IFS Aviation Maintenance

Custom Lobby Creation Guide

Maintenix 8.3-SP10

Document Revision: 8.3-SP10-1

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Introduction

The purpose of this document is to provide the end-to-end ability to create custom lobbies with their respective data sets, enabling existing customers to take advantage of the IFS Lobbies functionality through a co-deployed solution and a Maintenix-only data source.

This document covers:

- Technical details on how to create custom projections based on Maintenix data.
- Instructions on how to create custom lobbies with associated UI based list views.

The document also provides a basic insight into (described under the relevant sections):

- Projection Models
- Client Models

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Create a data mart/view in the Maintenix schema

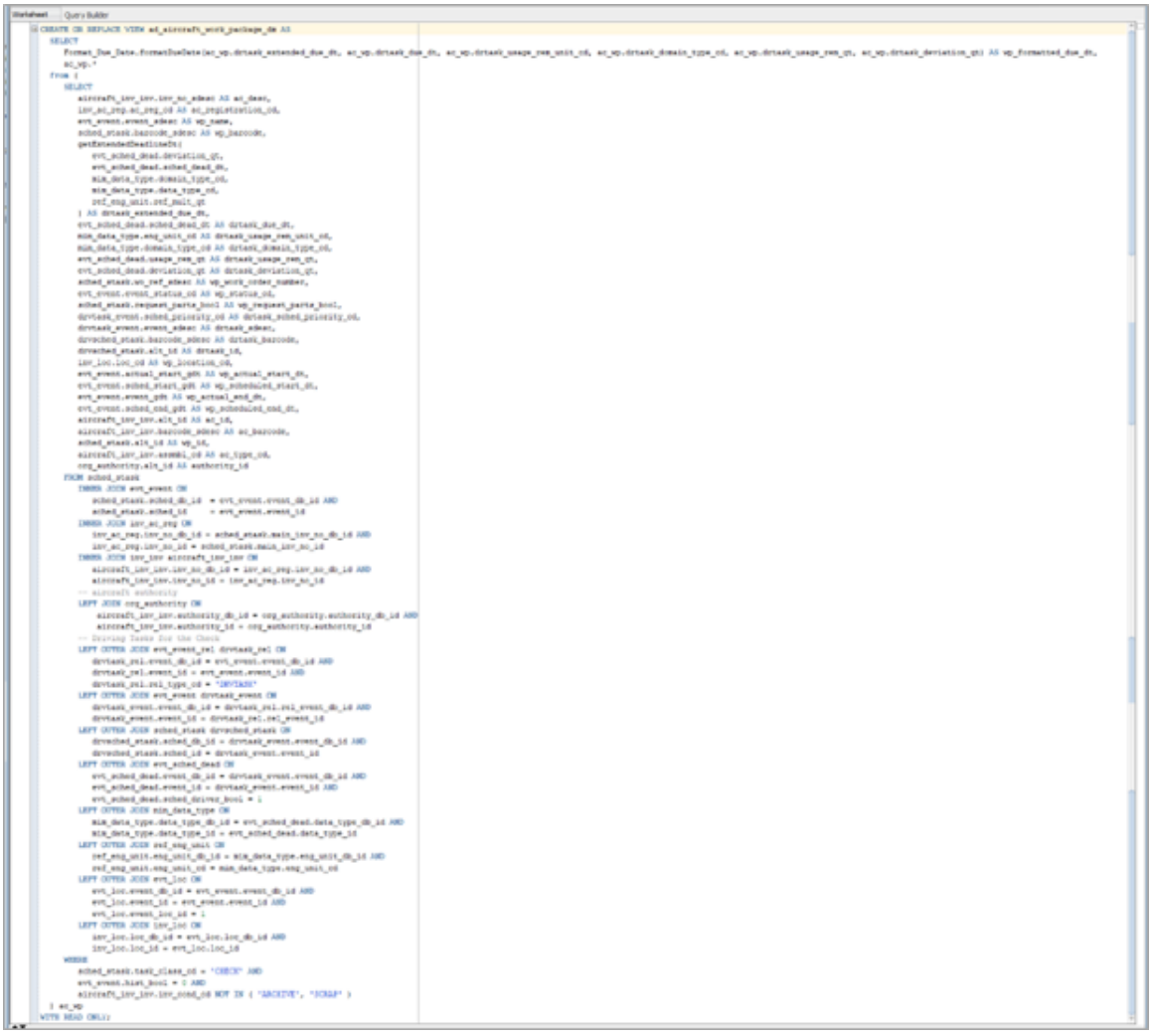
This section provides a stepwise guide on how to create a database view in the Maintenix schema.

2.1 Create a data mart/view

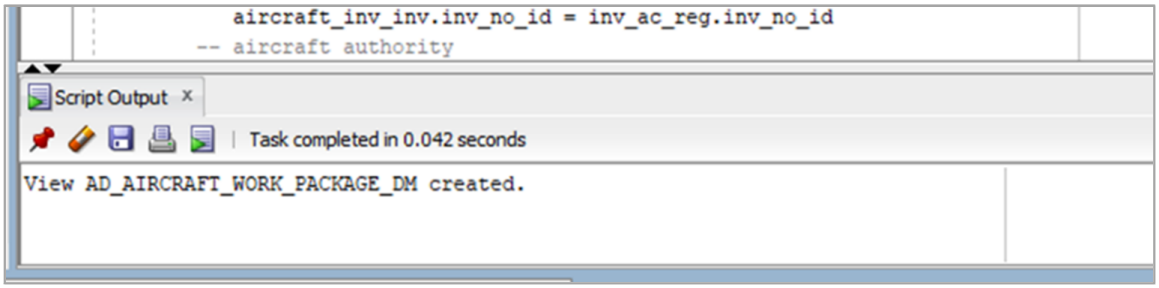
1. Establish connection to the Maintenix database from the development application (E.g.: SQL Developer).
2. Write the script/query to create the required data mart/view.
   - Script the query in the following format:

```
CREATE OR REPLACE VIEW <ViewName> AS
<QueryRequiredToCreateView>{
}
WITH READ ONLY;
```

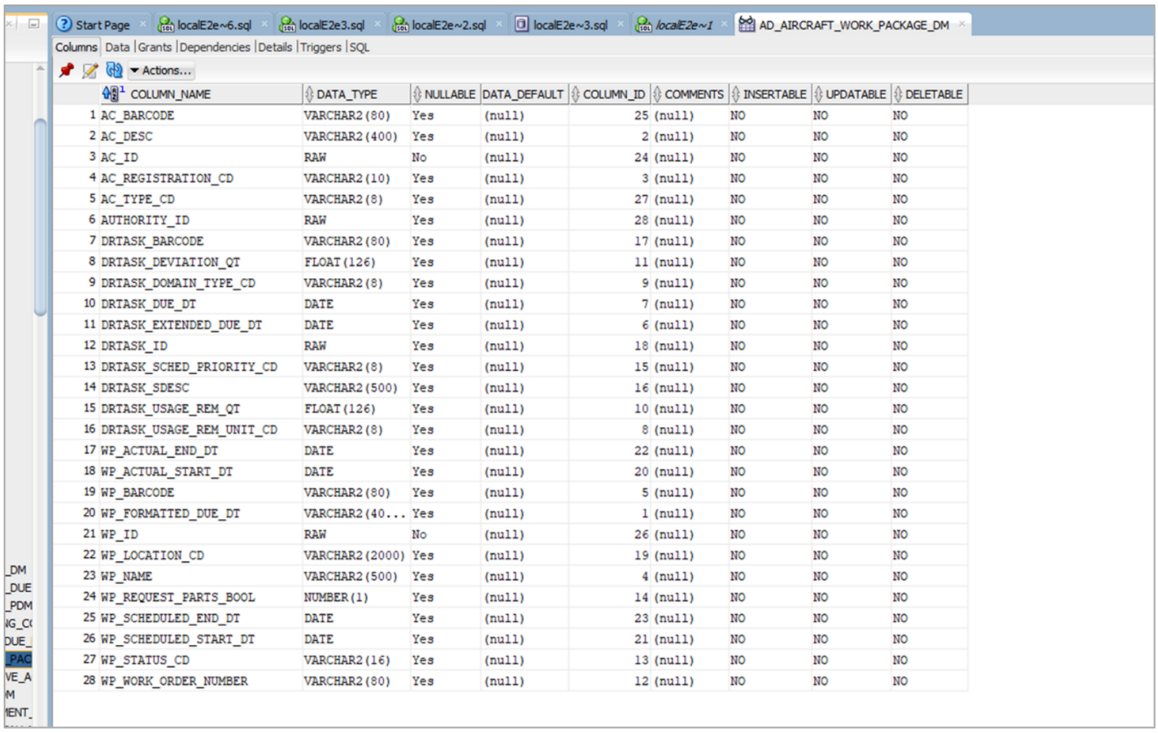
   - Define the attributes to be listed in the data mart/view under the query.



3. Execute the script to create the Maintenix data mart/view.
4. Scroll down to the output window to view the script status (E.g.: the Script Output panel on SQL Developer application).



5. On the **Connections** navigation panel, expand the **Views** node under **Database Connections** to locate the newly created data mart/view and its attributes.



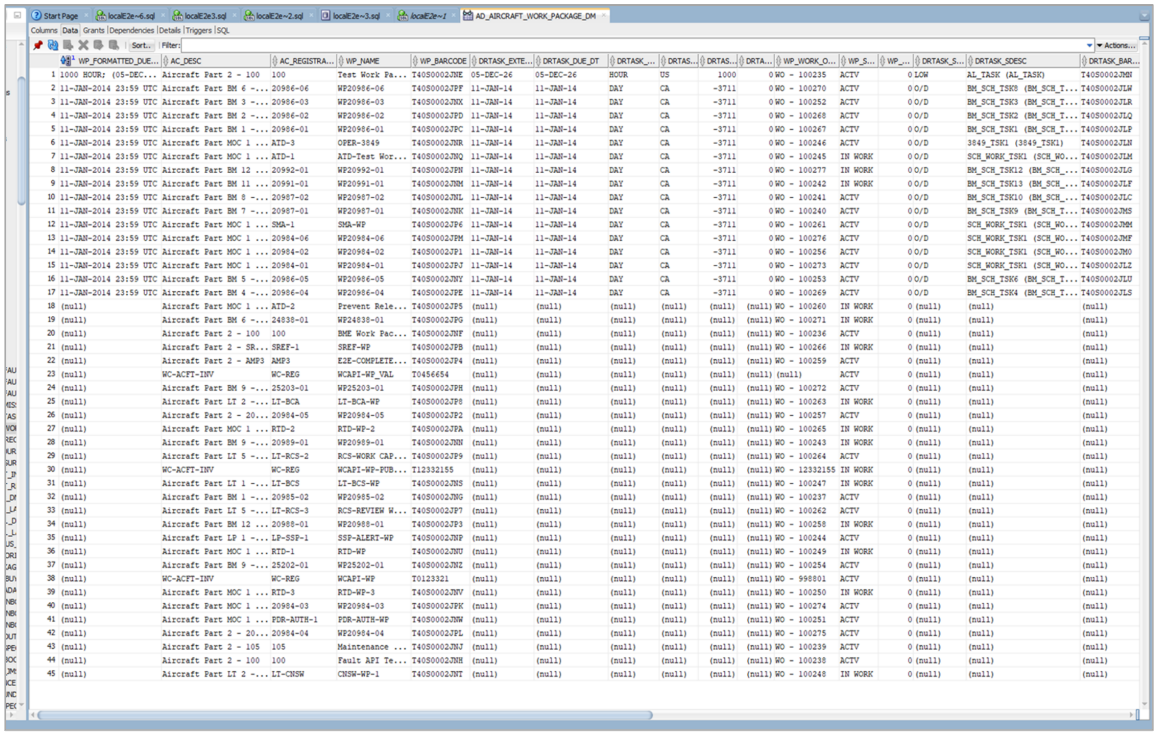
Start Page | localE2e~6.sql | localE2e3.sql | localE2e~2.sql | localE2e~3.sql | localE2e~1 | AD_AIRCRAFT_WORK_PACKAGE_DM

Columns | Data | Grants | Dependencies | Details | Triggers | SQL

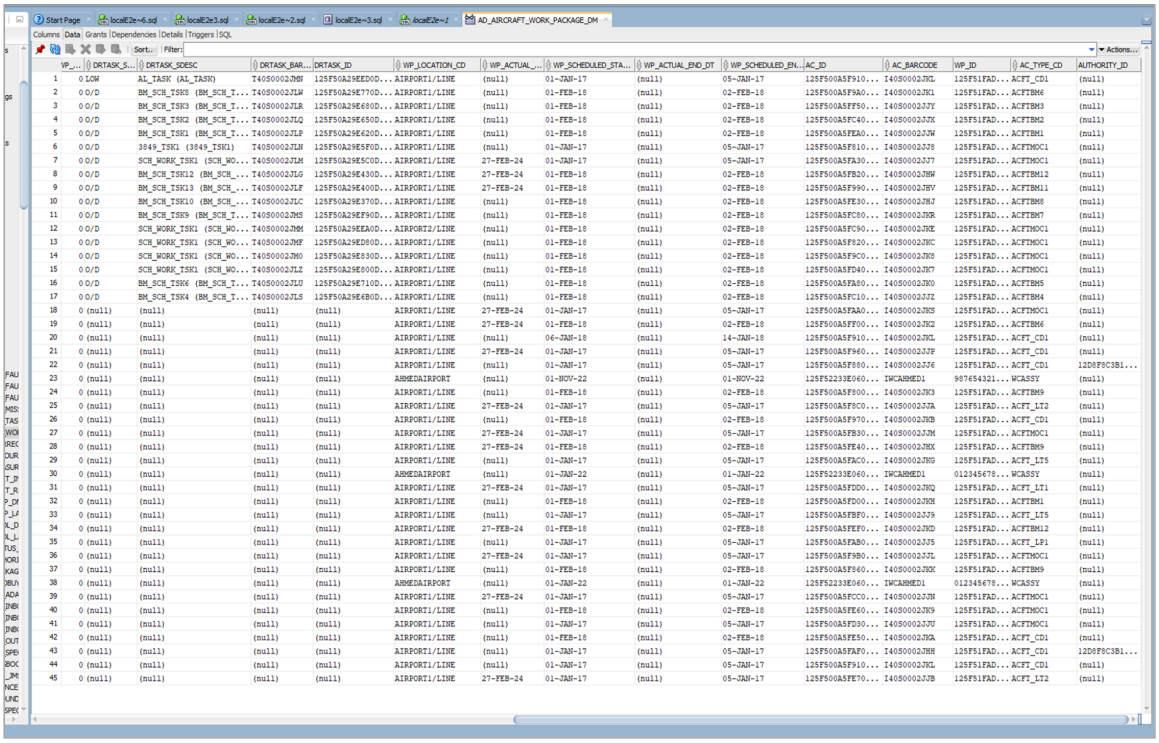
Actions...

	COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS	INSERTABLE	UPDATABLE	DELETABLE
1	AC_BARCODE	VARCHAR2(80)	Yes	(null)	25	(null)	NO	NO	NO
2	AC_DESC	VARCHAR2(400)	Yes	(null)	2	(null)	NO	NO	NO
3	AC_ID	RAW	No	(null)	24	(null)	NO	NO	NO
4	AC_REGISTRATION_CD	VARCHAR2(10)	Yes	(null)	3	(null)	NO	NO	NO
5	AC_TYPE_CD	VARCHAR2(8)	Yes	(null)	27	(null)	NO	NO	NO
6	AUTHORITY_ID	RAW	Yes	(null)	28	(null)	NO	NO	NO
7	DRTASK_BARCODE	VARCHAR2(80)	Yes	(null)	17	(null)	NO	NO	NO
8	DRTASK_DEVIATION_QT	FLOAT(126)	Yes	(null)	11	(null)	NO	NO	NO
9	DRTASK_DOMAIN_TYPE_CD	VARCHAR2(8)	Yes	(null)	9	(null)	NO	NO	NO
10	DRTASK_DUE_DT	DATE	Yes	(null)	7	(null)	NO	NO	NO
11	DRTASK_EXTENDED_DUE_DT	DATE	Yes	(null)	6	(null)	NO	NO	NO
12	DRTASK_ID	RAW	Yes	(null)	18	(null)	NO	NO	NO
13	DRTASK_SCHED_PRIORITY_CD	VARCHAR2(8)	Yes	(null)	15	(null)	NO	NO	NO
14	DRTASK_SDESC	VARCHAR2(500)	Yes	(null)	16	(null)	NO	NO	NO
15	DRTASK_USAGE_REM_QT	FLOAT(126)	Yes	(null)	10	(null)	NO	NO	NO
16	DRTASK_USAGE_REM_UNIT_CD	VARCHAR2(8)	Yes	(null)	8	(null)	NO	NO	NO
17	WP_ACTUAL_END_DT	DATE	Yes	(null)	22	(null)	NO	NO	NO
18	WP_ACTUAL_START_DT	DATE	Yes	(null)	20	(null)	NO	NO	NO
19	WP_BARCODE	VARCHAR2(80)	Yes	(null)	5	(null)	NO	NO	NO
20	WP_FORMATTED_DUE_DT	VARCHAR2(40...	Yes	(null)	1	(null)	NO	NO	NO
21	WP_ID	RAW	No	(null)	26	(null)	NO	NO	NO
22	WP_LOCATION_CD	VARCHAR2(2000)	Yes	(null)	19	(null)	NO	NO	NO
23	WP_NAME	VARCHAR2(500)	Yes	(null)	4	(null)	NO	NO	NO
24	WP_REQUEST_PARTS_BOOL	NUMBER(1)	Yes	(null)	14	(null)	NO	NO	NO
25	WP_SCHEDULED_END_DT	DATE	Yes	(null)	23	(null)	NO	NO	NO
26	WP_SCHEDULED_START_DT	DATE	Yes	(null)	21	(null)	NO	NO	NO
27	WP_STATUS_CD	VARCHAR2(16)	Yes	(null)	13	(null)	NO	NO	NO
28	WP_WORK_ORDER_NUMBER	VARCHAR2(80)	Yes	(null)	12	(null)	NO	NO	NO

6. Navigate to the **Data** tab to view the data displayed under the newly created view.



	WP_FORMATTED_DUE...	AC_DESC	AC_REGISTRA...	WP_NAME	WP_BARCODE	DRTASK_EXTE...	DRTASK_DUE_DT	DRTASK_...	DRTAS...	DRTAS...	DRTA...	WP_WORK_O...	WP_S...	WP_...	DRTASK_S...	DRTASK_SDESC	DRTASK_BAR...
1	1000 HOUR; (05-DEC...	Aircraft Part 2 - 100	100	Test Work Pa...	T40S0002JNE	05-DEC-26	05-DEC-26	HOUR	US	1000	0	WO - 100235	ACTV	0	LOW	AL_TASK (AL_TASK)	T40S0002JNH
2	11-JAN-2014 23:59 UTC	Aircraft Part BM 6 -...	20986-06	WP20986-06	T40S0002JPF	11-JAN-14	11-JAN-14	DAY	CA	-3711	0	WO - 100270	ACTV	0	O/D	BM_SCH_TSK8 (BM_SCH_T...	T40S0002JLW
3	11-JAN-2014 23:59 UTC	Aircraft Part BM 3 -...	20986-03	WP20986-03	T40S0002JNX	11-JAN-14	11-JAN-14	DAY	CA	-3711	0	WO - 100252	ACTV	0	O/D	BM_SCH_TSK3 (BM_SCH_T...	T40S0002JLR
4	11-JAN-2014 23:59 UTC	Aircraft Part BM 2 -...	20986-02	WP20986-02	T40S0002JPD	11-JAN-14	11-JAN-14	DAY	CA	-3711	0	WO - 100268	ACTV	0	O/D	BM_SCH_TSK2 (BM_SCH_T...	T40S0002JLQ
5	11-JAN-2014 23:59 UTC	Aircraft Part BM 1 -...	20986-01	WP20986-01	T40S0002JPC	11-JAN-14	11-JAN-14	DAY	CA	-3711	0	WO - 100267	ACTV	0	O/D	BM_SCH_TSK1 (BM_SCH_T...	T40S0002JLP
6	11-JAN-2014 23:59 UTC	Aircraft Part MOC 1 ...	ATD-3	OPER-3849	T40S0002JNR	11-JAN-14	11-JAN-14	DAY	CA	-3711	0	WO - 100246	ACTV	0	O/D	3849_TSK1 (3849_TSK1)	T40S0002JLN
7	11-JAN-2014 23:59 UTC	Aircraft Part MOC 1 ...	ATD-1	ATD-Test Wor...	T40S0002JNQ	11-JAN-14	11-JAN-14	DAY	CA	-3711	0	WO - 100245	IN WORK	0	O/D	SCH_WORK_TSK1 (SCH_WO...	T40S0002JLM
8	11-JAN-2014 23:59 UTC	Aircraft Part BM 12 ...	20992-01	WP20992-01	T40S0002JPH	11-JAN-14	11-JAN-14	DAY	CA	-3711	0	WO - 100277	IN WORK	0	O/D	BM_SCH_TSK12 (BM_SCH_...	T40S0002JLG
9	11-JAN-2014 23:59 UTC	Aircraft Part BM 11 ...	20991-01	WP20991-01	T40S0002JNM	11-JAN-14	11-JAN-14	DAY	CA	-3711	0	WO - 100242	IN WORK	0	O/D	BM_SCH_TSK13 (BM_SCH_...	T40S0002JLF
10	11-JAN-2014 23:59 UTC	Aircraft Part BM 8 -...	20987-02	WP20987-02	T40S0002JNL	11-JAN-14	11-JAN-14	DAY	CA	-3711	0	WO - 100241	ACTV	0	O/D	BM_SCH_TSK10 (BM_SCH_...	T40S0002JLC
11	11-JAN-2014 23:59 UTC	Aircraft Part BM 7 -...	20987-01	WP20987-01	T40S0002JNK	11-JAN-14	11-JAN-14	DAY	CA	-3711	0	WO - 100240	ACTV	0	O/D	BM_SCH_TSK9 (BM_SCH_T...	T40S0002JMS
12	11-JAN-2014 23:59 UTC	Aircraft Part MOC 1 ...	SMA-1	SMA-WP	T40S0002JP6	11-JAN-14	11-JAN-14	DAY	CA	-3711	0	WO - 100261	ACTV	0	O/D	SCH_WORK_TSK1 (SCH_WO...	T40S0002JMH
13	11-JAN-2014 23:59 UTC	Aircraft Part MOC 1 ...	20984-06	WP20984-06	T40S0002JPM	11-JAN-14	11-JAN-14	DAY	CA	-3711	0	WO - 100276	ACTV	0	O/D	SCH_WORK_TSK1 (SCH_WO...	T40S0002JMF
14	11-JAN-2014 23:59 UTC	Aircraft Part MOC 1 ...	20984-02	WP20984-02	T40S0002JP1	11-JAN-14	11-JAN-14	DAY	CA	-3711	0	WO - 100256	ACTV	0	O/D	SCH_WORK_TSK1 (SCH_WO...	T40S0002JM0
15	11-JAN-2014 23:59 UTC	Aircraft Part MOC 1 ...	20984-01	WP20984-01	T40S0002JPJ	11-JAN-14	11-JAN-14	DAY	CA	-3711	0	WO - 100273	ACTV	0	O/D	SCH_WORK_TSK1 (SCH_WO...	T40S0002JLZ
16	11-JAN-2014 23:59 UTC	Aircraft Part BM 5 -...	20986-05	WP20986-05	T40S0002JNY	11-JAN-14	11-JAN-14	DAY	CA	-3711	0	WO - 100253	ACTV	0	O/D	BM_SCH_TSK6 (BM_SCH_T...	T40S0002JLU
17	11-JAN-2014 23:59 UTC	Aircraft Part BM 4 -...	20986-04	WP20986-04	T40S0002JPE	11-JAN-14	11-JAN-14	DAY	CA	-3711	0	WO - 100269	ACTV	0	O/D	BM_SCH_TSK4 (BM_SCH_T...	T40S0002JLS
18	(null)	Aircraft Part MOC 1 ...	ATD-2	Prevent Rele...	T40S0002JP5	(null)	(null)	(null)	(null)	(null)	(null)	WO - 100260	IN WORK	0	(null)	(null)	(null)
19	(null)	Aircraft Part BM 6 -...	24838-01	WP24838-01	T40S0002JPG	(null)	(null)	(null)	(null)	(null)	(null)	WO - 100271	IN WORK	0	(null)	(null)	(null)
20	(null)	Aircraft Part 2 - 100	100	BME Work Pac...	T40S0002JNF	(null)	(null)	(null)	(null)	(null)	(null)	WO - 100236	ACTV	0	(null)	(null)	(null)
21	(null)	Aircraft Part 2 - SR...	SREF-1	SREF-WP	T40S0002JPB	(null)	(null)	(null)	(null)	(null)	(null)	WO - 100266	IN WORK	0	(null)	(null)	(null)
22	(null)	Aircraft Part 2 - AMP3	AMP3	E2E-COMPLETE...	T40S0002JP4	(null)	(null)	(null)	(null)	(null)	(null)	WO - 100259	ACTV	0	(null)	(null)	(null)
23	(null)	WC-ACFT-INV	WC-REG	WCAPI-WP_VAL	T0456654	(null)	(null)	(null)	(null)	(null)	(null)	(null) (null)	ACTV	0	(null)	(null)	(null)
24	(null)	Aircraft Part BM 9 -...	25203-01	WP25203-01	T40S0002JPH	(null)	(null)	(null)	(null)	(null)	(null)	WO - 100272	ACTV	0	(null)	(null)	(null)
25	(null)	Aircraft Part LT 2 -...	LT-BCA	LT-BCA-WP	T40S0002JP8	(null)	(null)	(null)	(null)	(null)	(null)	WO - 100263	IN WORK	0	(null)	(null)	(null)
26	(null)	Aircraft Part 2 - 20...	20984-05	WP20984-05	T40S0002JP2	(null)	(null)	(null)	(null)	(null)	(null)	WO - 100257	ACTV	0	(null)	(null)	(null)
27	(null)	Aircraft Part MOC 1 ...	RTD-2	RTD-WP-2	T40S0002JPA	(null)	(null)	(null)	(null)	(null)	(null)	WO - 100265	IN WORK	0	(null)	(null)	(null)
28	(null)	Aircraft Part BM 9 -...	20989-01	WP20989-01	T40S0002JNN	(null)	(null)	(null)	(null)	(null)	(null)	WO - 100243	IN WORK	0	(null)	(null)	(null)
29	(null)	Aircraft Part LT 5 -...	LT-RCS-2	RCS-WORK CAP...	T40S0002JP9	(null)	(null)	(null)	(null)	(null)	(null)	WO - 100264	ACTV	0	(null)	(null)	(null)
30	(null)	WC-ACFT-INV	WC-REG	WCAPI-WP-PUB...	T12332155	(null)	(null)	(null)	(null)	(null)	(null)	WO - 12332155	IN WORK	0	(null)	(null)	(null)
31	(null)	Aircraft Part LT 1 -...	LT-BCS	LT-BCS-WP	T40S0002JNS	(null)	(null)	(null)	(null)	(null)	(null)	WO - 100247	IN WORK	0	(null)	(null)	(null)
32	(null)	Aircraft Part BM 1 -...	20985-02	WP20985-02	T40S0002JNG	(null)	(null)	(null)	(null)	(null)	(null)	WO - 100237	ACTV	0	(null)	(null)	(null)
33	(null)	Aircraft Part LT 5 -...	LT-RCS-3	RCS-REVIEW W...	T40S0002JP7	(null)	(null)	(null)	(null)	(null)	(null)	WO - 100262	ACTV	0	(null)	(null)	(null)
34	(null)	Aircraft Part BM 12 ...	20988-01	WP20988-01	T40S0002JP3	(null)	(null)	(null)	(null)	(null)	(null)	WO - 100258	IN WORK	0	(null)	(null)	(null)
35	(null)	Aircraft Part LP 1 -...	LP-SSP-1	SSP-ALERT-WP	T40S0002JNP	(null)	(null)	(null)	(null)	(null)	(null)	WO - 100244	ACTV	0	(null)	(null)	(null)
36	(null)	Aircraft Part MOC 1 ...	RTD-1	RTD-WP	T40S0002JNU	(null)	(null)	(null)	(null)	(null)	(null)	WO - 100249	IN WORK	0	(null)	(null)	(null)
37	(null)	Aircraft Part BM 9 -...	25202-01	WP25202-01	T40S0002JNJ	(null)	(null)	(null)	(null)	(null)	(null)	WO - 100254	ACTV	0	(null)	(null)	(null)
38	(null)	WC-ACFT-INV	WC-REG	WCAPI-WP	T0123321	(null)	(null)	(null)	(null)	(null)	(null)	WO - 998801	ACTV	0	(null)	(null)	(null)
39	(null)	Aircraft Part MOC 1 ...	RTD-3	RTD-WP-3	T40S0002JNV	(null)	(null)	(null)	(null)	(null)	(null)	WO - 100250	IN WORK	0	(null)	(null)	(null)
40	(null)	Aircraft Part MOC 1 ...	20984-03	WP20984-03	T40S0002JPK	(null)	(null)	(null)	(null)	(null)	(null)	WO - 100274	ACTV	0	(null)	(null)	(null)
41	(null)	Aircraft Part MOC 1 ...	PDR-AUTH-1	PDR-AUTH-WP	T40S0002JNW	(null)	(null)	(null)	(null)	(null)	(null)	WO - 100251	ACTV	0	(null)	(null)	(null)
42	(null)	Aircraft Part 2 - 20...	20984-04	WP20984-04	T40S0002JPL	(null)	(null)	(null)	(null)	(null)	(null)	WO - 100275	ACTV	0	(null)	(null)	(null)
43	(null)	Aircraft Part 2 - 105	105	Maintenance ...	T40S0002JNJ	(null)	(null)	(null)	(null)	(null)	(null)	WO - 100239	ACTV	0	(null)	(null)	(null)
44	(null)	Aircraft Part 2 - 100	100	Fault API Te...	T40S0002JNH	(null)	(null)	(null)	(null)	(null)	(null)	WO - 100238	ACTV	0	(null)	(null)	(null)
45	(null)	Aircraft Part LT 2 -...	LT-CNSW	CNSW-WP-1	T40S0002JNT	(null)	(null)	(null)	(null)	(null)	(null)	WO - 100248	IN WORK	0	(null)	(null)	(null)



	VP_...	DRTASK_S...	DRTASK_SDESC	DRTASK_BAR...	DRTASK_ID	WP_LOCATION_CD	WP_ACTUAL_...	WP_SCHEDULED_STA...	WP_ACTUAL_END_DT	WP_SCHEDULED_EN...	AC_ID	AC_BARCODE	WP_ID	AC_TYPE_CD	AUTHORITY_ID
1	0	LOW	AL_TASK (AL_TASK)	T40S0002JNH	125F50A29EED0D...	AIRPORT1/LINE	(null)	01-JAN-17	(null)	05-JAN-17	125F500A5F910...	140S0002JKL	125F51FAD...	ACFT_CD1	(null)
2	0	O/D	BM_SCH_TSK8 (BM_SCH_T...	T40S0002JLW	125F50A29E770D...	AIRPORT1/LINE	(null)	01-FEB-18	(null)	02-FEB-18	125F500A5F9A0...	140S0002JK1	125F51FAD...	ACFTBM6	(null)
3	0	O/D	BM_SCH_TSK3 (BM_SCH_T...	T40S0002JLR	125F50A29E680D...	AIRPORT1/LINE	(null)	01-FEB-18	(null)	02-FEB-18	125F500A5FF50...	140S0002JJY	125F51FAD...	ACFTBM3	(null)
4	0	O/D	BM_SCH_TSK2 (BM_SCH_T...	T40S0002JLQ	125F50A29E650D...	AIRPORT1/LINE	(null)	01-FEB-18	(null)	02-FEB-18	125F500A5FC40...	140S0002JJX	125F51FAD...	ACFTBM2	(null)
5	0	O/D	BM_SCH_TSK1 (BM_SCH_T...	T40S0002JLP	125F50A29E620D...	AIRPORT1/LINE	(null)	01-FEB-18	(null)	02-FEB-18	125F500A5FEA0...	140S0002JJW	125F51FAD...	ACFTBM1	(null)
6	0	O/D	3849_TSK1 (3849_TSK1)	T40S0002JLN	125F50A29E5F0D...	AIRPORT1/LINE	(null)	01-JAN-17	(null)	05-JAN-17	125F500A5F810...	140S0002JJ8	125F51FAD...	ACFTMOC1	(null)
7	0	O/D	SCH_WORK_TSK1 (SCH_WO...	T40S0002JLM	125F50A29E5C0D...	AIRPORT1/LINE	27-FEB-24	01-JAN-17	(null)	05-JAN-17	125F500A5FA30...	140S0002JJ7	125F51FAD...	ACFTMOC1	(null)
8	0	O/D	BM_SCH_TSK12 (BM_SCH_...	T40S0002JLG	125F50A29E430D...	AIRPORT1/LINE	27-FEB-24	01-FEB-18	(null)	02-FEB-18	125F500A5FB20...	140S0002JHW	125F51FAD...	ACFTBM12	(null)
9	0	O/D	BM_SCH_TSK13 (BM_SCH_...	T40S0002JLF	125F50A29E400D...	AIRPORT1/LINE	27-FEB-24	01-FEB-18	(null)	02-FEB-18	125F500A5F990...	140S0002JHV	125F51FAD...	ACFTBM11	(null)
10	0	O/D	BM_SCH_TSK10 (BM_SCH_...	T40S0002JLC	125F50A29E370D...	AIRPORT1/LINE	(null)	01-FEB-18	(null)	02-FEB-18	125F500A5FE30...	140S0002JHJ	125F51FAD...	ACFTBM8	(null)
11	0	O/D	BM_SCH_TSK9 (BM_SCH_T...	T40S0002JMS	125F50A29EF90D...	AIRPORT1/LINE	(null)	01-FEB-18	(null)	02-FEB-18	125F500A5FC80...	140S0002JKR	125F51FAD...	ACFTBM7	(null)
12	0	O/D	SCH_WORK_TSK1 (SCH_WO...	T40S0002JMM	125F50A29EEA0D...	AIRPORT2/LINE	(null)	01-FEB-18	(null)	02-FEB-18	125F500A5FC90...	140S0002JKE	125F51FAD...	ACFTMOC1	(null)
13	0	O/D	SCH_WORK_TSK1 (SCH_WO...	T40S0002JMF	125F50A29ED80D...	AIRPORT1/LINE	(null)	01-FEB-18	(null)	02-FEB-18	125F500A5F820...	140S0002JKC	125F51FAD...	ACFTMOC1	(null)
14	0	O/D	SCH_WORK_TSK1 (SCH_WO...	T40S0002JM0	125F50A29E830D...	AIRPORT1/LINE	(null)	01-FEB-18	(null)	02-FEB-18	125F500A5F9C0...	140S0002JK8	125F51FAD...	ACFTMOC1	(null)
15	0	O/D	SCH_WORK_TSK1 (SCH_WO...	T40S0002JLZ	125F50A29E800D...	AIRPORT1/LINE	(null)	01-FEB-18	(null)	02-FEB-18	125F500A5FD40...	140S0002JK7	125F51FAD...	ACFTMOC1	(null)
16	0	O/D	BM_SCH_TSK6 (BM_SCH_T...	T40S0002JLU	125F50A29E710D...	AIRPORT1/LINE	(null)	01-FEB-18	(null)	02-FEB-18	125F500A5FA80...	140S0002JKO	125F51FAD...	ACFTBM5	(null)
17	0	O/D	BM_SCH_TSK4 (BM_SCH_T...	T40S0002JLS	125F50A29E6B0D...	AIRPORT1/LINE	(null)	01-FEB-18	(null)	02-FEB-18	125F500A5FC10...	140S0002JJZ	125F51FAD...	ACFTBM4	(null)
18	0	(null)	(null)	(null)	(null)	AIRPORT1/LINE	27-FEB-24	01-JAN-17	(null)	05-JAN-17	125F500A5FAA0...	140S0002JKS	125F51FAD...	ACFTMOC1	(null)
19	0	(null)	(null)	(null)	(null)	AIRPORT1/LINE	27-FEB-24	01-FEB-18	(null)	02-FEB-18	125F500A5FF00...	140S0002JK2	125F51FAD...	ACFTBM6	(null)
20	0	(null)	(null)	(null)	(null)	AIRPORT1/LINE	(null)	06-JAN-18	(null)	14-JAN-18	125F500A5F910...	140S0002JKL	125F51FAD...	ACFT_CD1	(null)
21	0	(null)	(null)	(null)	(null)	AIRPORT1/LINE	27-FEB-24	01-JAN-17	(null)	05-JAN-17	125F500A5F960...	140S0002JJP	125F51FAD...	ACFT_CD1	(null)
22	0	(null)	(null)	(null)	(null)	AIRPORT1/LINE	(null)	01-JAN-17	(null)	05-JAN-17	125F500A5F880...	140S0002JJ6	125F51FAD...	ACFT_CD1	12D8F8C3B1...
23	0	(null)	(null)	(null)	(null)	ARMEDAIRPORT	(null)	01-NOV-22	(null)	01-NOV-22	125F5233E060...	IWCARMED1	98765432l...	WCASSY	(null)
24	0	(null)	(null)	(null)	(null)	AIRPORT1/LINE	(null)	01-FEB-18	(null)	02-FEB-18	125F500A5F800...	140S0002JK3	125F51FAD...	ACFTBM9	(null)
25	0	(null)	(null)	(null)	(null)	AIRPORT1/LINE	27-FEB-24	01-JAN-17	(null)	05-JAN-17	125F500A5F8C0...	140S0002JJA	125F51FAD...	ACFT_LT2	(null)
26	0	(null)	(null)	(null)	(null)	AIRPORT1/LINE	(null)	01-FEB-18	(null)	02-FEB-18	125F500A5F970...	140S0002JKB	125F51FAD...	ACFT_CD1	(null)
27	0	(null)	(null)	(null)	(null)	AIRPORT1/LINE	27-FEB-24	01-JAN-17	(null)	05-JAN-17	125F500A5FB30...	140S0002JJM	125F51FAD...	ACFTMOC1	(null)
28	0	(null)	(null)	(null)	(null)	AIRPORT1/LINE	27-FEB-24	01-FEB-18	(null)	02-FEB-18	125F500A5FE40...	140S0002JHX	125F51FAD...	ACFTBM9	(null)
29	0	(null)	(null)	(null)	(null)	AIRPORT1/LINE	(null)	01-JAN-17	(null)	05-JAN-17	125F500A5FAC0...	140S0002JNG	125F51FAD...	ACFT_LT5	(null)
30	0	(null)	(null)	(null)	(null)	ARMEDAIRPORT	(null)	01-JAN-22	(null)	01-JAN-22	125F5233E060...	IWCARMED1	012345678...	WCASSY	(null)
31	0	(null)	(null)	(null)	(null)	AIRPORT1/LINE	27-FEB-24	01-JAN-17	(null)	05-JAN-17	125F500A5FDD0...	140S0002JNQ	125F51FAD...	ACFT_LT1	(null)
32	0	(null)	(null)	(null)	(null)	AIRPORT1/LINE	(null)	01-FEB-18	(null)	02-FEB-18	125F500A5FD00...	140S0002JKH	125F51FAD...	ACFTBM1	(null)
33	0	(null)	(null)	(null)	(null)	AIRPORT1/LINE	(null)	01-JAN-17	(null)	05-JAN-17	125F500A5FBF0...	140S0002JJ9	125F51FAD...	ACFT_LT5	(null)
34	0	(null)	(null)	(null)	(null)	AIRPORT1/LINE	27-FEB-24	01-FEB-18	(null)	02-FEB-18	125F500A5FEF0...	140S0002JKD	125F51FAD...	ACFTBM12	(null)
35	0	(null)	(null)	(null)	(null)	AIRPORT1/LINE	(null)	01-JAN-17	(null)	05-JAN-17	125F500A5FAB0...	140S0002JJ5	125F51FAD...	ACFT_LP1	(null)
36	0	(null)	(null)	(null)	(null)	AIRPORT1/LINE	27-FEB-24	01-JAN-17	(null)	05-JAN-17	125F500A5F9B0...	140S0002JJL	125F51FAD...	ACFTMOC1	(null)
37	0	(null)	(null)	(null)	(null)	AIRPORT1/LINE	(null)	01-FEB-18	(null)	02-FEB-18	125F500A5F860...	140S0002JKK	125F51FAD...	ACFTBM9	(null)
38	0	(null)	(null)	(null)	(null)	ARMEDAIRPORT	(null)	01-JAN-22	(null)	01-JAN-22	125F5233E060...	IWCARMED1	012345678...	WCASSY	(null)
39	0	(null)	(null)	(null)	(null)	AIRPORT1/LINE	27-FEB-24	01-JAN-17	(null)	05-JAN-17	125F500A5FCC0...	140S0002JJN	125F51FAD...	ACFTMOC1	(null)
40	0	(null)	(null)	(null)	(null)	AIRPORT1/LINE	(null)	01-FEB-18	(null)	02-FEB-18	125F500A5FE40...	140S0002JK9	125F51FAD...	ACFTMOC1	(null)
41	0	(null)	(null)	(null)	(null)	AIRPORT1/LINE	(null)	01-JAN-17	(null)	05-JAN-17	125F500A5FD30...	140S0002JJU	125F51FAD...	ACFTMOC1	(null)
42	0	(null)	(null)	(null)	(null)	AIRPORT1/LINE	(null)	01-FEB-18	(null)	02-FEB-18	125F500A5FE50...	140S0002JKA	125F51FAD...	ACFT_CD1	(null)
43	0	(null)	(null)	(null)	(null)	AIRPORT1/LINE	(null)	01-JAN-17	(null)	05-JAN-17	125F500A5FAF0...	140S0002JHH	125F51FAD...	ACFT_CD1	12D8F8C3B1...
44	0	(null)	(null)	(null)	(null)	AIRPORT1/LINE	(null)	01-JAN-17	(null)	05-JAN-17	125F500A5F910...	140S0002JKL	125F51FAD...	ACFT_CD1	(null)
45	0	(null)	(null)	(null)	(null)	AIRPORT1/LINE	27-FEB-24	01-JAN-17	(null)	05-JAN-17	125F500A5FE70...	140S0002JJB	125F51FAD...	ACFT_LT2	(null)

2.2Grant data mart/view to IFSAPP schema

Run the following script to grant access to the previously created Maintenix data mart/view to IFSAPP schema.

```
GRANT SELECT ON <ViewName> TO ifsapp WITH GRANT OPTION;
GRANT SELECT ON <ViewName> TO ifsinfo;
GRANT SELECT ON <ViewName> TO ifssys;
```

2.3Replicate Maintenix data mart/view on the IFSAPP schema and configure Authority filtering

1. Log in to the IFSAPP schema using the relevant login credentials.
2. Write and run the script/query required to create the view on the IFSAPP schema.
   - Script the query in the following format:

```
CREATE OR REPLACE VIEW <MaintenixViewName> AS
SELECT
<ListOfDataFieldsFromMaintenixView>
FROM Maintenix.<ViewName> <AliasNameForMaintenixView>
WHERE
(
   <AliasNameForMaintenixView>.authority_id IS NULL OR EXISTS
   (
   SELECT 1 FROM maintenix.ad_user_authority_dm user_authority
   WHERE User_authority.username=Fnd_Session_API.Get_Fnd_User
   AND (user_authority.authority_id IS NULL
   OR <AliasNameForMaintenixView>.authority_id=
   user_authority.authority_id)
   )
)
```

   - Use the above indicated WHERE clause to set authority filtering for SQL query related data associated with authorities.

Note A few entities in Maintenix can be associated with an Authority and therefore a user must have a matching assigned Authority to authorize certain operations on the related entities. The WHERE clause indicated above updates the existing query to use the **ad_user_authority_dm** (available as a default data mart/view) to filter records for the current user. The username of the current user on IFSAPP schema is retrieved via the **Fnd_Session_API.Get_Fnd_User** function. User authority filtering view is updated by the use of a JOIN between user authority for the current username and the authority ID.

Further, if the SQL query related data are associated with Authorities, the following data attribute must be added to the SQL query to expose the governing Authority's ID:

```
authority_id(Maintenix table/attribute: org_authority.alt_id)
```

3

Create a projection model with IFS Developer Studio

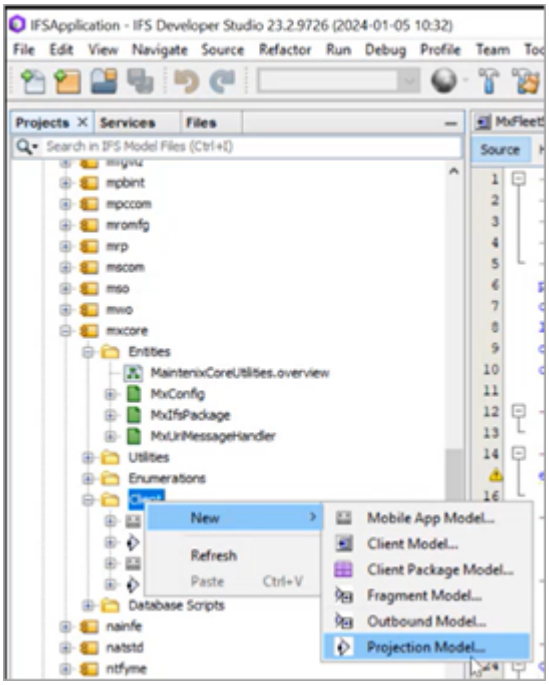
This section provides a stepwise guide on how to create a projection model using IFS Developer Studio.

A projection exposes the functional area or business logic of IFS Cloud in the form of a RESTful web service. The structure of the projection model can be broken down into two main elements as shown below.

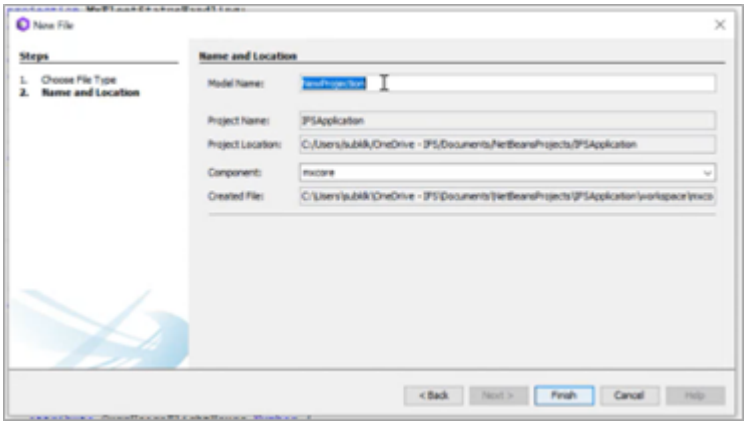
The main entry points	Defined in the form of an entity set. An entity set is the element in the URI that can be accessed from the client.
The body	Contains projection controls that can be customized for the required functionality.

3.1 Create a projection model

1. Open IFS Developer Studio.
2. Navigate to the **Projects** tab on the navigation panel.
3. Scroll down the list and navigate to the **mxcore>Client** project component.
4. Right-click **Client.**
5. On the menu, select **New>Projection Model.** This will open a pop up to create a new projection model.



6. Provide a **Model Name** for the projection as indicated (E.g.: MxFleetStatusHandling).



7. Click **Finish** to create the projection model.

3.2Connect Maintenix data mart/view to the projection model

1. Scroll down the created ***.projection** to locate the **Queries** section.
2. Create a query as indicated below, to link Maintenix data views to the projection.
   - Script the query in the following format:

```
query <QueryName> {
   from "<MaintenixViewName>";
   lu = none;
   attribute <AttributeName> datatype;
```

```
    ....
}
```

- Specify the view name (previously created Maintenix data mart/view) under **from**.
- Specify the data fields of the Maintenix view that are to be used in the projection as **attributes**.
- Specify the **data type** against the defined attribute.

```
--------------------------------- QUERIES ---------------------------------
query MxFleetStatusQuery {
   from = "ad_fleet_status_dm";
   lu = none;
   attribute AcSdesc Text;
   attribute AcRegistrationCd Text;
   attribute AcSerialNumber Text;
   attribute AcFinNumber Text;
   attribute CurrUsageFlightHours Number {
      format = decimal;
   }
   attribute CurrUsageCycles Number;
   attribute AcOperatingStatus Text;
   attribute AcRegBodyCd Text;
   attribute AcLocationCd Text;
   attribute WpSdesc Text;
   attribute WpStartDt TimestampUtc;
   attribute WpEndDt TimestampUtc;
   attribute WpTurnAroundTimeDt Text;
   attribute WpLocationCd Text;
   attribute AcAssmblCd Text;
   attribute AcBarcode Text;
   attribute UtcTimeZoneCode Text {
      fetch = "'UTC'";
   }
   attribute WpBarcode Text;
   attribute AuthorityId Text;
```

3. Move up the *.projection file and locate the **Main Entry Points** section.
4. Create a new entry point to expose the data fetched via the previously created query.

```
---------------------------- MAIN ENTRY POINTS ----------------------------
entityset MxFleetStatusQuerySet for MxFleetStatusQuery;
```

4

Create a client model with IFS Developer Studio

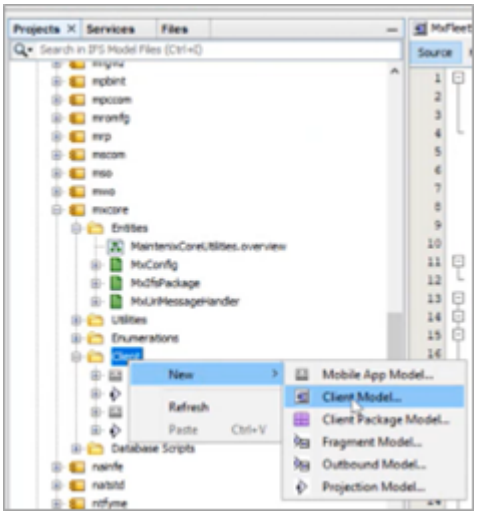
This section provides a stepwise guide on how to create a client page using IFS Developer Studio, and connect same with the projection model.

The client model specifies the visual UI elements, their layout and bindings to data, and the operations exposed by the projection.

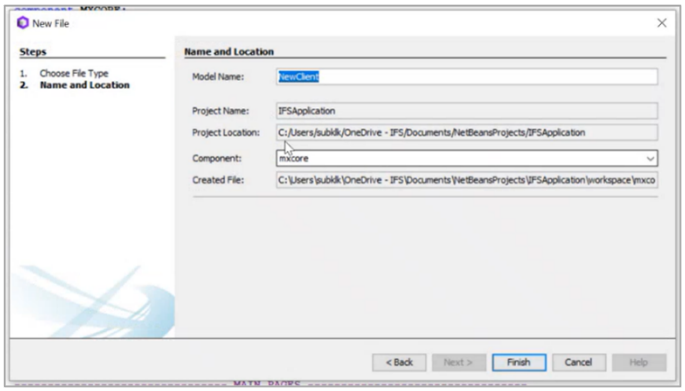
Top level Containers	Page, Assistant, Navigator
Visual elements placed inside Containers	Group, List, Selector, Command, Dialog

4.1 Create a client Model

1. Navigate to the **Projects** tab on the IFS Developer Studio navigation panel.
2. Scroll down the list and navigate to **mxcore>Client** project component.
3. Right-click **Client.**
4. On the menu, select **New>Client Model**. This will open a pop up to create a new client model.



5. Provide a **Client Name** for the client model (E.g.: MxFleetStatus).



6. Click **Finish** to create the client model.

4.2Create a list view under the client model

1. Move down the created ***.client** to locate the **Lists** section.
2. Create a list as indicated below, to link the data from the projection model to the client model (this draws data from the projection model query created in the previous step).
   - Declare the list in the following format:

```
list <ListName> for <QuerySpecifiedUnderTheProjection> {
}
```

   - Specify the **fields** of the list as per the **attributes** of the projection model query.
   - Define **labels** under each listed field. Labels indicate the column names that will be displayed on the IFS Cloud client page.

```
---------------------------------- LISTS ----------------------------------
list FleetStatusList for MxFleetStatusQuery {
   label = "Fleet Status";

   field AcSdesc {
      label = "Aircraft";
   }
   field AcRegistrationCd {
      label = "Tail Number";
   }
   field AcSerialNumber {
      label = "Serial Number";
   }
   field AcFinNumber {
      label = "FIN Number";
   }
   field CurrUsageFlightHours {
      label = "Flight Hours";
   }
   field CurrUsageCycles {
      label = "Cycles";
   }
   field AcOperatingStatus {
      label = "Operating Status";
   }
   field AcRegBodyCd {
      label = "Regulatory Body";
   }
   field AcLocactionCd {
      label = "Location";
   }
   field WpSdesc {
      label = "Next Work Package";
   }
   field WpStartDt {
      label = "Work Package Start Date";
      displaytimezones = UtcTimeZoneCode;
   }
   field WpEndDt {
      label = "Work Package End Date";
      displaytimezones = UtcTimeZoneCode;
   }
   field WpTurnAroundTimeDt {
      label = "Turn Around Time ";
   }
   field WpLocationCd {
      label = "Work Package Location";
   }
   command NavigateToMaintenix;
}
```

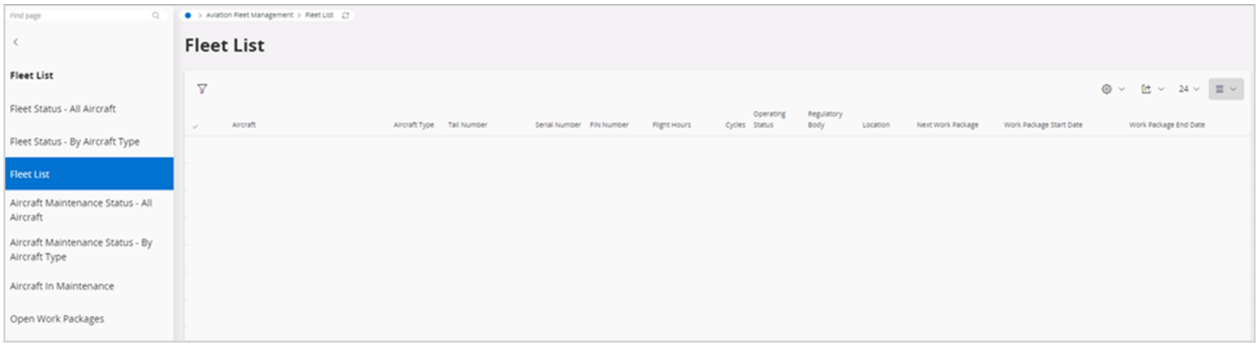
4.3Connect client model list to navigator entry

Note Creating a navigator entry/linking the lobby page to the navigator menu can also be done via the IFS Cloud UI. Refer the *Link lobby page to navigator menu* section.

1. On the ***.client** page, move down to locate the **Main Pages** section.

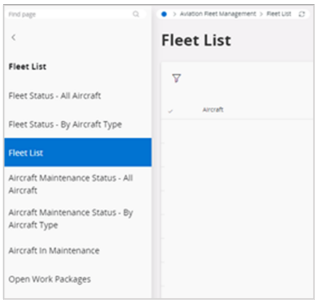
2. Create a page entry as indicated below to call the projection model query and the client model list view into action.

```
------------------------------ MAIN PAGES --------------------------------
page FleetStatusPage using MxFleetStatusQuerySet {
   label = "Fleet List";
   list FleetStatusList;
}
```

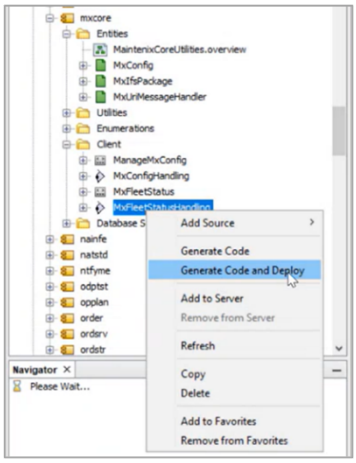


3. On the same *.client page, move up to locate the **Navigator Entries** section.
4. Create the navigator entry as indicated below, to link the data from the client page to the navigation panel on the IFS Cloud UI.

```
---------------------------- NAVIGATOR ENTRIES ----------------------------
navigator {
   entry MxFleetListNavEntry parent MxCoreLobbyNavigator.MxFleetManagementNavEntry at index 300 {
      label = "Fleet List";
      page FleetStatusPage;
   }
}
```



5. Upon completion of the above, right-click the client model, and the projection model from the Developer Studio navigation tab and select **Generate Code and Deploy**.



5

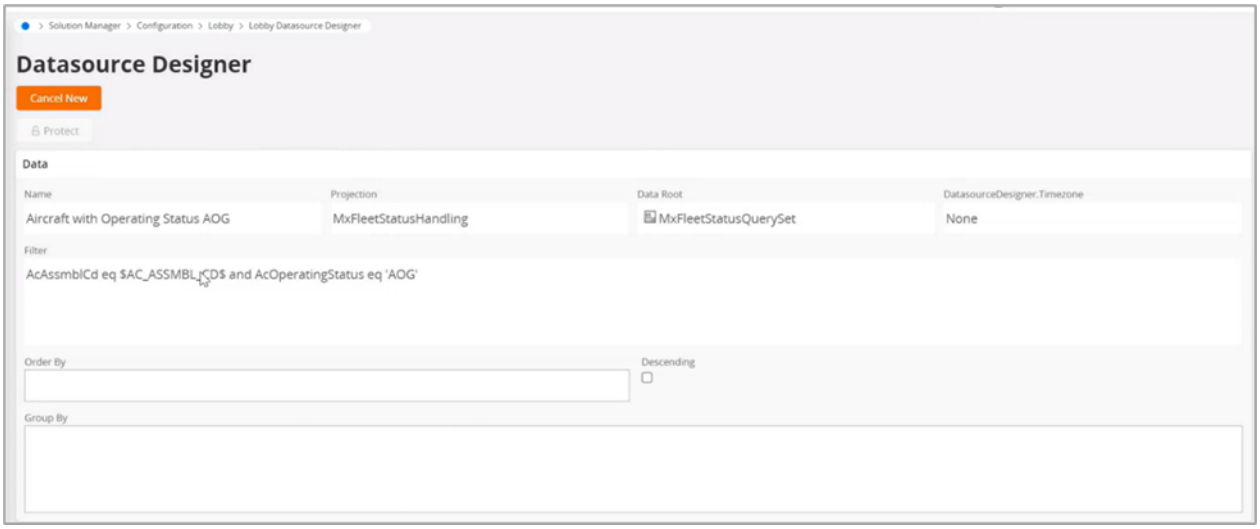
Create a lobby page on IFS Cloud

This section provides a stepwise guide on how to create a lobby page using the projection.

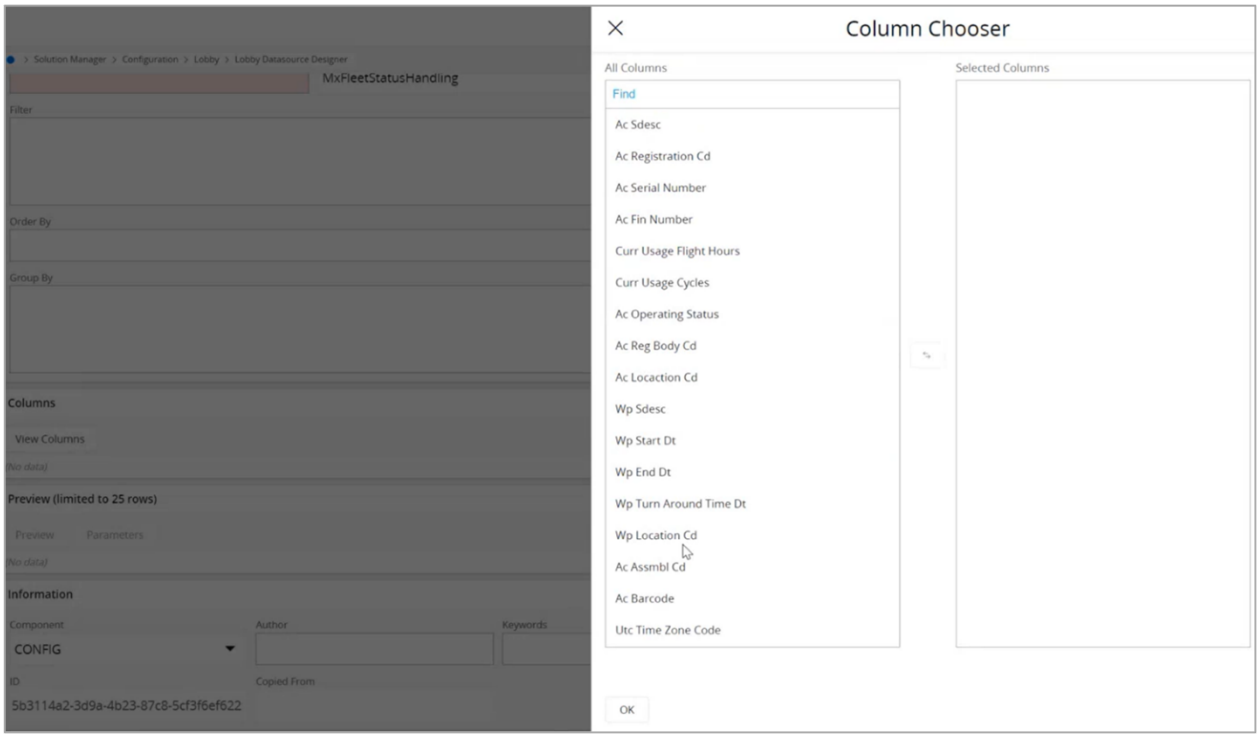
5.1 Create a data source for the lobby page

1. Log in to the IFS Cloud platform.
2. Navigate to **Solution Manager>Configuration>Lobby>Lobbies>Lobby Datasource Designer** view.
3. Click **+** and select **Projection** from the menu.

4. Fill the mandatory fields:
   - **Name:** Provide a name for the data source.
   - **Projection:** Expand the drop down menu and select the previously created projection from the list.
   - **Data Root:** Expand the drop down menu and select the previously created entity set from the list.
   - **Filter:** List the filter conditions by which the lobby data should be filtered for display and their respective parameters. Filter conditions should be defined in the OData syntax.

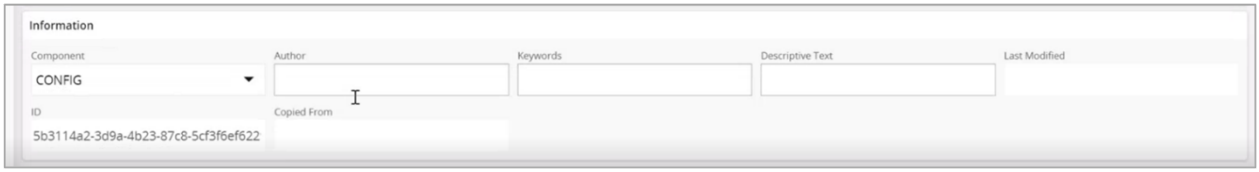


5. Move down to the **Columns** section and click **View Columns.**
6. Select the columns required to create the data source for the element and click the **swap** button to move same from **All Columns** to **Selected Columns.**
   - Columns selected to be displayed must meet the following requirements:
     a. A column that has a unique value per row must be listed first. The unique value will affect the value that will later be displayed on lobby elements.
     b. Column(s) must have values that will drive page parameters.



7. Click **OK.**

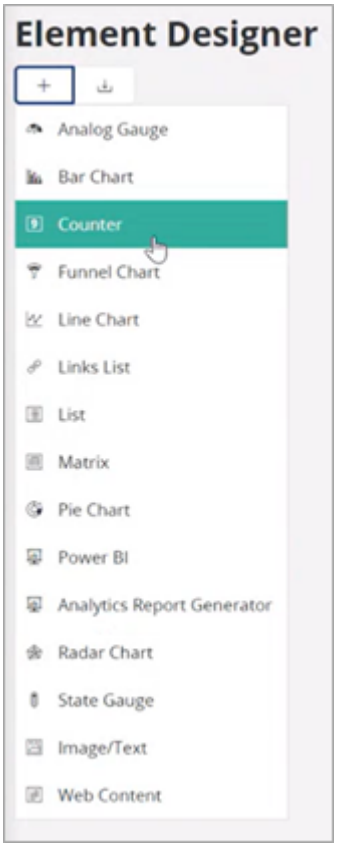
8. Move down to the **Information** section and set up the **Component** details from the drop down menu (In this example, the Component selected should be **mxcore** as per the project component from the Developer Studio).



9. Click **Save** to create the data source.

5.2Design elements of the lobby page

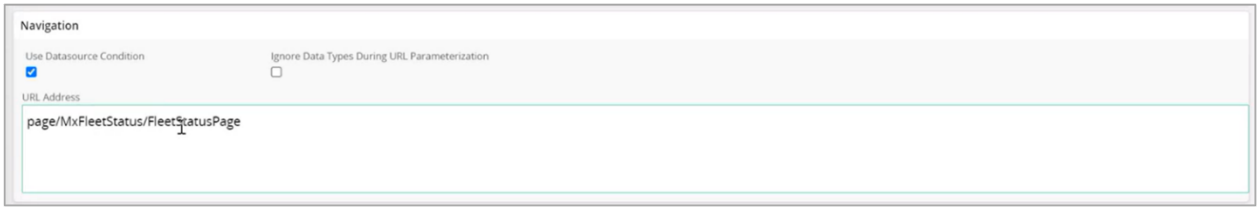
1. Navigate to **Solution Manager>Configuration>Lobby>Lobby Element Designer** view.
2. Click **+** and select the required element type from the menu (E.g.: Counter).



3. Set the element layout as required.

4. Move down to the **Data** section and fill the data fields:
   - **Datasource:** Expand the drop down menu and select the previously created data source from the list.
   - **Column:** Expand the drop down menu and select the data source column to be used for populating the element on the lobby page.
   - **Aggregate:** Expand the drop down menu and select the aggregate format in which data should be displayed on the element.
   - **Refresh Interval:** Set the refresh interval in seconds as required.

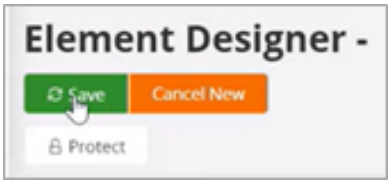
5. Move down to the **Navigation** section.
6. Under **URL Address**, link the page to which the element should redirect to when clicked.



7. Mark the **Use Datasource Condition** check box to apply the same page parameters that were used when designing the data source for the client page.

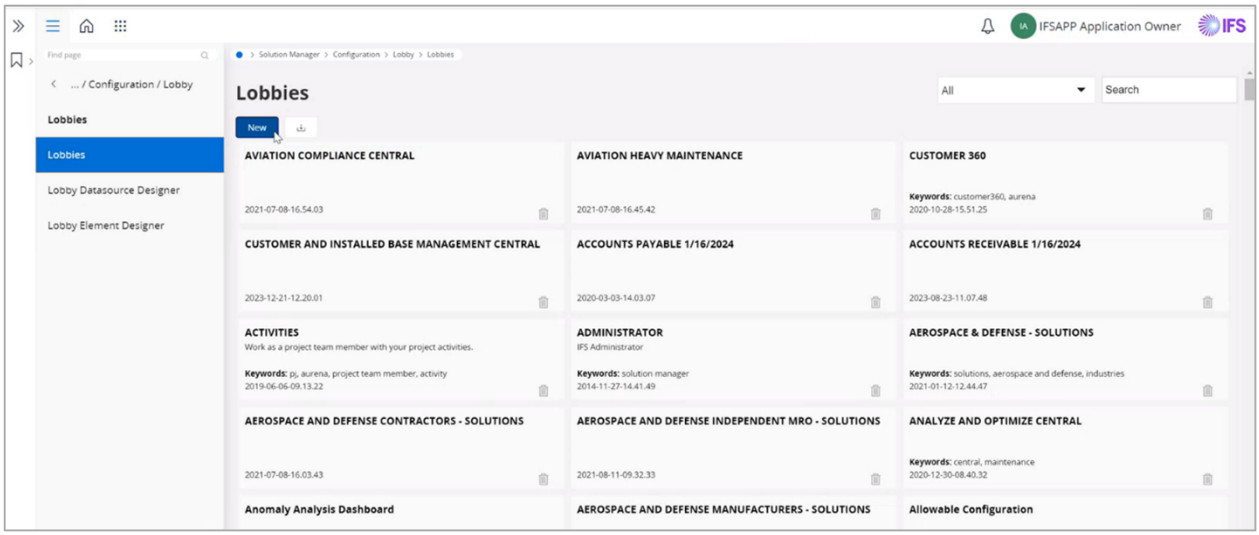
> **Note** If the **Use Datasource Condition** option is not used, the filter conditions specified under *Create a data source for the lobby page* must be redefined using the OData syntax.

8. Use the **Preview** option to preview the designed element before saving changes.
9. Click **Save** to create the element.

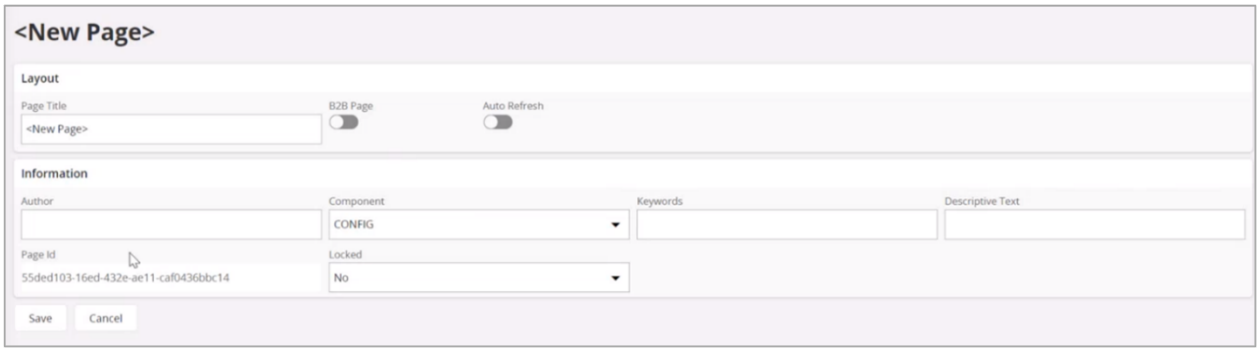


5.3Create and link lobby page to data source and elements

1. Navigate to **Solution Manager>Configuration>Lobby>Lobbies** view.
2. Click **New** to create a new lobby page.



3. Provide a page title for the new lobby page.
4. Use the **Auto Refresh** toggle to set a desired refresh time gap for the page data.
5. Move down to the **Information** section and set up the **Component** details from the drop down menu (In this example, the Component selected should be **mxcore** as per the project component from the Developer Studio).



6. Click **Save** to create the lobby page.

6

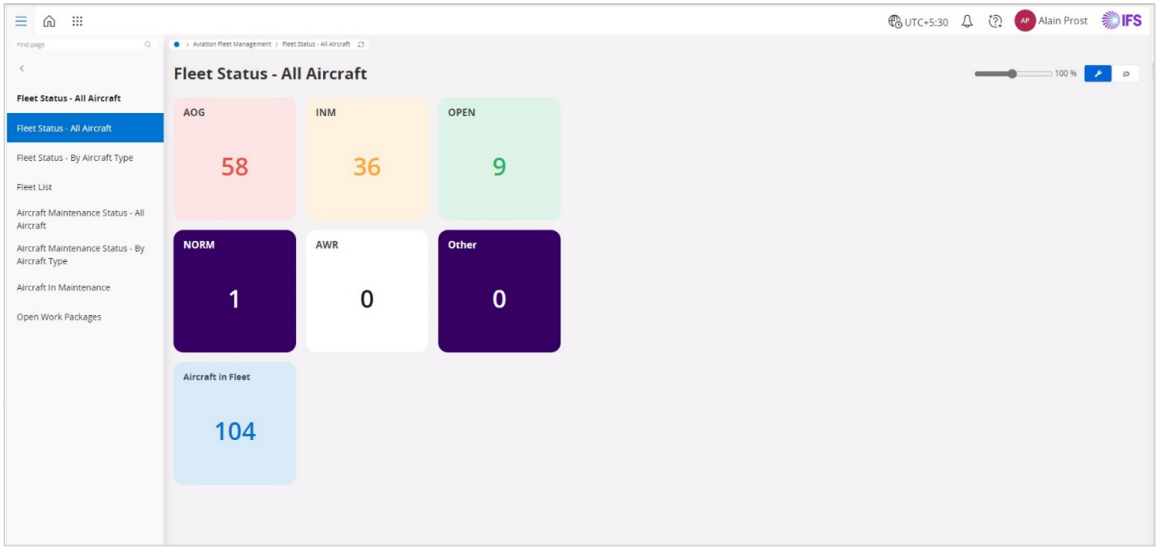
Customize the configured lobby page from IFS Cloud UI

This section provides a stepwise guide on how to duplicate and customize a lobby page.

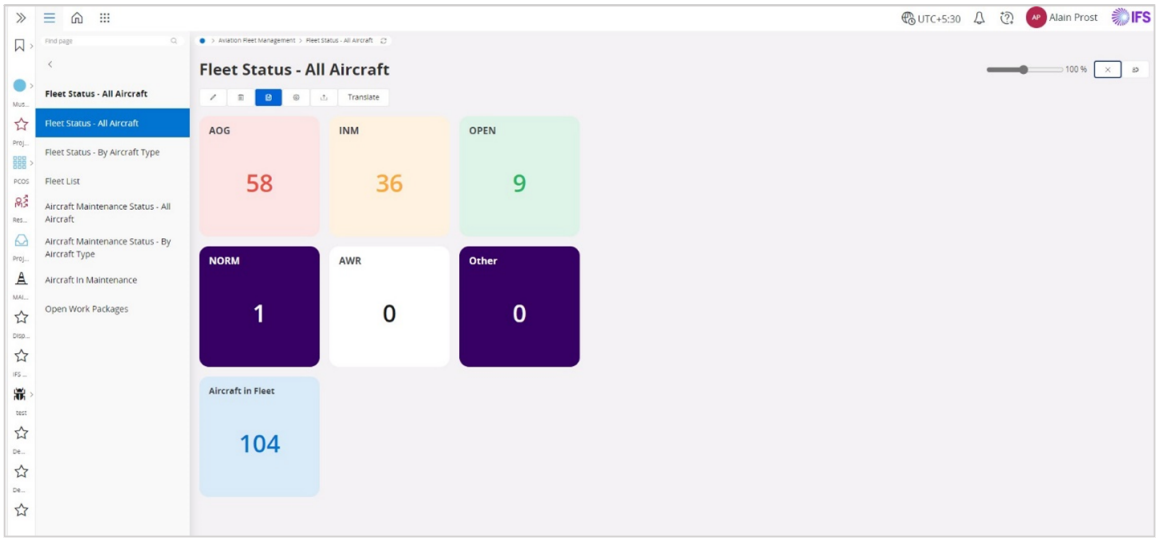
Note It is recommended to create a duplicate of the lobby page prior to customizing a lobby page, as any changes made may be lost when application updates are deployed by the admin.

6.1 Duplicate a lobby page

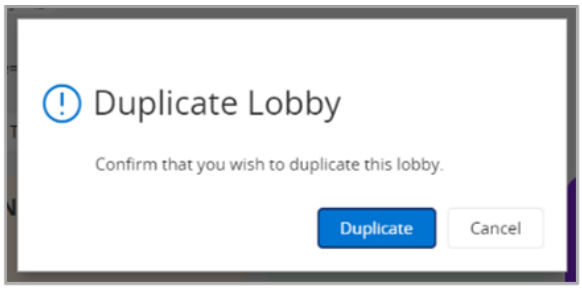
1. Navigate to the created lobby page.
2. Click the indicated **Configure** button to reconfigure the lobby page.

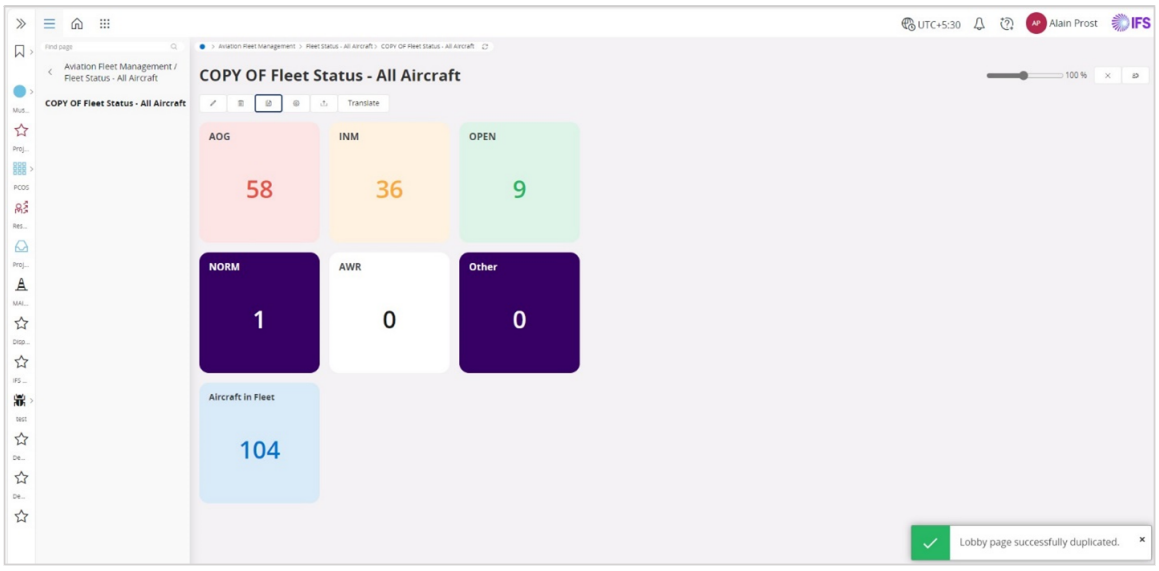


3. Click the indicated **Duplicate** button to duplicate the lobby page.



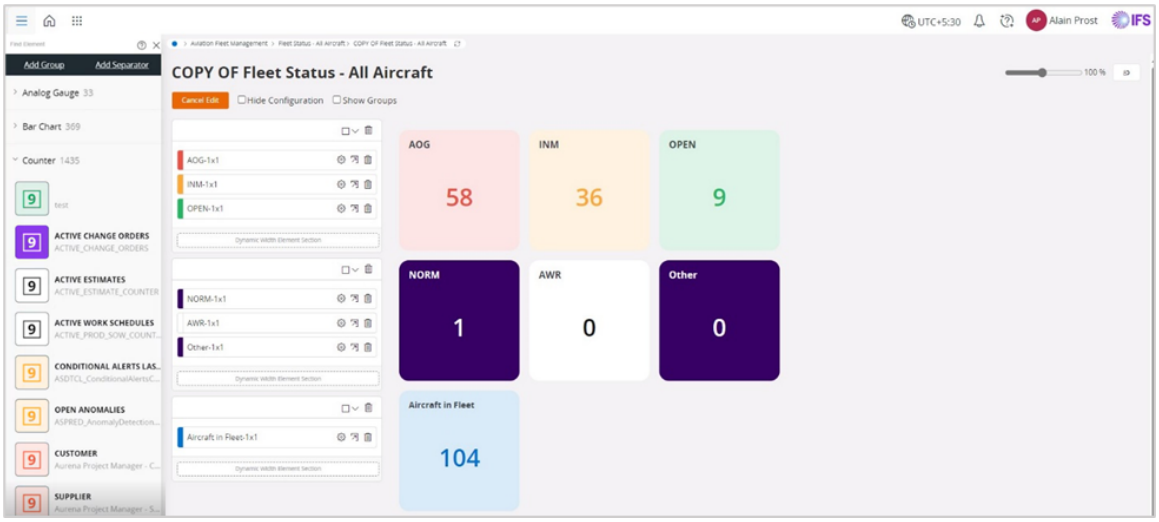
4. On the prompt that follows, click **Duplicate** to confirm duplication of the lobby page. This redirects to the duplicated lobby page





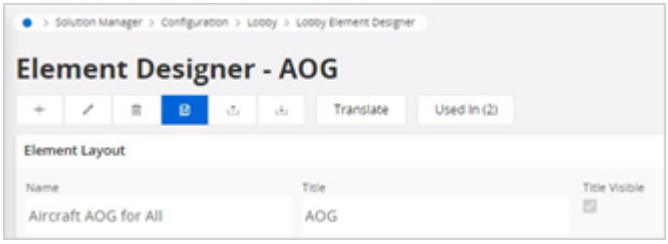
6.2Customize the duplicated lobby page

1. Navigate to the duplicated lobby page.
2. Click the **Configure** button to reconfigure the lobby page.
3. Click on the **Pencil** icon to start editing the lobby page view.

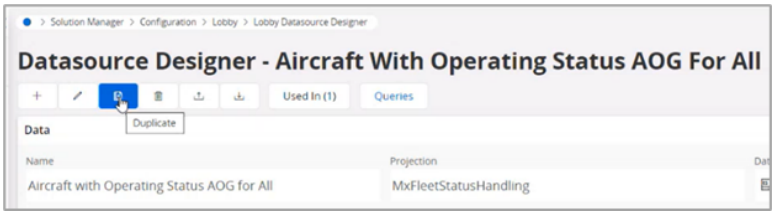


> **Note** If the elements and related data sources on the duplicated lobby page require modifications (i.e. not used as-is), it is recommended that the same are duplicated prior to modification. Any modifications made to non-duplicated elements and data sources will automatically be applied to the original lobby pages.

4. Duplicate the lobby page elements and their respective data sources as required.
   - To duplicate an element:



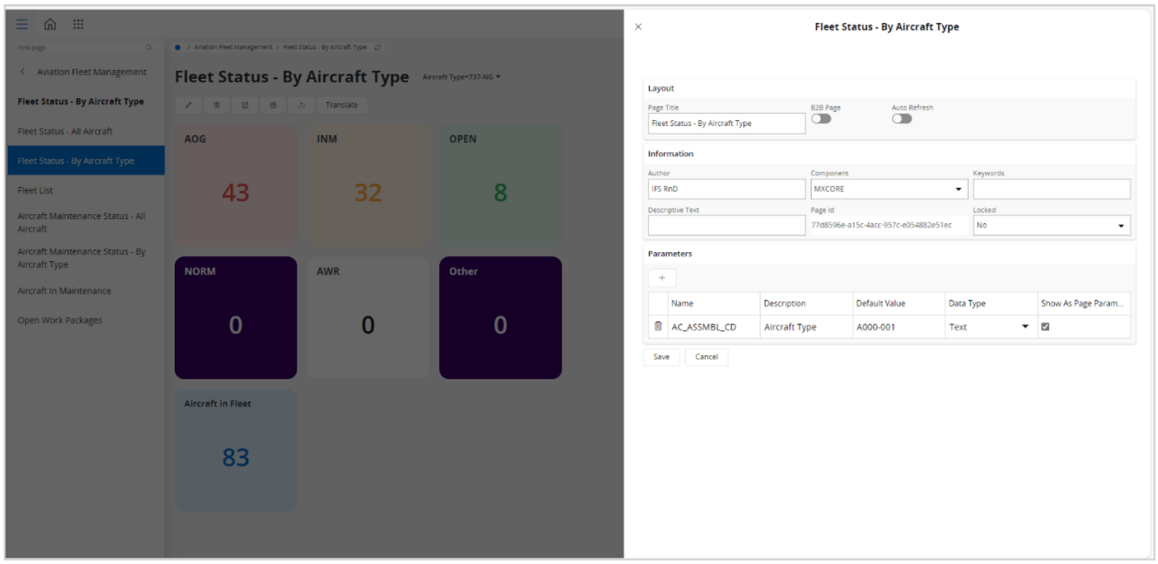
   - To duplicate a data source:



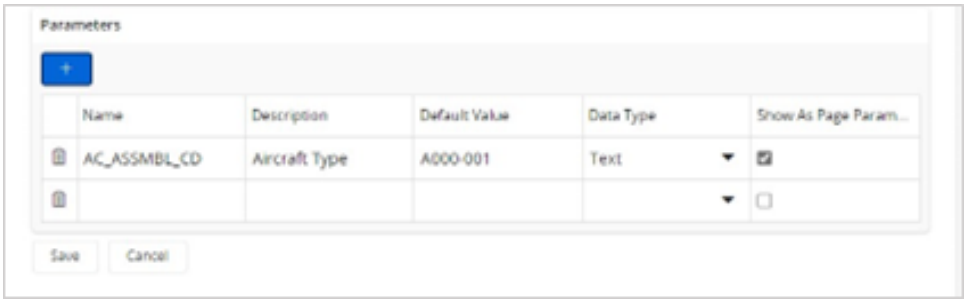
5. Add the duplicated and modified elements and data sources back into the duplicated lobby page (Refer *Create a lobby page on IFS Cloud*).
6. Make any other required changes to the duplicated lobby page view and click **Save** to save the changes made.

6.3Add page parameters to the lobby page

1. Navigate to the created lobby page.
2. Click the **Configure** button to reconfigure the lobby page.
3. Click the **Settings** button to navigate to the page properties view.



4. Move down to the **Parameters** view and click **+** to add parameters.



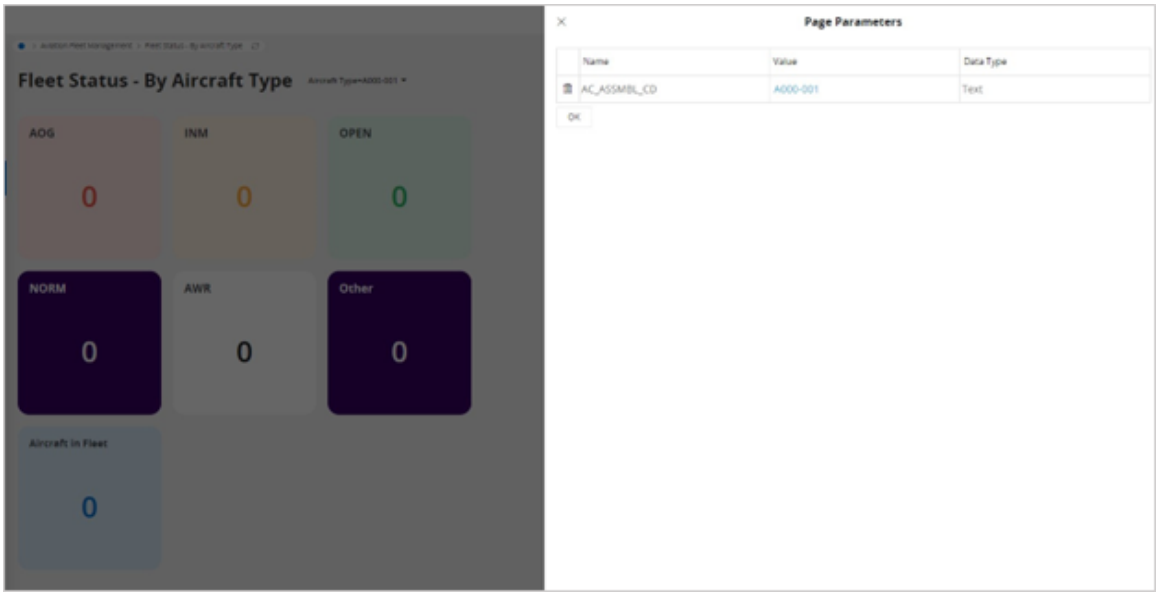
5. Fill the required details:
   - **Name:** Add the pre-defined parameter.
   - **Description:** Provide a name for the parameter.
   - **Default Value:** Add a default value for the parameter.
   - **Data Type:** Expand the drop down menu to select the required data type.

- **Show as Page Parameter:** Mark the check box to display the parameter as the default page parameter.

6. Click **Save** to save the changes made.

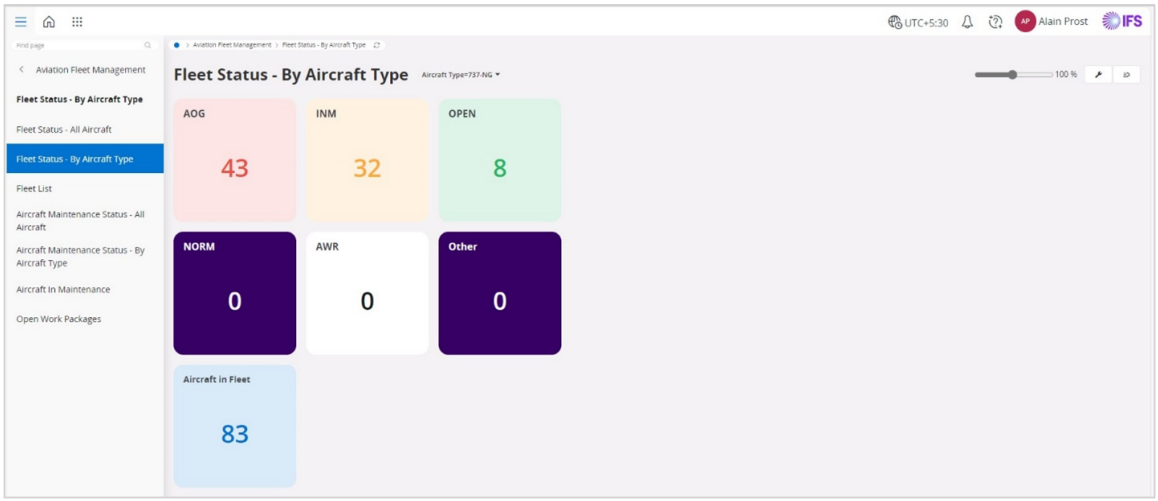
6.4Change lobby page parameter value and view details

1. On the lobby page, click on the **Aircraft Type** drop down to open the **Page Parameters** view (In this example, the lobby page has been configured to use *AC_ASSMBL_CD - Aircraft Type* as its default page parameter. Refer *Add page parameters to the lobby page* for steps).

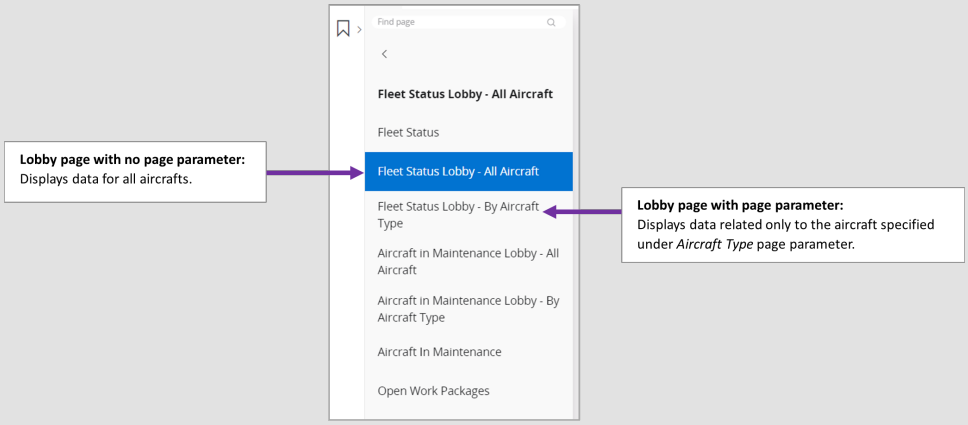


2. Update the value against the parameter indicated.

3. Click **OK** to set the page parameter value and to update lobby element values accordingly.
4. Click an element tile to navigate to its pre-configured redirected view.

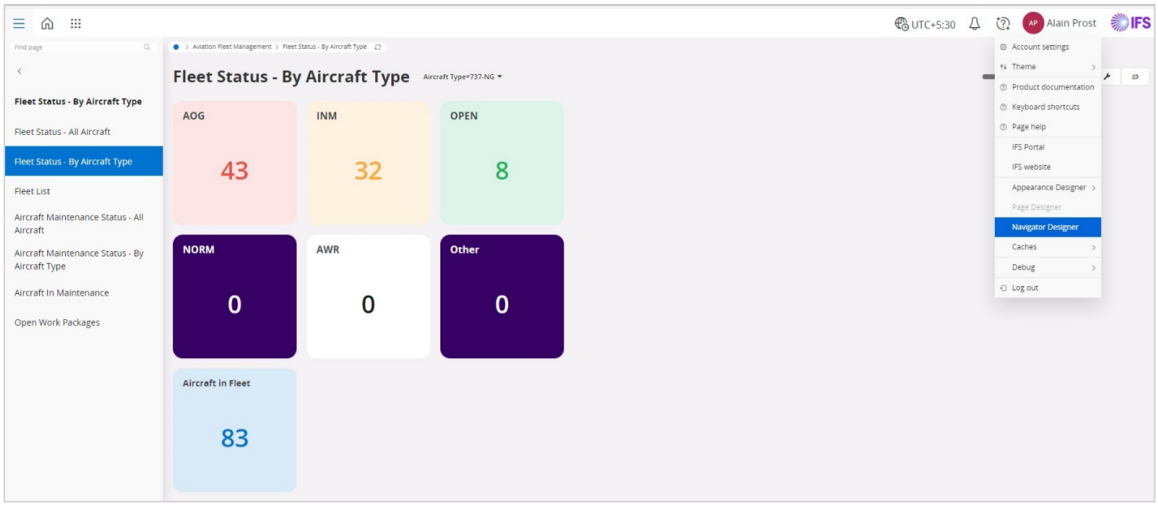


Note To view lobby page data values with no page parameter filter, navigate to same on the navigation panel as indicated below:

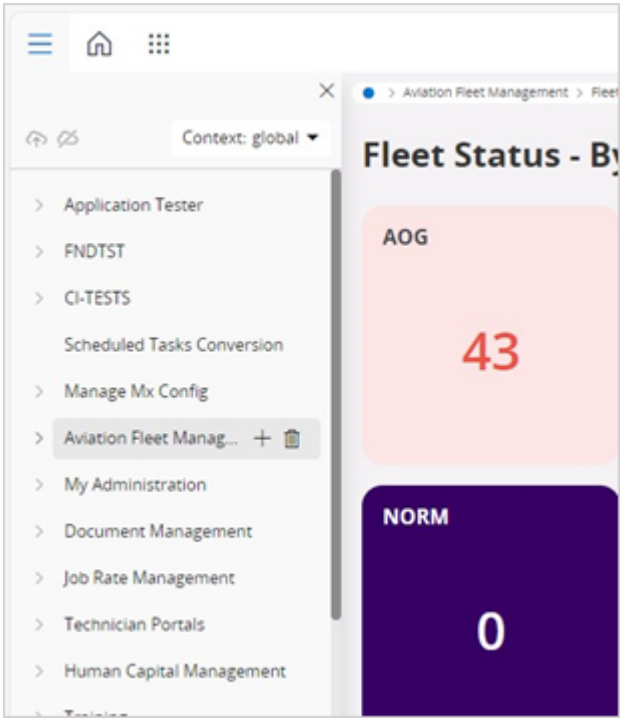


6.5Link lobby page to navigator menu

1. On the IFS Cloud UI, click on the **user account** icon.
2. On the menu, click **Navigator Designer** to open the navigator settings view.

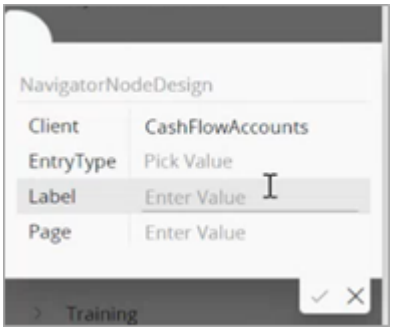


3. From the list, select the menu location to which the lobby page should be connected and click **+** to open the **Navigator Node Design** view.



4. Fill the details required to link the lobby page.

   - **Client:** This indicates the connection node selected for the lobby page.
   - **Entry Type:** Expand the drop down menu and select entry type value as **Lobby.**
   - **Label:** Add the lobby page title as the label.
   - **Page:** Enter the page ID of the lobby page. This can be acquired from the lobby page details view under settings or from the lobby page URL.



5. Click the **check mark** to save the changes made to the navigator menu.

7

References

This section provides a list of references for further reading related to various aspects of the custom lobby creation process.

- *Technical Documentation for IFS Cloud - Lobby Configuration*
- *Technical Documentation For IFS Cloud - Element Designer*
- *How to develop and IFS Cloud Web Client page – Getting Started*
- *Create a simple IFS Cloud Web Client page*
- *IFS Cloud Web Component Reference - Projection Controls*
- *Basic Tutorial · OData - the Best Way to REST*

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