Technology Taskforce

Judith Hellerstein | March 14, 2018

ICANN AT-LARGE

ICANN **61**

COMMUNITY FORUM

SAN JUAN

10–15 March 2018

Technology Taskforce (TTF) Agenda

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Introduction to the Technology Taskforce

2

Update of selected projects

- Policy tracking
- TTF wiki layout
- Review/Report of Conferencing Solutions
- TTF recommendation to ALAC re: group chat

3

Selected Technology Issues Updates

- upgrade of the LACRALO mailing list translation tool
- making recordings of conference calls playable on mobile devices
- ICANN's Adobe Connect issues

4

What are your Technology Issues in ICANN?

Introduction to the Technology Taskforce

About the Technology Taskforce (TTF)

- The Technology Taskforce (TTF) evaluates and reviews different technologies and tools that can help the ICANN At-Large Community communicate, collaborate and accomplish their goals and objectives for ICANN activities.

- Examples of these technologies include Chat or Web conferencing tools, Captioning, Knowledge Management tools, or anything that helps Individual Internet users become active within ICANN.

Test of NARALO Conference call livestream

About the Technology Taskforce (TTF)

- The TTF is open to anyone in the ICANN community interested in Information and Communication Technology and how they can be applied to solve the needs of ICANN At-Large and other ICANN Constituencies.

- The TTF has 1 to 2 conference calls a month.

- TTF work and Projects can be found at http://bitly.com/TTF-work

- The TTF wiki page http://bitly.com/Technology-Taskforce

- To join the TTF, email At-Large Staff at staff@atlarge.icann.org

Information Transparency Proposal (ITI)

• ITI is focused on improving access to ICANN's published information through the implementation of a document management system (DMS) and the enforcement of content governance.

• It's goal is to create a process to govern, preserve, organize, and secure ICANN's public content.

• It's aim is to build a foundation of content governance through consistent multilingual tagging, an information architecture, and enforced workflows.

• Rebuild of technical infrastructure of ICANN's information management, and implementation and enforcement of content governance through a new DMS and CMS.

• Evaluate, collect, and publish data that ICANN creates or collects that is relevant to ICANN's mission or the unique identifiers that it helps to coordinate.

ITI (continued)

- The ICANN Board approved funding for ITI in September 2017
- The project kicked off in January 2018 and is expected to deliver that increased transparency of information and improved search by Dec. 2019.
- The goal of the project is to increase the transparency of ICANN's public information and make it easier to access this information.
- The best way to do this is to Improve the multilingual navigation of https://www.icann.org.
- Give users the ability to receive new public content directly to their inboxes if that is their preference.

Open Data Initiative (ODI)

•ITI and ODI share a similar goal – to make it easier for the ICANN community to access information.

•This goal is in service of the ICANN organization's commitment to accountability and transparency.

•While ITI and ODI share a similar goal, the two initiatives are distinct projects that tackle different types of ICANN information and use different methods of making that information more transparent.

Update on Selected Projects

Policy Tracking Proposal

The At-Large website has a policy summary page listing all of the correspondence issued by the ALAC (advice to the Board, and responses to public comments) since 2003 and allows for searches by Topic Keywords assigned to the correspondence.

Policy Tracking Proposal

Here's what can be found when details about an ALAC comment is sought

Policy Tracking Proposal

Recommendations to the Board

The Board receives recommendations from a variety of sources from the ICANN community, including advice from the Advisory Committees as set forth in Article 12 of ICANN's Bylaws.

This page provides information on the status of advice to the Board from the Advisory Committees identified below:

- At-Large Advisory Committee (ALAC)
- Root Server System Advisory Committee (RSSAC)
- Security and Stability Advisory Committee (SSAC)

Actions and updates on advice from the Governmental Advisory Committee (GAC) are not currently included on this page. Please refer to GAC Advice Scorecards adopted from time to time by the Board on the GAC website. Most recently, the Board adopted the GAC Advice from the ICANN 59 Johannesburg Communiqué.

Latest Advice to the ICANN Board

As of 30 Sep 2017 (since previous month end)

Advisory Committee	Advice Document

The limitations with the search function

- The ICANN Board responses to the advice submitted by the ALAC cannot be found as they are not linked to the database, but they exist here at https://features.icann.org/board-advice

- Staff responses to ALAC's inputs to ICANN public comments cannot be found as they are not linked to the database.

- The texts of the PDFs are not indexed, limiting the ability to search for persons who acted as penholders for the advice statements and looking for specific wording in the policy statements.

Policy Tracking Proposal

This proposal seeks to have ICANN allocate resources to design and build a system that will remove or significantly reduce these limitations by initially:

- Adding the ICANN Board responses and Staff Responses to the ALAC statements database on the At-Large website. This would be of benefit to At-Large and the public to show the impact of our work both within and outside of At-Large.

- Having the text inside the PDFs of our ALAC documents fully searchable. Additional data fields for each ALAC statement such as penholders can be added.

This would pave the way for a wider ranging phase 2 - a Policy Management Process System, by aligning databases to a common standard based on Open Data standards, interoperability and interactivity.

Policy Tracking Proposal

- At present, all coordination of databases (from the Board's response to ALAC advice to RALO involvement and At-Large Structure input to policy) is done manually, resulting in a high workload on At-Large Staff and in inaccurate and sporadic updating of policy according to overall workload and key personnel.

- Whilst this proposed is a short term measure (phase 1 of a wider "Policy Management Process System"), ICANN needs to treat this in a holistic fashion.

- The full proposal can be downloaded at https://go.icann.org/2lJkKjf

TTF Subgroup to develop review of conferencing solutions
- Project leads : Justine Chew, Satish Babu, Joly MacFie
  https://community.icann.org/x/MpvbAQ

1 About this Review of Conferencing Solutions	2 Adobe Connect Challenges	3 Key desired features for a conferencing solution(s)
4 Progress made amidst Challenges Faced	5 Next step, feedback, suggestions	

About this review of Conferencing Solutions

1 **Initiation**
Commenced by At-Large Technology Taskforce (TTF) since early 2013.

2 **Adobe Connect Challenges**
Undertaken as a result of Adobe Connect connectivity challenges.

3 **Identifying Alternatives**
Involves **ongoing usability review of alternative solutions** to Adobe Connect.

4 **Key Desired Features**
Based on an **evolving set of key desired features**.

5 **Progress & Challenges**
Notwithstanding limited resources and numerous challenges, and complicated by introduction of new solutions over time, some progress has been made.

6 **Next Steps**
To continue review subject to constraints in resources to critically assess alternatives in light of continued proliferation of solutions / solution providers.

Adobe Connect

- The TTF explored a variety of conferencing solutions in 2013 when ICANN appeared to be switching to *LucidMeetings*, a cloud based conferencing solution.
- Since then, the TTF has focused on continued research on plugins for *Adobe Connect* to further enhance/improve the benefits of conference calls for At-Large.
- However, the TTF continues to review other solutions as and when they (including new versions / features) become accessible.
  - We extensively looked at Meetecho which is used by the IETF but found it not mature enough for ICANN
- Similarly ICANN IT also reviews other conferencing solutions that are used by different multilateral institutions
- So far, neither the TTF or ICANN has found any other conferencing solutions that meet the needs of the community.

Adobe Connect: Key issues

◉ Connectivity challenges
- Since ICANN switched to the new vendor in recent times many users have complained about connectivity issues ranging from an inability to connect to poor audio quality, constant dropping or crashing of Adobe Connect
- When screen sharing, users' screen tends to crash more frequently and also the tool bar, which includes the chat, queue, audio column, attendees' list, disappears when doing screen share
- Mobile users cannot see when someone has shared their screen in Adobe Connect, and cannot use all pods (eg. cannot participate in polls during calls)
- Adobe Connect can only display one audio channel, would be better if can have a separate audio feed

◉ Recording administration / archiving
- Resource intensive

Evolving key desired features

Accessibility

Needs to support:

- Most popular desktop browsers running on MS Windows, Apple OS, Linux with **minimal required plugins**
- Variety of **mobile / tablet devices** running on iOS, Android
- Users with **low bandwidth internet access**
- **Voice dial-in**
- Small to large participant numbers

Functionality

Should feature or allow integration of:

- Whiteboard - **presentation sharing of multiple format** documents by **any participant**
- **Management of agenda** during conference
- **Queueing** for speaking order
- **Polling** of attendees
- Public and private text **chats**
- Separate or multiple **audio feeds, translations**
- **Captioning**, notes generation

User Experience

Ease of use with minimal guidance needed for both participants and administrators, intuitive UI

Administrative Ease

Needs to support:

- **Meeting scheduling**
- **AV recording in reusable format**
- **Archiving and posting** of recording – video streaming, audio file etc

Vendor Reliability

For technical support:

- Standby, online - chat, email, telephone
- Responsiveness
- Ease of integration with additional plugins
- Upgrades, new feature rollout
- Cost, licensing

Progress Made

Factors / Challenges

The TTF has and continues to face inevitable circumstances which impact its review:

- New solutions, features become available over time as industry matures, making it more difficult to conduct apple-to-apple comparisons

- Desired features list changes/grows over time

- Not all solutions are open source or available for trial without cost. Those which are require use of own servers, volunteer resources etc.

- Workability of solutions often subject to quality of Internet connections which is beyond a vendor's control /remit.

- TTF trials should ideally involve a reasonably large number of testers in various locales, using various devices running a variety of operating systems

VS

Solutions Reviewed / Tested

- Up to February 2015, the TTF had reviewed over a dozen web conferencing solutions apart from Adobe Connect

- Special purpose calls were done with TTF members testing each of the solutions, looking at usability, features, accessibility, cost and cross platform availability

- Comparison table of the solutions tested (Adobe Connect, Lucid Meetings, Blue Jeans, ReadyTalk, Webex.com, GoToMeetNow, join.me, MeetingBurner, Infinite Conferencing, AnyMeeting, Jitsi Meet) https://community.icann.org/x/O1R-Ag

- The TTF continues to identify/test newer alternatives as they become available/accessible (Zoom, MegaMeeting, Clearside, MeetEcho, Blackboard, ClickMeeting)

Next step

- As at October 2017, the TTF has not yet made any suggestions in terms of a viable alternative conferencing solution.
- We are continually researching other solutions and will shortly have a special purpose call looking at ZOOM which is used by the Internet Society.
- In light of recent developments with *Adobe Connect*, coupled with the time & cost investments made thus far, TTF continues to focus on research on plugins for improving use of *Adobe Connect.*

Moving forward, TTF will continue to identify, review & test (where feasible) solutions:-

- ❏ Based on evolving key desired features list, but not necessarily meeting all
- ❏ Which are open source and/or available without/at low cost
- ❏ To suggest for use by smaller groups of At-Large Community
- ❏ On an as-and-when basis

ZOOM

- Zoom is a light-weight VC tool that also has screen sharing as well as Chat
  - It works well on mid- to low-bandwidth situations
  - It is fully accessible and easy to use for people with low or no vision.
  - It also offers multiple platforms, iOS, Android, Mac, PC, and Linux
  - It does not have fancy features such as Voting pods
  - Basic licenses (up to 40 min) are free and fully functional
  - Pro licenses and higher ones have more features including offline chat and other tools.

Zoom (2)

- Unlike Adobe Connect, Zoom does not depend on Flash, but does require a one-time download
- In Zoom, call recording can be automated
- Business accounts and above can automatically transcribed audio using machine translation
- RTT and other Captioning pods work well
- Also have a separate room option for smaller group discussions which can then be joined to meet a larger group.
- Zoom is a real option for most kind of audio/video conferences and can be better than Adobe Connect under some circumstances

TTF subgroup to look at redesign of TTF wiki page

- Project leads : Dustin Phillips, Sarah Kiden

At-Large Technology Taskforce Working Group

Created by Matt Ashtiani, last modified by Dev Anand Teelucksingh on Feb 12, 2018

Description | Get Involved | Contact | Monthly Reports | Members | Action Items | About

Description

The At-Large Technology Taskforce (TTF) evaluates and reviews different technologies and tools that can help the ICANN At-Large Community (including the At-Large Advisory Committee (ALAC) communicate, collaborate and accomplish their goals and objectives for ICANN activities. These tools range from chat tools, web conferencing tools, captioning to anything that will help Individual Internet users become active in the At-Large Community. Technology provides the tools that enable people to connect, collaborate, and work towards making the world more accessible, enabling the benefits of the Internet to be available to all.

Get Involved

We welcome anyone who is interested in collaborating and seeing how we can better meet the needs of ICANN At-Large to participate, suggest ideas, and become and active member. We have recently opened up the group to other ICANN constituencies and look forward to working with all ICANN communities to solving common problems. All who are interested to join are welcome. We look forward to your participation and involvement.

Mailing list: ttf@atlarge-lists.icann.org

To subscribe to the mailing list (or read the archives / manage your subscription) please visit https://mm.icann.org/mailman/listinfo/ttf

Contact

Staff Support Lead: Mario Aleman

Please email ICANN At-Large Staff at staff@atlarge.icann.org or the current chairs of the TTF: Dev Anand Teelucksingh or Judith Hellerstein directly.

TTF subgroup to look at redesign of TTF wiki page (updates)

- Had several subgroup team calls to discuss the redesign and implemented changes here:

- Had a call with At-Large staff to discuss project in the context of this project in the larger context of their effort to standardize and restructure the layout of the community wiki pages

- We concluded that we will merge the Prototype wiki page with the current homepage in a way that makes sense in this context

Adobe Connect Connectivity challenges

- Since ICANN switched to the new vendor many users have complained about connectivity issues ranging from an inability to connect to poor audio quality, constant dropping or crashing of Adobe Connect.

- When screen sharing, the users' screen tends to crash more frequently and also the toolbar, which includes the chat, queue, audio column, attendees' list, disappears when doing screen share.

- Mobile users cannot see when someone has shared their screen in Adobe Connect.

- Adobe can only display one audio channel, would be better if can have a separate audio feed.

Connectivity Guidelines

- The TTF has created a page to track Adobe Connect Connectivity issues, http://bitly.com/ttf-issues
- In an effort to be more proactive, the TTF created a new sub-project to focus on these connectivity issues
- ICANN IT has its own ticketing process and so any guidelines the TTF creates has to work with the current ICANN Ticketing process.
- Currently, ICANN staff running each meeting are tasked with submitting tickets for IT problems that occur in each of these meeting.
- What the TTF will be working on is creating guidelines advising users of the steps and the information that IT staff need to follow up on any ticket created regarding connectivity issues.

Connectivity Guidelines

- The guidelines will include what information IT staff will need to figure out how to resolve the issue and to allow the IT staff to better follow up with their vendor
- IT staff are working to create a form so that staff or others can place this info on the form.
- ICANN IT staff requests TTF outreach support so that smaller groups and sessions are aware of the system
- Other: Wizards, ICANN online help resources

Selected Technology Issues

About Technology Issues Page

The TTF maintains a [Technology Issues Page](#) to track possible technology related issues noted by the TTF and the At-Large Community for raising with ICANN Staff to develop solutions and/or workarounds.   http://bitly.com/ttf-issues

At-Large Technology Issues

Created by Dev Anand Teelucksingh, last modified on Oct 23, 2017

- Current Technology Issues
- Adobe Connect Issues
- Resolved Technology Issues

This page seeks to track possible technology related issues noted by the At-Large Technology Taskforce Working Group and the At-Large Community for raising with ICANN Staff.

Current Technology Issues

Status of Issue	Updated	Description of Issue	Solution / Workarounds
IN PROGRESS	22 Oct 2017	LACRALO mailing list issues - see discussion-of-LACRALO-mailing-list-issues for a deeper background behind this issue.	The TTF filed a budget request to the At-Large FBSC in FY17 for ICANN to finance the hiring of a programmer to assist the volunteer ICANN staff member to fix outstanding bugs - see At-Large FY17 Budget Development Workspace , this was approved by the At-Large FBSC and filed with ICANN Finance. On the 2016-08-08 At-Large Technology Taskforce Call, ICANN Staff member @ Corinna Ace

Key Technology Issues

Some of the key technology issues noted:

★   Making Adobe Connect recordings accessible to mobile users

★   Adobe Connect connectivity Issues
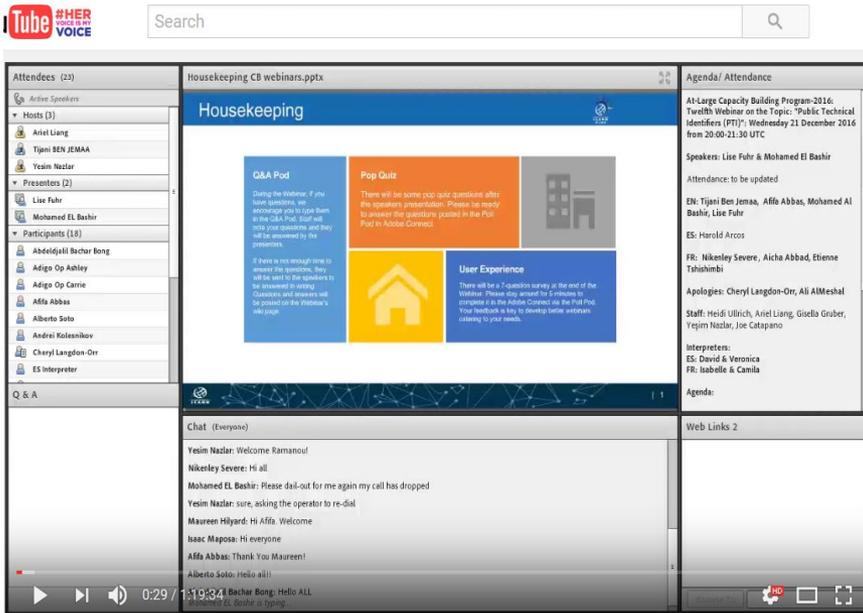
At-Large Capacity Building Webinar: Public Technical Identifiers (PTI)

ICANN At-Large

Subscribe 35

19 views

- All of the ICANN At-Large conference calls and webinars are done using Adobe Connect. However, the recordings from this conferencing solution are encoded in Adobe Flash.

- Such recordings are therefore unplayable on mobile and tablet devices and playback of recordings on a PC with Flash installed is cumbersome compared with video sharing websites.

- The TTF noted that with [Adobe Connect 9.5, ICANN has the ability to save recordings in MP4 format](#) using the Adobe Connect add-in on Staff's computers.

- Formats like MP4 can be edited and put on video sharing websites for easier re-sharing on websites and social media and accessible to the At-Large community using computers or mobile devices.

- At-Large Staff has created two recordings and uploaded to YouTube
  - [Technology Taskforce 08-04-2016](#)
  - [Capacity Building on PTI](#)

- At ICANN59, Billy Einkamerer noted that YouTube supports Flash video (FLV) uploads. ICANN staff made available a FLV recording and this was uploaded to YouTube directly without any conversion to MP4.

  [ICANN 59 TTF session on YouTube](#)
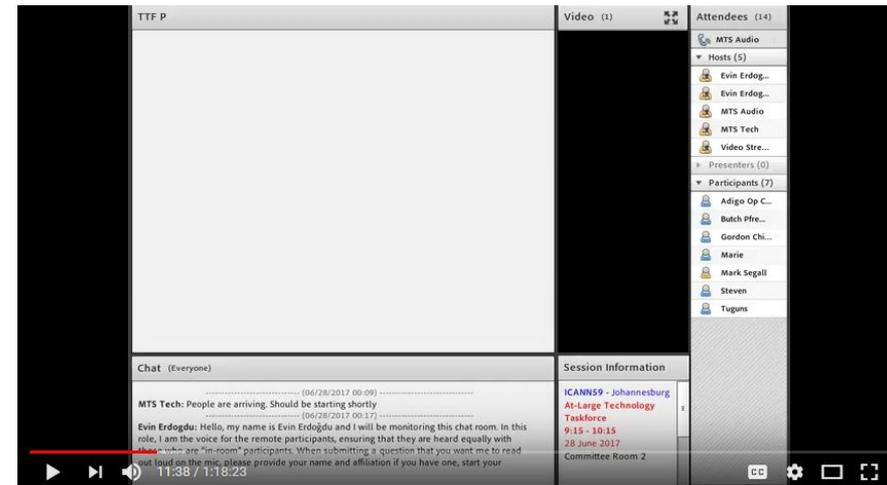
Challenges noted:

- Staff have to download/playback the recording in real time to do the conversion of the adobe connect recording to MP4 or FLV.

- On Macs, only one instance of Adobe Connect add-in can be launched at a time so staff cannot attend a meeting while creating an offline recording.

- High bandwidth need to stay connected to the Adobe Connect room to download the FLV file and to upload the video to YouTube - Staff may not have enough bandwidth where they work and be able to do both regular duties and do the conversion.
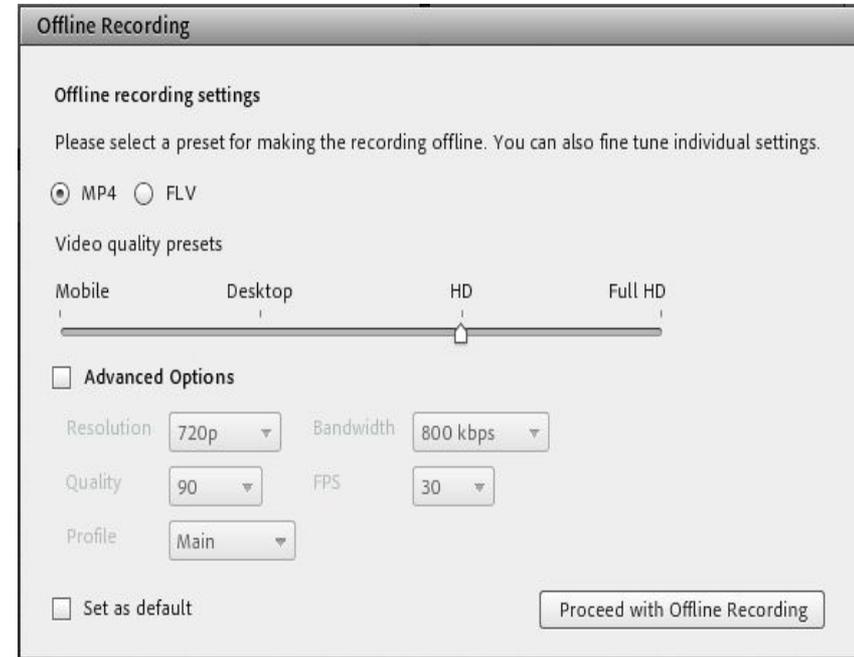
(Credit : Adobe)

Another approach : Livestream conference calls to YouTube

As a test, Dev Anand Teelucksingh used OBS Studio to stream his desktop to YouTube while attending the NARALO October 9 2017 in Adobe Connect.

Advantages:

- Can post to social media to watch the livestream as the meeting happens

- Eliminates the need to download recordings and then upload to YouTube after the call.
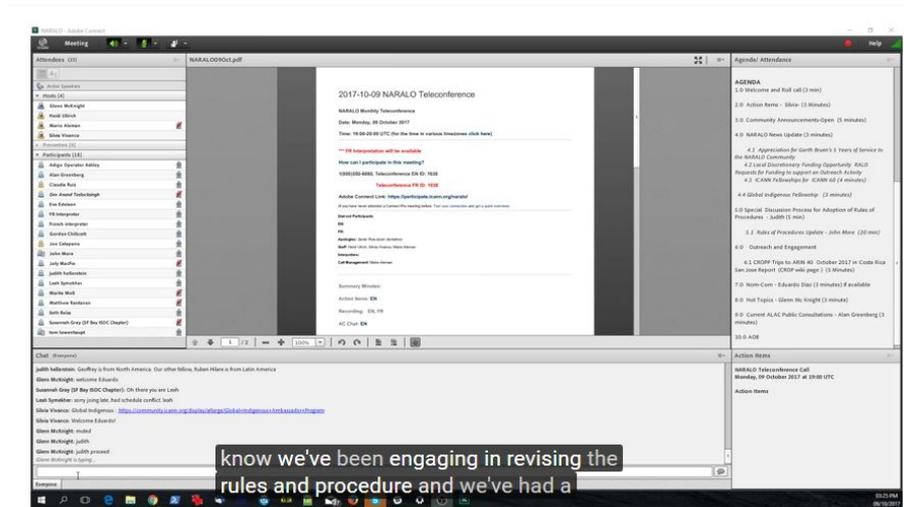
Test of NARALO Conference call livestream

Livestream of NARALO October 9 2017 call
https://youtu.be/8tV5yALgI8A

Another approach : Livestream conference calls to YouTube

Challenges

● Requires bandwidth to both attend and stream at the same time.

● Care needed to mute system sounds and microphone

● Care also needed to not switch away from Adobe Connect or have other programs pop up over the screen
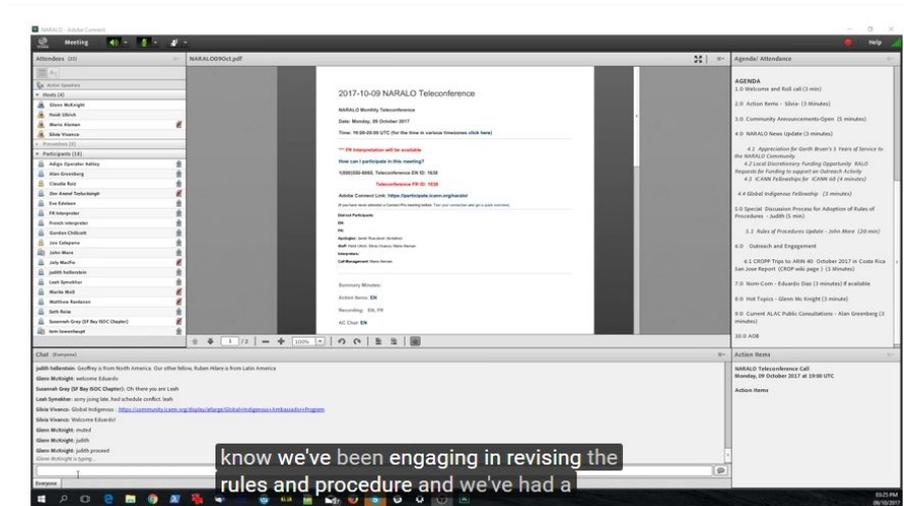
Test of NARALO Conference call livestream

Livestream of NARALO
October 9 2017 call
https://youtu.be/8tV5yALgI8A

We need to have the At-Large's Community meetings available on sites like YouTube.

Two possible approaches

- Use a computer at a location such as an ICANN office (which should have sufficient bandwidth) to do the download of the recording after the call and uploading to YouTube, alleviating the need for At-Large staff's computers to be tied up doing the download/export. The computer can be run by a staff person at the office or remote controlled by At-Large Staff.

- Use a computer at a location such as an ICANN office (which should have sufficient bandwidth) to enter the Adobe Connect room at the beginning of the meeting, stream the desktop showing the Adobe Connect room to YouTube for the duration of the meeting and ending the livestream when the meeting ends.

Questions, Comments?

Adobe Connect Connectivity challenges

- In an effort to allow for Adobe to work better on the Mac, PC, and Mobile platforms, Adobe has focused its efforts on creating and distributing desktop versions of Adobe Connect not only for the Mobile market but also for the desktop/laptop market.

- This effort has resulted in more audio and connectivity problems but many of these go away when using the desktop versions and launching from there then from the browser.

- It is hoped that these new versions that do not use Flash will solve some of the interoperability issues

Learn more on the TTF page on Adobe Connect at
https://community.icann.org/x/6xcQAg

What are Your Technology Issues in ICANN?

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The TTF wiki page : http://bitly.com/Technology-Taskforce

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# Extra Slides if there is time

Credit : XKCD https://xkcd.com/

How At-Large should use Group chat?

At-Large uses Skype for chat/instant messaging.

Some of the disadvantages with using Skype:

- Chat history is not preserved. A number of At-Large discussions over the years have been lost as persons upgrade their machines.

- Conversations on various topics happens in one group so as multiple persons chime in at different times, potential conversations on a particular topic/issue are lost in the one stream.

- No ability to search messages across all skype groups - one has to remember what skype group a message was in to find it.
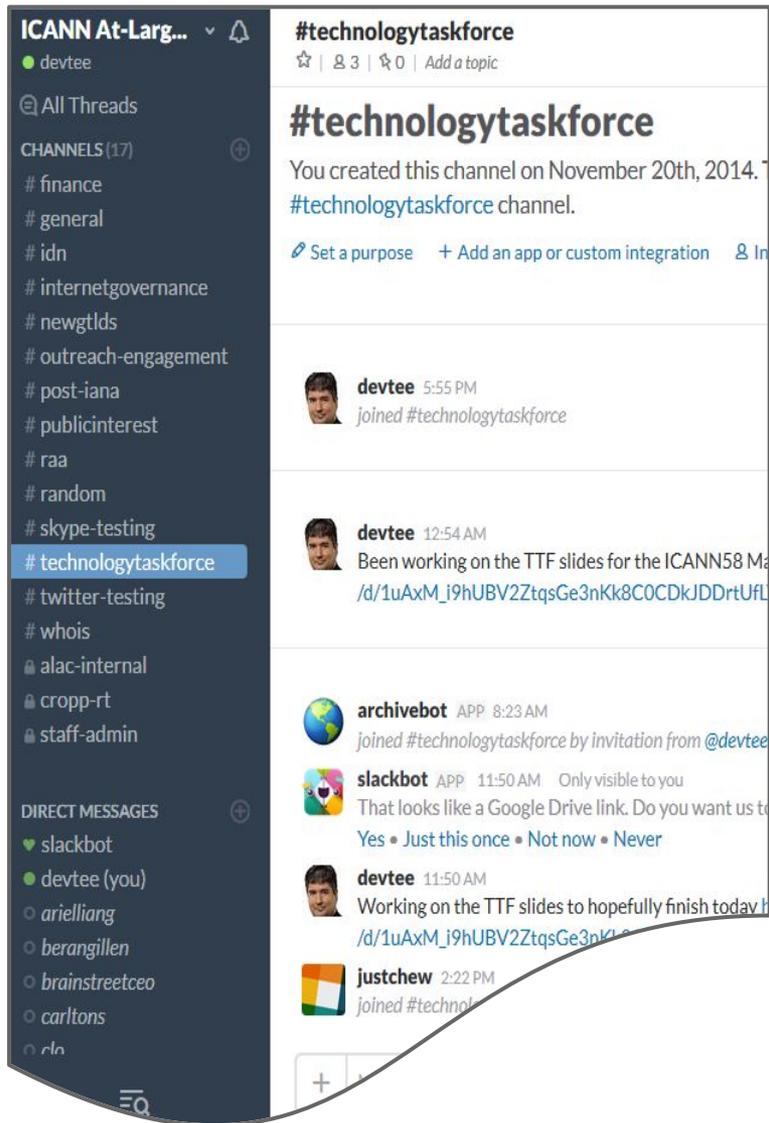
[Slack](), [Mattermost](), [Rocket.chat](), [HipChat]() all share common features:

- creating public rooms or channels for groups and/or topics
- creating private groups not visible to persons not in the group
- mobile apps to send push notifications to senders on mobile devices
- ability to search across your channels and rooms
- can be administered by staff to create,archive,delete rooms/channels
- staff/admins have more control to add, remove, and invite persons
- allows for extensions/integrations so that different services can be integrated (eg Twitter)

Benefits of Group Chat
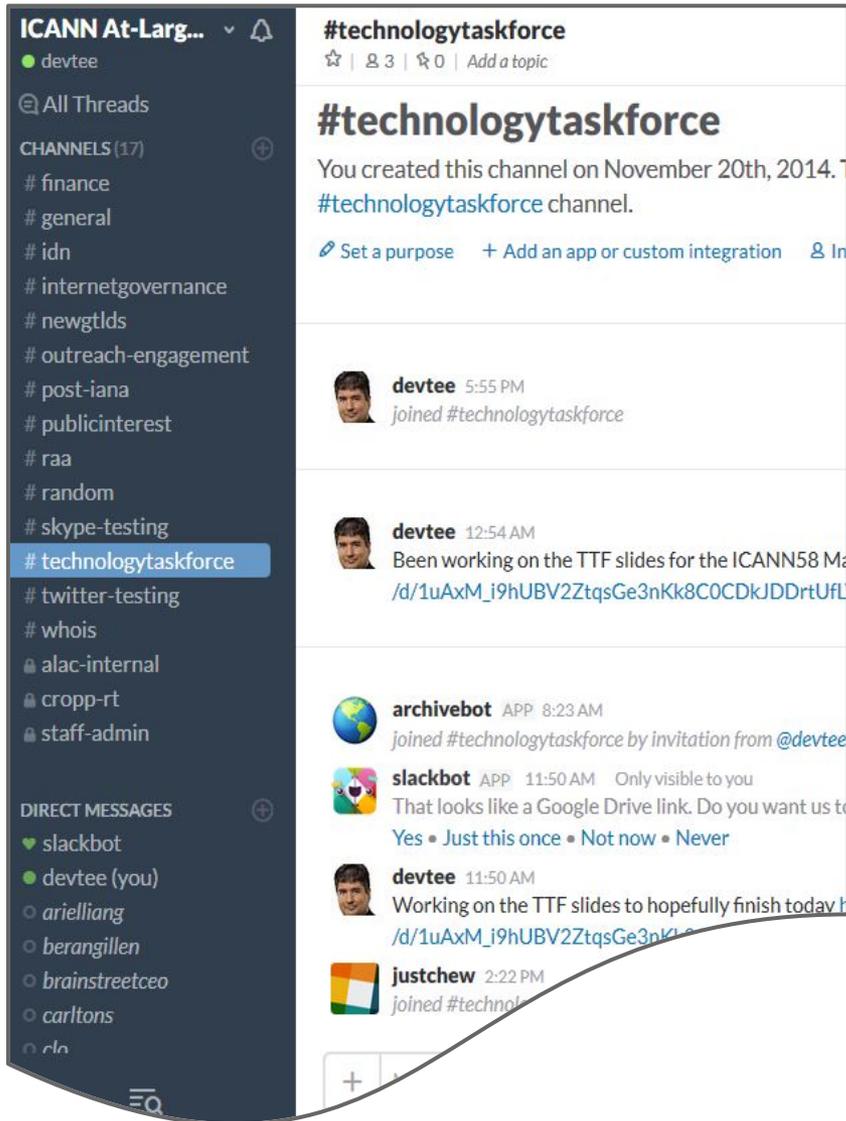
Group Chat ([Slack](), [Mattermost](), [Rocket.chat](), [HipChat]()) offers significant benefits over Skype

- At-large community members can be added by Staff and added to channels of their particular interest and/or group.

- potential for discussions on topics they are interested in, reducing email clutter and increasing participation.

- ability to find messages and conversations of interest to them.

TTF activities re: Group Chat

- The TTF first tested and used Slack before the ICANN50 meeting in 2014 for the At-Large Summit II, to assist with the At-Large Social Media. Channels were created for each of the Thematic Groups, and Staff used to coordinate with Social Media volunteers to send pictures and information from the Thematic Groups sessions for resharing on At-Large's social media.

- We looked at Hipchat and Hall in 4Q 2014 (which was acquired by Hipchat in 2015).

- The TTF has had a demo of Rocket.chat by James Gannon from the NCUC at the ICANN56 Helsinki meeting and a followup demo on the 2016-09-19 At-Large Technology Taskforce Call

- The TTF tested Sameroom.io which bridges different chat systems so that messages from one chat system can appear on another chat system (e.g Skype to Slack)

- The TTF tested Mattermost, in February 2017 thanks to Niran Beharry installing Mattermost and making it available to the TTF for using.

What approach to use?

ICANN should deploy its group chat solution that can be controlled and supported internally by ICANN.

An ICANN deployed solution would allow ICANN to customise the group chat solution to suit the AC/SOs which have varying needs.

Such an approach will require some planning, investment and testing by ICANN before such an solution could be publicly available.

Therefore, in the meantime…...

What approach to use?

However, one approach the TTF has investigated is for the At-Large Community to use the free tier Slack version that we have at
https://icannatlarge.slack.com/
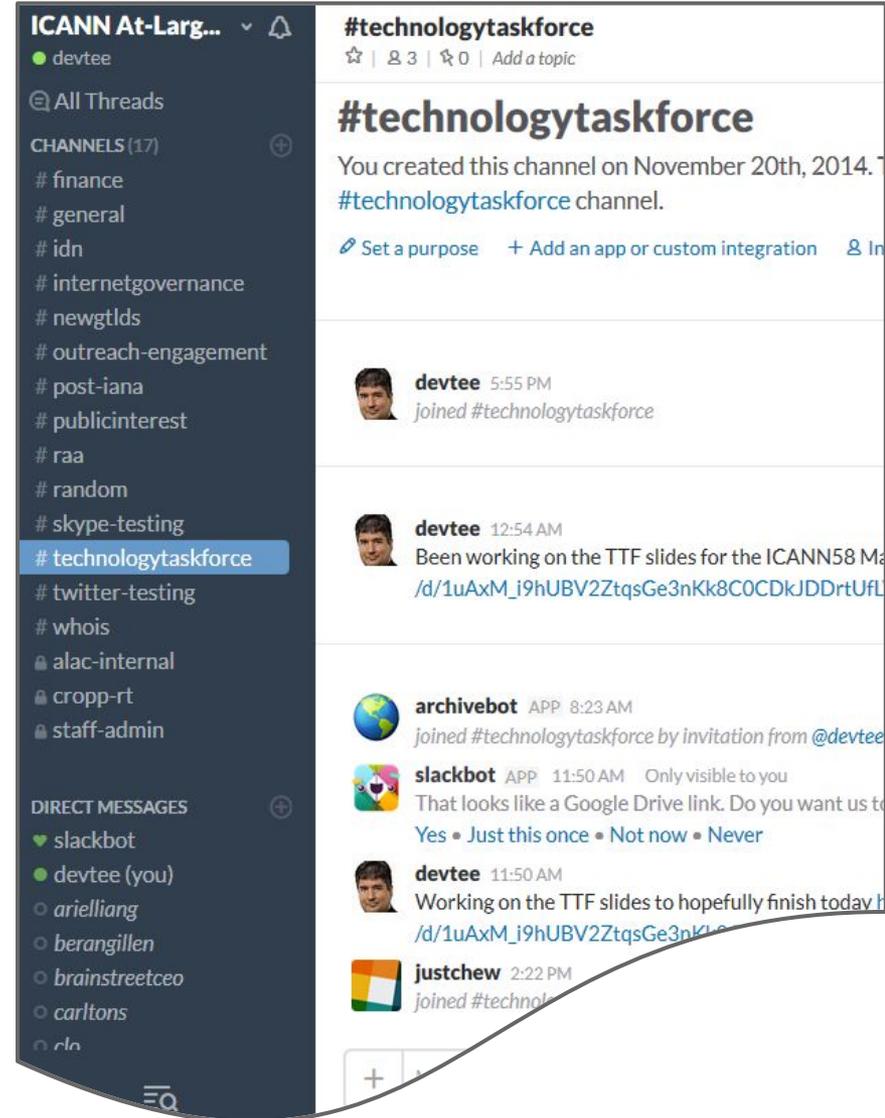
- The challenge of a volunteer to deploy an open source solution for a large number of users using their resources without payment and support it to configure or fix things is too much and runs the risk of a volunteer unable to fulfil such a task after valiantly starting and the self hosted version goes down.

- ICANN may be considering group chat solutions longer term but given Slack export capabilities, the At-Large Slack Chat can be exported to a future chat solution.

- From an end user perspective, Slack works. It has the key features we want in group chat - threaded conversations, mobile apps, ability to create public channels, private rooms, and direct messages, search across channels.

What approach to use?

- The free tier offers 10 integrations – the TTF has installed several integrations in Slack

  - Twitter notifications to Slack channel

  - Have Voice/Video chat with Skype

  - Google Calendar to send notifications from the At-Large Calendar

  - Translate tool for persons to translate text inside of Slack
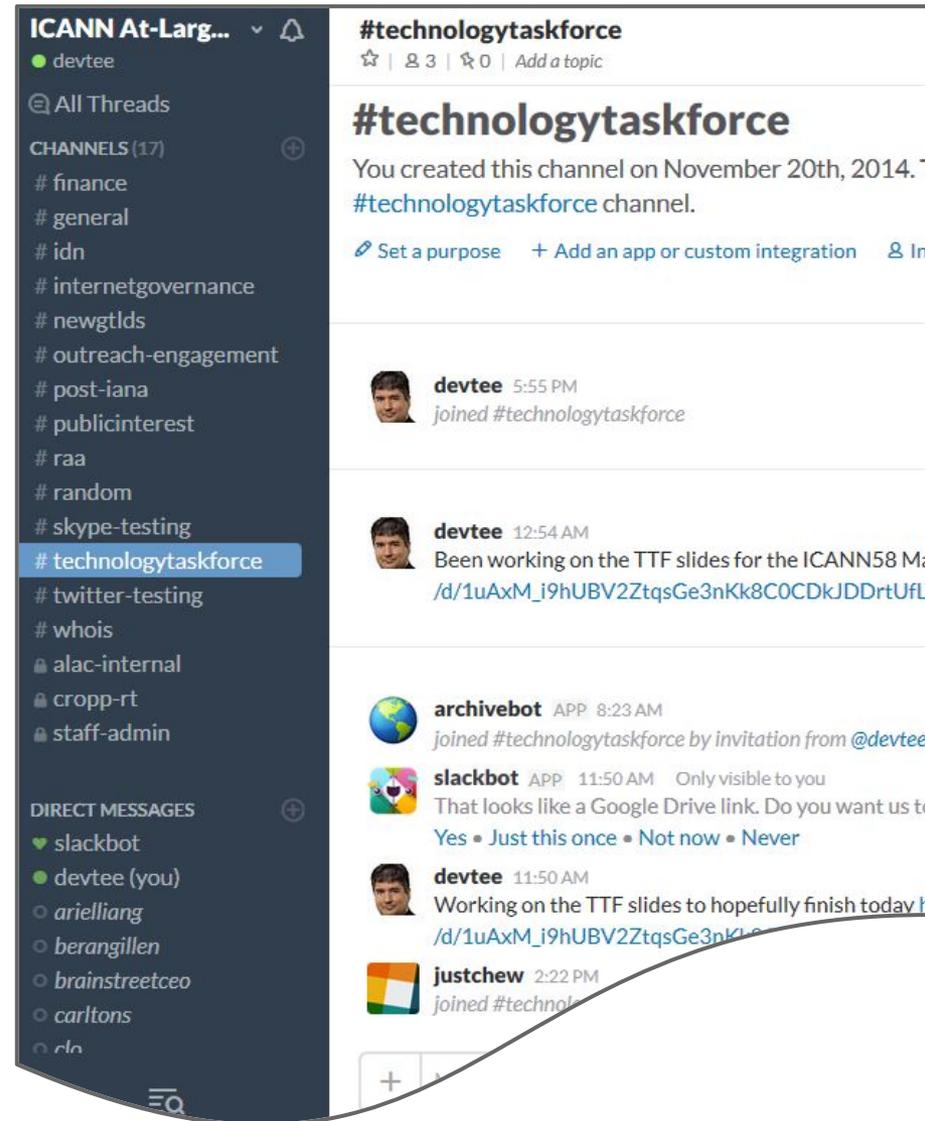
What approach to use?
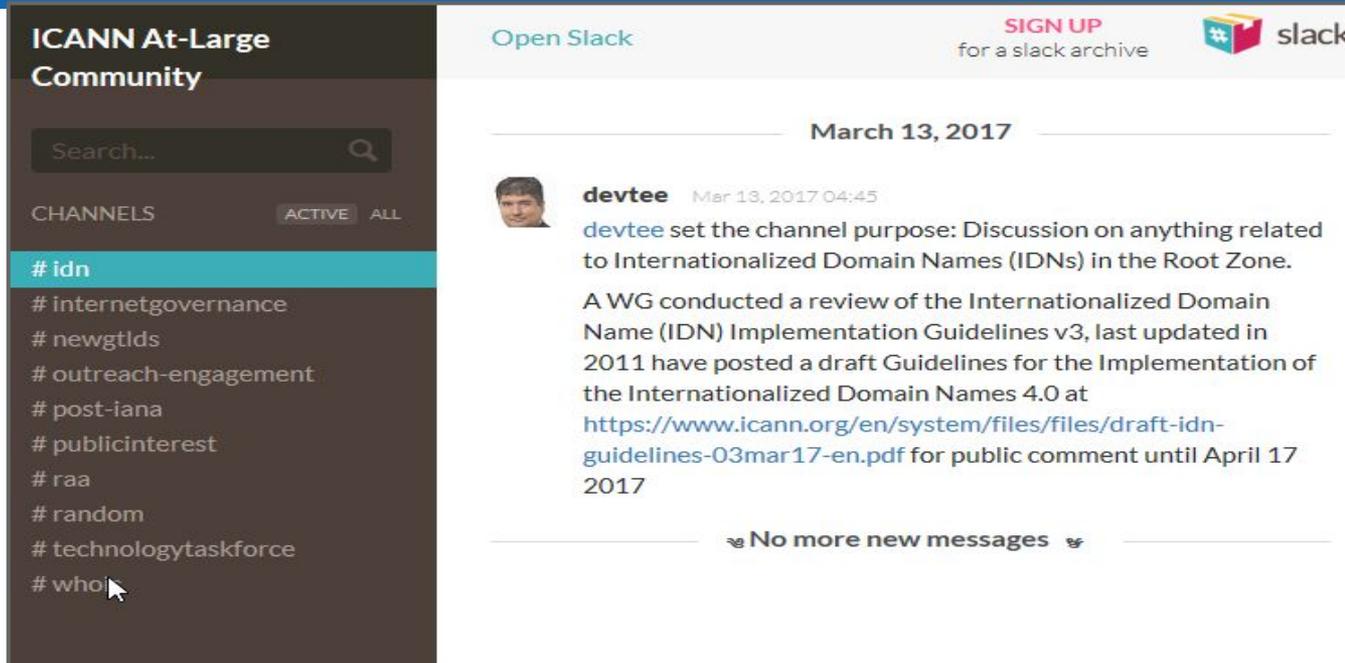
- The TTF also installed a bot to create a public facing website of the Slack chats at http://icannatlarge.slackarchive.io/ . So our chats can be linked from a wiki or At-Large website to specific channels like http://icannatlarge.slackarchive.io/idn/

- The chats can be exported from Slack by Staff on a regular basis as a backup.

Questions, Comments?