registration Board

Brew Hut

Bulletin Board (+add a bulletin)

Registration Board (+add a registration)

Pinned Bulletins

2017.02.19 **George Hill**
A security guard has been unlawfully preventing cars for non-motorized recreationalists from getting ... [read more](#).

2015.07.31 **Roland Burton**
Please use firewood sparingly. In summer 2014, VOC spent about \$7k to fly in firewood ... [read more](#).

Recent Bulletins

2015.02.01 **Robin Tivy – Hut in good shape**
The hut was in good shape in my brief visit to it. See Trip Report

2011.03.14 **Evan Morris – Stove being repaired**
The 2-burner Coleman stove is currently removed for repairs, so make sure you bring your own.

March/April

-	26	-	27	-	28	-	29	-	30	-	31	7
-	2	-	3	-	4	-	5	-	6	-	7	4
-	9	-	10	-	11	3	6	11	20	21	22	8
-	16	-	17	-	18	-	19	-	20	-	21	8
-	23	-	24	-	25	-	26	-	27	-	28	29

Name should link to that persons profile. VOC members will see the full profile whereas "Non-Active Members" will only see the equivalent "Non-Active Member" profile for that person.

Show the only four bulletins at most. Exec members can choose to "pin" bulletins. This can be done on the Brew Hut bulletin board page.

Cell highlighted to indicate a VOC trip will be occurring on this night at the Hut. Cell could highlight red if Hut is overcapacity. Cell could highlight blue if a VOC workhike is happening.

(15) Donation Calculations & Online Payment

This is the very last step of the process. The donate button could be done a number of ways. The goal is to encourage users to donate the recommended amount. The donate button should only become available after the Hut Registration dates have passed. In this way, we don't have to worry about refunds. Methods of payment are still up in the air and an ongoing discussion with the AMS.

(16) Organizing a Trip (& a Hut Registration)

When an Active VOC member hits the "Organize a Trip" button they are directed to a long form where they can put in all the details of their trip. At the bottom, there is a radio button that says, "do you want to use the sign-up tools?". There should be a similar radio button that says, "Will you be going to a Hut during your trip?". The options should then say:

- » "Yes: My Hut Registration is
- » "No: I need to make a Registration"

If yes, the user will use a drop-down menu to show the user's active registrations. Once they select their registration and save their trip, the hut registration will be linked to that trip. If they select No, then the new registration form fields should appear along with a drop down to select which Hut the trip will be taking place in. Arrival/Departure dates are still necessary because sometimes on trips people stay in more places than just the hut (ex. Harrison Hut vs. Meager Creek Hotsprings).

It is desirable for there to be a snapshot calendar similar to the Hut Registration Summary Page, with highlighting that could be, for example, red that would show which dates your trip will land on in the calendar. The calendar could be interactive so that the user can scroll in time to see registrations in different months in the future. The calendar is merely visual (users do not select their registration dates by clicking on the calendar).

The registration numbers of the Hut registration should update automatically in coordination with the sign-up tools via the expected group size until either members are marked as going (then use numbers for the people going) or until a few days before the trip is happening (let's say 7 days?) then use the committed list until the going list is used (if its used). With this feature, a VOC member does not need to constantly update his Hut Registration if the amount of people going on the trip change. It also allows us to very accurately measure the VOC's usage of our Huts (at least for those trips which are registered).

(17) Trip Agenda

On the trip agenda, there are links to the Trip Details, Sign Up and Wiki Page. We suggest a fourth addition that will link to the respective Hut Registration. If a registration is made with a trip ID, that trip should automatically obtain the registration ID and vice versa.