2018-12-13 AAI Developers Meeting

Attachments (including meeting recording)

File	Modified
Multimedia File zoom_0.mp4	Dec 13, 2018 by James Forsyth

Chat Server

private group aai-dev on Rocketchat server: http://onap-integration.eastus.cloudapp.azure.com:3000/group/aai-dev

Agenda Items

START RECORDING

	Title	Responsible	Status	Last discussed	Notes
1	Answering wiki questions	Team	IN PROGRESS	13th Dec 2018	Recently saw a few unanswered AAI questions in
	questions				https://wiki.onap.org/display/DW/questions/all?&filter=recent
					Probably need a regular reminder to monitor this corner of the wiki to be responsive to users.
					Pavel: Or maybe something like an A&AI mailing list? (just brainstorming here)
2	Inconsistency in Janus Graph		IN PROGRESS	13th Dec 2018	Invite Andrew Muller CT Paterson or other Amdocs people to talk about A&AI consistency (https://docs.janusgraph.org //atest/eventual-consistency.html) and how to resolve the issue (for example Concurrent operations aai-resources's PUT method). Ideally on 20th Dec 2018 on the dev meeting.
					The idea in Beijing was that since we are going to use Champ, we would get rid of inconsistency problems we have currently in Janus - clarify it this is true, if not figure out an approach how to deal with this issue.
3	Janus Graph 0.2.2	James Forsyth	IN PROGRESS	13th Dec 2018	Discuss a move to janusgraph 0.2.2 or 0.3.1 in Dublin.
	or 0.3.1				Benefits?
					Breaking change + migration needed ?
					Analysis needed on benefits of 0.3.1 until 10th Jan 2019 (decision should be made on the meeting on 10th).
4	Spring Boot Upgrade	James Forsyth	IN PROGRESS	13th Dec 2018	https://spring.io/blog/2018/11/29/spring-boot-1-5-18-available-now - support for 1.5.x spring boot will end in Aug 2019 so we should consider upgrading.
					We should update to spring 2.X.X.
					James Forsyth creates a JIRA item for Dublin for upgrading the spring in all A&AI repositories.
5	Helm chart 'requested' values for Small + Large	James Forsyth	IN PROGRESS	6th Dec 2018	AAI 1940 - Correct resources requirements in Helm Charts CLOSED
	AAI deployments				James Forsyth will apply the changes he outlined in AAI-1940
6	HAproxy in OOM	Pavel Paroulek	IN PROGRESS	1st Nov 2018	Why is the pod for HAproxy not named (hard to figure out that there is a proxy), unsure how it is logging and where
					James Forsyth creates JIRA tasks to 1. to have the pod named 2. add logging to the proxy
					AAI-1807 - Change the aai pod name to aai-haproxy CLOSED
					AAI-1810 - Add option to enable logging for haproxy docker CLOSED

7	AAI-DMaaP event	Keong Lim	OPEN	Just had a look at this DMaaP bug
	problems?			DMAAP 896 - [MR] Error: KafkaConsumer is not safe for multi-threaded access CLOSED which shows up
				two AAI-related exceptions when getting events:
				INFO org.onap.dmaap.dmf.mr.service.impl.EventsServiceImpl - KafkaConsumer is not safe for multi-threaded accesson AAI-EVENT datarouter ****** datarouter from Remote10. 42.133.135 INFO org.onap.dmaap.dmf.mr.service.impl.EventsServiceImpl - [AAI-EVENT/datarouter/datarouter]
				INFO org.onap.dmaap.dmf.mr.service.impl.EventsServiceImpl - KafkaConsumer is not safe for multi-threaded accesson champRawEvents spike ****** spike from Remotel0.42.121.41 INFO org.onap.dmaap.dmf.mr.service.impl.EventsServiceImpl - [champRawEvents/spike/spike]
				Anyone else seen or reported similar problems in AAI?
8	aai-cassandra performance issues	Keong Lim	OPEN	Michael O'Brien has documented performance issues in aai-cassandra:
	performance issues			■ Cloud Native Deployment (search for LOG-376 to find the specific references to AAI) ■ https://jira.onap.org/browse/LOG-376?focusedCommentId=29358&page=com.atlassian.jira.plugin.system.issuetabpanels:comment-tabpanel#comment-29358 hector has discovered that the stress test jar (liveness probe?) in aai-cassandra is hammering the cpu/ram/hd on the vm that aai is on - this breaks the etcd cluster (not the latency/network issues we suspected that may cause pod rescheduling)
				Is there something that should be tweaked in AAI config? Or documentation on the recommended setup to run the VM?
				I'll come to the next AAI meet (conflicts with pomba meet) -
				LOC 376 - Logstash full saturation of 8 cores with AAI deployed on one of the quad 8 vCore vms for 30 logs /sec - up replicaSet 1 to 3 or use DaemonSet CLOSED
9	get notified of AAI Casandra issues	Keong Lim	OPEN	Mike Elliott wrote in OOM Meeting Notes - 2018-12-5
	automatically			f. AAI team wanted to get notified of AAI Casandra issues automatically i. Can we setup a Nagios or equivalent to monitor both rancher/k8 and the applications for rancher/k8 issues ?
				Keep an eye out for new issues!
10	Purpose of fields in AAI	Keong Lim	OPEN	Dénes Németh wrote in AAI-4104 - Invalid handling of external system certificates CLOSED :
				In think it would be good to answer what is the meaning of the field (collection of PEMs of the CA xor URL)
				Questions:
				I. Is AAI intended to strictly prescribe how the fields are used and what contents are in the values? Or does AAI simply reflect the wishes of all the client projects that use it to store and retrieve data?
				Even if (1) is true, AAI is not really in any position to enforce how clients use the data, so really (2) is always true and we need to consult the original producers of the data and the ultimate consumers of the data to document their intended meanings.
				How do we push to have documentation on the purpose and meaning of the fields in AAI?
				Where does all this documentation go?
				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-Consumer Pairings

11 Postel's Law / Robus Keong Lim 6th Dec 2018 While helping UUI team to debug a family of related issues such as OPEN AAI data inputs USECASEUI 183 - create ext-aai-network api can not accept json request CLOSED , found that their JSON request bodies had inserted extra lines that were not acceptable to AAI, e.g. **Not Accepted Input** ext-aai-network: { "aai-id": "VDF", "schema-version": "version-1", "resource-version": "1542082337501" } vs **Expected Input Format** "aai-id": "VDF", "schema-version": "version-1", "resource-version": "1542082337501" Initially, I thought this could be due to XML-to-JSON translation error, but it could also have been a copy-paste from the output of a GET, e.g. > GET /aai/v14/network/ext-aai-networks HTTP/1.1 "ext-aai-network": ["aai-id": "createAndDelete", "schema-version": "version-1", "resource-version": "1542247826990" "aai-id": "aaiId-2", "schema-version": "version-2", "resource-version": "1542029867153"] In the spirit of Postel's Law ("be liberal in what you accept"), could/should AAI accept both variations of the input data above? There could be additional validation that the element name inside the request body matches the element name in the URL of the API (similar validation is already performed for the key ID value). It would also allow for simple methods of data transfer/migration, where AAI output is directly accepted as AAI input. 7th Dec: As per Jimmy's comment below, the difference between the "Not Accepted Input" and "Expected Input Format" is the behaviour controlled by "SerializationFeature.WRAP_ROOT_VALUE" as described in: https://stackoverflow.com/questions/37882478/serializationfeature-wrap-root-value-as-annotation-in-jacksonjson https://fasterxml.github.io/jackson-databind/javadoc/2.6/com/fasterxml/jackson/databind/SerializationFeature.html Copyright license header restricted to 12 Pavel Paroulek In the copyright OPEN 1 company * org.onap.aai * Copyright © 2017-2018 AT&T Intellectual Property. All rights reserved. If there is a company other than AT&T the build fails saying the license header is wrong

13	Return codes and messages for WS	Pavel Paroulek	OPEN	Is there a guide for the description of the error message and the error codes? How are new error states (message + code) added?
14	OOM Artifacts	Pavel Paroulek	OPEN	Some of our top level OOM deployment artifacts are not unique (i.e. don't take namespace into account as all other deployables), is that intentional?
15	AAI test data bootstrap	Keong Lim	OPEN	Looking at AAI usage in OOF - HPA guide for integration testing by Dileep Ranganathan, wondering whether there is a better way to bootstrap AAI test data?
				Generating AAI data Note: Required only if the Multicloud has no real cloud-regions and HPA discovery carnot happen. If Multicloud team has data for creating the Cloud-region and doesn't have the HPA, then please update the existing data with the flavors with HPA. 1. Import the postman collection CASABLANCA_AAI_postman.json 2. To addremove HPA Capabilities edit the flavors section in the body of PUT Coud-Region(). 3. doubted professory Use passany Use passany to add the complex and cloud regions in the order specified below (small professor). 4. Use the GET requests to verify the data. (snip screenshot of specific sequence) 4. Use the GET requests to verify the data. (snip screenshot of specific sequence) Similarly, Scott Seabolt and J Armstrong / Joss Armstrong wrote for APPC Sample A&AI Data Setup for vLBADNS for APPC Consumption and Script to load vLB into AAI: The below put_vLB sh script can be used to submit the vLB data to A&AI in order to run ConfigScale-Out use case. This script and referenced JSON files are used on an AAI instance where the cloud-region and tenant are already defined. Similarly: **** **TEST-133*** Demo.sh init step is not adding availability-zone information in AAI **CLOSED*** *** **VCPE** Use Case Tutorial: Design and Deploy based on ONAP** Related **** **AAI-1448** - Correct broken links **CLOSED*** ***OTE** Use Case Tutorial: Design and Deploy based on ONAP** Related ***** **AAI-1448** - Correct broken links **CLOSED*** Potential issues: ********* **Test-1438** - AAI-Internal server Error:500 **CLOSED*** Potential issues: ************* **Test-1438*** - AAI-Internal server Error:500 **CLOSED**** *******************************
16	AAI too slow for OOF/HAS	Keong Lim	OPEN	Under OOF Homing and Allocation Service (HAS) section, Dileep Ranganathan wrote about Project Specific enhancements: Optimize - AAI cache Use MUSIC or any other alternative in memory caching like Redis etc? Optimize flavor retrieval from A&AI and Cache the information if necessary See also OPTFRA 268 - OOF - project specific enhancements CLOSED Similarly to the "AAI too slow for Holmes" item below, this introduction of extra caching of AAI data is a worrisome development and sad indictment of the performance of the system architecture. What can we do about this? Would the AAI Cacher AAI 1337 - AAI Cacher CLOSED help to improve performance?

17	MultiCloud usage of	Keong Lim	OPEN	Bin Yang and Lianhao Lu wrote in
	AAI for HPA telemetry/time- series data to OOF			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.
				1. 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:
				 how much additional load will this place on AAI? will AAI cope with this load? is AAI suitable for "time-series data"? is "telemetry data" considered to be "active & available inventory"? should OOF access the telemetry/time-series data via other means (not AAI)? AAI API latency (4-6 second per request as benchmarked in CMCC lab) could be a problem
18	Relationship between POMBA Common Model and	Keong Lim	OPEN	Under POMBA Common Model, Geora Barsky and Sharon Chisholm discuss objects that seem to overlap the AAI schema:
	AAI schema?			 Network has direct relationships with PNFs and physical links PNF has direct relationship with p-interfaces and l-interfaces
				Curious to know what is the relationship between the POMBA Common Model and the AAI schema? There seems to be an overlap in these object definitions and relationships.
				Is POMBA a potential client for AAI schema services?
				15th Nov: As per Geora's and Sharon's comments:
				POMBA is a client of AAI APIs. It retrieves certain objects from AAI and transforms it into POMBA COMMON model which is aimed to represent flat structure of service instance representation.
				The POMBA model enables us to normalize data from different data sources to facilitate auditing. To save time and work, we often use A&AI as our starting point, but conceptually, this model can have more than is currently or makes sense to have in A&AI.
				So, POMBA needs to evolve independently of AAI, even though it has common ancestry.
				As we are having discussions about the AAI Schema Services with a view to future dynamic schema updates, e.g. via SDC modelling, we will need to be aware of the downstream impacts of such a change.
10	AALDDO (Wasan I I		I think this needs to be added to the use cases for AAI Schema Services (and GraphGraph?) behaviours.
19	AAI-BBS for Dublin	Keong Lim	OPEN	Started collating proposed changes in wiki AAI-BBS Proposals for Dublin Release
				Investigating code proposal 1: In AAI, when the "orchestration-status", "service-instance-location-id", "input-params" for a Service Instance changes, notify ExtAPI so it does not need to poll AAI
				Is it already covered by spike? If so, how to consume the events? If not, how to make AAI publish new events to DMaaP?

20	Orchestration Scenarios for VNFs	Keong Lim	OPEN		Comments on Orchestration Scenarios related to AAI:
	Scenarios for VINES				Viswanath Kumar Skand Priya / Viswanath KSP said:
					Thank you Ranny Haiby & Fernando Oliveira . I agree partly, but I still have following queries: • I agree & acknowledge that atleast for a foreseeable future, we would need a way to specify the VNFM / NFVO as part of "Design Decision", which I believe can be reflected as part of VNFD/NSD (using some special attribute) or as part of internal Model that SDC might build before distributing the same. SO can then use this hint to select relevant actors. My only question is, why this has to be maintained in AAI which is exclusively for runtime record? All AAI cares about is what is running in the network irrespective of how that got orchestrated. Isn't it?
					On a broader note, I would like to understand what's the original intent of AAI (atleast in ECOMP world)? Are we simply assuming that, just because AAI has "available inventory" in its name, we are expecting it to keep track of cloud inventory realtime? Because our entire story (including the new G-FPS proposal) is based on this assumption. Can anyone from AAI team or ATT clarify on this? Because AFAIK, AAI neither has the schema to host such available inventory, nor the MC has the publisub or polling mechanism (today) to refresh the cloud inventory inplace. Ofcourse those can be scoped for further releases, but my original question is, was that the original intent behind AAI or are we now including it in the scope?
					and Fernando Oliveira replied:
					For the first question: I think that A&AI needs to maintain the VNF instance VNFM instance and the NS instance NFVO instance relationship for subsequent life cycle operations, i.e. a scale or heal operation. The path would be something like Event (VNF Instance, Busy) DCAE (policy for VNF instance) Policy Evaluation (VNF instance, Scale-out) SO (VNF instance, Scale-out) A&AI (find VNFM instance for the VNF instance) SO (VNF instance, VNFM instance, Scale-out) SOL003 Adapter (VNFM instance, VNF instance, Scale-out) VNFM instance, Scale-out).
					As I understand, ESR has "esr-vnfm-list", which has an "esr-vnfm", which has "esr-system-info-list", which has a "relationship-list" that can contain relationships to "generic-vnf" and other AAI objects.
					The "generic-vnf" object also contains "self-link", "ipv4OamAddress", "ipv4OamGatewayAddress", etc, which links the AAI object back to its "source-of-truth" external-system.
					Is there some new data, new schema or new API that is required on top of this?
					Fernando Oliveira; Apologies for my lack of knowledge, but a few comments: 1. For the VNF/VF VNFM case, I think that there needs to be a reference from a VNF/VF instance record to the specific instance of the VNFM that was used to deploy the VNF/VF. If there is already such a reference from the VNF/VF through the ESR to the specific item on the esr-vnfm-list, then I think that would be sufficient. If not I think that would be a new requirement. 2. For the Service NFVO case, Is there an equivalent NFVO/Orchestrator list in the ESR? The esr-nfvo-list would need the same set of info as the VNFM case. If the esr-nfvo-list does exist, I think that there needs to be a reference from the Service Instance record to the specific NFVO instance that deployed the Service. Is there such a reference? If not, I think that would be a new requirement. Bo Lv can comment more on the current ESR capabilities, but I believe there are only 3 kinds of systems so far: EMS, VNFM and third-party SDNC.
					ESR could be extended to handle VNFO as another kind of system.
21	CIA images for AAI	Keong Lim	OPEN		Adolfo Perez-Duran / Adolfo Perez-Duran raised
					INT-769 - Build platform/cpu-agnostic AA&I container images CLOSED and its many sub-tasks.
					Most, but not all, of AAI container code is Java, so is it really feasible to be both platform-agnostic and CPU-agnostic? What is the actual range of platforms and CPUs targeted?
22	Modeling team R4 discussion, including extra AAI attributes in a model- driven way	Keong Lim	IN PROGRESS	15th Nov 2018	Modelling team having Service Instance thoughts by Chesla Wechsler, which will affect AAI schema. Also referred from comments on ONAP R4+ Service Modeling Discussion Calls
					9)"uhn-portal-url"?"Bandwidth", "QoS", "SLA",etc, attributes that not all the services need but still need to be stored in certain service instance: stored as a schemaless field on the service-instance vertex (Chesla will follow up) (my concerns: according to the call, is that ok if we set a "global-type of service" and a "customized-type of service", then mapped it with internal descriptor, and AsA's model only stores global type in service instance's schema, but stores the customer-faced attributes of service in a schemaless way? Chesla Wechsler Kevin Scaggs Andy Mayer)
					See also Modeling 2018-11-13
					The service-instance already uses a "metadata" relationship, which can store an arbitrary list of key-value pairs, but perhaps AAI should extend the use of the "properties" element, which is also an arbitrary list of name-value pairs or the "extra-properties" element, which is also an arbitrary list of name-value pairs.
					15th Nov: Having seen Chesla's presentation, it should be called "Model-driven schema" rather than "schemaless" behaviour, since the idea is that the changes are controlled by SDC modelling. Seems aligned to the eventual goal in AI Schema Service Use Case Proposals and AAI Schema Service.

23	Jackson Replacement	Team Keong Lim	ON HOLD	1st Nov 2018	Security subcommittee has recommended teams move away from jackson, and will be presenting alternatives and asking for an assessment from each project. Our team will need to do an analysis - this would not be trivial, especially given how many of our repos are impacted. As of now, this would be a very high LOE for the team, we need to understand what the recommendation from the SECCOM is before we can provide better details on what the LOE
		Tian Lee			would be.
					Updated: Using Google gson vs FasterXML Jackson
					10th Oct: Present to Seccom meeting
					15th Oct: Present to PTL meeting 31st Oct: Debatable whether the cost of swapping Cassandra and changing code is worth the benefit of removing
					Jackson from the vulnerabilities list.
					On-Hold until James Forsyth consults with other PTLs: PTL 2018-11-05
24	AAI too slow for	Keong Lim	IN PROGRESS	1st Nov 2018	10th Dec: Mentioned as S3P in vF2F meeting: ONAP Project Developers Event, Dec 10 - 12, 2018, (Virtual Webinars) Guangrong Fu mentioned AAI in Baseline Measurements based on Testing Results:
	Holmes	CT Paterson	IN PROGRESS		
					Cache the AAI data and refresh them periodically so that Holmes won't have to make an HTTP call to AAI every time it tries to correlate one alarm to another.
					The problem for caching is how to know when to update the cached data. Even though the access time may be fast for Holmes, the risk is using out-of-date data, so the correlations will be wrong anyway. Also, duplicating the AAI data outside of AAI is probably a bad architectural decision. Making AAI faster for these use cases would be better.
					Has there been a performance analysis of where the time is spent? Could it help to use ElasticSearch (e.g. as in sparky)? Should Holmes have a batch interface to get more AAI data in fewer calls? Or a better correlation API that results in fewer calls?
					31st Oct: https://lists.onap.org/g/onap-discuss/topic/27805753
					1st Nov:
					Guangrong Fu will try custom queries for queries that took to long to return The hardware (mainly storage) influences the query speed - need to find out what hardware was the speed test conducted on (Guangrong Fu will provide HW specs)
					HOLMES-186 - Improve the performance on AAI queries. OPEN
					Would the AAI Cacher AAI Cacher CLOSED help to improve performance?
25	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 ?
26	Disable unused web services	Pavel Paroulek	IN PROGRESS	6th Dec 2018	Could we disable unused (i.e. not integrated) A&AI web services, so that the deployment is faster and the resource footprint is smaller? e.g. Champ (any other ws?)
	(see also Helm				Motivation: Decrease the resource footprint for A&AI (ONAP) deployments
	chart requested values)				Idea: we could support 2 different deployments 1. full (normal) deployment and 2. barebones deployment. The point of the "barebone" deployment would be to deploy only the essential services necessary for proper functioning of A&AI (leaving out services like cacher, sparky, graphadmin, having 1 cassandra node instead of 3 or 5 etc).
					In order to reduce hardware/cloud costs (mainly the memory footprint) it could be beneficial to support a minimalistic A&AI deployment.
					1st Nov:
					Venkata Harish Kajur and Pavel Paroulek - investigate how to disable/enable charts in A&AI so we can create a core group of pods which handle the use-cases and than extended group will all the services. Consider a group of unused /unintegrated services (like Champ). Consider other possible groups (like GUI?)
27	AAI Champ	Pavel Paroulek	IN PROGRESS	1st Nov 2018	Who is responsible for the project? What is the roadmap for the project? Who will do the integration?
28	Dublin 5G Use Case	Benjamin Cheung	IN PROGRESS	25th Oct 2018	Dublin AAI changes in support of 5g use cases.
					Link for presentation: 5G - PNF Plug and Play (Casablanca carry-over items)
					NF A&AI: S/W Image Repository Info NF A&AI: Cloud Home Info NF A&AI: External Manager IP Address NF A&AI: S/W Version Object Association

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29	AAI Tutorial updates	Keong Lim	IN PROGRESS	29th Nov	Following updates for AAI Developer Environment Setup - Casablanca need to update the link in step 14: Tuterial: Making and Testing a Scheme Change in A&AI.
					Tutorial: Making and Testing a Schema Change in A&AI
					Need separate pages for Beijing, Casablanca, Dublin, etc.
					AAI 1973 - Schema update wiki is out of date of Casablanca CLOSED
					Harish will update the documentation - the section Tutorial: Making and Testing a Schema Change in A&AI
					Need to distinguish on the wiki tutorials for:
					 running A&AI (just installing for non-devs) seting up a dev environment to develop AAI ("Developer Onboarding" section on wiki)
					James Forsyth will check if we still need to support HEAT deployment for Dublin
30	Schema Service	Manisha Aggarwal	IN PROGRESS	29th Nov 2018	Discuss about the Schema Microservice
					AAI Schema Service
					11th Oct: Suggested Use Case Proposals for Dynamic AAI Schema Changes based on CCVPN usecase experience
					1st Nov: William Reehil Robby Maharajh Venkata Harish Kajur will review requirement updates and research the open questions so that a final draft can be prepared for implementation
					8th Nov: Added AAI Schema Service Use Case Proposals for discussion and planning
					15th Nov: Reviewed the Requirements section in AAI Schema Service again.
31	AAI GraphGraph	Keong Lim	IN PROGRESS	29th Nov 2018	William Reehil wrote introduction to (proposal for?) A&Al GraphGraph
					What must the solution provide?
					 a generic interface to interact with the schema and edge information, so it can be accessed via end users and microservices
					 ability to be configured with any schema given in the set formats (JSON for edge rules, OXM for schema)
					 ability to easily communicate to an end user a node type's attributes and edge rules when provided with a node type as input
					Looks like an API to reflect on the schema from an instance in the database.
					Is there some overlap with the AAI Schema Services?
					Is this leveraging AAI Schema Services e.g. as client? proxy? facade? implementation detail?
					Is it an alternative to AAI Schema Services?
					Update: Keong Lim I do see an overlap with the schema service mainly for the retrieval of the data, but GraphgGraph will offer more on top of that(UI, NLP), during the POC code for GraphGaph there was no schema service.
					Implementation details can be discussed on our call for how exactly to leverage the schema service, the poc code, and where the core logic resides for this functionality.
					15th Nov: Reviewed A&AI GraphGraph and agreed that there is now overlap with AAI Schema Service that should be addressed in updating the POC version.
					administrating the LOO version.
32	AAI HAProxy and 2-	Pavel Paroulek	IN PROGRESS	29th Nov	Technical solution to either decommission the proxy or make design changes to AAF to enable client side certificates.
	way-TLS				After VF2F we will know if this is a requirement in Dublin. We discuss after this date.
					question raised: MSB - would client authentication be supported?
33	ESR	James Forsyth	DONE	6th Dec 2018	ESR in Dublin will be bug fix and non-functional requirements.
		Bo Lv			Should ESR use AAF for RBAC in Dublin?
					Clients of ESR are MultiVIM and VF-C
					External system passwords are not encrypted in AAI
					During registration of cloud-region, ESR calls multi cloud, but when user is deleting data from the port ESR does not call multi cloud but should (feature request?)
					James Forsyth will establish a weekly AAI/ESR call - 9 PM EST 10 AM China time for several weeks to get the project on track for Dublin.
					James Forsyth will create a session next Thursday 19.12. 10 AM China time for Bo Lv

34 AAF Resiliency Keong Lim IN PROGRESS 8th Dec 2018 Yang Xu wrote in AAF Component:	
If AAF stops working, e.g. AAI returns authorization error, bounce AAF aaf-locate and aaf-service containers. This looks like some problem for resiliency and healthchecks. Is there a JIRA case for this already? If mentioned the "fix" in passing AAI-1762 - [aai-traversal] Fails to authorize user with java.lang.lllegalStateException CLOSED Helen Chen, is there a scenario for this in Casablanca Release Resiliency Testing Status? Jonathan Gathman, Mike Elliott, how can this remedy be automated? See also AAF-599 - Users of the CADI library should be able to detect AAF service down James Forsyth will ask Jonathan Gathman about this item.	
named-query replacements AAI-1989 - AAI Named Query Deprecation OPEN	n-queries
named-query API in Dublin 36	