



DAX F21 Status/Plans

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ENERGY

DAX Recent Progress

- 10 Qserv deployments now
 - New 5-node cluster at SLAC this week, using “found” hardware
 - UK working on a new deployment
 - See <https://confluence.lsstcorp.org/display/DM/Qserv+Deployments>
- New ‘lite’ containers now running in CI
 - Build times hours -> minutes
 - Image size 4Gib -> 1Gib
 - Single binary artifact instead of 6 different “flavors”
 - Simplified OS-native package management
 - cmake builds instead of scon
- Scale performance testing/improvements on ‘large’ cluster at NCSA
- Lots of ingest and k8s improvements, bug fixes, in support of IDF (ops funded)
- Ongoing support for MW (BG3 registry schema migration, click CLI fixes)
- Schema browser
 - Github pages based; rendered directly from Felis yaml on master in sdm_schemas repo
 - Preview: https://fritzm.github.io/sdm_schemas/browser/baseline

Reminder: DAX on accelerated ramp to ops

	FY20	FY21	FY22	FY23
FTE Constr.	6.68	2.18	1.16	0.00
FTE Ops	0.00	3.73	4.49	5.25
FTE Total	6.68	5.90	5.65	5.25

DAX Planned Activities through FY23

FY21

- Performance and fault-tolerance
- Query classification and progress APIs

FY22

- User-generated products
- Query coverage

FY23

- Integration
- Documentation

Plus: MW support (.5 FTE Andy S.), T&S support (.5 FTE John G.), APDB integration (FY21/FY22?)

F21 Epics

Epic	Description	Sps	Sps	resource loading [sp]						WBS	
		estim	alloc	ABH	AS	FJ	FM	IG	JG		NP
DM-2080	F18 Large Scale Qserv Tests (KPM50)	52	15					15			02C.06.02.03
DM-25279	F20 Director Indices	22	5					5			02C.06.02.03
DM-25399	F20 Schema Browser	2	2				2				02C.06.02.03
DM-30612	F21 APDB	6	6		6						02C.06.01.01
DM-30584	F21 Qserv Refactoring	59	59	26					33		02C.06.02.03
DM-30608	F21 Qserv Build Maintenance	23	23				1			22	02C.06.02.03
DM-30610	F21 Qserv Ingest Improvements	10	10					10			02C.06.02.03
DM-30611	F21 Qserv Kubernetes	47	47			47					02C.06.02.03
DM-30613	F21 DAX Documentation	4	4				1	3			02C.06.02.03
DM-30609	F21 Gen3 Middleware	31	31		20					11	02C.06.04
	Total Planned		202	26	26	47	4	33	33	33	
	Surplus		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

S22/F22 Planned Epics (Partial)

Epic	Description	Sps estim	Sps alloc	resource loading [sp]						WBS	
				ABH	AS	FJ	FM	IG	JG		NP
DM-30585	S22 Qserv Refactoring	35	35					15	20		02C.06.02.03
DM-30626	S22 Qserv Kubernetes	47	47			47					02C.06.02.03
DM-30628	S22 Gen3 Middleware	19	19		12					7	02C.06.04
	Total Planned		101	0	12	47	0	15	20	7	
	Surplus		39	15.75	3.75	0.00	1.97	4.69	0.00	12.69	

Epic	Description	Sps estim	Sps alloc	resource loading [sp]						WBS	
				ABH	AS	FJ	FM	IG	JG		NP
DM-30586	F22 Qserv Refactoring	22	22					9	13		02C.06.02.03
DM-30627	F22 Qserv Kubernetes	32	32			32					02C.06.02.03
DM-30629	F22 Gen3 Middleware	13	13		8					5	02C.06.04
	Total Planned		67	0	8	32	0	9	13	5	
	Surplus		27	10.50	2.50	0.00	1.31	4.13	-0.01	8.13	