## 2019-05-23 AAI Developers Meeting

## Attachments (including meeting recording)

File	1		Modified	Modified		
Mul	timedia File Recorded	Session - 2019-05-23	.mp4 May 23, 20	May 23, 2019 by James Forsyth		
Status	OPEN	IN PROGRESS	ON HOLD	DONE	CANCELLED	

## Agenda Items

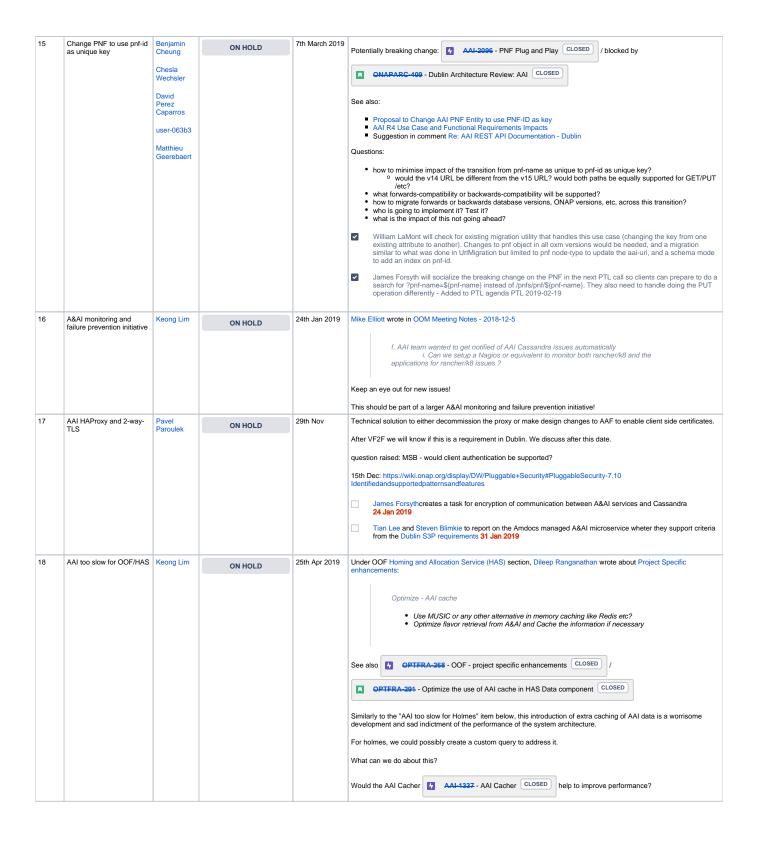
## START RECORDING

	Title	Raised By	Status	Last discussed	Notes
1	AAI Standalone UI Access /setup	Thamlur Raju	OPEN		Francis Paquette  James Forsyth  In casablanca environment without Sparky-fe, how we are able to access the AAI-UI?  In standalone AAI setup, how can i access the AAI UI? i am running the resources, traversal, elastic-search, search-data-service and sparky-be. but not able to access the UI, need to run any other services to access the UI? tried with below URL,  http:// <ip>:9517/services/aai/webapp/index.html  response:  Whitelabel Error Page  This application has no explicit mapping for /error, so you are seeing this as a fallback.  Tue May 21 05:07:26 UTC 2019  There was an unexpected error (type=Not Found, status=404).</ip>
2	AAI schema UML diagram	Keong Lim	OPEN		No message available  https://lists.onap.org/g/onap-discuss/topic/31619985  See also:  AAI OXM Schema UML AAI EdgeRules UML AII Swagger v16 UML Gerrit review for swagger template https://gerrit.onap.org/r#/c/87941/  Meeting recording attached to previous week 2019-05-16 AAI Developers Meeting  See also wiki and sub-pages: Reverse-engineering AAI data model to Papyrus information model
3	Optimise ad-hoc retrieval of any resource with any of its cousin relationships	Keong Lim	IN PROGRESS	2019-05-16	Raised as JIRA case  Raised as JIRA case  AAI 2437 - Optimise ad-hoc retrieval of any resource with any of its cousin relationships CLOSED  Gerrit review https://gerrit.onap.org/r/#/c/87940/  Would like to gather opinions on the implementation (see the comments in the JIRA case). The query has been tested in my dev environment but unsure if the query is done the best way.  SoumyaNaikis invited to a future session to discuss further
5	Dublin Branching  Review El Alto proposals	James Forsyth	IN PROGRESS	2019-05-09	El Alto runs Jun - Sep - technical debt and S3P/deployability release  Frankfurt starts in Sep  As of now, master will accept feature development for Frankfurt  We tag dublin at release time (early June)  The Dublin branch becomes El Alto (similar to a Dublin Maintenance Release)  El Alto changes will be cherry picked back to master  AAI Epics in JIRA: 11 issues

6	GraphGraph demo	Pavel Paroulek	IN PROGRESS	2nd May 2019	A 5-10 minute demo of GraphGraph  Alt 531 - Tooling and utilities in support of providing visualization for the AAI model, edge rules, and schema CLOSED	
					·	
					Feedback needed!	
7	AAI Modeling Multi-part key for schema elements	Keong Lim	IN PROGRESS	25th Apr 2019	From https://lists.onap.org/g/onap-discuss/topic/31317665	
					Discussion:	
					The cloud-region schema element is unusual in that it has a two-part key i.e. "cloud-owner" and "cloud-region- id". There are not many other usages of it ("ctag-pool", "service-capability" and "route-target" are three others, out of over 100 other schema elements)	
					Is it possible to enhance the error message to indicate that part of the key value is missing from the relationship data?	
					AA1 2391 - Improper behavior when relationship-data is missing key attribute(s)	
					☐ Is it time to deprecate the relationship-data and switch over to using the related-link only?	
					Is there any modeling guidance that would steer new designs away from using multi-part key for schema elements?	
					Are there other caveats to using the multi-part key design for schema elements?	
					Can we get feedback from Chandra Cinthalaon the key design for multi-part keys and whether this will be more common going forward?	
					From: CINTHALA, CHANDRA [mailto:cc1196@att.com] Sent: Tuesday, April 30, 2019 12:16 AM To: Keong Lim <a href="Keong.Lim@huawei.com">Keong.Lim@huawei.com</a> ; FORSYTH, JAMES <ji2512@att.com< a=""> Cc: AGGARWAL, MANISHA <a href="Keong.Lim.">Ce: AGGARWAL, MANISHA <a href="Keong.Lim.">Keong.Lim.</a> has assigned tasks to you in "2019-05-02 AAI Developers Meeting"</a></ji2512@att.com<>	
					Keong,	
					I think we have no plans to deprecate the relation-data option the in the A&AI relationship payload.	
					It's another option for the client to specify the relationship.	
					Thanks	
					Chandra	
					See also email from Marco Platania in https://lists.onap.org/g/onap-discuss/topic/31385256	
8	Return codes and messages for WS	Pavel Paroulek	IN PROGRESS	25th Apr 2019	Is there a guide for the description of the error message and the error codes? How are new error states (message + code) added?	
					<ul> <li>✓ William LaMont will send James Forsyth the output of a script that formats the error properties file to make a wiki page and readthedocs</li> <li>✓ James Forsyth should commit that script and create a wiki for the error properties</li> </ul>	
					Sumos rought should continue that surpt and create a wird for the entiriproperties	

25th Apr: Wiki page OOF - HPA guide for integration testing up	data is maintained?	
Similarly, Scott Seabolt and J Armstrong / Joss Armstrong wro APPC Consumption and Script to load vLB into AAI:		
The below put_vLB.sh script can be used to subn run ConfigScaleOut use case. This script and refe AAI instance where the cloud-region and tenant a	erenced JSON files are used on an	
Similarly:		
■ TEST-133 - Demo.sh init step is not adding avail	lability-zone information in AAI CLOSED	
■ NATE-705 - Add availability zone call to AAI in Rot	bot framework CLOSED	
■ vCPE Use Case Tutorial: Design and Deploy based on	ONAP	
Related AAI-1948 - Correct broken links CLOSED o	n the brittleness of the ReadTheDocs links to data files.	
One for VIM: How-To: Register a VIM/Cloud Instance to ONAF  AAI-1928 - AAI-Internal server Error:500 CLOSED	<sup>2</sup> and	
Potential issues:  • fragility of static import data file w.r.t. schema changes :		
how "common" is this knowledge, i.e. what to load, whe     should it be automated/scripted, rather than manual ste     should it be a simulator program or test harness, rather     should it reside within AAI CI/CD jobs for maintenance:     who maintains the data itself? Is there a "data repositor documentation repository links in git?     how many other teams have similar private stashes of / does it need to be published at a stable URL to avoid links.	ore to get it, who else should be using it, etc? sps to bootstrap? than a static data file? and upgrade of schema versions? y' which can be delegated to other teams, e.g. like AAI bootstrap data?	
Possible solution/action:		
Look at the examples API and possibly enhance it to g	get the desired behavior	
Collect all the known data samples, commit to test-cor	nfig repo, update the teams/wiki to point to test-config	
AAI 2399 - Collate test data from wiki into AAI	repository CLOSED	
10 Purpose of fields in AAI Keong Lim IN PROGRESS 18th April 2019 Dénes Németh wrote in AAI 1184 - Invalid handling of o	external system certificates CLOSED :	
In think it would be good to answer what is the me PEMs of the CA xor URL)	eaning of the field (collection of	
Questions:		
1. Is AAI intended to strictly prescribe how the fields are used a     2. Or does AAI simply reflect the wishes of all the client project		
Even if (1) is true, AAI is not really in any position to enforce how eneed to consult the original producers of the data and the unintended meanings.		
How do we push to have documentation on the purpose and m	neaning of the fields in AAI?	
Where does all this documentation go?  Should the documentation be backed up by validation code?	-	
	Should the documentation be backed up by validation code?  See also discussion about AAI in 2018-11-28 ExtAPI Meeting notes	
29th Nov: Started on new wiki page AAI Schema Producer-Co	29th Nov: Started on new wiki page AAI Schema Producer-Consumer Pairings	
18th Apr: Can we have this documentation go into ONAP in a	generic way?	
24th Apr: See also questions about "sw-version" in https://wiki. focusedCommentId=63996633#comment-63996633	onap.org/display/DW/5G+-+PNF+Plug+and+Play?	

11	range query	Keong Lim	IN PROGRESS	7th Feb 2019	if I had some AAI data with attributes that are strings but nominally contain date/timestamps, is there a way to query for a particular range of values? is there a way to do partial match? regex? PUT /aai/v13/query?format=raw  { "gremlin": "g.V().has('aai-ts', org.janusgraph.core. attribute.Text.textContains('URL'))" }  https://github.com/JanusGraph/janusgraph/blob/master/janusgraph-core/src/main/java/org/janusgraph/core /attribute/Text.java  Invite Arul Nambi and CT Paterson to next week's dev call to talk about how sparky/elastic does partial/range matches
12	2 Types of logging in A&AI WS	Pavel Paroulek	ON HOLD	1st Nov 2018	There are 2 types of logging in the services  • one read from EELFManager • the other Logger log = Logger.getLogger(  Is that correct? Shouldn't there be just 1 type?  1st Nov:  After Casablanca release investigate logging guidelines and figure out what library to use in order to unify logging within A&AI  26th Nov: See also ONAP Application Logging Specification - Post Dublin  29th Nov: how does this fit with  LOG 877 - S3P: Logging streaming/format alignment for dublin - China Telecom, Deutsche Telekom, Vodafone  CLOSED  ?
13	Schema-service roadmap	James Forsyth Pavel Paroulek	ON HOLD	21st Mar 2019	The schema-service is ready. Currently it provides file-sharing capabilities in terms of schema/edgerule files.  In order for GraphGraph to take advantage of the schema parsing/processing in schema-service additional abstractions have to be implemented on top of the crude file/2string functionality currently in schema-service.  Venkata Harish Kajurwill ask Manisha Aggarwalif the current functionality of the schema-service is the final version for Dublin and if there will be further enhancements in next releases.  GraphGraph needs the following functionality:  Venkata Harish Kajur and Manisha Aggarwal What is missing in schema service that is needed in graphgraph is the following:  • rest call to get available schemas  • list of all schema nodes/items (like vserver, tenant, p-interfaces) for example on a REST path/schemas/ (schema)/nodes  • all relevant attributes of a given node/item for example on REST path /schemas/(schema)/nodes/ (schema)/edges where you specify a "from" "to" schema items as query params)  • subgraph of the schema, where you specify 1. initial (roof) items/node (like tenant or vserver) 2. schema version and 3. number of parent/cousin/child hops from the initial item/node  • all paths in a given schema graph between 2 items/nodes (like vserver and tenant) for a given schema version edges in the schema graph should be composed of edges in the schema file + edges created from the edgerules file  • edges should contain basic attributes when delivered via the subgraph call (like parent/child relationship and important properties from edgerules) and have additional (or all) attributes when queries via /schemas/(schema) /edges REST endpoint.  20. Mar 2019:  Open questions for schema-service:  1. what is the current implemented functionality?  2. what are the business use-cases in ONAP for schema-service? Description of functionality in relation to other services/projects is needed. In other words who needs it and why?  3. if no business use-cases can be formulated we should consider removing sche
14	New AAF Certificates at startup	Jimmy Forsyth	ON HOLD	24th Jan 2019	"our future proposed functionality"?  AAF will generate certificates to the be used by the containers at startup; AAI services should use the run-time generated certs instead of the ones that are in the repos or oom charts.  In dublin the services will mount a volume with certificates. This is on the roadmap for Dublin as a feature.  • is this for all service and/or HAProxy?  • Where are the certificates coming from (OOM/gerrit/generated by AAF)   James Forsythwill ask Jonathan Gatham when the certificate init image is going to be available in ONAP and wether it is documented 31 Jan 2019



19	MultiCloud usage of AAI Keong Lim 18th April 2019 Bin Yang and Lianhao Lu wrote in		Bin Yang and Lianhao Lu wrote in		
	for HPA telemetry/time- series data to OOF		ON HOLD	,	MULTICLOUD 274 - HPA telemetry data collection and persistence CLOSED :
					HPA telemetry data collection and make it persistent in A&AI, from which OOF can leverage during its decision making process.
					and
					Multi-cloud to collect the data from time-series data services like Prometheus (http://prometheus.io) or openstack Gnocchi, and push them to A&AI based on the data recording & aggregation rules.
					and
					The reason why we propose here is that VES mechanism doesn't store the telemetry data into A&AI. And OOF now can only get those kind of data from A&AI.
					Some concerns:
					<ul> <li>how much additional load will this place on AAI?</li> <li>will AAI cope with this load?</li> <li>is AAI suitable for "time-series data"?</li> <li>is "telemetry data" considered to be "active &amp; available inventory"?</li> <li>should OOF access the telemetry/time-series data via other means (not AAI)?</li> <li>AAI API latency (4-6 second per request as benchmarked in CMCC lab) could be a problem</li> </ul>
20	AAI Backup and Restore	Keong Lim	ON HOLD	10th Jan 2019	Brian Freeman asked on Re: Backup and Restore Solution: ONAP-OOM:
					what would be the approach to backup an entire ONAP instance particularly SDC, AAI, SDNC data? would it be a script with all the references to the helm deploy releases or something that does a helm list and then for each entry does the ark backup?
					What is the AAI strategy for backup and restore?
					What is the overall ONAP strategy for backup and restore?
					Should it be unified with the data migration strategy as per "Hbase to Cassandra migration" on 2018-11-14 AAI Meeting Notes?
					James Forsythwill raise the topic of having backups and restore functionality in ONAP - if it is feasible, on the roadmap and what others PTL think
					Jimmy didn't directly raise the topic but there was movement - Keong Lim asked "if istio service mesh is a no-go, is there a replacement for secure onap communications?is backup/restore/upgradability included in s3p?"
					Michael O'Brien replied that a reference tool set for backup and restore was introduced in Casablanca: Backup and Restore Solution: ONAP-OOM
					Mike Elliott said he would look at Brian's question, AAI will provide support as needed.