

Benefits of CAFM

- CAFM systems put Operations & Maintenance Manuals (O&Ms), Asset Registers and commissioning schedules all in one place

Level 2 BIM is not just about 3D coordination, in response to the UK Government 2025 Construction Strategy, Level 2 also involves consideration of both Capital Expenditure (**CAPEX**) and Operational Expenditure (**OPEX**). Sustainability and reducing carbon emissions are also a critical aspect of the strategy. This includes operation, energy management, **lifecycle** and **Facilities Management (FM)**.

BIM drives a more effective solution to collating the Operations & Maintenance Manuals (O&Ms), generating Asset Registers, create commissioning schedules, populating **data** for incorporating in to **Computer Aided Facilities Management (CAFM) systems** etc. However, this will only work with a **collaborative approach** driven through **Government Soft Landings (GSL)**, where these issues, resources, costs and time are **shared** across the team, including the **Client and FM**.

Computer Aided Facilities Management (CAFM)

This includes software and systems that enable:

- Space and facilities management,
- Asset management
- Task management
- Planned and preventative maintenance
- Efficiently execute reactive maintenance
- Standardise services and streamline processes
- Improve long-term planning of service requirements against budgets to ensure alignment with core business needs

Many existing CAFM systems have data requirements that are similar to Construction, Operation, Building information exchange (COBie), but are currently manually typed into the system if at all, with often minimal data added.

Example CAFM software

Asset Code	Description	Building	Location	System	Tag	Type	Name	Cost Centre	Health/Status	Sparepart Risk	Performance Risk	Lease Risk	Collaboration	Actual B.
MSFG001-5.6.7-31-01	Under Floor Heating	MSFG001-70	Teaching Block (School Building)	HS-003	HS-003-01	UnPublished			0	0	0	0	0	0
MSFG001-5.6.7-31-02	Class ventilation system	MSFG001-70	Teaching Block (School Building)	HS-003	HS-003-02	UnPublished			0	0	0	0	0	0
MSFG001-5.6.7-31-03	Hand driers	MSFG001-70	Teaching Block (School Building)	HS-003	HS-003-03	UnPublished			0	0	0	0	0	0
MSFG001-5.6.7-31-04	Control of Lighting	MSFG001-70	Teaching Block (School Building)	HS-003	HS-003-04	UnPublished			0	0	0	0	0	0
MSFG001-5.6.7-31-05	Control of Ventilation	MSFG001-70	Teaching Block (School Building)	HS-003	HS-003-05	UnPublished			0	0	0	0	0	0
MSFG001-5.6.7-31-06	Emergency Lighting	MSFG001-70	Teaching Block (School Building)	HS-003	HS-003-06	UnPublished			0	0	0	0	0	0
MSFG001-5.6.7-31-07	Intercom/Door	MSFG001-70	Teaching Block (School Building)	HS-003	HS-003-07	UnPublished			0	0	0	0	0	0
MSFG001-5.6.7-31-08	Door intercom	MSFG001-70	Teaching Block (School Building)	HS-003	HS-003-08	UnPublished			0	0	0	0	0	0
MSFG001-5.6.7-31-09	Access	MSFG001-70	Teaching Block (School Building)	HS-003	HS-003-09	UnPublished			0	0	0	0	0	0
MSFG001-5.6.7-31-10	Reception	MSFG001-70	Teaching Block (School Building)	HS-003	HS-003-10	UnPublished			0	0	0	0	0	0
MSFG001-5.6.7-31-11	Hand sanitiser	MSFG001-70	Teaching Block (School Building)	HS-003	HS-003-11	UnPublished			0	0	0	0	0	0
MSFG001-5.6.7-31-12	Control of Heating	MSFG001-70	Teaching Block (School Building)	HS-003	HS-003-12	UnPublished			0	0	0	0	0	0
MSFG001-5.6.7-31-13	Control of Ventilation	MSFG001-70	Teaching Block (School Building)	HS-003	HS-003-13	UnPublished			0	0	0	0	0	0
MSFG001-5.6.7-31-14	Control of Lighting	MSFG001-70	Teaching Block (School Building)	HS-003	HS-003-14	UnPublished			0	0	0	0	0	0
MSFG001-5.6.7-31-15	Control of Ventilation	MSFG001-70	Teaching Block (School Building)	HS-003	HS-003-15	UnPublished			0	0	0	0	0	0
MSFG001-5.6.7-31-16	Control of Lighting	MSFG001-70	Teaching Block (School Building)	HS-003	HS-003-16	UnPublished			0	0	0	0	0	0
MSFG001-5.6.7-31-17	Control of Ventilation	MSFG001-70	Teaching Block (School Building)	HS-003	HS-003-17	UnPublished			0	0	0	0	0	0
MSFG001-5.6.7-31-18	Control of Lighting	MSFG001-70	Teaching Block (School Building)	HS-003	HS-003-18	UnPublished			0	0	0	0	0	0
MSFG001-5.6.7-31-19	Control of Ventilation	MSFG001-70	Teaching Block (School Building)	HS-003	HS-003-19	UnPublished			0	0	0	0	0	0
MSFG001-5.6.7-31-20	Control of Lighting	MSFG001-70	Teaching Block (School Building)	HS-003	HS-003-20	UnPublished			0	0	0	0	0	0

MSFG001-5.6.7-31 - AC unit - Mitsubishi Status: ACTIVE - Active

Asset

Asset Code: MSFG001-5.6.7-31 Group: AC01

Service Details: SYS-05.6 - SERVICES: SPACE HEATING & AIR CONDIT... Tag: Cen AC - 5.6.7 Central Air Conditioning

Contacts Assigned: PPH: No selection Name: No selection

Asset Responsibility: Description: AC unit - Mitsubishi Parent Asset: MSFG001-5.6.7-00 - Air Conditioners - PPH Group

Product Code: Serial No.:

Manufacturer: Model: PLFY-F100V/APH-A

Barcode: Drawing #:

Qty: 1.00 Supplier: No selection

Cost Centre: No selection Asset Status: Active

Location: Site: Mulberry School for Girls Building: MSFG001-01 - Mulberry School for Girls Location: G-005 - E10

Notes:

Benefits of complete CAFM data

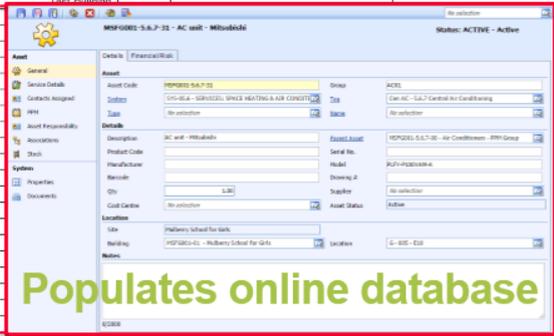
- Every maintainable asset listed, per space, per building of each type and instance
- All Product information fed into the CAFM system, including any specified performance data

Results in

- Full Lifecycle capability
- Knowledge of specific equipment per room for replacements
- Avoidance of additional site visits to ascertain equipment required
- Spares management
- Barcode tagging per asset for tracking and management
- Ability to schedule planned preventative maintenance

COBie Data

COBie	FSI							
Information Type	Tab	Field	Tab	Equivalent Field	Input Type	Max length	Example Input/Guidance	Notes
Spatial	Facility	Name	Sites	Site Name	Text	30	Test Site 1	
		ProjectName	Buildings	Building Code	Text	20	TB1	
		SiteName		Building Name	Text	40		
		SiteDescription		Building Address	Text	100		
Asset	Floor	Name	Locations	Floor	Text	5		
		Description		Location Description	Text	50		
	Space	Name		Room Number	Text	20		
		Description		Asset Code	Text	20		
	Type	Name	Assets	Asset Description	Text	50		
		Description		Manufacturer Name	Text	20		
		Manufacturer		Model Type	Text	20		
		ModeNumber		Supplier Name	Text	50		
	WarrantyGuarantorParts	Suppliers	Supplier Name	Text	50			
		Assets	Warranty Expiry Date	Date (d/mm/yyyy)				
ExtSystem	Systems	System Description	Text	100				
	Tags	Tag Description	Text	100				
Component	Assets	Serial Number	Text	30				
		Warranty Expiry Date	Date (d/mm/yyyy)					
System	Systems	Warranty Start Date	Date (d/mm/yyyy)					
		Name	System Code	Text	5			
O&M Information	Job	Name	PPM_Instructions	System Description	Text	100		
		Description		Instruction Description	Text	100		
	Duration		Instruction Text	Text	1000			
	Frequency	PPM_Tasks	Estimated Time (in Minutes)	Numeric			120	
	FrequencyUnit		Service Frequency	drop down			WEEKLY/MONTHLY/YEARLY	
	Impact		Period Units	drop down			1-52	
		Value	Estimated Stock Cost	Numeric			20.00	



COBie

CAFM Data

Guidance