

**Australian Computer Society**  
**Constitutional Reform Working Group (CRWG)**  
**Report on the Online Forum**  
25 November 2021

**Background**

The Working Group is required to undertake consultation with members. Three rounds of consultation are stipulated, each stimulated by a seed-document addressing respectively principles for a suitable constitution, possible features of a constitution, and a draft constitution.

A key element of the Engagement Plan is an open Online Forum, so that threads of discussion can evolve of their own accord.

A set of Functional Requirements for the Forum was prepared. See Attachment 1.

It was discovered that there were, among the various platforms that ACS has installed or has access to, several tools that could potentially satisfy the need. The one recommended to CRWG was HiveBrite.

Initial experiments with HiveBrite were not very satisfactory, but, with time running out, CRWG agreed to await its availability. The availability date kept walking away, until, a day after it was due to be launched, in the afternoon prior to the long weekend, the date was shifted further back, to a point after the scheduled completion-date of the Round 1 consultation period.

A member of CRWG implemented the Forum the following morning, using a publicly-available service, groups.io. The WG members alpha-tested it during the first half of the long weekend of 2-4 October, had it beta-tested during the Sunday-Monday, and launched it at BOB on the next business day, Tuesday 5 October.

The groups.io-based Forum was used for Round 1 of the consultation, from 5 October to 5 November. It attracted over 100 participants, and over 400 postings. This Report reflects on what has been learnt from Round 1 about the Online Forum design and implementation.

This Report addresses two topics:

- The adequacy of the Functional Requirements in Appendix 1; and
- The suitability of the groups.io service as a means of fulfilling those needs.

## Evaluation of the Functional Requirements

This section briefly considers the extent to which the Functional Requirements were and are appropriate, and to which they need revision.

The twin aims were stated to be to enable members to both contribute and interact with one another, and to enable the Working Group members to analyse the input and feedback.

The first stated requirement was support for **a nested tree-structure of discussions**. A two-level structure proved to be sufficient, because the second dimension of categorisation, referred to as 'tagging', provided the requisite richness, without imposing further layers. (The groups.io service includes a feature called Subgroups, which would have enabled nesting if required).

It was stated that **additional categorisations orthogonal to the stream structure** could be needed, although as a lower priority than nested streams and separable threads. The tagging scheme proved to be vital, and more effective for semi-structured discussions like the Round 1 consultation process than a nested tree-structure without an orthogonal categorisation scheme.

It was specified that the **capabilities of participants** needed to include:

- Add a new posting to a specific stream or sub-stream
- Create a new thread and post to it
- Respond to a previous message within a stream, sub-stream or thread (default)
- Respond to a previous message but to the poster only

All of these facilities were available, and used. Other facilities were available, some preparatory and some supplementary. Some were used; but no other primary capabilities emerged.

It was stated that postings needed to include **reference to the stream, thread and/or message, and any specific text or object, that the posting is responding to**, preferably seamlessly or in an automated manner. This feature was largely, although imperfectly, available, and the several comments about the weakness in the design were confirmatory of the need for it.

For the **user interface and customer experience**, functionality and non-ugliness were prioritised over prettiness of formatting features or customisability. It was stated to be highly desirable for **threads to be visibly apparent, e.g. by indenting, and readily expanded and contracted**. The importance of this was borne out by the inadequately-clear link between a response and the posting it was responding to, and the absence of indenting and the ability to expand/contract sub-threads.

It was stated to be highly desirable that participants have **an easy and obvious capability to hide, or unsubscribe from, busy threads and sub-threads that they did not wish to follow**. The groups.io service does not have this feature, instead enabling participants to nominate all Topics (i.e. threads) that they want to follow. This caused a few participants some dissatisfaction, although no evidence was seen of participation or discussion being stultified as a result of it.

The **notification of new contributions by other people to the forum** was stated to be a necessary feature, with the **access options** at least including onforwarding of postings or periodic (typically daily) digests to the subscriber's email-address (or other habitat). This is a feature of groups.io, and the diversity of choices made by participants was confirmatory of its importance.

A further requirement was for **a repository of documents**, to initially contain the seed-document and supporting documents; but able to be added to by participants. This is available in groups.io. It proved to indeed be an essential capability for the Forum Manager. Although lightly used by participants, it was a valuable channel in those few instances.

A particular need was for the Forum Manager to be able to publish, and periodically bring to attention, **a 'Code of Conduct', or more positively expressed a 'Participation Guide'**. The groups.io feature was used, and, although slightly less well-designed than it could be, the importance of the requirement was confirmed. Overall, that facility was satisfactory-to-good.

It was stated that **Item-identifiers** were needed (i.e. for each message in a stream, sub-stream or thread, and for each document). These exist in groups.io, and were important to have.

It was stated that messages need to be able to contain **hotlinks to external locations**, to avoid unnecessary cross-loading of copies into the repository. That need was confirmed in practice.

It was stated that all parties who wish to contribute needed to be able to do so, i.e. members, ex-members, potential future members, staff-members of the ACS, of corporations and of industry associations, and interested members of the public. This required **convenient login by anyone**

**whose attention was drawn to the forum and who wanted to access it and/or contribute to it.** Comments about weaknesses in the registration scheme confirmed the importance of a simple and quick registration process.

The requirement was declared for **administrative and supervisory capabilities**. It was envisaged that **all controls would be set to the lowest level initially**, that the streams would be actively monitored, and that one or more administrators would communicate with all, some or individual participants as needed, and adjust settings on streams, threads or individual participants where necessary. The groups.io service contains multiple relevant features, some of which were used. For example, moderation can be imposed on all traffic, on specified participants, or on specific Topics (i.e. threads) – although not on sub-threads. No need arose to switch on moderation for either the whole Forum or any Topic. Moderation was imposed on one participant who posted an off-topic (and rather strange) message, and on another participant with a similarly scatological email-address. (But, in fact, neither address was used for any further postings). The requirement was confirmed as being necessary, and as being specified at a sufficient level of detail.

It was stated that the service needs to be either **based on international open standards, or otherwise readily accessible from all device-types and OS**. This is self-evidently important, but no further insights were achieved because groups.io runs in browsers, and no reports emerged of any difficulties with any browsers or browser-versions. (However, in one of the browser-versions used by the Forum Manager, a merely 2-year-old version of Safari fails to offer the HTML composition palette when creating a new message).

A **search facility** was required, globally, by stream and sub-stream, and by thread. Only a global search was available, but this did not loom as a critical issue for the Forum Manager or participants.

The requirement was declared that **content needs to be readily extractable**. This is self-evidently critical for the CRWG's purpose. The groups.io facilities are less than wonderful; but, after experimentation, an efficient and effective extraction technique was quickly found.

It was stated that all content needed to be **backed-up and recoverable**. No test was contrived of the service, but a couple of interim backups were extracted as insurance, in .mbox format, and hence potentially both re-loadable to groups.io and cross-loadable to an alternative service.

It was stated that an **archive** needed to be readily drawn off at relevant times, and accessibility to, search within, and extraction from the archive must not be dependent on ongoing subscription to a particular commercial service. This is self-evidently essential for CRWG's purposes. It was satisfied by convenient extraction into Word (or indeed any other proprietary format, or as raw text).

It was stated that **any third-party service-provider must not be able to exploit content, meta-data, profiles, social network data, etc.** This is self-evidently important for CRWG's purposes. The groups.io service has possession of the content. The Terms declare that "The Company will not use any User Content you provide to any email group for any purpose other than to provide the Services, for the operation of the Services and to otherwise improve or enhance the Services" (subject to conventional provisos relating to legal requirements and needs).

Finally, the Functional Requirements identified a set of **25 Use Cases**. All were satisfied by groups.io, and all proved to be appropriate requirements, with the following qualifications:

- The capabilities for a logged-in ACS member to auto-generate an account, and for a visitor to log in as ACS member and auto-generate an account, are not supported by groups.io (and would have required onerous own-coding for HiveBrite). Provided that the registration arrangements are obvious and convenient, these two Use Cases are of little importance
- The capability for a participant to suppress / hide display of a Topic is, in groups.io, somewhat hidden, and suppression of sub-threads is not supported. This proved to be a minor weakness, and can be omitted from the lists of Mandatory and Highly Desirable Use Cases
- The requirement for the Forum Manager to be able to set moderation on thread (Topic), account-holder(s) and the whole Forum is essential. However, the absence of moderation being able to be set on a sub-thread has not transpired to be a feature of any importance
- The requirement that the Forum Manager be able to carry over any existing account-holders into a new forum (in particular from Round 1 to Round 2) has not yet been further investigated

## Evaluation of groups.io as the Platform for the Online Forum

As shown in Attachment 1, a brisk environmental scan identified about 30 tools that were of potential relevance to the need. That scan identified no single, standout option – but given how superficial the survey was, that was no surprise. However, of the 30, three were highlighted as having reasonable prospects of satisfying the need: Discourse, groups.io and bangthetable.

A major problem with the large majority of the available platforms is that their perception of the user need is for a marketing-driven approach, with projection at and control over participants the main motivation. The CRWG's need (and the need of ACS members) is for a Forum in which equals participate, rather than a provider / driver / central organisation dominating.

The brief experience experimenting with HiveBrite was ample to show that HiveBrite is a marketing-oriented platform, not a community-oriented tool. (It also has many apparent design deficiencies, and a remarkably high bug-quotient). It was an unattractive option, but, as it is supported in-house, it appeared appropriate that CRWG use it – until the availability date precluded it.

Quick passes across Discourse and bangthetable were not encouraging. The flavour of each of them is also not strongly related to the idea of a 'community of equals', and the costs involved appeared to be significant. In contrast, a quick pass across groups.io suggested its orientation was more attuned to the need, and its cost was trivial. (A CRWG member is paying \$20 pmo for the Premium service. The Enterprise version is \$200 pmo: <https://groups.io/static/pricing>).

The Forum Manager's experiences with groups.io were as follows:

- Familiarisation was brisk
- Creation of a 'Group', and configuration of the Forum, were straightforward
- Establishment of the Forum (invitation-link, welcome message, arranging for the Code of Conduct to display, creation of a Tag-set, creation of a small set of Topics/threads by posting initial, demonstrator-style postings, invitations to CRWG members) took a couple of hours to get to grips with, look up Forum Manager/Owner documentation, create, test and amend
- Joining Instructions and initial Explanations for the first few participants required a bit more learning, and some inventiveness, on the part of the Forum Manager than expected. (However, all of the above was completed in 5 hours, including breaks)
- Few mid-course corrections were necessary (e.g. two of the 30-odd configuration settings were adjusted after the first couple of days' experience)
- When quick-response action was needed (twice) to ensure new registrants were subjected to moderation, the relevant levers were very quickly located
- The Forum Manager's message-broadcast facility took a while to find, at: Admin / Members / select at least one Member / Actions / Send Message (Until you select at least one Member, the Action isn't visible) ('Send Message' doesn't do what it says; it enables you to compose a Message)
- The only extraction facility, at Admin / Members / Download, extracts a range of things, but the important content, the Messages, is only available in .mbox format. The most convenient extraction technique transpired to be to use: Messages / toggle top-left button to Topics / click on a Topic / copy-and-paste entire contents to an editor, manually edit to remove all except the content, poster-identifier, message-identifier and date-stamp (time is only available within current day – ?), copy to the target-file. The sequence in which Topics appear changes continually, and no sequencing tools are available; so a separate control-sheet needs to be maintained to ensure orderly extraction. (However, all of this took only an hour's learning, and a couple of hours' extra work to do)

Participants had variable first-experiences, from immediate comfort, via quick familiarisation, ongoing discomfort, to a very few people unable to break in. Presumably this reflected participants' degree of familiarity with online fora, and the particular user interface norms the service uses.

**The groups.io service satisfies the majority of the Functional Requirements in full, a number of the Requirements in part, and falls short on a very few Requirements. In rough terms (and no formal scoring exercise has been done), its impression score is 7-1/2 to 8 out of 10. There is no benefit in even considering alternatives for Round 2.**

Several aspects could be readily improved, however. See Attachment 2.

## Attachment A: Functional Requirements of the Online Forum

Revised Draft of 22 August 2021, adding in the Appendix

### Background

The Working Group is to undertake consultation with members. Three rounds of consultation are required, each stimulated by a seed-document addressing respectively principles for a suitable constitution, possible features of a constitution, and a draft constitution.

The Engagement Mechanisms include:

- a **Repository** where members and others can access the consultation materials
- **Live Events** at which presentations and discussion can occur
- **Inbound Channels** so that members and others can:
  - submit feedback on the consultation materials
  - submit input on aspects not dealt with in the consultation materials
- an open **Online Forum**, so that threads of discussion can evolve of their own accord
- **Analysis** of the feedback and input

This document contains functional requirements for the open online/electronic forum.

Perhaps 250 people might contribute by this means. Some people may do so once only, others sporadically, and some at length and/or repetitively. It is likely that some people will have a narrow focus on one or two specific topic-areas, while others may contribute on multiple topics.

### The Requirements

This section outlines the nature of the consultation process, and the features that are needed of an online forum. The twin aims are to enable members to both contribute and interact with one another, and to enable the Working Group members to analyse the input and feedback.

Each round of consultation will have some inherent structure. The first round is to address the nature, mission, purpose and functions of the organisation, followed by principles for a suitable constitution. The second is to comprise a suite of key features of a constitution. The third is to be a draft constitution, broken into segments and clauses.

The online forum service therefore needs to support **a nested tree-structure of discussions**. For example, the first round could comprise separate streams as follows, with examples of subsidiary streams shown for one of them:

1. Process of the Consultation
2. Nature of the Society
3. Mission of the Society
4. Purposes of the Society
5. Functions of the Society
  - 5.1 Technical and Ethical Standards
  - 5.2 Membership Requirements
  - 5.3 Member Services
  - 5.4 Public Policy
  - 5.5 ...
6. Principles for a Suitable Constitution

The **capabilities of participants** need to include:

- Add a new posting to a specific stream or sub-stream
- Create a new thread and post to it
- Respond to a previous message within a stream, sub-stream or thread (default)
- Respond to a previous message but to the poster only

Postings need to include **reference to the stream, thread and/or message, and any specific text or object**, that the posting is responding to. It is preferable that this be seamless or automated.

It is highly desirable for **threads to be visibly apparent, e.g. by indenting, and readily expanded and contracted**. Important considerations are the functionality of the user interface and customer experience, and non-ugliness. But there's no great importance in prettiness of formatting features or the ability to select or customise the appearance. (Well, maybe an ACS logo somewhere!).

Because discussions in a stream may give rise to particularly busy threads on very specific topics, it is highly desirable that people have **an easy and obvious capability to hide, or unsubscribe from, busy threads that they do not wish to follow**.

The **notification of new contributions by other people to the forum** is a necessary feature, but great sophistication may not help much. Of greater significance is that each participant be able to receive notifications in a way that suits their personal style. Although the mainstream is likely to be via mobile and by web-based interfaces, **access options** need to include onforwarding of postings or periodic (typically daily) digests to the subscriber's email-address (or other habitat).

It is possible that **additional categorisations orthogonal to the stream structure** could be needed – conventionally referred to as **Tags** as distinct from Topics. However, these are hard to enforce, so this appears to be a lower priority than nested streams and separable threads.

A further need is for **a repository of documents** to be created and extended. This would initially contain the seed-document and any supporting documents; but **participants need to be able to contribute documents**, e.g. some members may post copies of documents published by other professional societies. Some documents may need to appear in each occurrence of the forum. In particular, **a 'Code of Conduct', or more positively expressed a 'Participation Guide' \*\***, needs to be published and the link displayed sufficiently prominently.

**Item-identifiers** are needed (i.e. for each message in a stream, sub-stream or thread, and for each document), such that it can be linked to from any other message or document. Messages need to be able to contain **hotlinks to external locations**, to avoid unnecessary cross-loading of copies into the repository.

All parties who wish to contribute need to be able to do so. This extends beyond the current Society membership to include ex-members, potential future members, staff-members of the ACS, of corporations and of industry associations, and interested members of the public. This requires **convenient login by anyone whose attention is drawn to the forum and who would like to contribute**. No more than very simple registration details should be needed.

Sufficient **administrative and supervisory capabilities** are essential. It is envisaged that **all controls would be set to the lowest level initially**, that the streams would be actively monitored, and that one or more administrators would communicate with all, some or individual participants as needed, and adjust settings on streams, threads or individual participants where necessary.

The service needs to be either **based on international open standards, or otherwise readily accessible from all device-types and OS**.

A **search facility** is vital, globally, by stream and sub-stream, and by thread.

**Content needs to be readily extractable** into, for example, summary documents.

All content needs to be **backed-up and recoverable**.

An **archive** needs to be readily drawn off at relevant times, and accessibility to, search within, and extraction from the archive must not be dependent on ongoing subscription to a particular commercial service.

Any **third-party service-provider** must not be able to exploit content, meta-data, profiles, social network data, etc.

\*\* Exemplars of different styles of Code of Conduct / Participation Guide are as follows:

<https://internet.org.au/about/25-policies/201-code-of-conduct>

<https://try.discourse.org/faq>

[https://whirlpool.net.au/wiki/wp\\_rules](https://whirlpool.net.au/wiki/wp_rules)

## Options

A vast array of communication tools exists. The most widespread remains email and e-lists. Several generations of tools with better-looking interfaces and modestly different and/or modestly enhanced functionality have come, and in some cases gone again.

Available tools suffer from many deficiencies, including

- being proprietary islands with little or no inter-operability with other islands
- limited market-share
- manneristic user-interface styles
- operation by providers that are highly exploitative of their users
- designs whose purpose is to capture eyeballs rather than serve users' needs
- narrow conceptions of human communications contexts and modes
- a focus on image and excitement rather than usefulness
- a focus on a particular category of users, such as software development teams

Categorisation is fraught with difficulties because all genres overlap. The following is an endeavour to group a number of mainstream tools with other tools with at least some common characteristics. Services that appear not to address the needs well enough are *greyed-out*. Services that appear to have some prospects of satisfying the need are underlined:

- *Email-Lists* such as Listman, GNU Mailman, phpList
- *Old-Style BBS / Message Boards / Internet/Discussion Fora / Groups*  
[https://en.wikipedia.org/wiki/List\\_of\\_Internet\\_forums](https://en.wikipedia.org/wiki/List_of_Internet_forums)  
Yahoo! Groups (closed), *Google Groups* (ailing), Whirlpool
- *Wikis*, such as MediaWiki, BlueSpice MediaWiki
- *Commercial Social Media*, such as LinkedIn, Reddit, Discord
- *Enterprise Social Media*, such as Jive, Yammer (but what about "external communities"?)
- *Collaborative Social Media*, such as GroupSpaces (discontinued)
- *Newer-Style Tools*, such as Slack, Gitter, Discourse, Mattermost (platform)
- *Enterprise-Oriented Tools*, such as MS Teams, groups.io, Trello
- *Community Consultation Fora*, such as Vanillaforums, Verint | Telligent, bangthetable
- *Project Management Tools*, such as Gitter, Confluence, Trello, Zoho Projects (except for 'Team Collaboration': Feed, Chat, Forums, Pages, Documents)
- *Content Management Systems*, such as WordPress, Joomla, Drupal
- *DIY Platforms*, such as phpBB

## Some Prospects To Be Evaluated

- **Discourse**

<https://www.discourse.org/features>

<https://meta.discourse.org/docs?tags=getting-started>

- **groups.io**

<https://groups.io/static/features>

<https://groups.io/helpcenter/membersmanual>

- **bangthetable**

<https://www.bangthetable.com/engagementhq-community-software/forums/>

[https://letstalk.cornwall.gov.uk/overview/forum\\_topics/what-are-the-changes-we-need-to-make-now](https://letstalk.cornwall.gov.uk/overview/forum_topics/what-are-the-changes-we-need-to-make-now)

# Functional Requirements of the Online Forum

## Use Cases

### Bootstrap (one-time)

- God creates an instance of HiveBrite
- God creates Forum Manager account(s) for that instance

### Configuration (one-time)

- Forum Manager reviews and amends default settings

### Establishment (once for each phase, i.e. trial, then 3 consultation phases)

- Forum Manager creates a space / forum
- Forum Manager reviews and amends default settings
- Forum Manager creates segments and any sub-segments (e.g. a dozen key questions)
- Forum Manager creates Repository
- Forum Manager posts to the Repository the Code of Conduct / Participation Guide, the seed documents for the phase, and any supporting documents

- Forum Manager carries over any existing account-holders into the new forum

### Account Creation and Code / Participation-Guidelines Display (per user)

- Logged-in ACS member auto-generates an account
- Visitor logs in as ACS member and auto-generates an account
- Visitor creates an account
- Visitor creates an 'anonymous' account

### Posting

- Account-holder accesses one or more files in the Repository
- Account-holder creates posting in segment / sub-segment / thread

- Account-holder posts a file to the Repository

### Response to Posting

- Account-holder responds to posting in segment / sub-segment / thread

### Notifications and Digests

- Account-holder sets auto-notification on segment / sub-segment / thread, to a target
- Account-holder sets frequency of despatch of periodic digests to a target

### Thread and Segment Creation and Suppression

- Account-holder creates new segment / sub-segment / thread

- Account-holder suppresses / hides display of new segment / sub-segment / thread

### Moderation

- Forum Manager sets moderation on account-holder
- Forum Manager sets moderation on thread, segment, sub-segment or whole forum
- Forum Manager receives notification of posting, reviews, rejects/responds/releases

### Extraction

- Forum Manager extracts into a content-format suitable for analysis, maintaining structure by forum, segment, sub-segment and thread



## **Attachment 2: Important Opportunities to Improve groups.io**

### **Menus**

- The primary facilities – Messages, Hashtags, and New Topic, need to be in upper-case and a bright colour, with all other options de-emphasised.
- Topics should be an option at the top level, not just within Messages.

### **Page-Content Sequences**

- Several pages require basic sorting capabilities (e.g. latest-first, earliest-first, alpha), particularly Messages / Messages and Messages / Topics.

### **Topic-Headers**

- The Tags selected for a Topic should be kept out of the Subject-line and displayed separately.

### **Sub-Topics / Sub-Threads**

- Critically, the concept of a Sub-Thread /Sub-Topic is needed, as follows:
  - Messages responding to a prior Message should establish a Sub-Thread
  - Messages responding to a prior Message should appear immediately after the Message they're responding to
  - Messages responding to a prior Message should be indented, to display the relationship
  - Sub-Topics should be expandable and contractable
  - Sub-Topics should be capable of being set for moderation, independently of the Topic

(Currently, nomatter which Message within a Topic a Message is replying to, the Reply is added to the chronological end of the Topic. It may contain 'replying-to' text – if the poster has highlighted that text before they reply; but even then it doesn't contain a link or Message-number to the relevant Message. And, in many cases, it lacks any indication of the Message that stimulated it).

### **Registration**

- Vagaries and confusions arise in the registration process and its semi-programmed messages. The process needs re-analysis, simplification and improved obviousness.

### **Content of Emailed Versions of Messages**

- Emailed versions of messages don't include any reference to whatever it is that the message is responding to. They need a link to the message, or at the very least a message-number.

### **The Forum Manager's message-broadcast facility took a while to find, at:**

- Admin / Members / select at least one Member / Actions / Send Message  
(Until you select at least one Member, the Action isn't visible)  
( 'Send Message' doesn't do what it says; it enables you to compose a Message)

### **Export Facilities**

- An export of Topics, i.e. unique Subject-headers, is needed, with a link to the page, and basic statistics such as count of messages, count of Sub-Topics (i.e. messages that have replies)
- An export of Message within Topic is needed, including:
  - Member-Identifier/Email-Address
  - Date-Time-Stamp (i.e. time as well as date)
  - Message-Content
  - An end-of-Message marker
- An export of Message within Topic within Hashtag is needed (content as immediately above)