



Review of FMS software

Original review: 12/9/2021

Final review before User Acceptance: 3/23/2022

Login to FMS Home.

2. Campus Viewer

2a. Interface (pp 2-4) **Please navigate through that interface. Remember that there are tool tips on most areas of the interface that you can access by hovering your mouse.**

- Measuring tool is great
- Formerly InVision's Space Viewer.
- Can edit data on side bar. Cannot add or remove employees. This is OK as is; however, we cannot use this for Space Audits.

2b. Viewbys (p.5) **Please let us know what viewbys you would like to see on the datasets in the left information panel.**

- Viewbys are good – by department and current space use, with colorful legends that grey out unassignable space.
- **Can room numbers be seen through the color? The legend has to be set back to default to see the room numbers.**

2c. Data layer / data fields (pp 6-12) **Please click through each data layer by identifying on the map and let us know what data fields you want hidden and you want available in the interface.**

- Order is good – I understand that some modules rely on each other.

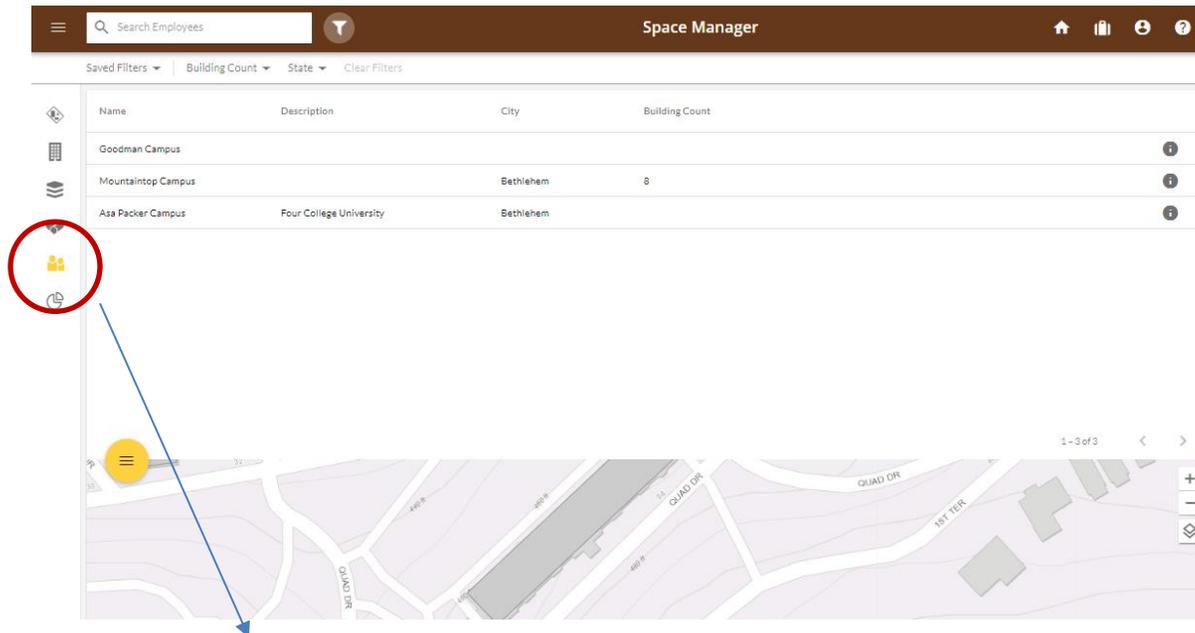
3. Space Manager

3b. KPI Cards (p.13) **Please make sure to click in the search box in the search and filter view to find data. Also, please click on the funnel (filter icon) and practice filtering your data and saving filters. You can also create KPI cards here.**

- New feature: can save useful filters and create useful KPI cards. Any additional filters added to this feature would be helpful.

3c. Data Fields / filterable fields (pp. 13-14) **Please look at the data fields and the filterable fields in the search and filter view and let us know what you don't want to see and fields that you think are missing.**

- Requested Data Fields at the Building Level - please add BuildingID & Building Full Name - this was done!



- **Filters at the Employee Level – this does not seem to work. Please check.**

3d. Detail view (General, Capacity, & Occupancy (pp 15 – 19) **For all of the entities on the left side of the interface, click on each and then double a record in the grid. This will take you to the details view. Please click through each tab (e.g. General, Capacity & Occupancy, etc.) and let us know what fields you would like to see and what you would like removed.**

- Should Description have something in it? (I think this is the former Comments field) – this was done!

3e. Detail view Reports (see 3e Reports, Comparison & Requirements (pp 26 – 35) **In the details view for spaces, floors, and buildings, please click on the actions menu (hamburger button) and then click on reports. Please run each report and let us know if these reports can replace your custom reports. Remember, we are looking to use out-of-the-box functionality where possible to make your upgrade process easier.**

FOR ALL REPORTS

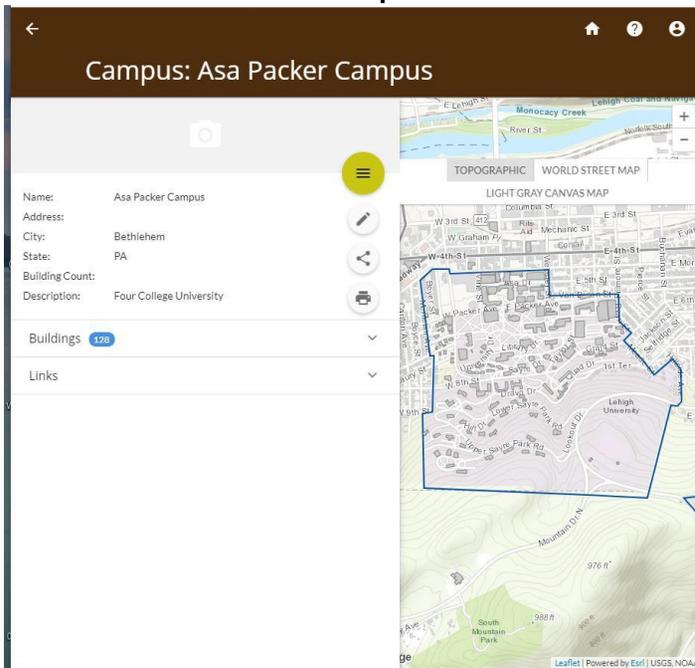
- For square foot numbers do not use decimal places.
- For percentages use 2 decimal spaces.
- Always use Space by Use (As-Used), **not** by type (As-Built). Space by Use is most important, as that is the current use and we only track data for the current use of the spaces. Space by type is only used to compare changes, and not

used often.

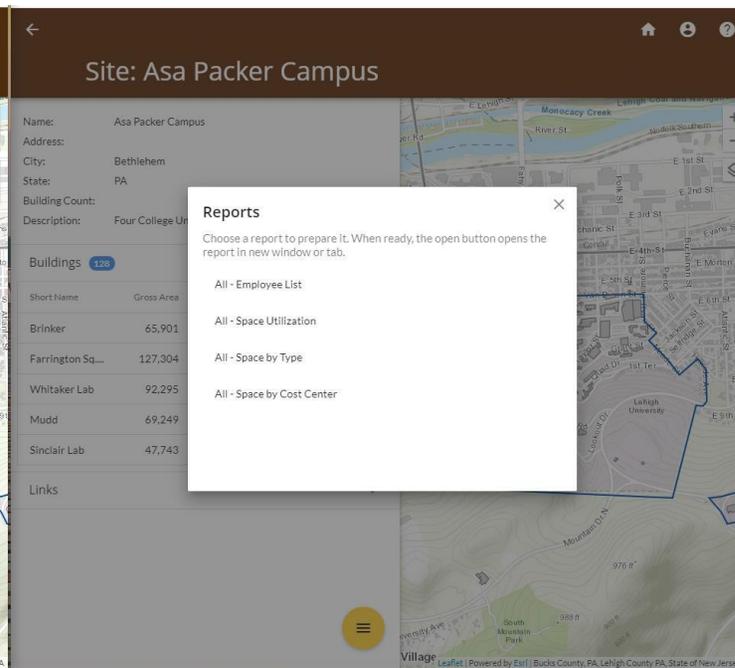
3e REPORTS COMPARISON & REQUIREMENTS (BELOW)

** Are Lehigh requirements

InVision Campus Level



FMS Site Level



InVision Campus Level No reports

FMS Site Level Reports

- **All-Employee List** ~ *InVision FM Employee Detail Report* (by building)

The screenshot shows the InVision FM Employee Detail Report interface. At the top left is the InVision FM logo. The title 'InVision FM Employee Detail Report' is at the top right, with the date '12/9/2021' below it. The main heading is 'All Buildings' with a sub-total 'Total Staff: 2,396'. On the left, a summary for 'Building Whitaker' shows 132 total staff, with 'Floor 01 Staff' having 41. Below this is a table of employee details:

Name	Email	Phone	Cost Center	Department	Shift	Room
Benscoter, Arlan O.	aob0					121C
Chan, Helen M.	hmc0					139
DuPont, John N.	jnd1					135
DuPont, John N.	jnd1					135A

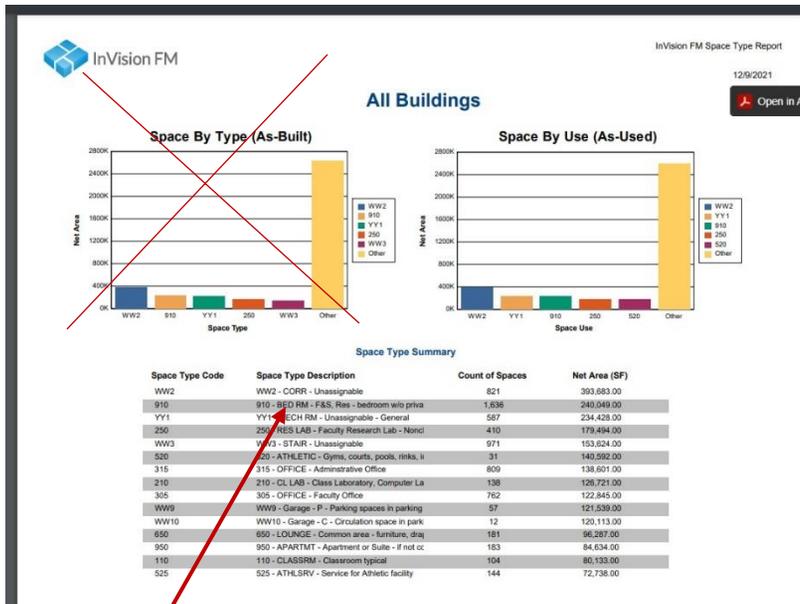
**** Do not need Phone, Cost Center, or Shift. Please add a column for current Room Use**

- **All-Space Utilization** ~ *InVision FM Space Utilization Report* (by building/by floor)

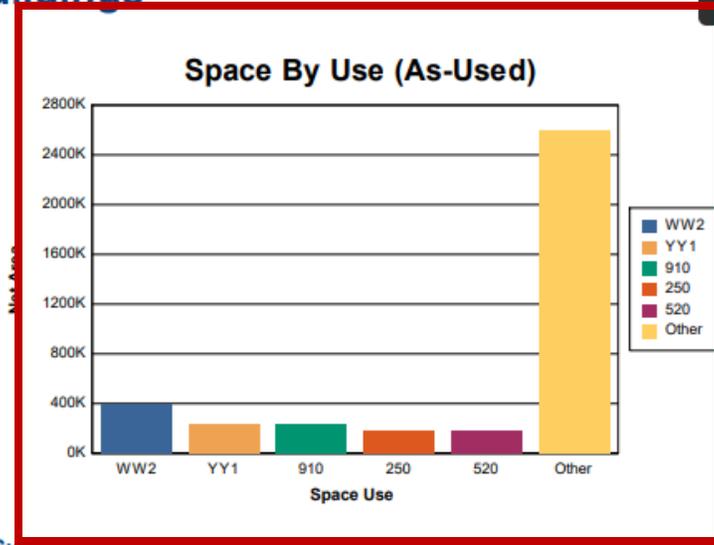
****No changes**

- All-Space by Type – ~ InVision FM Space Type Report (Use Code Summary; then, usable, assignable & GSF by floor.

12/9/2021



Buildings



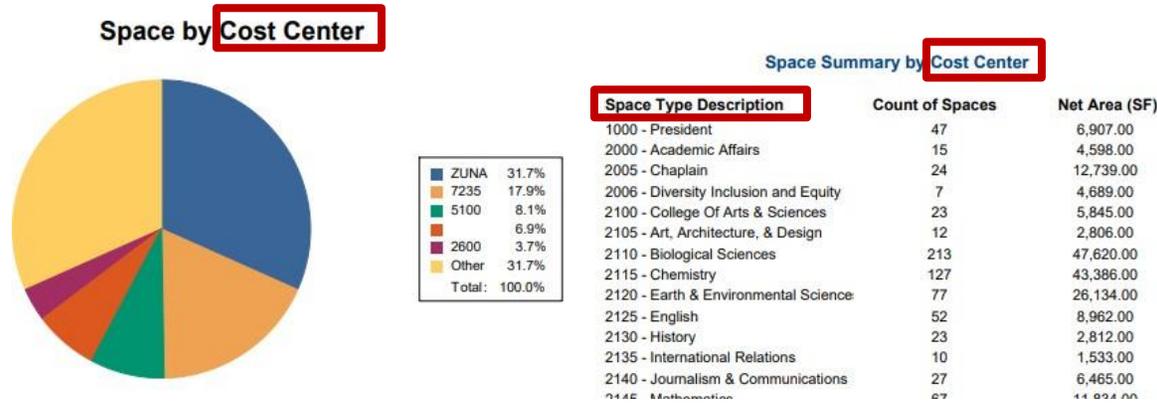
Summary

****Need "Space by Use", not by type.**

**** In graph, all space uses must be shown and sorted numerically. The other yellow column can be used for all unassignable spaces (ww, xx, yy).**

- All - Space by Cost Center

All Buildings



- ** Cost Center should be "Department"
- ** Space Type Description label should be "Department Code - Description"
- ** Graph should include ZCLM / ZUNA / ZVAC / ALL OTHERS (Classrooms / Unassignable / Vacant / All Others)

Building Whitaker

Floor 01	Cost Center:	Net Area (sf):	Total Spaces:
	CMRC - Ctr for Advanced Mat N	13,827.00	35
	ZUNA - Unassignable	5,331.00	14
	2425 - Materials Science & Engr	5,044.00	12
	ZCLM - Classroom	359.00	1
		54.00	1

- Cost Center Summary by Floor section – **Building uses short name, please use Full Name of Building

InVision Building Level

The screenshot shows the InVision Building Level interface. At the top, there is a search bar labeled 'Search Buildings' and a filter icon. Below this is a table with columns: Facility Name, Building ID, Short Name, and Full Name. The table lists several buildings, including 'Asa Packer Campus' with IDs 0001, 0002, 0005, etc. A 'Reports' dialog box is open in the center, containing a list of report options: Building Summary Report, Room Use by College and Dept, Assignable vs Unassignable, Room Inventory by Building, Room Inventory by College, Room Inventory by Department, Room Inventory by Faculty Assigned, and Room Inventory by Faculty Occupied. The background shows a map of the campus area.

FMS Building Level

The screenshot shows the FMS Building Level interface. At the top, there is a search bar labeled 'Search Buildings' and a filter icon. Below this is a table with columns: Facility Name, Short Name, Floor Count, Gross Area, Usable Area, and Occupancy Rate. The table lists buildings with metrics such as 'Asa Packer Cam...' with 7 floors, 65,901 gross area, and 0% occupancy. A 'Reports' dialog box is open in the center, containing a list of report options: Building - Space by Type, Building - Space by Cost Center, Building - Space Utilization, Building - Asset Inventory, and Building - Employee List. The background shows a map of the campus area.

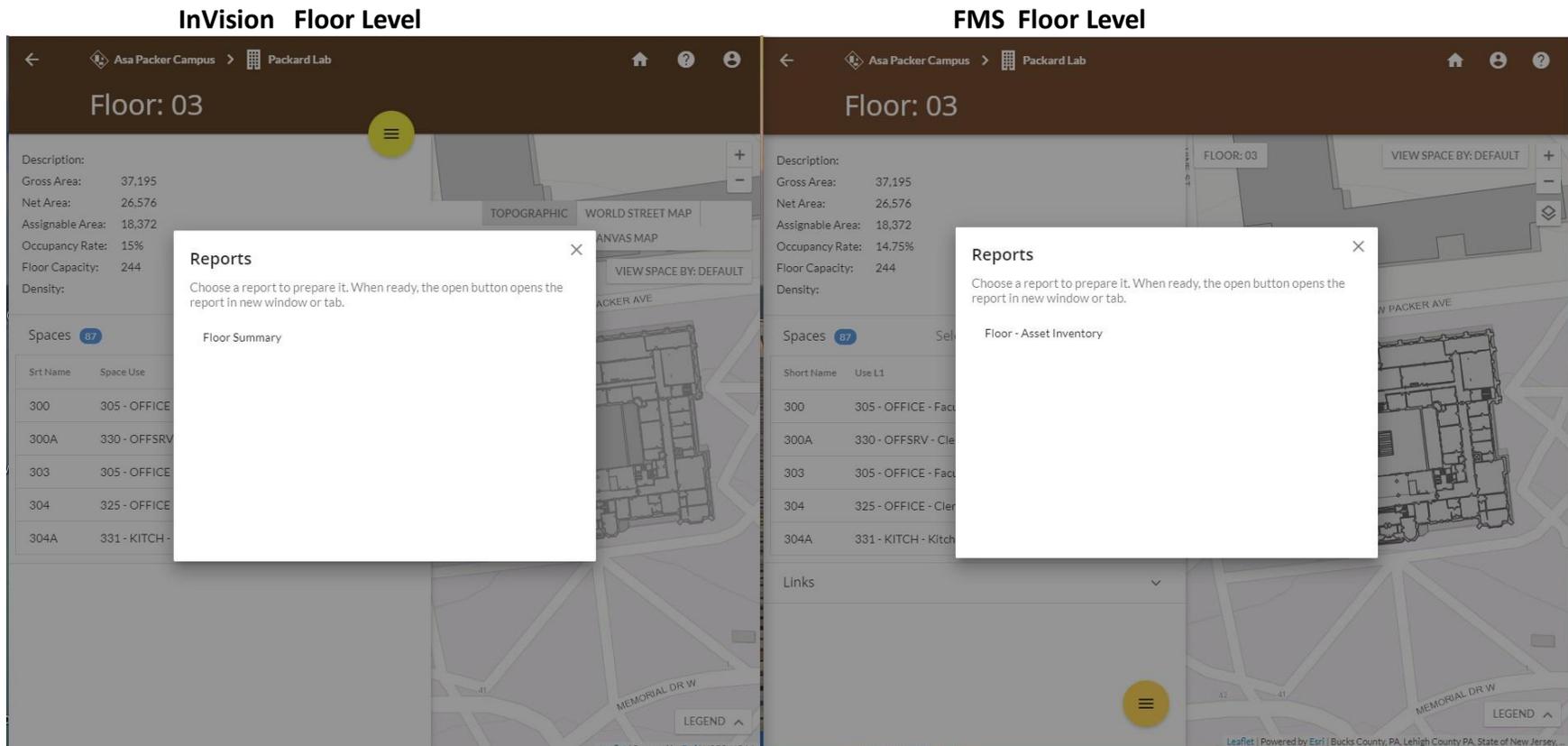
InVision - Building Level Reports

Report Name .pdf	Crystal Report .rpt
Building Summary Report	bBuildingNASFSummary
Room Use by College and Dept	bRoomUseSummaryByCollege
Assignable vs Unassignable	bAssignablesvsUnassignableRmlInv
Room Inventory by Building	bRoomInventorybyBuilding
Room Inventory by College	bRoomInventorybyCollege
Room Inventory by Department	bRoomInventorybyDept
Room Inventory by Faculty Assigned	bRoomInventorybyFacultyAssign
Room Inventory by Faculty Occupied	bRoomInventorybyFacultyOcc

FMS - Building Level Reports

- **Building – Space by Type** **Title of this report should be **Building - Space by Use** InVision FM Space Use Report
 - **Chart**
 - ** Only need Space by Use (As-Used), **not** by type (As-Built).
 - ** In graph, “Other” is important – all space uses should be shown in pie chart.
 - **Space Type Summary**
 - ** Need Space by Use (As-Used), **not** by type (As-Built).
 - ** Order Space Type Code numerically, then alphabetically.
 - ** Use Space Use Description not Space Type Description
 - **Space Classification Details**
 - ** Use full name of space
 - ** In Cost Center, use Department with Description. Only using the Code is not helpful.
 - ** Only use Space Use. Do not use Space Type.
- **Building – Space by Cost Center**
 - **Chart**
 - ** Label “Space Type Description” should be “Department”
 - ** Can all the departments be shown in the pie chart?
 - **Cost Center Summary By Floor**
 - * Use Full name of building.
- **Building – Space Utilization**
 - **Chart**
 - ** Widen Building Name field.
 - ** Show all the departments in the pie chart?
 - **Space Utilization Details**
 - ** Check what tables are being used for the calculations.
- **Building – Asset Inventory** not being used at the present by Lehigh
- **Building – Employee List**
 - **Report**
 - ** Use the full name of building.

- ** Order by full name of building.
- ** Do not need Phone / Shift.
- ** Cost Center?



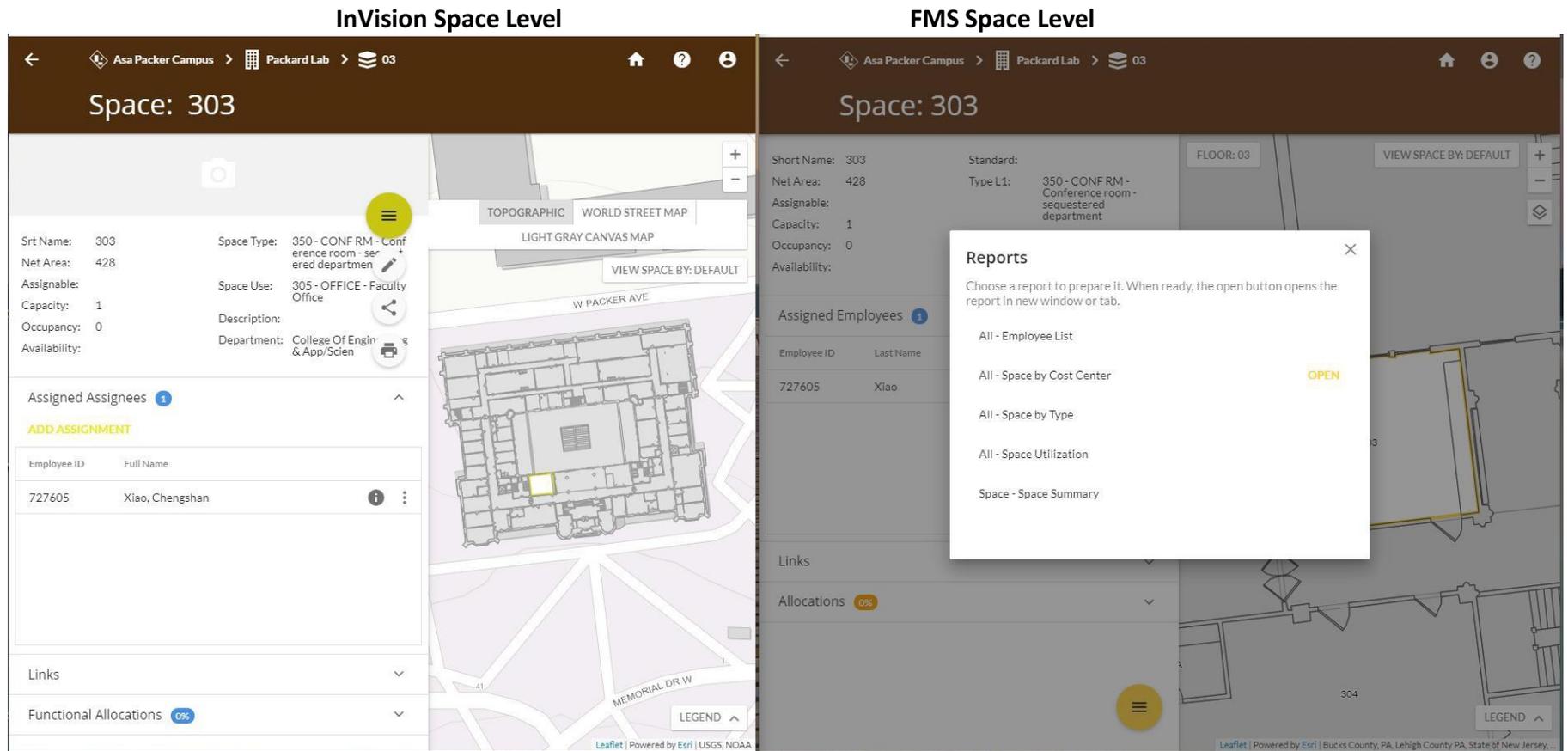
Vision - Floor Level Reports

Report Name .pdf	Crystal Report .rpt	
Floor Summary		

FMS - Building Level Reports

Report Name		
Floor – Asset Inventory		

- **Floor – Asset Inventory** not being used at the present by Lehigh



InVision Space Level No reports

FMS Space Level All these reports are the same as Site Level Reports

- **All-Employee List**
- **All-Space by Cost Center**
- **All-Space by Type**
- **All-Space Utilization**
- **Space-Space Summary – Report Failed**

InVision Administration Reports

InVision

ID *	Name
bAssignablesUnassignableRminv	Assignable vs Unassignable
bBuildingNASFSummary	Building Summary Report
bRoomInventoryByBuilding	Room Inventory by Building
bRoomInventoryByCollege	Room Inventory by College
bRoomInventoryByDept	Room Inventory by Department
bRoomInventoryByFacultyAssign	Room Inventory by Faculty Assigned
bRoomInventoryByFacultyOcc	Room Inventory by Faculty Occupied
bRoomUseSummaryByCollege	Room Use by College and Dept
fFloorSummary	Floor Summary
np_SA_ReviewStatus-Summary	SA_ReviewStatus-Summary
npBuildingAddressByName	Building Address List by Building Name
npBuildingAddressByNumber	Building Address List by Building Number
npBuildingAreaSummary	Building Area Summary
npBuildingAreaSummaryByCampus	Building Summary by Campus
npBuildingAreaSummaryByType	Building Summary by Type
npBuildingMasterSummary	Building Master Summary
npDeptBldgNASFSpaceSummaryByCollegeUnit	Department and Building NASF Space Summary by College
npDeptNASFSpaceSummary	Department NASF Space Summary
npDeptNASFSpaceSummaryByBuilding	Department and Building NASF Space Summary by Building
npResearchAreas	Research Areas
npRoomInventoryAllBldgs	Room Inventory all Bldgs
npRoomInventoryAllColleges	Room Inventory by College Unit
npRoomInventoryAllDepartments	Room Inventory all Departments
npRoomInventoryOfficesFaculty-Staff	Room Inventory Offices - Faculty & Staff by number
npRoomOccupants-Offices	Room Occupants-Offices-NASF
npRoomUseSummaryByCollege-Stem	RoomUseSummaryByCollege-Stem
npRoomUseSummaryByDepartment	RoomUseSummaryByDepartment
npRoomUseSummaryByUseCodeAll	Room Use Summary by Use Code
npRoomUseSummaryByUseCodeGrouped	Room Use Summary by Use Codes Grouped

FMS

ID *	Name
all_asset	All - Asset Inventory
all_employee_detail	All - Employee List
all_roof_inspection	All - Roof Inspections
all_roof_summary	All - Roof Inventory
all_space_cost_center	All - Space by Cost Center
all_space_standard	All - Space by Standard
all_space_type	All - Space by Type
all_space_utilization	All - Space Utilization
building_asset	Building - Asset Inventory
building_employee_detail	Building - Employee List
building_roof_inspection	Building - Roof Inspections
building_roof_summary	Building - Roof Inventory
building_space_cost_center	Building - Space by Cost Center
building_space_type	Building - Space by Type
building_space_utilization	Building - Space Utilization
exterior_asset	All - Outdoor Asset Inventory
floor_asset	Floor - Asset Inventory
QC_Essential	Essential Data Quality Report
QC_SpaceAssignment	Space Assignment Occupancy and Utilization Data Quality Report
QC_SpaceCapacityAssignable	Space Capacity and Assignability Data Quality Report
QC_SpaceInventoryClassification	Space Inventory Classification Data Quality Report
realproperty_scenario_impact	Real Property Scenario Impact
space_summary	Space - Space Summary

I will be adding these reports to the dashboard.

4. Space Audit (now Space Editor)

4a. Datasets viewbys (p. 21) (This app looks similar to Campus Viewer but you can edit in this app. You may be able to use this app instead of your custom Space Audit app.)

This app cannot be used for our Annual Space Audit because it does not allow for the updating of Assigned To fields. Please change the name to "Space Editor" as it may be confusing when referring to Lehigh's Annual Space Audit.

4b. Please let us know what viewbys you would like to see on the datasets in the left information panel.

- Viewbys are good – by department and current space use, with colorful legends that grey out unassignable space.
- Can room numbers be seen through the color? The legend has to be set back to default to see the room numbers.
- **** Change label to Space: by Department Assigned (Organization Assigned is a different field)**

5. Data Manager

5a. Data Fields (pp 22 – 25) Please review the data fields for each entity on the left side of the interface. Please let us know what data fields that you would like to see that are not there and data fields that you would like removed.

The screenshot shows the 'Data Manager' interface. At the top, there are buttons for '+ ADD A NEW SPACE' and 'BULK UPDATE'. Below is a table with columns: Space ID, Division*, College*, Department*, Space Capacity, Occupancy, Vacancy, Net Area, and Space Use Category 1*. The table contains three rows of data. Below the table is an 'EMPLOYEE ASSIGNMENT' modal window. The modal has a header '+ ADD A NEW EMPLOYEE ASSIGNMENT' and a table with columns: Employee ID*, Created by, Created Date, Last Edited by, and Last Edited Date. The modal contains one row of data for 'Rafiq, Tariq' with email 'mjbg@lehigh.edu' and creation date '3/23/2022 12:06:45 PM'. A red circle highlights the delete icon (an 'X' in a square) next to the employee name. At the bottom of the modal, there is a page indicator '1 - 1 of 1 Items'.

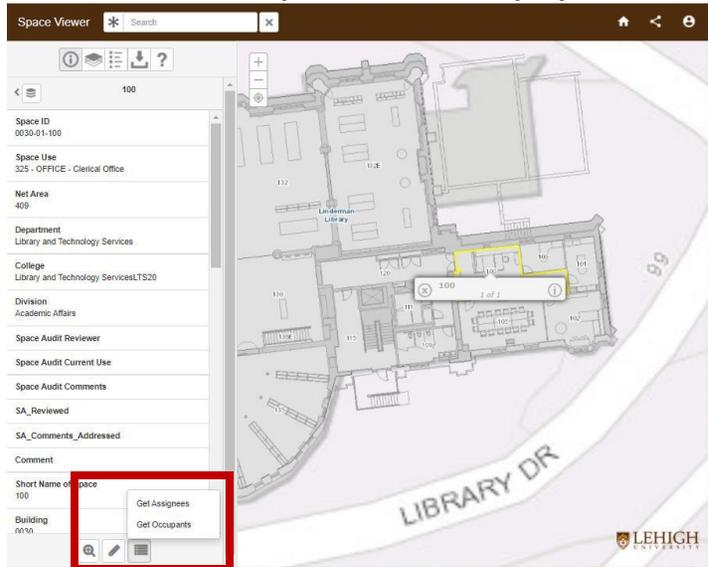
Space ID	Division*	College*	Department*	Space Capacity	Occupancy	Vacancy	Net Area	Space Use Category 1*
0011-0B-001	Academic Affairs	College Of Engineering & App/Scien	Mechanical Engr & Mechanics	1	0	1	128	315 - OFFICE - Administrative Office
0012-0B-001	Unassignable	Unassignable	Unassignable	0			455	YY1 - MECH RM - Unassignable - General
0013-0B-001	Academic Affairs	College Of Engineering & App/Scien	Civil & Environmental Engineering				1440	210 - CL LAB - Class Laboratory, Computer Lab, etc.

Employee ID*	Created by	Created Date	Last Edited by	Last Edited Date
Rafiq, Tariq	mjbg@lehigh.edu	3/23/2022 12:06:45 PM	mjbg@lehigh.edu	3/23/2022 12:06:45 PM

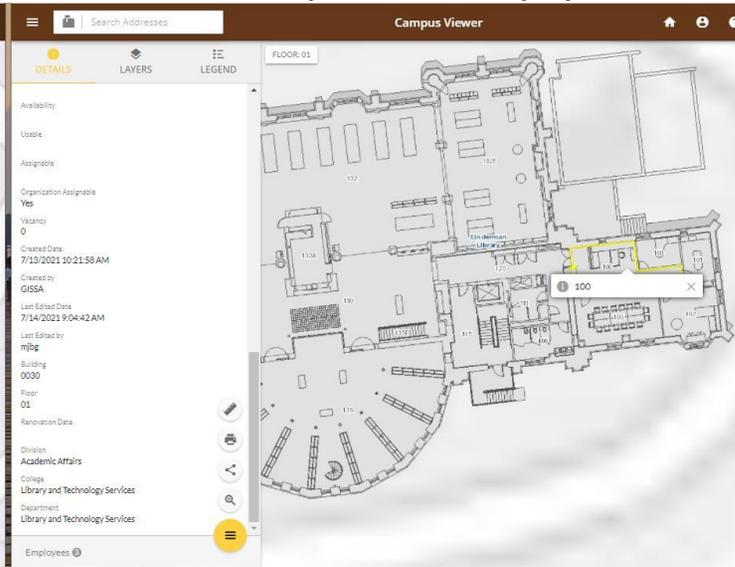
- Cannot seem to delete Employee at this place.

I am still reviewing this section. MJB

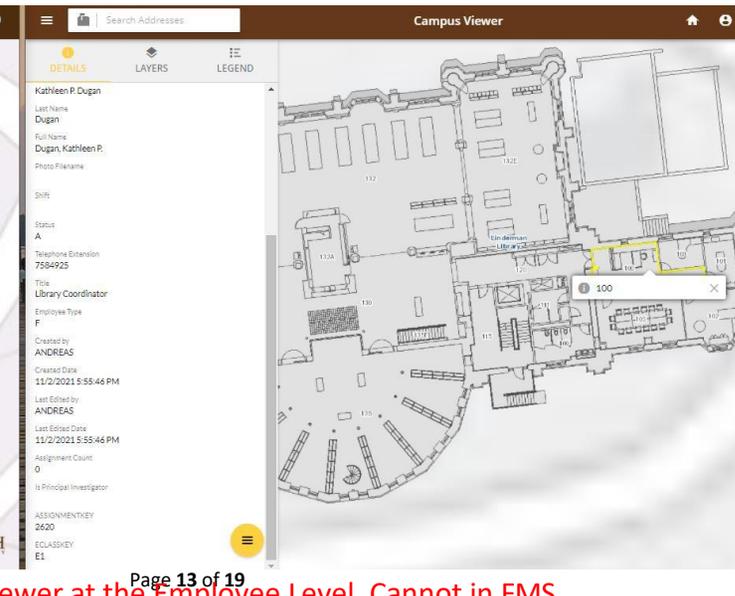
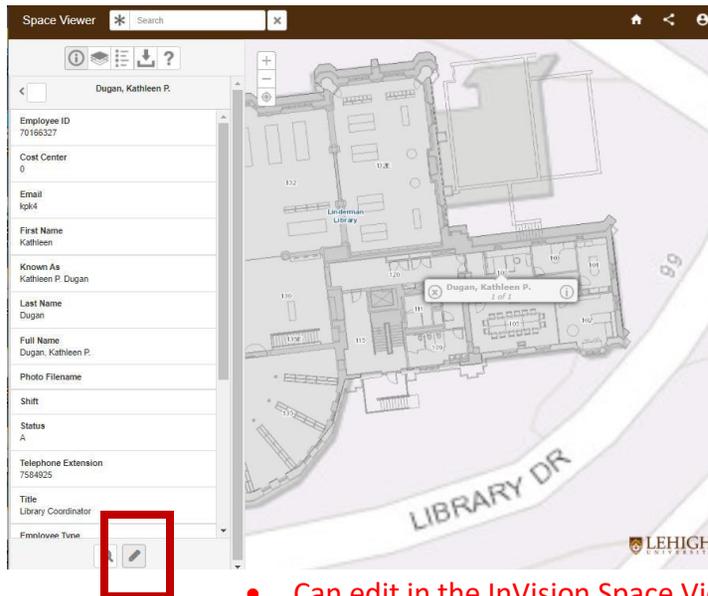
InVision Space Viewer – Employee Level



FMS Campus Viewer - Employee Level



- Can edit in the InVision Space Viewer at the Space Level. Cannot in FMS.
- Can access Assign To and the Occupants in the InVision Space Viewer. Cannot in FMS.



- Can edit in the InVision Space Viewer at the Employee Level. Cannot in FMS.

Employees (1).xlsx - Excel

File Home Insert Page Layout Formulas Data Review View Acrobat Tell me what you want to do... Sign in

From Access From Web From Text From Other Sources Existing Connections New Query Show Queries From Table Recent Sources Refresh All Properties Edit Links Sort Filter Clear Reapply Advanced Text to Columns Flash Fill Remove Duplicates Data Validation Consolidate Relationships Manage Data Model What-If Analysis Forecast Sheet Group Ungroup Subtotal

Get External Data Get & Transform Connections Sort & Filter Data Tools Forecast Outline

D1 Department

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W		
1	Object ID	Employee	Cost Center	Department	Email	First Name	Known As	Last Name	Full Name	Photo	Filer	Shift	Status	Telephone	Title	Employee	Created by	Created Date	Last Edited	Last Edited	Assignment	Is Principal	Principal	ASSIGNMENT	ECL
2	1011	70222622		Academic Affairs	bdk3	Elizabeth	Elizabeth A	Dolan	Dolan, Elizabeth A.			A			Deputy Prc F	ANDREAS	ANDREAS	ANDREAS	ANDREAS	ANDREAS	0			2000	E1
3	1099	70390325		Academic Affairs	pam8	Patricia	Patricia A.	Mann	Mann, Patricia A.			A	7583813		Director, A F	ANDREAS	ANDREAS	ANDREAS	ANDREAS	ANDREAS	0			2000	E1
4	1137	70583624		Academic Affairs	cmh505	Cindy	Cindy M.	H Hart	Hart, Cindy M.			A			Exec Sec t F	ANDREAS	ANDREAS	ANDREAS	ANDREAS	ANDREAS	0			2000	N1
5	5231	500354		Academic Affairs	drh514	Daniele	Daniele R.	Holland	Holland, Daniele R.			A			Faculty Aff F	ANDREAS	ANDREAS	ANDREAS	ANDREAS	ANDREAS	0			2000	N1
6	1094	70274577		Accounting	jmm6	Joseph	Joseph M.	Manzo	Manzo, Joseph M.			A	7584608		Professor c F	ANDREAS	ANDREAS	ANDREAS	ANDREAS	ANDREAS	0			2205	F9
7	1280	70575028		Accounting	hes205	Heibatollah	Heibatollah	Sami	Sami, Heibatollah			A	7583407		Professor F	ANDREAS	ANDREAS	ANDREAS	ANDREAS	ANDREAS	0			2205	F9
8	1332	705268		Accounting	jbk317	Jae Bum	Jae Bum	Kim	Kim, Jae Bum			A			Assistant F F	ANDREAS	ANDREAS	ANDREAS	ANDREAS	ANDREAS	0			2205	F9
9	1353	766987		Accounting	tgr218	Thomas	Thomas G.	Rees	Rees, Thomas G.			A			Professor c F	ANDREAS	ANDREAS	ANDREAS	ANDREAS	ANDREAS	0			2205	F9
10	1937	70114737		Accounting	ppg0	Parveen	Parveen P.	Gupta	Gupta, Parveen P.			A	7583443		Professor F	ANDREAS	ANDREAS	ANDREAS	ANDREAS	ANDREAS	0			2205	F9
11	1056	70281080		Admissions	sck7	Sarah	Sarah C. B.	Bombard	Bombard, Sarah C.			A			Senior Assi F	ANDREAS	ANDREAS	ANDREAS	ANDREAS	ANDREAS	0			2800	E1
12	1203	70747714		Admissions	rjs313	Robert	Robert J. S.	Suerth	Suerth, Robert J.			A			Assistant E F	ANDREAS	ANDREAS	ANDREAS	ANDREAS	ANDREAS	0			2800	E1
13	1219	75533		Admissions	neg212	Neil	Neil F. G.	Gogno	Gogno, Neil F.			A			Senior Assi F	ANDREAS	ANDREAS	ANDREAS	ANDREAS	ANDREAS	0			2800	E1
14	1427	746493		Admissions	daw318	Daniel	Daniel A. V.	Warner	Warner, Daniel A.			A			Vice Provo F	ANDREAS	ANDREAS	ANDREAS	ANDREAS	ANDREAS	0			2800	E1
15	1551	778012		Admissions	nam617	Nadson	Nadson M.	Moussa	Moussa, Nadson			A			Enrollment E	ANDREAS	ANDREAS	ANDREAS	ANDREAS	ANDREAS	0			2800	N1

Faculty

Ready

- ** Saved filter works well, but gives back all data. It would be more useful to narrow it down by Department.
- ** It would be more useful if Building Name, Room number, and Room Use was included.

InVision Space Manager Space Level

FMS Space Manager Space Level

The image shows two side-by-side screenshots of space management software. The left screenshot is from InVision Space Manager, and the right is from FMS Space Manager. Both show details for Space 124 on Floor 01. Red boxes and arrows highlight specific differences:

- InVision (Left):**
 - Availability: Occupied
 - Assigned Assignees: 1 (with 'ADD ASSIGNMENT' button)
 - Employee Class: NonExempt - Full Tim...
 - Department: 2430
- FMS (Right):**
 - Availability: (Empty)
 - Assigned Employees: 1 (with table below)
 - Employee Class: (Empty)
 - Department: (Empty)
 - Additional fields: Gross Area, Net Area (2,780), Physical Capacity, and Telephone Ext.

Employee ID	Last Name	First Name	Cost Center	Telephone Ext.	Status
70058159	Towne	Richard			F

- ** Do not need Gross Area or Physical Capacity
- ** Do not need Cost Center or Telephone Ext.
- ** Please add Department full name – is it Org Assigned field?

Why is Availability: Occupied in InVision but empty in FMS?

** Cannot Add Assignment or Edit in FMS. Can this be added to FMS?

InVision Space Manager Employee Level

Assignee: Towne, Richard E.

TOPOGRAPHIC WORLD STREET MAP LIGHT GRAY CANVAS MAP

GENERAL CLASSIFICATION

Full Name: Towne, Richard E. Email: ret0
Known As: Richard E. Towne Telephone Ext:
Title: Laboratory Operations Supv

Assigned Spaces 3

ADD ASSIGNMENT

Space ID	Short Name	Space Use	Floor ID	Standard	Availability
0019-01-124	124	240 - MAKER - Cr...	01		Occupied
0019-01-171	171	255 - LAB SRV - R...	01		
0019-01-171M	171M	255 - LAB SRV - R...	01		

Remove Assignment

FMS Space Manager Employee Level

Employee: Towne, Richard E.

GENERAL CLASSIFICATION

Last Name: Towne Email: ret0
First Name: Richard Telephone Ext:
Full Name: Towne, Richard E.
Known As: Richard E. Towne
Title: Laboratory Operations Supv

Assigned Spaces 3

Space ID	Short Na...	Use L1	Floor ID	Standard	Availability
0019-01-124	124	240 - MAKER - Cr...	01		
0019-01-171	171	255 - LAB SRV - R...	01		
0019-01-171M	171M	255 - LAB SRV - R...	01		

Links

** Cannot Edit in FMS like in InVision. Can this be added to FMS?

InVision Space Manager Employee Level

Assignee: Towne, Richard E.

GENERAL CLASSIFICATION

Status: Full Time
 Department: 2430
 Employee Class: NonExempt - Full Time - 37.5
 Employee Type: F

Assigned Spaces +

ADD ASSIGNMENT

Space ID	Sort Name	Space Use	Floor ID	Standard	Availability
0019-01-124	124	240 - MAKER - Cr...	01		Occupied
0019-01-171	171	255 - LAB SRV - R...	01		
0019-01-171M	171M	255 - LAB SRV - R...	01		

Remove Assignment

FMS Space Manager Employee Level

Employee: Towne, Richard E.

GENERAL CLASSIFICATION

Status: F
 Cost Center:
 Department:
 Shift:
 Employee Type: F

Assigned Spaces +

Space ID	Short Na...	Use L1	Floor ID	Standard	Availability
0019-01-124	124	240 - MAKER - Cr...	01		
0019-01-171	171	255 - LAB SRV - R...	01		
0019-01-171M	171M	255 - LAB SRV - R...	01		

Links

** Do not need Cost Center or Shift
 **

** Department should be full name of department if available at this level.

