

About

About

Suggestions 4 but with adjusted tables names and columns names.

See database scripts for details.

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A few things to keep in mind

Existing Namiong

- references to other entries are by uuid (through device, namepart tables)
- no log tables, instead logs are handled by new entries in concerned tables

Above design kept in suggestion for refactored Naming.

If references would be handled by id instead of uuid, it would mean *considerably* more work to update tables using referenced item each time there is change in a reference. Referring to uuid means having reference to latest in line of history for that uuid.

Thoughts / Conclusion

Proper indices and keys are key! to successful suggestions.

Therefore recommendation to proceed with Suggestion 4.

Naming database, Suggestion 4

appinfo	flyway_schema_history	user_notification	useraccount	namepart	device	namepartrevision	devicerevision
id	installed_rank	id	id	id	id	id	id
version	version	notification_type	version	version	version	version	version
schemaversion	description	user_login_name	role	nameparttype	uuid	deleted	conventionname
	type		username	uuid		mnemonic	conventionnameeqclass
	script					name	deleted
	checksum					processsdate	instanceindex
	installed_by					processorcomment	requestdate
	installed_on					requestdate	device_id
	execution_time					requestercomment	devicetype_id
	success					status	requestedby_id
						namepart_id	section_id
						parent_id	additionalinfo
						processedby_id	processorcomment
						requestedby_id	
						mnemoniceqclass	
						description	

systemgroup	system	subsystem	discipline	devicegroup	devicetype	essname
id	id	id	id	id	id	id
version	version	version	version	version	version	version
uuid	uuid	uuid	uuid	uuid	uuid	uuid
name	parent_uuid	parent_uuid	name	parent_uuid	parent_uuid	systemgroup_uuid
mnemonic	name	name	mnemonic	name	name	system_uuid
mnemonic_equivalence	mnemonic	mnemonic	mnemonic_equivalence	mnemonic	mnemonic	subsystem_uuid
description	mnemonic_equivalence	mnemonic_equivalence	description	mnemonic_equivalence	mnemonic_equivalence	devicetype_uuid
status	description	description	status	description	description	instance_index
latest	status	status	latest	status	status	convention_name
deleted	latest	latest	deleted	latest	latest	convention_name_equivalence
requested	deleted	deleted	requested	deleted	deleted	description
requested_by	requested	requested	requested_by	requested	requested	status
requested_comment	requested_by	requested_by	requested_comment	requested_by	requested_by	latest
	requested_comment	requested_comment	processed	requested_comment	requested_comment	deleted
processed	processed	processed	processed_by	processed	processed	requested
processed_by	processed_by	processed_by	processed_comment	processed_by	processed_by	requested_by
processed_comment	processed_comment	processed_comment		processed_comment	processed_comment	requested_comment
						processed
						processed_by
						processed_comment



Naming database, Suggestion 4, example

ESS names

Acc
Acc:RFS-PRLTap-054
A2T
A2T:RFS-PRLTap-054
A2T-010PRL
A2T-010PRL:RFS-PRLTap-054

systemgroup							
id	uuid	name	mnemonic	mnemonic_equivalence	status	latest	deleted
1	4262e1e7-2444-412e-83d7-aeabf58262c6	Accelerator	Acc	ACC	APPROVED	false	
1050	4262e1e7-2444-412e-83d7-aeabf58262c6	Accelerator			APPROVED	false	
5007	4262e1e7-2444-412e-83d7-aeabf58262c6	Accelerator	Acc	ACC	APPROVED	true	

system								
id	uuid	parent_uuid	name	mnemonic	mnemonic_equivalence	status	latest	deleted
16	e67a497c-9c55-4942-97fc-700c8ec56031	4262e1e7-2444-412e-83d7-aeabf58262c6	Accelerator to Target	A2T	A2T	APPROVED	false	
1708	e67a497c-9c55-4942-97fc-700c8ec56031	4262e1e7-2444-412e-83d7-aeabf58262c6	Accelerator to Target	A2T	A2T	APPROVED	true	

subsystem								
id	uuid	parent_uuid	name	mnemonic	mnemonic_equivalence	status	latest	deleted
2292	c2fce615-ed5d-40f9-8fb5-0b91502536e5	e67a497c-9c55-4942-97fc-700c8ec56031	01 Phase Reference Line	010PRL	10PR1	APPROVED	true	

discipline							
id	uuid	name	mnemonic	mnemonic_equivalence	status	latest	deleted
242	e9b859d8-5c49-4098-9332-988edb898eef	RF Systems	RFS	RFS	APPROVED	true	

devicegroup								
id	uuid	parent_uuid	name	mnemonic	mnemonic_equivalence	status	latest	deleted
2282	5b5e1400-a390-4b39-ac3e-dd48a40cb073	e9b859d8-5c49-4098-9332-988edb898eef	Phase Reference Line			APPROVED	true	

devicetype								
id	uuid	parent_uuid	name	mnemonic	mnemonic_equivalence	status	latest	deleted
2283	bb1e68a6-e233-4595-ae88-f9186b6760c6	5b5e1400-a390-4b39-ac3e-dd48a40cb073	Phase Reference Line Tap	PRLTAP	PR1TAP	APPROVED	false	
2692	bb1e68a6-e233-4595-ae88-f9186b6760c6	5b5e1400-a390-4b39-ac3e-dd48a40cb073	Phase Reference Line Tap	PRLTap	PR1TAP	APPROVED	true	

essname								
id	uuid	systemgroup_uuid	system_uuid	subsystem_uuid	devicetype_uuid	Instance index	convention _name	convention _name _equivalence
122707	5a9f7f3a-5bac-443e-9fe2-ca51e8a5cc68	4262e1e7-2444-412e-83d7-aeabf58262c6					Acc	ACC
122708	d9249c6b-a7b3-4cef-8f7b-fc995e75c47b	4262e1e7-2444-412e-83d7-aeabf58262c6			bb1e68a6-e233-4595-ae88-f9186b6760c6	054	Acc: RFS-PRLTap-054	ACC: RFS-PR1TAP-54
122709	00cc4bd6-1b0a-4f2f-893c-08fec86dee1f		e67a497c-9c55-4942-97fc-700c8ec56031				A2T	A2T
122710	85719dfe-a07e-4e1a-9445-cc4497fc2eb6		e67a497c-9c55-4942-97fc-700c8ec56031		bb1e68a6-e233-4595-ae88-f9186b6760c6	054	A2T: RFS-PRLTap-054	A2T: RFS-PR1TAP-54
122711	501f8c39-26c2-48dc-a35d-7e8f54121bb5			c2fce615-ed5d-40f9-8fb5-0b91502536e5			A2T-010PRL	A2T-10PR1
32540	07bce0ae-0947-47c8-941e-cc76678fd29a			c2fce615-ed5d-40f9-8fb5-0b91502536e5	bb1e68a6-e233-4595-ae88-f9186b6760c6	054	A2T-010PRL: RFS-PRLTap-054	A2T-10PR1: RFS-PR1TAP-54

Naming database, Suggestion 4, complex example

More complexity, one and same ESS name

essname								
id	uuid	systemgroup_uuid	system_uuid	subsystem_uuid	devicetype_uuid	instance_index	convention_name	convention_name_equivalence
6543	2edcacdb-e618-4d64-8e95-303ac014ed87			7e67365b-3d01-4acb-873f-4af7e29eeca5	aeb02f70-afea-489c-b3ae-c37cc7951fdf	215100	FEB-050ROW:PBI-MTCA-215100	FEB-50ROW:PB1-MTCA-215100
23348	2edcacdb-e618-4d64-8e95-303ac014ed87			7e67365b-3d01-4acb-873f-4af7e29eeca5	aeb02f70-afea-489c-b3ae-c37cc7951fdf	215100	FEB-050Row:PBI-MTCA-215100	FEB-50ROW:PB1-MTCA-215100
36636	2edcacdb-e618-4d64-8e95-303ac014ed87			7e67365b-3d01-4acb-873f-4af7e29eeca5	aeb02f70-afea-489c-b3ae-c37cc7951fdf	004	FEB-050Row:PBI-MTCA-004	FEB-50ROW:PB1-MTCA-4
42812	2edcacdb-e618-4d64-8e95-303ac014ed87			7e67365b-3d01-4acb-873f-4af7e29eeca5	aeb02f70-afea-489c-b3ae-c37cc7951fdf	040	FEB-050Row:PBI-MTCA-040	FEB-50ROW:PB1-MTCA-40
73122	2edcacdb-e618-4d64-8e95-303ac014ed87			7e67365b-3d01-4acb-873f-4af7e29eeca5	aeb02f70-afea-489c-b3ae-c37cc7951fdf	040	FEB-050Row:PBI-MTCA-040	FEB-50ROW:PB1-MTCA-40
85393	2edcacdb-e618-4d64-8e95-303ac014ed87			7e67365b-3d01-4acb-873f-4af7e29eeca5	aeb02f70-afea-489c-b3ae-c37cc7951fdf	9040	FEB-050Row:PBI-MTCA-9040	FEB-50ROW:PB1-MTCA-9040
89039	2edcacdb-e618-4d64-8e95-303ac014ed87			7e67365b-3d01-4acb-873f-4af7e29eeca5	aeb02f70-afea-489c-b3ae-c37cc7951fdf	040	FEB-050Row:PBI-MTCA-040	FEB-50ROW:PB1-MTCA-40
92290	2edcacdb-e618-4d64-8e95-303ac014ed87			7e67365b-3d01-4acb-873f-4af7e29eeca5	aeb02f70-afea-489c-b3ae-c37cc7951fdf	050x	FEB-050Row:PBI-MTCA-050x	FEB-50ROW:PB1-MTCA-50X
92313	2edcacdb-e618-4d64-8e95-303ac014ed87			7e67365b-3d01-4acb-873f-4af7e29eeca5	aeb02f70-afea-489c-b3ae-c37cc7951fdf	050	FEB-050Row:PBI-MTCA-050	FEB-50ROW:PB1-MTCA-50
92446	2edcacdb-e618-4d64-8e95-303ac014ed87			7e67365b-3d01-4acb-873f-4af7e29eeca5	aeb02f70-afea-489c-b3ae-c37cc7951fdf	050	FEB-050Row:PBI-MTCA-050	FEB-50ROW:PB1-MTCA-50
92544	2edcacdb-e618-4d64-8e95-303ac014ed87			7e67365b-3d01-4acb-873f-4af7e29eeca5	aeb02f70-afea-489c-b3ae-c37cc7951fdf	050	FEB-050Row:PBI-MTCA-050	FEB-50ROW:PB1-MTCA-50
95904	2edcacdb-e618-4d64-8e95-303ac014ed87			7e67365b-3d01-4acb-873f-4af7e29eeca5	aeb02f70-afea-489c-b3ae-c37cc7951fdf	050	FEB-050Row:PBI-MTCA-050	FEB-50ROW:PB1-MTCA-50
104108	2edcacdb-e618-4d64-8e95-303ac014ed87			7e67365b-3d01-4acb-873f-4af7e29eeca5	aeb02f70-afea-489c-b3ae-c37cc7951fdf	050	FEB-050Row:PBI-MTCA-050	FEB-50ROW:PB1-MTCA-50
109398	2edcacdb-e618-4d64-8e95-303ac014ed87			59dca0b0-3eb5-4898-9fa5-20d323db1050	aeb02f70-afea-489c-b3ae-c37cc7951fdf	200	PBI-BCM01:PBI-MTCA-200	PB1-BCM1:PB1-MTCA-200
112748	2edcacdb-e618-4d64-8e95-303ac014ed87			59dca0b0-3eb5-4898-9fa5-20d323db1050	909559a0-6500-4845-8671-e1cf852fc090	200	PBI-BCM01:Ctrl-MTCA3U-200	PB1-BCM1:CTR1-MTCA3U-200
113113	2edcacdb-e618-4d64-8e95-303ac014ed87			59dca0b0-3eb5-4898-9fa5-20d323db1050	909559a0-6500-4845-8671-e1cf852fc090	201	PBI-BCM01:Ctrl-MTCA3U-201	PB1-BCM1:CTR1-MTCA3U-201
113331	2edcacdb-e618-4d64-8e95-303ac014ed87			59dca0b0-3eb5-4898-9fa5-20d323db1050	909559a0-6500-4845-8671-e1cf852fc090	201	PBI-BCM01:Ctrl-MTCA3U-201	PB1-BCM1:CTR1-MTCA3U-201

Content						
deviceNames						
GET		/deviceNames		<div>Lists all ESS names</div> <div><pre>select * from essname en where en.latest = true</pre></div> <div>Loop through returned rows.</div>		<div>Not consider status.</div> <div>Return most recent for each device.</div>
GET		/deviceNames/devicetype/search/{devicetype}		<div>Finds all ESS names with given device type (search)</div> <div><pre>select * from essname en, devicetype dt where en.latest = true and dt.uuid = en.devicetype_uuid and dt.latest = true</pre></div> <div>Loop through returned rows and match with regex / devicetype for search.</div>		<div>Not consider status.</div> <div>Return most recent for given parameter.</div>
GET		/deviceNames/devicetype/{devicetype}		<div>Finds all ESS names with given device type (exact match)</div> <div><pre>select * from essname en, devicetype dt where en.latest = true and dt.uuid = en.devicetype_uuid and dt.latest = true and dt.mnemonic = 'devicetype'</pre></div> <div>Loop through returned rows.</div>		<div>Not consider status.</div> <div>Return most recent for given parameter.</div>
GET		/deviceNames/discipline/search/{discipline}		<div>Finds all ESS names with given discipline (search)</div> <div><pre>select * from essname en, devicetype dt, devicegroup dg, discipline di where en.latest = true and dt.uuid = en.devicetype_uuid and dt.latest = true and dg.uuid = dt.parent_uuid and dg.latest = true and di.uuid = dg.parent_uuid and di.latest = true</pre></div> <div>Loop through returned rows and match with regex / discipline for search.</div>		<div>Not consider status.</div> <div>Return most recent for given parameter.</div>
GET		/deviceNames/discipline/{discipline}		<div>Finds all ESS names with given discipline (exact match)</div> <div><pre>select * from essname en, devicetype dt, devicegroup dg, discipline di where en.latest = true and dt.uuid = en.devicetype_uuid and dt.latest = true and dg.uuid = dt.parent_uuid and dg.latest = true and di.uuid = dg.parent_uuid and di.latest = true and di.mnemonic = 'discipline'</pre></div> <div>Loop through returned rows.</div>		<div>Not consider status.</div> <div>Return most recent for given parameter.</div>
GET		/deviceNames/search/{searchText}		<div>Finds all ESS names containing given text (search)</div> <div><pre>select * from essname en where en.latest = true</pre></div> <div>Loop through returned rows and match with regex / searchText for search.</div>		<div>Not consider status.</div> <div>Return most recent for given parameter.</div>
GET		/deviceNames/subsystem/search/{subsystem}		<div>Finds all ESS names by given subsystem (search)</div> <div><pre>select * from essname en, subsystem sub where en.latest = true and sub.uuid = en.subsystem_uuid and sub.latest = true</pre></div> <div>Loop through returned rows and match with regex / subsystem for search.</div>		<div>Not consider status.</div> <div>Return most recent for given parameter.</div>
GET		/deviceNames/subsystem/{subsystem}		<div>Finds all ESS names by given subsystem (exact match)</div> <div><pre>select * from essname en, subsystem sub where en.latest = true and sub.uuid = en.subsystem_uuid and sub.latest = true and sub.mnemonic = 'subsystem'</pre></div> <div>Loop through returned rows.</div>		<div>Not consider status.</div> <div>Return most recent for given parameter.</div>

Content						
deviceNames						
GET		/deviceNames/system/search/{system}		<div><div>Finds all ESS names by given system (search)</div><div><pre>select * from essname en, systemgroup sg where en.latest = true and sg.uuid = en.systemgroup_uuid and sg.latest = true select * from essname en, system sys where en.latest = true and sys.uuid = en.system_uuid and sys.latest = true</pre></div><div>Loop through returned rows and match with regex / system for search.</div></div>		<div>Not consider status. Return most recent for given parameter.</div> <div>For<ul style="list-style-type: none">System GroupSystem.</div> <div>Combine query results.</div>
GET		/deviceNames/system/{system}		<div><div>Finds all ESS names by given system (exact match)</div><div><pre>select * from essname en, systemgroup sg where en.latest = true and sg.uuid = en.systemgroup_uuid and sg.latest = true and sg.mnemonic = 'system' select * from essname en, system sys where en.latest = true and sys.uuid = en.system_uuid and sys.latest = true and sys.mnemonic = 'system'</pre></div><div>Loop through returned rows.</div></div>		<div>Not consider status. Return most recent for given parameter.</div> <div>For<ul style="list-style-type: none">System GroupSystem.</div> <div>Combine query results.</div>
GET		/deviceNames/{uuid}		<div><div>Finds ESS name by uuid or name</div><div><pre>select * from essname en where en.latest = true and en.uuid = 'uuid' select * from essname en where en.latest = true and en.convention_name = 'uuid'</pre></div><div>Loop through returned rows.</div></div>		<div>Not consider status. Return most recent for given parameter.</div>
healthcheck						
GET		/healthcheck		<div>Healthcheck of Naming application</div> <div><pre>// return healthcheck as server timestamp // datetime - dateStyle, timeStyle - full</pre></div> <div>Reuse current implementation.</div>		<div>Return http response code 200 to show that application is up and running.</div>

Content					
parts					
GET		/parts/mnemonic/search/{searchText}		<div><p>Finds all parts containing mnemonic with the specific search text.</p><pre>select * systemgroup sg where sg.latest = true select * from system sys where sys.latest = true select * from subsystem sub where sub.latest = true select * from discipline di where di.latest = true select * from devicetype dt where dt.latest = true</pre><p>Loop through returned rows and match with regex / searchText for search.</p></div>	<div><p>Consider status.</p><p>For</p><ul style="list-style-type: none">System GroupSystemSubsystemDisciplineDevice Type<p>Combine query results.</p></div>
GET		/parts/mnemonic/{mnemonic}		<div><p>Finds all parts by specific mnemonic.</p><pre>select * systemgroup sg where sg.latest = true and sg.mnemonic = 'mnemonic' select * from system sys where sys.latest = true and sys.mnemonic = 'mnemonic' select * from subsystem sub where sub.latest = true and sub.mnemonic = 'mnemonic' select * from discipline di where di.latest = true and di.mnemonic = 'mnemonic' select * from devicetype dt where dt.latest = true and dt.mnemonic = 'mnemonic'</pre><p>Loop through returned rows.</p></div>	<div><p>Consider status.</p><p>For</p><ul style="list-style-type: none">System GroupSystemSubsystemDisciplineDevice Type<p>Combine query results.</p></div>
GET		/parts/mnemonicPath/search/{searchText}		<div><p>Finds all parts containing mnemonic path with the specific search text.</p><p>Level 1</p><pre>select sg.mnemonic from systemgroup sg where sg.latest = true select di.mnemonic from discipline di where di.latest = true</pre><p>Level 2</p><pre>select sg.mnemonic, sys.mnemonic from system sys, systemgroup sg where sys.latest = true and sg.uuid = sys.parent_uuid and sg.latest = true</pre><p>Level 3</p><pre>select sg.mnemonic, sys.mnemonic, sub.mnemonic from subsystem sub, system sys, systemgroup sg where sub.latest = true and sys.uuid = sub.parent_uuid and sys.latest = true and sg.uuid = sys.parent_uuid and sg.latest = true select di.mnemonic, dt.mnemonic from devicetype dt, devicegroup dg, discipline di where dt.latest = true and dg.uuid = dt.parent_uuid and dg.latest = true and di.uuid = dg.parent_uuid and di.latest = true</pre><p>Loop through returned rows.</p></div>	<div><p>Consider status.</p><p>For</p><ul style="list-style-type: none">System Group (1)System (2)Subsystem (3)Discipline (1)Device Type (3)<p>Go through</p><ul style="list-style-type: none">name parts level 1name parts level 2name parts level 3<p>Combine query results.</p></div>

Content					
history					
GET		/history/deviceNames/name/{name}		<div>Finds history for ESS names given search parameters (exact match) name (required) from, to, type (optional).</div> <div><pre>select * from essname en where en.convention_name = 'uuid'</pre></div> <div>Loop through returned rows.</div>	
GET		/history/deviceNames/uuid/{uuid}		<div>Finds history for ESS names given search parameters (exact match) uuid (required) from, to, type (optional).</div> <div><pre>select * from essname en where en.uuid = 'uuid'</pre></div> <div>Loop through returned rows.</div>	
GET		/historyparts/mnemonic/{mnemonic}		<div>Finds history for name parts given search parameters (exact match) mnemonic (required) from, to, type (optional)</div> <div><pre>select * from systemgroup sg where sg.mnemonic = 'mnemonic'</pre></div> <div><pre>select * from system sys where sys.mnemonic = 'mnemonic'</pre></div> <div><pre>select * from subsystem sub where sub.mnemonic = 'mnemonic'</pre></div> <div><pre>select * from discipline di where di.mnemonic = 'mnemonic'</pre></div> <div><pre>select * from devicetype dt where dt.mnemonic = 'mnemonic'</pre></div> <div>Loop through returned rows.</div>	<div>Consider status.</div> <div>For<ul style="list-style-type: none">System GroupSystemSubsystemDisciplineDevice Type</div> <div>Combine / choose query results.</div>
GET		/history/parts/uuid/{uuid}		<div>Finds history for name parts given search parameters (exact match) uuid (required) from, to, type (optional)</div> <div><pre>select * from systemgroup sg where sg.uuid = 'uuid'</pre></div> <div><pre>select * from system sys where sys.uuid = 'uuid'</pre></div> <div><pre>select * from subsystem sub where sub.uuid = 'uuid'</pre></div> <div><pre>select * from discipline di where di.uuid = 'uuid'</pre></div> <div><pre>select * from devicetype dt where dt.uuid = 'uuid'</pre></div> <div>Loop through returned rows.</div>	<div>Consider status.</div> <div>For<ul style="list-style-type: none">System GroupSystemSubsystemDisciplineDevice Type</div> <div>Combine / choose query results.</div>