ELIXIR Beacon Strategic Calls
Minutes and Actions 2017
A GA4GH Discovery Work Stream Subgroup

These are the minutes for the Beacon meetings, a driver project of the GA4GH Discovery Work Stream. For further information, please visit the GA4GH Work Stream page at https://ga4gh.org. (See also the Vision Statement and recent Activities)

Other minutes documents are available:
Current
Archive Folder

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Meeting Protocols

- Please note that by participating in meetings, attendees agree to adhere to the GA4GH Standards of Professional Conduct.
- Meetings may be recorded for note-taking purposes. Recordings will be deleted within three months of the meeting taking place.
- Dates should be specified in the international format yyyy-mm-dd

Links:
- Google.drive (minutes, archived documents, presentations etc)
  - Slides from the Beacon Technical Calls (Sprint reviews) are found here
  - F2F meeting, Barcelona (19-20 March 2018) document
  - Beacon Technical Call notes
- Github repository
- Email group
- Network website
- Implementation Study 2018 link

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2017-12-12: Beacon v0.4 !

Chair: Michael Baudis (SIB)
Attendees: Heidi Sofia (NIH), Stephanie Dyke (McGil), Jordi Rambla, Sabela de la Torre (ELIXIR-ES), Ilkka Lappalainen, Juha Törnroos (ELIXIR-FI), Dylan Spalding, Matthew Laird (EBI), Marc Fiume (DNAStack) David Lloyd (ELIXIR Hub)

Regrets: Serena Scollen, Susheel Varma

	Actions Arising	Assigned To	Deadline	
1.	Draft paper - redraft as correspondence	David	Next call	
2.	Release notes & list new features	Juha		
3.	Final updated for v0.4	Marc to contact Miro		
4.	GA4GH Drivers meeting	Marc	Jan '18	

	Agenda Item	Speaker	Time
1.	Approve Previous Minutes and Agenda	Chair	5 min
2	Review of Actions from 28th November (below)	Michael	10 min
3.	Towards Beacon v0.4 ● Final steps (Technical notes) ● Announcement		
4.	Beacon v0.5 (1.0) see / contribute to Wishlist		
5.	VMC as future of GA4GH variant formats		
6.	Beacon F2F (Feb/Mar 2018)		
7.	A.O.B		
8.	Next Calls: 19th December: Technical Call (tbc) 9th January: Strategic Call (26th December Cancelled)		

	Previous Actions	Assigned	Deadline	Update
1.	Draft paper	David	Next call	Contacted Nature Biotech
2.	V0.4 is backwards compatible	Juha		Yes
3.	Release notes & list new features	Juha		In hand
4.	Beacon Project Website	Susheel	Tech Call	Complete
5	Planning a meeting for all Drivers (early Dec) and will include questions about query needs	Marc		Meeting / Align with other GA4GH groups. (Outside Beacon-specific context)

Minutes:

Beacon v0.4	
JT, MF	Outstanding issues: ● Marc to contact Miro for progress ● Juha to draft release notes
JR	GA4GH Drivers call early 2017 (Marc)

	Discovery Workstream [TC MInutes](#) and [Roadmap](#)

VMC	
MB	Now attending the GA4GH VMC (Variant Modelling Collaboration) ● Aim to create a standard description for genomic variants (inc. coordinates) ● Specifications [paper](#) released Sept 17 ● Part of Genomic Knowledge [Workstream](#) ● Milestones for this group to be developed early 2018

Beacon F2F	
DL	Save the Date 15th March (probably Amsterdam, tbc)

AOB	
JR DL MF	The nature of the current call, GA4GH / ELIXIR relationship? GA4GH coordination limited, now picked up by ELIXIR. GA4GH Workstreams (Discovery and others) each with a number of Driver Projects, of which the Beacon is one. If a new Driver wants to get involved they would be welcome. Better to have discussions within these calls so all aware of developments Certain ELIXIR specific milestones might be best discussed in smaller group
26th Dec Strategic TC cancelled.	

2017-11-28: Beacon v0.4 ?

Chair: Michael Baudis
Attendees:

Marc Fiume, Miro Cupak (DNAStack), Mike Qu (Philips), Juha Törnroos (Elixir-FI), Anthony Brookes, Vagelis Ladas (Leicester) Niclas Jareborg (ELIXIR-SE), Jordi Rambla, Sabela de la Torre (ELIXIR-ES), Stephanie Dyke (McGill), Heidi Sofia (NIH), Dylan Spalding, Saif Ur-Rehman (EBI), Melissa Konopko, Lena Dolman (GA4GH), David Lloyd (Elixir Hub)

Regrets: Ilkka Lappalainen (ELIXIR-FI)

	Actions Arising	Assigned To	Deadline
1.	[Draft paper](#)	David	Next call
2.	V0.4 is backwards compatible	Juha	
3.	Release notes & list new features	Juha	
4.	Beacon Project Website	Susheel	Tech Call

	Agenda Item	Speaker	Time
1.	Approve Previous Minutes and Agenda	Chair	5 min
2	Review of Actions from 11th November (below)	Michael	10 min
3.	Beacon Virtual Hackathon review ([schedule](#) + notes)	Juha, Miro, Sabela, Saif	15 min
4.	Towards Beacon v0.4 ● Final steps (Technical [notes](#)) ● Announcement	All	15 min
5.	Beacon v0.5 (1.0) wish List	All	
6.	A.O.B		

	Previous Actions	Assigned	Deadline	Update
1.	Draft paper Lena and Angela will now make final review, Marc to comment.	Lena, Marc, David		Ongoing - David to contact Nature.
2.	Project structure (document) review & comment	All		Complete
3	Planning a meeting for all Drivers (early Dec) and will include questions about query needs	??		

Minutes:

Hackathon

JT, ST   Useful progress. some outstanding issues, hope to complete outstanding tasks by next call (Dec 12th).

DL   Was hackathon effective and would another be useful, perhaps as an alternative to Tech Calls? (General support.)

Towards Beacon v0.4

MF   Is 0.4 backwards compatible?   (Juha to confirm)

MB   Largely adding attributes rather than modifying, so likely to be consistent.   (Juha to draw up list of changes & release notes)

MF   Propose this API be promoted through GA4GH mechanism, the first version to be shepherded through. (MB: Agree)

V0.5 Wishlist

MB   Handoff mechanism (see #114 and slides.)

JT   Consider what is required to achieve v1.0 and work to address this.

MF   Meta data field
          Secure Access Beacon (White-list?)

JT   Working towards registration process using AAI rather than listing.

MF   A reference implementation that allows any user could standup a Beacon with chosen IP Provider - no accounts made, registration process to make a count. Plug-in providing necessary addn.

MB   ELIXIR Beacon development focused on (adapting) existing mechanisms

MF   Good to share that which is in/out scope, with others picking up the gaps.

MB   Time frame?
MF   Propose next release (v1.0 or other) by Jan/Feb 2018? Keep momentum going
JR   One improvement at a time in different versions rather than jump to v1.0

MB   Next release is the switch from Protobuf to OpenAPI.
JR   To have both versions available (OpenAPI and Protobuf)

AOB

MF   Discovery Workstream call 11am EST 29th Nov.

JT   Beacon Project Website visible?

DS   Thanks for all comments on security documents, these have now been merged.

2017-11-14: Project Structure

Chair: Serena Scollen (ELIXIR Hub),
Attendees: Serena Scollen (Elixir Hub), Marc Fiume, Miro Cupak (DNAStack), Mike Qu (Philips), Juha Törnroos (Elixir-FI), Anthony Brookes (Leicester) Jordi Rambla, Sabela de la Torre (ELIXIR-ES), Jonathan Dursi (CanDIG), Stephanie Dyke (McGill), Heidi Sofia (NIH), Saif Ur-Rehman (EBI), David Horner (Milan), Michael Baudis (ELIXIR-CH), Melissa Konopko, Lena Dolman (GA4GH), Matthew Laird (EBI), David Lloyd (Elixir Hub)

Regrets: Niclas Jareborg, Francis Jeanson (Ont. Brain Inst), Ilkka Lappalainen (ELIXIR-FI) Susheel Varma (Elixir Hub), Dylan Spalding (EBI)

	Actions Arising	Assigned To	Deadline
1.	Draft paper Lena and Angela will now make final review, Marc to comment.	MF, LD	
2.	Project structure (document) review & comment	All	
3	Planning a meeting for all Drivers (early Dec) and will include questions about query needs	??	

	Agenda Item	Speaker	Time
1.	Approve Previous Minutes and Agenda	Chair	5
2	Review of Actions from 31st October (below)	Serena	10
3.	Project structure (document)	Serena	10
4.	Technical Call Update (document)	Miro/Juha/Sabela	10
5.	Beacon Virtual Hackathon (schedule)	Serena	5
	A.O.B Call details changing to **gotomeet.me/SerenaScollen** Serena - maternity leave commences soon		

	Previous Actions	Assigned	Deadline	Update
1.	Draft paper Lena and Angela will now make final review, Marc to comment.	Lena, Marc		Ongoing, waiting response from Nature
2.	Review GitHub reorganisation	All Susheel	15 / 24th Oct	Complete. GitHub set up for Beacon.
3.	Protocol Buffers / Open API Draw up one page document to compare (see link) Understanding of the GA4GH position	Juha Susheel (Rishi)	7th Nov Tech. call.	Decision made to continue with Protocol Buffers until 0.4 release and switch to OpenAPI after the Beacon 0.4 release. Complete.

Minutes:

SS   **Project structure** (document) invite all to review and comment.
1. GA4GH responsible for the Beacon API (development and stewardship of the standards).
2. ELIXIR Driver Project:
   ○ An implementation
   ○ Contribute to the development of the standards
   ○ Close participation in technical and DWS calls

- ○ Defined work plan to end 2018 (milestones & deliverables),
- ○ Actively encourage wider participation from across GA4GH

Retain the current meeting schedule (Alternate Strategic / Technical calls, coordinated by ELIXIR, involving all participants.)
Aim to avoid potentially redundant meetings.
Occasional (monthly, or less) meeting to discuss ELIXIR specific issues (funding etc)

MF   API within DWS under stewardship of a team (other API / Products under a Task Team) [See diagram](#)

ALL   Semantic differences, suggested naming conventions (*From both call and follow up discussion*)
- ● Beacon API (GA4GH Standard / Product)   (Avoid *Beacon / Beacon Project*)
- ● ELIXIR Beacon (Driver Project)
- ● Product Team (The API being a DWS Product)   (Avoid *Task Team*)

MB   Unclear how DWS will integrate different activities.

MF   Other Driver Projects in Discovery WS (potentially VICC, ICGCmed, Monarch, EGA, Australian Genomics). Still to be confirmed.

JR   (discussing various call possibilities) Good to have representation on other WS calls.

MF   Suggest:
1. Strategy Call = All Drivers + Task Team members (Coordinated by ELIXIR)
2. Technical Call = All Drivers + Task Team members (Coordinated by ELIXIR)
3. Driver specific calls (Coordinated by Driver)

TB   Question about which entity takes the lead. (Which is the dog and which is the tail)
All   Beacon API = lead; influenced the Driver Projects (One dog with multiple tails, working together)
JR   Beacon API should meet the needs of all Driver Projects (taking input from all)
TB   Concern that ELIXIR, as the most active Driver, shapes the development of the API, need to ensure that future developments are discussed with GA4GH Beacon group.
ELIXIR doing most of heavy lifting
SS   Do not wish other contributors to feel excluded, need input to balance the ELIXIR workplan.

TB   Future considerations: to develop a query language (Potential focus for GA4GH Beacon work?)
MB   Discussions at Plenary workshop, how to query resources (Genomics England, VICC etc)
Need to check what others require.
MF   See Query Language as an extension of the Variant API 'look-up', opportunity for Beacon & MME to share search API.
Planning a meeting for all Drivers (early Dec) and will include questions about query needs.

SS   Run through the second half of the [document](#), outline of personnel and roles. (Invite input)

SS   **Technical Update**
JT   ● Working towards v0.4
ST   ● Hackathon (21st) to make final changes
- ● Decided to continue with Protocol Buffers until 0.4 release and switch to OpenAPI

2017-10-31: Plenary/Technical Call Update

Chair: Susheel Varma
Attendees: Susheel Varma (Elixir Hub) , Serena Scollen (Elixir Hub), Mike Qu (Philips), Francis Jeanson (Ont. Brain Inst), Juha Tornroos (Elixir-FI), Dylan Spalding (EBI), Anthony Brookes (Leicester) Vagelis Ladas (Leicester), Jordi Rambla (ELIXIR-ES), Sabela de la Torre (ELIXIR-ES) Lena Dolman (GA4GH), Marc Duby (Broad), Niclas Jareborg (ELIXIR-SE) David Lloyd (Elixir Hub)
Regrets: Marc Fiume (DNAStack) Ilkka Lappalainen (ELIXIR-FI)

Actions Arising	Assigned To	Deadline

1.	[Draft paper](#) Lena and Angela will now make final review, Marc to comment.	Lena, Marc	
2.	[GitHub reorganisation](#) Susheel to contact Rishi	Susheel	
3.	Protocol Buffers / Open API Draw up one page document to compare Understanding the GA4GH position	Juha Susheel (Rishi)	7th Nov Tech. call.

	Agenda Item	Speaker	Time
1.	Approve Previous Minutes and Agenda	Chair	5
2	Review of Actions from 3rd October	Susheel/Serena	10
3.	GA4GH Plenary Update - Discovery WS alignment	Marc Fiume	10
4.	Technical Call Update ([document](#))	Miro/Juha/Sabela	10
5.	Beacon Virtual Hackathon [[Doodle Poll](#)]	Susheel	5
	A.O.B Genomic Knowledge Standards workstream subgroups - request for leads from driver projects - Variation Representation - Michael Baudis - Variation Annotation	Serena	10

	Previous Actions	Assigned	Deadline	Update
1.	Review and comment on [draft paper](#) (Also to be reviewed at Plenary). Reviewers comments to be made available.	ALL Susheel	15th Oct	If no further updates - send to GA4GH team for review? Lena and Angela will now make final review
2.	Review [GitHub reorganisation](#)	All Susheel	15 / 24th Oct	Proposal carried forward to Rishi for Discovery WS
3.	Reach out to Variant Annotation task team (Fiona/Helen) to determine if there is an existing ontology for variant data types (case-level, annotation, in silico prediction)	Susheel	20 Oct	Fiona/Helen recommended to use [Sequence Ontology](#) FWD to Francis, Jordi
4.	Circulate security documents, invite comments [IN PROGRESS] (draft [here](#))	Dylan		Done DS will close to comments and send round
5.	Investigate JSON + RDF, SparQL friendly formats for metadata on Beacon	Francis		Done and discussed at Beacon Workshop and Tech call

Minutes:

Plenary Debrief:

SV Generally good.
Beacon Workshop would have benefited from a more technical bias to highlight priorities.
Need better understanding of the alignment with Discovery Work Stream.

MB Beacon, MME and others are part of the Discovery WS, GA4GH keen to see closer ties.
Not technically challenging, good to understand MME better and build closer ties.
Clinical Data exposed through Beacon - need hand-off to allow appropriate access. (Have written an outline of prototype)

JR ELIXIR Beacon need to see themselves as a Project parallel to others (MME especially)
Need reps in different Workstreams.

SS Remote attendance for the Workshop was not always easy, variable sound quality and unable to
ST identify who was present / speaking. (Agreed it was better than nothing.)   Plenary proper was better.

LD Notes from the Plenary will be captured in the Workstreams RoadMap, available in January.

Technical Call update

ST Two issues closed
SV Five outstanding to complete Beacon v0.4 (released as v1.0)

Virtual Hackathon

SV Propose to hold a hackathon via Zoom.
Start in Barcelona, finish in Toronto, 2 hour overlap, complete Beacon v1.0
- Finalise outstanding issues
- Fix bugs
- Complete website
- Full documentation
- Reference Implementation (at least one; CRG, ELIXIR)
- List of desirable features for next release

Doodle Poll circulated, will close end of the week.

AOB

SS: Andy Yates from **Genomic Knowledge Standards Workstream** (GKS) looking for leaders for two
subgroups:
1) Variation Representation; developing standards for the modelling of variation from simple single
substitutions to more complex structural use-cases. This sub-group would build on the work from
VMC.

2) Variation Annotation; linking variations to reference knowledge such as phenotypes, ontologies for
structured data representation, and nomenclature, as well as capturing the evidence that support
variant interpretations.
Invite any interest to get in touch.

JT **Protocol Buffer or Open API** for schema description
SV The switch to Protobuf was driven by GA4GH reference implementation etc.
JR Beacon to make own decision, draw up two 1-page documents listing Pro / Cons of each.
VL Deep Dive on next Tech Team call,
Current work that would be affected by the decision on-hold

AA iDash Challenge - new Beacon attack link
New Privacy Preserving methods under review by BioInformatics Journal
DS Attack was outlined at the Workshop, new documents will address this.

NJ Second Swedish Beacon to be lit soon, serving technical data

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2017-10-03: GitHub Reorganisation

Chair: Susheel Varma
Attendees "Name (Affiliation)":

Susheel Varma (Elixir Hub) , Serena Scollen (Elixir Hub), Mike Qu (Philips), Francis Jeanson (Ont. Brain Inst),
Juha Tornroos (Elixir-FI), Dylan Spalding (EBI), Heidi Sofia (NHGRI), Ilkka Lappalainen (Elixir-FI), Stephanie Dyke
(McGill Uni), Vagelis Ladas (Leicester Uni), Jordi Rambla (Elixir-ES), Lena Dolman (GA4GH), Melissa Konopko
(GA4GH), Aurelien Barre (Elixir-FR), David Lloyd (Elixir Hub)

	Actions Arising	Assigned To	Deadline
1.	Review and comment on draft paper (Also to be reviewed at Plenary) Reviewers comments to be made available.	ALL Susheel	15th Oct
2.	Review GitHub reorganisation	All	15 / 24th Oct

	Agenda Item	Speaker	Time
1.	Approve Previous Minutes and Agenda	Chair	5
2	Review of Actions from 19th September 2017	Susheel/Serena	15
3.	GitHub reorganisation	Susheel/Miro/Juha	15
4.	Revisit how ELIXIR and Beacon are involved in the new GA4GH structure and what the 'Champion' and 'Contributor' roles mean?	Serena, Melissa	15
	A.O.B		10

	Previous Actions	Assigned	Deadline	Update
1.	Reach out to Variant Annotation task team (Fiona/Helen) to determine if there is an existing ontology for variant data types (case-level, annotation, in silico prediction)	Susheel	20 Oct	Fiona/Helen recommended to use Sequence Ontology
2.	Circulate security documents more widely [IN PROGRESS] (draft here)	Dylan		Revised link, circulate to mailing list and invite comments.
3.	Check dial-in facilities for October 16th for Driver Project presentations	Lena		Zoom available for Workshop on 15th and Plenary on 17th. Details here
4.	Make comments on the draft paper where updates required	All	22 Sept	**LD** - still with Marc & Miro Susheel - some minor changes, encourage all to read & comment; review at the Plenary.
5	Investigate JSON + RDF, SparQL friendly formats for metadata on Beacon	Francis		**FJ**: ● Looking at how to make use of RDF and JSON LD for metadata ● Will discuss with Miro (& Marc) to consider what fields need to capture. (follow up with Susheel) ● JSON LD represent data structure ● RDF standard ontology format. **JT**: Any Use Case in mind? Francis: Will discuss with Miro. Also looking at automated discovery, requestor granted further access if reqd. **SV**: Overlaps with BioSchema. Use Case: Allowing Beacon to discover Beacons. **JR**: EGA beacon - Dataset description on other website, JSON LD = Linked Data, much more than one Use Case for GA4GH endorse Need to understand whether this technology is common in GA4GH
6	Send slides (Circulated)	Jaak	Done	

Minutes:

GitHub reorganisation:
SV: Was discussed at last Tech Call, aim for own GitHub Name Space, although looks like Discovery Group may have own. A lot of repositories, don't have access to all.

Can park discussion, people can read through and add comments. Pick up discussion at Orlando or on next St call.
JT - support this, should have done already

Revisit involvement in GA4GH structure.
SS: recent discussions around effective meetings - Technical and Strategic calls.
Beacon is now an Elixir Driver Project with links to GA4GH Discovery Work stream (Marc Fiume, Harindra Arachchi leads)
Own funding from Elixir, own deliverables, work with DW team, need to discuss details with Marc. Any concerns contact Marc / Serena
LD: Each driver project have named people participating in work stream to keep momentum going, encourage people to step forward.
SS: Contributor roles, some Elixir, some not. Review end 2017 once restructure fully in place

SV: A lot of work from technical work streams, feed into driver project, then asked to product roadmap. Too much to expect in time? (1-2 days) Not had enough involvement with Driver Stream.
MK: Goal is to establish a starting point, aware they will develop with time, looking for initial plans.
LD: Final detailed roadmap, with timeline, to be in place within few months.
SS: A lot of GA4GH people only be aware of changes at the Plenary
JR: Link to document submitted to GA4GH, with the people named?
LD: Agreed:

ELIXIR BEACON (individuals in yellow are registered for Oct 15 Workshop)

Champions: Serena Scollen, Ilkka Lappalainen, Michael Baudis

Work Stream	Contributors from your Driver Project
Discovery [Marc Fiume is co-Lead]	Juha Törnroos, Miro Cupak, Sabela de la Torre
Large-Scale Genomics	Marc Fiume, Susheel Varma
Data Use & Researcher IDs (formerly Access & Authentication)	Juha Törnroos, Knox Carey, Susheel Varma
Cloud	Marc Fiume, Susheel Varma
Genomic Knowledge Standards	Michael Baudis, Susheel Varma
Clinical & Phenotypic Data Capture	Anthony Brookes, Susheel Varma
Regulatory & Ethics	Stephanie Dyke
Data Security	Dylan Spalding, Knox Carey, Susheel Varma

AOB:
SD: GitHub links - PR consent codes, unsure how to interpret the technical IT details but good to see this in place, links to Beacon Structure?
SV: suggest follow up with Sabela.
Francis: enabling Beacon Project to include consent code definitions within code structure, define CC in the Beacon for data being served.
SD: Using the most recent version of Data Use Ontology (Consent Codes as DUO by EBI and the Broad)?
Juha: based on the publication.

SD: that is the original list, V2 following publication = a couple of changes based on community comments. Data Use Ontology (DUO) is kept up to date.
https://github.com/ga4gh/ga4gh-consent-policy/pull/4

SD: will circulate links to publication, GA4GH Consent Codes table, etc, will be new codes coming now and then, currently may be additional codes relevant to H3A.
Here's the publication.

Beacon Wishlist
* Technical roadmap to align with Beacon 2018 roadmap
* Smaller, more frequent releases

- Need Beacon API and Beacon Network Wishlist

Depricated: see up-to-date roadmap from:

https://docs.google.com/document/d/18sSdyOljBgmiOKjsDDLmi214Y6Uuik5DnIje1Ul9w0s/edit#

		v0.5	v0.6	v1.0
	Possible timeframe:	May 2018 ?	Sept 2018 ?	Dec 2018 ?
1.	Documentation	✓		
2.	Handoff mechanism (see #114 and slides.)			
3.	Meta data field for querying (i.e. CURIE ontology code?)			
4.	Secure Access Beacon (White-list?) Registration via AAI			
5.	A reference implementation that any user could standup a Beacon with chosen IP Provider - no accounts made, registration process to make a count. Plug-in providing necessary addn.			
6.				
7.				
8.				
9.				
10.				

Regular Attendees

Attending	Affiliation		Attending	Affiliation	
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