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Asset DB Architect User Manual

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1 What is Architect?

Asset DB Architect is a software tool that has been developed to aid the process of print fleet redesign. A Device Fate matrix allows the current state print fleet (which has been captured using Asset DB) to be divided into devices for disposal, redeployment and devices to be kept in situ. A Product Catalogue then allows you to decide which new devices will make up the redesigned fleet. The fleet can be modified in a designer view that provides a graphical means of creating new assets and automatically transferring features and volume from existing assets to new ones. Assets from the existing environment that have been marked for redeployment are automatically redistributed in the new fleet with minimal intervention from the user. The distribution process will find an optimised solution that places each asset where it is needed most. When the new fleet has been designed, an evaluation view is provided to inspect the design and understand the changes that will be required to the existing fleet. You can also calculate the costs and environmental impact of your new solution and then generate reports summarising the changes in textual and graphical form.

2 The Solution Design Process

Asset DB Architect is much more than just a software tool – it embodies a solution design *process* that is captured in the workflow of the tool. The design process can be broken down into a series of distinct steps that are illustrated in **Error! Reference source not found.** and described in more detail in the following sections.

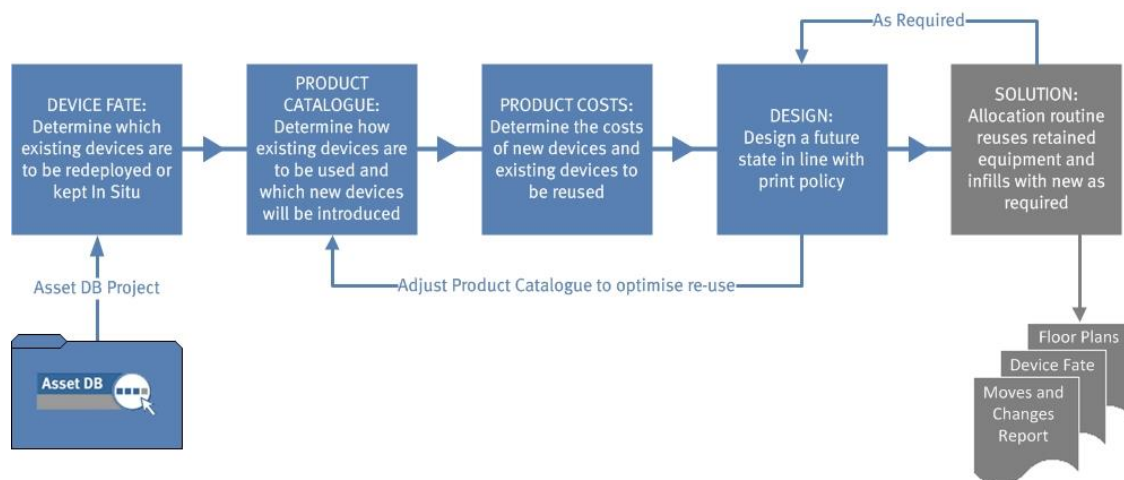


Figure 1. The Solution design process

The solution design process works best if there is an agreed print policy covering the following:

- The overall user to device ratio
- Access to colour and Legal/ A3 devices
- What is the maximum distance between a user and a device
- Any special needs of certain departments or workgroups
- Re-use/dispose guidelines for existing assets



- If the design is to be generic or make and model specific

With these guidelines in place, the task of entering data into Architect is far more straightforward.

3 Getting Started

The starting point for a solution design using Asset DB Architect is an Asset DB project representing an existing printing environment. Before continuing, you should ensure you have read the Asset DB Auditor and Analyst Manuals and are familiar with their contents.

3.1 Capturing and Understanding the Existing Environment

The first stage of any solution design is the detailed capture and analysis of the existing print environment. There are a number of categories under which data needs to be collected for later analysis and design work:

Device Attributes

For each asset in the project, it is important to have valid make and model data so that these assets can be identified in the Architect views. Paper handling capabilities etc. of the current fleet are required to know which print features are required in the future fleet.

Location Data

The physical location of the current fleet devices is essential to help decide upon the distribution of future fleet devices.

Volumes

The solution design process makes use of volume data in the existing print fleet. It is therefore crucial to ensure all assets have valid monthly volume data entered for them in the Asset DB project. This can be accomplished in a number of ways – see the Asset DB Analyst manual for more details.

When the print environment has been captured, a thorough analysis of the data is necessary before a new design can be started. The analysis should pay particular attention to the distribution of devices and volume through the site, the distribution of colour and A3 capability in the fleet and the print capacity at each location versus the volume requirements at that location.

Top Tip: ensure your project volumes are stable before creating your solution and do not recalculate volumes after your solution is in progress. Recalculating volumes after you have begun a solution can result in negative volumes and errors in your solution design.



3.2 Creating a Solution

Each Asset DB project can be assigned multiple solutions to show multiple future fleet options without the need for multiple projects. A new solution is created and associated with the currently open project by selecting File > New > Solution:

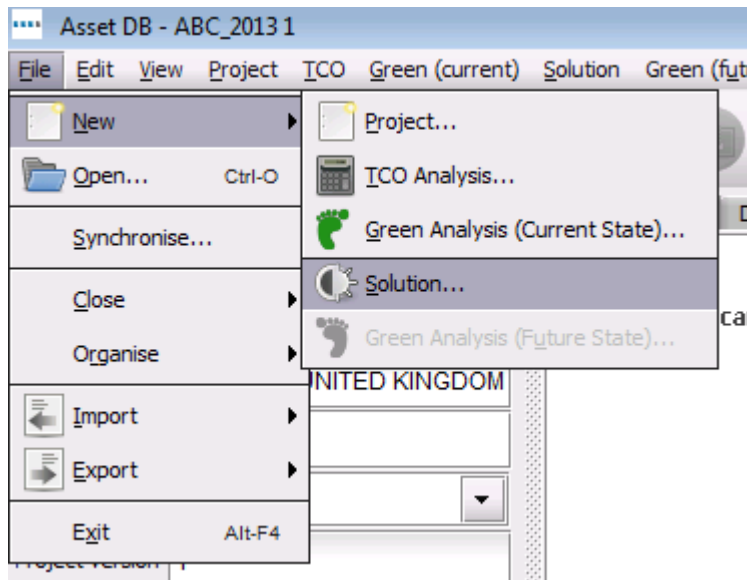


Figure 2. Creation of a new solution

After the new solution is created, five new tabs should be visible across the top of the screen as shown in Figure 3.

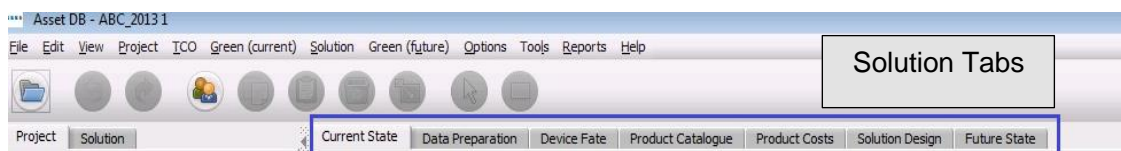


Figure 3. The Solution tabs

Each tab represents a phase in the solution design process described previously. The role of each tab is summarised briefly below:

- **Current State:** This tab shows the current print environment – it is simply the Asset DB project.
- **Data Preparation:** This tab enables users to review meter readings from the current state and also to generate volumes for the current fleet.
- **Device Fate:** This allows a decision to be made about the fate of each device in the fleet.
- **Product Catalogue:** This allows decisions to be made about the new devices to appear in the future fleet and their volume capabilities.
- **Product Costs:** This tab allows for the entry of cost data for the devices to be deployed in the future state.



- **Solution Design:** This is the design view where the new virtual print environment will be designed.
- **Future State:** This tab shows the new print environment after it has had new and redeployed devices deployed to it. It also provides a summary view of all the changes on each floor.

The Current State tab and the Data Preparation tab will not be discussed further in this document – see the Asset DB Auditor and Analyst Manuals for further information.

3.3 Synchronising a Solution

To allow for better collaboration, it is possible to synchronise a solution to the Asset DB Cloud so that it can be shared with others.

After you have created a new solution for a project which has been synchronised with the Cloud, simply select Solution > Synchronise (see Figure 4) or File > Synchronise > Solutions... and the solution will be synchronised with the Asset DB Cloud. It is possible to create and synchronise several solutions for a project.

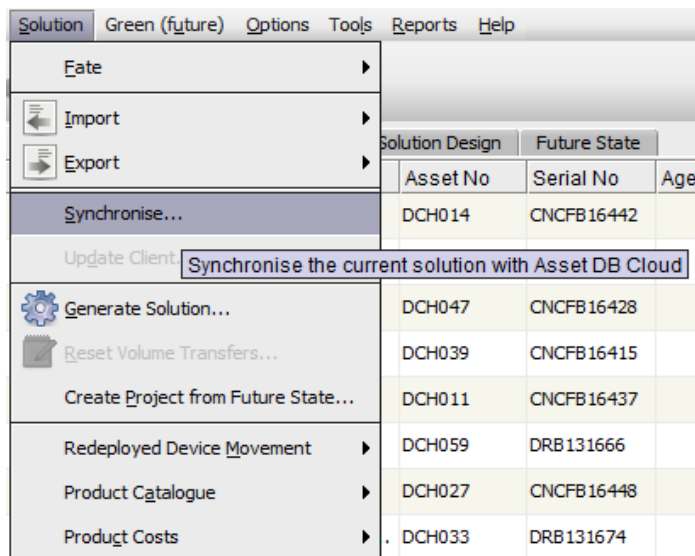


Figure 4. Synchronising a solution with the Asset DB Cloud

Once a solution is synchronised with the Asset DB Cloud, other users that have the same current state project open and up-to-date with the latest changes will be able to download any available solutions from the Asset DB Cloud by going to File > Synchronise > Solutions and then selecting a solution from the list (Figure 5).

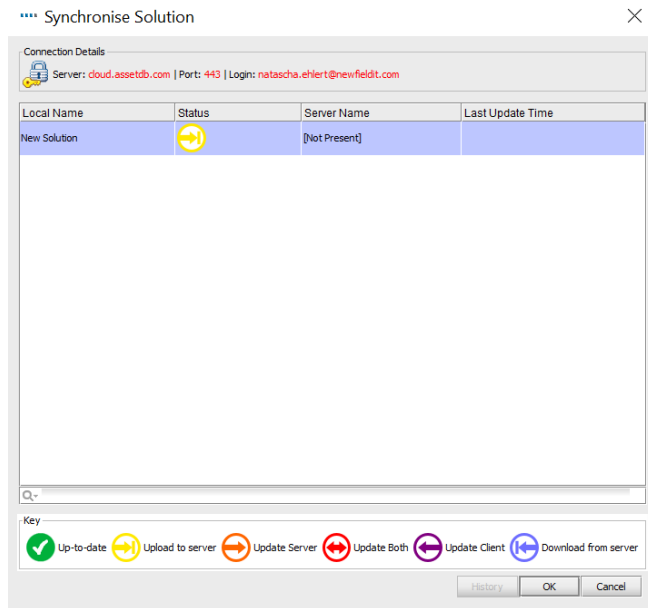


Figure 5. Download solution from Asset DB Cloud

In addition, there is the option to update your client with changes from the server without uploading any of your changes to the server. This is done via the Solution > Update Client... menu option.

This allows you to receive all changes that other collaborators have made even if your changes are not yet ready to be shared.

The functionality to write and view solution synchronisation messages is the same as in synchronising the current state, you can find more information in Section 22 of the Auditor manual.

3.4 Locking and Unlocking features of a Solution

When you have a solution open that has already been synchronised, you will need to lock the element you are working on before you are able to make any changes. The element could be the Product Catalogue or a site, building or floor. This is to ensure data integrity is maintained within the Solution.

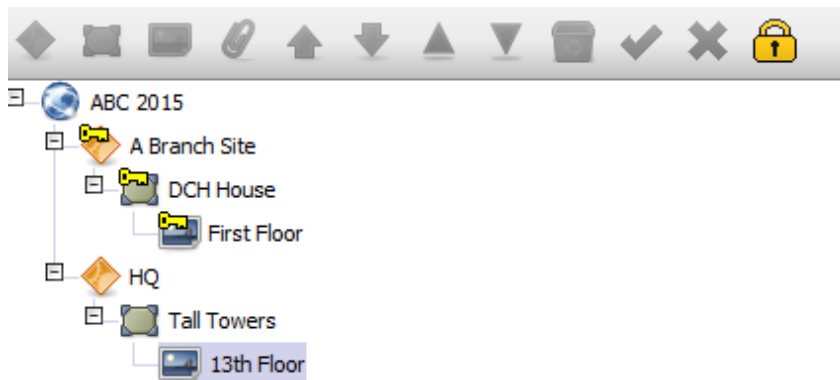


Figure 6. Locking a location



To lock a location in the project tree, simply select the site, building or floor you want to lock and click on the yellow lock (Figure 6). A key will then be displayed right next to the project tree item to indicate that you have that element locked.

Once a lock is set on a location, only the lock owner is able to perform the following tasks:

- Change fate of current state devices.
- Drag volume, or otherwise change volume in the Solution Design.
- Relocate a virtual asset onto another floor. Only the source floor needs to be locked.

Other users are still able to access that element in order to perform the following tasks, necessary to be able to complete other parts of the solution and reporting:

- Create a new Virtual Asset
- Assign a device from the product catalogue to a virtual asset
- Assign a redeployed device to a virtual asset
- Run Solution Generator
- Run reports

Once the user who set the lock finishes work on the solution and synchronises it, the lock is removed. Nevertheless, it is possible to override another user's lock on an element by clicking the lock yourself while they are offline, at which point the message in Figure 7 will be displayed. It is not advised to do this, as by overriding the lock, their changes will be discarded.

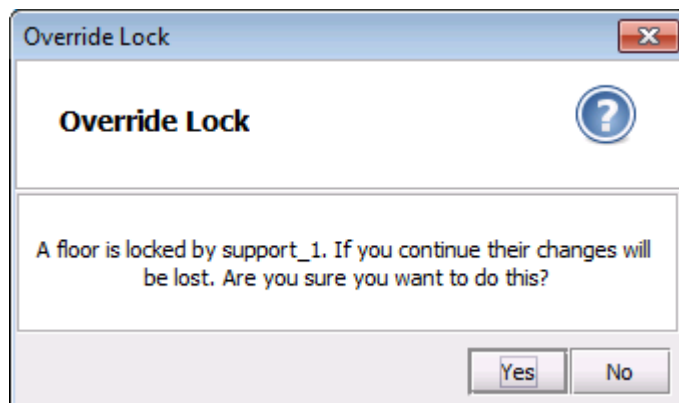


Figure 7. Override Lock dialogue box

When working on the Product Catalogue and in the Product Costs tab the padlock is located above these tabs (Figure 8). Applying a lock to the Product Catalogue will lock the Product Costs tab as well and vice versa.

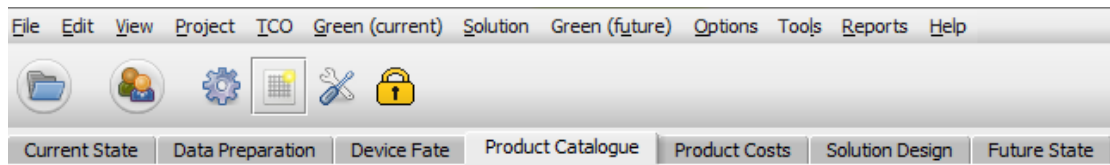


Figure 8. Product Catalogue lock

A lock applied on the Product Catalogue and Product Costs elements will prevent any other users from being able to perform the following tasks:

- Adding new Models to the catalogue
- Adding redeployed models to the product catalogue
- Updating Costs of models in the product catalogue

3.5 Assigning Sites, Buildings and Floors

As explained in the Asset DB Auditor manual (section 4.4) it is also possible to assign project tree elements at the Solution stage. These assignments are separate from the assignments in the Current State tab, so a floor assigned to a person in the current state can be assigned to someone different in the future state.

To assign a project tree element to a person, make sure the project as well as solution are synchronised with the Asset DB Cloud. Then follow instructions from section 4.4 in the Auditor manual. Anyone who has the same project and solution open, and is connected to the Asset DB Cloud will then see these changes in real time.

3.6 Marking project tree elements as complete or incomplete

To mark project tree elements as complete or incomplete, please see section 3.3 in the Auditor manual. Marking a project element as complete in the Solution is independent from marking it as complete in the Current State.



4 The Device Fate Tab

Type	Site	Building	Floor	Department	Make	Model	Asset No.	Serial No.	Age (Months)	Monthly Print	Consumables Mono CPP	Consumables Colour CPP	Fate
1	A Branch Site	DOH House	First Floor	Bulpen General	Del	81360	DOH047	CK9F816438	55	2,825	0	0	UNDETERMINED
1	A Branch Site	DOH House	First Floor		Del	81360	DOH039	CK9F816415	55	1,836	0	0	UNDETERMINED
1	A Branch Site	DOH House	First Floor	HR & Finance	Del	81360	DOH011	CK9F816437	55	4,604	0	0	UNDETERMINED
1	A Branch Site	DOH House	First Floor	HR & Finance	Del	81360	DOH045	CK9F816406	55	2,122	0	0	UNDETERMINED
1	A Branch Site	DOH House	First Floor	Secretaries	Del	81360	DOH030	CK9F816435	55	4,604	0	0	UNDETERMINED
1	A Branch Site	DOH House	First Floor	Bulpen General	Del	81360	DOH017	CK9F816427	72	2,517	0	0	UNDETERMINED
1	A Branch Site	DOH House	First Floor	IT	Del	81360	DOH041	CK9F816418	55	1,835	0	0	UNDETERMINED
1	A Branch Site	DOH House	First Floor	Bulpen General	Del	81360	DOH043	CK9F816422	55	1,836	0	0	UNDETERMINED
1	A Branch Site	DOH House	First Floor	Secretaries	Rich	Afco2022	DOH060	DR8131668	73	962	0.01	0.07	UNDETERMINED
1	A Branch Site	DOH House	First Floor	Director 2	Xerox	ColorQu...	DOH033	DR8131674	58	5,175	0.01	0.07	UNDETERMINED
1	A Branch Site	DOH House	First Floor	Secretaries	Del	81360	DOH012	CK9F816439	55	4,604	0	0	UNDETERMINED
1	A Branch Site	DOH House	First Floor	Server Room	Del	81360	DOH049	CK9F816433	55	1,836	0	0	UNDETERMINED
1	A Branch Site	DOH House	First Floor	Director 3	Del	81360	DOH014	CK9F816442	55	4,604	0	0	UNDETERMINED
1	A Branch Site	DOH House	First Floor	IT	Del	81360	DOH027	CK9F816448	55	4,604	0	0	UNDETERMINED
1	A Branch Site	DOH House	First Floor	Director 1	Epson	Stylus1280	DOH040	CK9F816417	86	1,727	0.04	0.13	UNDETERMINED
1	A Branch Site	DOH House	First Floor	HR & Finance	Del	81360	DOH046	CK9F816430	55	2,092	0	0	UNDETERMINED
1	A Branch Site	DOH House	First Floor	HR & Finance	Rich	Afco2022	DOH059	DR8131666	73	5,584	0.01	0.07	UNDETERMINED
1	A Branch Site	DOH House	First Floor	Reception	Xerox	ColorQu...	DOH035	DR8131663	67	12,478	0	0.03	UNDETERMINED
1	A Branch Site	DOH House	First Floor	Bulpen General	Del	81360	DOH044	CK9F816424	55	1,835	0	0	UNDETERMINED
1	A Branch Site	DOH House	First Floor	IT	Xerox	ColorQu...	DOH065	DR8131669	67	12,581	0	0.04	UNDETERMINED
1	A Branch Site	DOH House	First Floor	Bulpen General	Xerox	ColorQu...	DOH064	DR8131667	67	12,225	0	0.03	UNDETERMINED
1	A Branch Site	DOH House	First Floor	Secretaries	Del	81360	DOH042	CK9F816420	55	1,836	0	0	UNDETERMINED

Figure 9. The Device Fate view

The Device Fate view lists all the in-scope assets in the project in tabular form. Any assets marked Out of Scope in the current state will not show in the Device Fate.

Use the navigation tree at the top right hand corner of the screen to view the assets by site/building/floor. The tabular view shows various attributes for each asset that are considered useful in determining the fate of the asset. Further attributes can be added to this view by right clicking in the column header bar and selecting More... as shown in Figure 10.

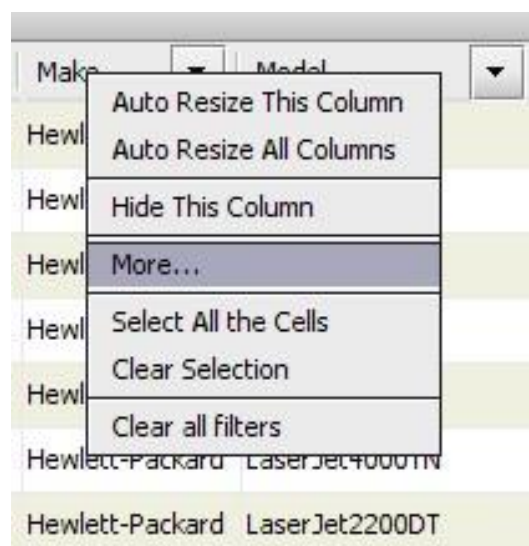





Figure 10. Adding new columns to the Device Fate table

This will bring up a Column Selection window where you can decide which categories you would like to show/hide.



The purpose of the Device Fate view is to decide the fate of each asset in the project. Assets can be assigned one of three fates:

- 
 ■ **Dispose** – the asset is not required in the new fleet.
- 
 ■ **Redeploy** – the asset is to be utilised in the new fleet if possible.
- 
 ■ **In Situ** – the asset will remain in the fleet in its current location with its current volume or less.

There are multiple factors that will help determine the fate of each device such as age, cost etc. all of which should be decided in the print policy.

The fate of an asset can be selected in one of three ways; by highlighting the asset row and using one of the fate buttons in the toolbar, by right clicking on the table row for the asset and selecting a fate from the popup menu or by using the dropdown in the Fate column (see Figure 11). Initially the fate of each asset is set to 'UNDETERMINED' (shown in the 'Fate' column).

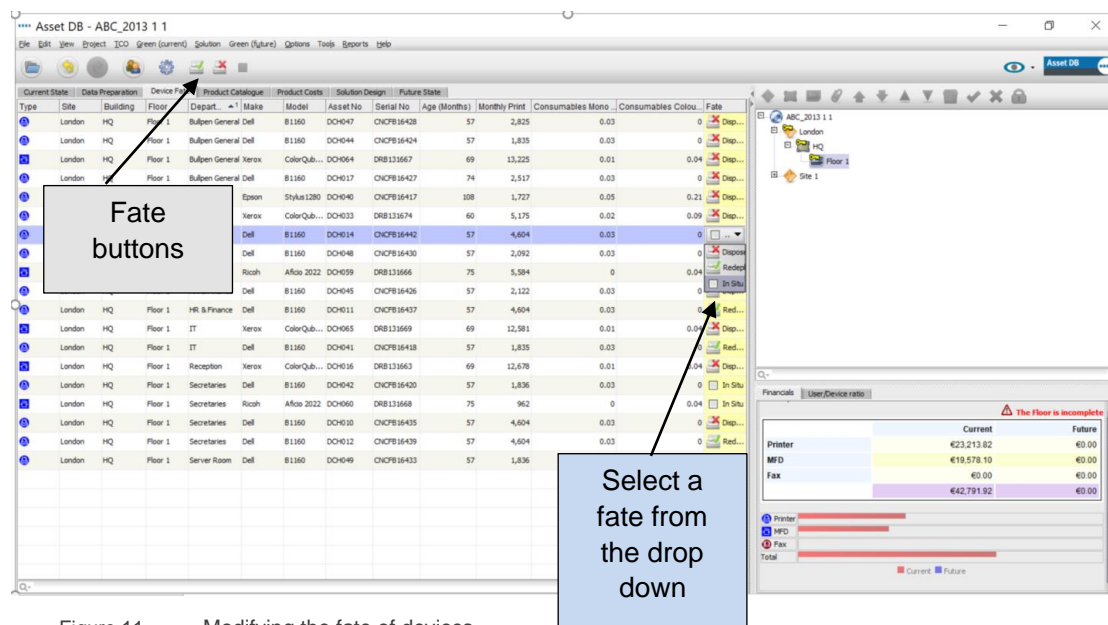


Figure 11. Modifying the fate of devices

A fate can be assigned to multiple assets by highlighting a number of rows and selecting their fate using either method described previously. Multiple rows can be highlighted by using the left mouse button and dragging the mouse or selecting the top row of the group



and holding Shift while clicking the bottom. To highlight rows that are not adjacent press the CTRL key on the keyboard.

Sometimes it is necessary to view an asset on the floor plan before a decision can be made about its fate. This can be achieved by right-clicking the asset row and selecting 'View On Floor Plan' as shown in Figure 12.

Type	Site	Building	Floor	Department	Make	Model	Asset No	Serial No
	Site 1	Building 1	Ground Floor		Hewlett-Packard	LaserJetP2035N	DCH004	CNCFB16425
	Site 1	Building 1	Ground Floor		Hewlett-Packard	LaserJetP2035N	DCH051	CNCFB16434
	Site 1	Building 1	Ground Floor		Hewlett-Packard	LaserJetP2035N	DCH038	CNCFB16416
	Site 1	Building 1	Ground Floor		Hewlett-Packard	LaserJetP2035N	DCH002	CNCFB16421
	Site 1	Building 1	Ground Floor		Hewlett-Packard	LaserJetP2035N	DCH057	CNCFB16445
	Site 1	Building 1	Ground Floor		Hewlett-Packard	LaserJetP2035N	DCH052	CNCFB16436
	Site 1	Building 1	Ground Floor		Hewlett-Packard	LaserJetP2035N	DCH054	CNCFB16440
	Site 1	Building 1	Ground Floor		Ricoh	Aficio2022	DCH062	DRB131672
	Site 1	Building 1	Ground Floor				DCH055	CNCFB16441
	Site 1	Building 1	Ground Floor				DCH053	CNCFB16449
	Site 1	Building 1	Ground Floor				DCH001	CNCFB16419
	Site 1	Building 1	Ground Floor				DCH066	DRB131671
	Site 1	Building 1	Ground Floor				DCH003	CNCFB16423
	Site 1	Building 1	Ground Floor				DCH058	CNCFB16446
	Site 1	Building 1	Ground Floor				DCH056	CNCFB16443
	Site 1	Building 1	Ground Floor		Ricoh	Aficio2022	DCH061	DRB131670

Figure 12. Viewing devices on the floor plan

This will take you to the Solution Design tab and highlight the asset on the floor. Note that the fate of a device can also be changed in the Solution Design view (see Section 7.9).

Data can be sorted in the table by clicking on any column heading; clicking on the heading again will reverse the sort order. You can also apply filters to the table by clicking on the down arrow next to each column header as shown in Figure 13. This is a very useful feature for grouping assets by any one of the displayed attributes and assigning them a fate in one step.

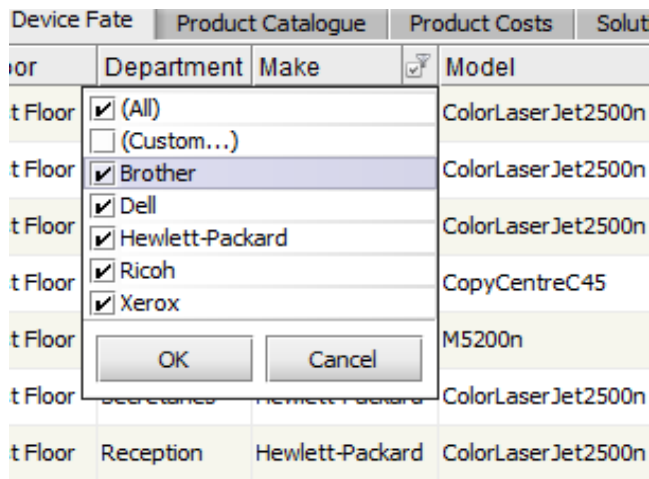


Figure 13. Applying filters

Column widths can be changed by clicking on the divider between the headers of any two columns and dragging the mouse.

5 The Product Catalogue Tab

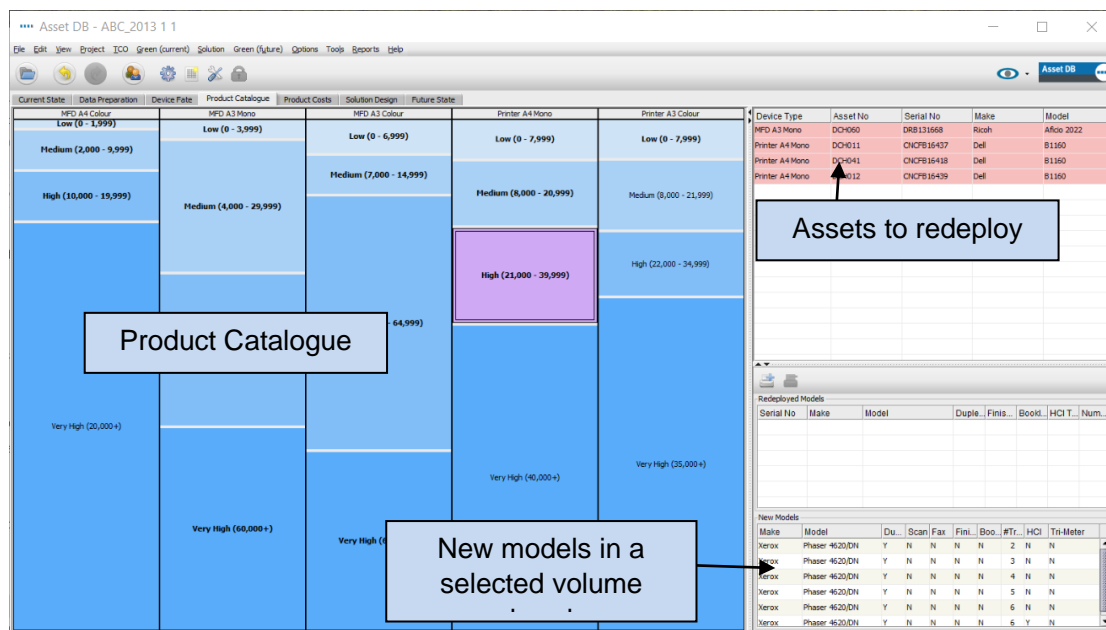


Figure 14. The Product Catalogue view

The Product Catalogue view is composed of three separate areas; in the top right hand panel there is a table containing the distinct assets that are to be redeployed. Beneath this panel is an empty panel that will hold information about the assets that will make up the future state as they are assigned amongst the columns in the main panel to the left. For more details please go to section 5.2.



The main panel contains the Product Catalogue that will be customised for the given requirements and consists of a series of columns that each represents a particular category of device. The category represented by each column is shown in the column header.

5.1 Altering Categories in the Product Catalogue

The Product Catalogue has ten predefined device categories:

- MFD A4 Black and White
- MFD A4 Colour
- MFD A3 Black and White
- MFD A3 Colour
- Printer A4 Black and White
- Printer A4 Colour
- Printer A3 Black and White
- Printer A3 Colour
- Fax
- Scanner

These may not all be present in the catalogue initially as only the required categories (derived from the existing print fleet population) are displayed. Categories can be added or removed by selecting the Add/Remove button.



Figure 15. Add/Remove device categories

Within each category column in the main panel of the Product Catalogue there are a series of volume 'bands' that have a description and a numerical range. These represent a categorisation of the overall volume range for the type of device described by the column. The range for each band can be adjusted by clicking on the boundary between any two bands and dragging it up or down.

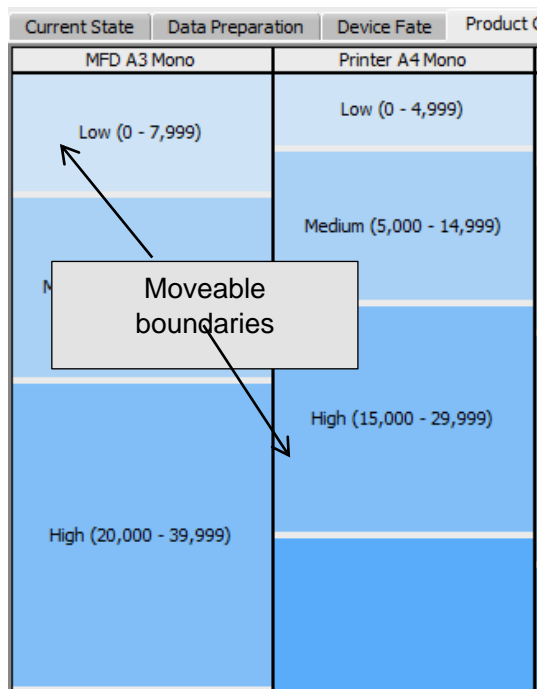


Figure 16. User defined volume bands.

Each column therefore represents a *volume profile* for a given category of device. The first step in setting up your Product Catalogue is to decide the volume capabilities of a low, medium, high and very high volume device in each of your categories.

For example, the Product Catalogue in **Error! Reference source not found.** shows that for Mono A3 MFDs any device that can do 0 to 7,999 pages per month is considered a Low volume device. Any device that can do 8,000 to 19,999 is considered a Medium volume device, etc.

5.2 Adding Redeployed Devices to the Product Catalogue

Once the volume bands have been set for all categories of device, the next step is to add devices into these bands to make up the catalogue.

The Product Catalogue will be made up of two groups of devices. The first group consists of brand new devices and the second consists of models that were redeployed in the Device Fate view.

The assets marked for redeployment are all contained in the table shown in the top right panel shown with their serial number (see Figure 14). Initially all rows in the table are highlighted in pink to indicate they have not yet been assigned to the Product Catalogue. A redeployed device is added to the product catalogue by first selecting the device, turning it red, and then click and dragging it across to one of the volume bands in the Product Catalogue on the left. When the drag operation is started, the column into which the model should be dropped is highlighted with a red border as shown in Figure 17.



MFD A3 Mono	MFD A3 Colour	Printer A4 Mono
Low (0 - 7,999)	Low (0 - 9,999)	Low (0 - 4,999)
Medium (8,000 - 19,999)	Medium (10,000 - 24,999)	Medium (5,000 - 14,999)
High (20,000 - 39,999)	<u>High (25,000 - 39,999)</u>	High (15,000 - 29,999)

Figure 17. Automatic highlighting of the correct device category and volume band

Select one of the volume bands in the highlighted column and release the mouse button to assign the model to that band. If the model has been successfully dropped into the volume band the text describing the band will change to bold and underlined. If you select the volume band and look at the bottom right hand panel, you will see the model listed under 'Redeployed Models' along with its capabilities. This area is described in more detail in Section 5.3.

You should also notice that the model name in the top right table is no longer highlighted in pink as shown in Figure 18.

Printer A4 Mono	Printer A4 Colour	MFD A3 Mono
Low (0 - 4,999)	Low (0 - 5,999)	Low (0 - 9,999)
<u>Medium (5,000 - 14,999)</u>	Medium (6,000 - 16,999)	Medium (10,000 - 24,999)
High (15,000 - 29,999)	High (15,000 - 29,999)	High (25,000 - 39,999)

Device Type	Asset No	Serial No	Make	Model
Printer A4 ...	Sales	NIT0001	Hewlett-Pac...	LaserJet40...
Printer A4 ...	HR	NIT0012	Hewlett-Pac...	LaserJet2200
Fax	Admin	NIT000162	Canon	L200
Scanner	Sales	NIT000178	Hewlett-Pac...	LaserJet40...
Scanner	Sales	NIT000180	Hewlett-Pac...	LaserJet40...
Scanner	Sales	NIT000181	Hewlett-Pac...	LaserJet40...
MFD A3 Mono	Sales	NIT00079	Hewlett-Pac...	LaserJet90...

Serial No	Make	Model	Du...	Fin...	Hig...
12356	Hewlett-P...	LaserJet2200	N	N	N

Figure 18. Visual indicators for Redeployed device allocation in the Product Catalogue

This process should then be repeated for all the models highlighted in pink in the top right table. Models can be dropped into more than one volume band if required.



Multiple redeployed devices can be added to a single volume band by using the Control key to multiple select and dragging as above.

Note that if you remove a redeployed device model from a volume band and the model has not been allocated anywhere else in the Product Catalogue it will be highlighted in pink again in the top right hand table.

5.3 Locating a Redeployed Device in the Catalogue

The location of a redeployed device in your catalogue can be displayed simply by clicking on the device in question in the top right panel. This will then highlight in yellow the volume band(s) in which it has been placed as shown in Figure 19.

Serial No.	Device Type	Make	Model
	Fax	Muratec	F82
DRB131664	MFD A3 Colour	Ricoh	AficioMPC3500ARDF
DRB131671	Printer A4 Colour	Epson	StylusPhoto12905
	Printer A4 Colour	Hewlett-Packard	ColorLaserJet2500n
	Printer A4 Mono	Dell	2330d
	Printer A4 Mono	Hewlett-Packard	LaserJet4000N
	Printer A4 Mono	Hewlett-Packard	

Figure 19. Visual indicators for Redeployed device allocation in the Model Matrix

5.4 Adding and editing New Models within the Product Catalogue

In addition to redeployed device models, it is also possible to add *any* model to the Product Catalogue. The Product Catalogue provides an opportunity at this stage to decide which models will be considered for use in the new print fleet and where they sit in the Product Catalogue.

To assign a model to any volume band click the volume band to highlight it and then select the 'Add Device' button in the bottom right panel as shown in Figure 20.

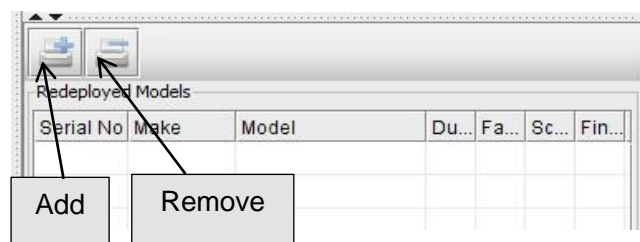


Figure 20. Add/Remove new models to the catalogue



First, select a manufacturer and model in the New Model pop-up. This is done by either using the drop down lists or typing key characters into the field and selecting from the options given. You should now select each of the capabilities that apply to that model using the tickboxes as shown in Figure 21 before clicking on 'Allocate New Model'.

Figure 21. Add/Remove new models to the catalogue

The text in the category should now have changed to bold and the bottom right panel should now list the model you have added under 'New Devices'. You can add multiple models to each volume band to cover as many capability options as you require. It is also possible to add multiple instances of the same device if required to allow for different capability options of the same model as shown in Figure 22. These distinct models will then appear as unique items in the Product Costs tab, which is further explained in Section 6.

Make	Model	Du...	Scan	Fax	Fin...	Boo...	#Tr...	HCI	Tri-Meter
Xerox	Phaser 4600/DN	Y	N	N	N	N	2	N	N
Xerox	Phaser 4600/DN	Y	N	N	N	N	3	N	N
Xerox	Phaser 4600				N	N	4	N	N
	Phaser 4600				N	N	5	N	N
	Phaser 4600				N	N	6	N	N
	Phaser 4600				N	N	6	Y	N

Figure 22. Multiple new models added to the catalogue

New models and Re-deployed devices can be removed from any volume band by selecting them and clicking on the remove button (see Figure 20).

Existing models can be edited by right-clicking and selecting "Edit Model" (Figure 22). When the same asset is included in different volumes ranges or categories it is possible to edit the capabilities of an individual model without needing to create a new one. Once the model has been edited and the Solution Generator has been run then the model information will automatically update on the floor plan. Please note that once the information has been changed then the pricing will be reset to 0 in the Product Costs tab.

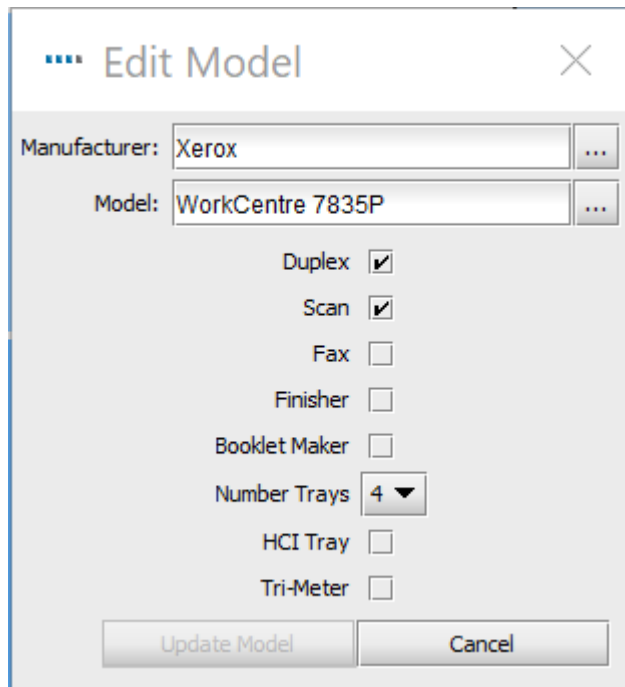


Figure 23. Edit models in the Product Catalogue

Once a new feature has been added, the “Update Model” button becomes available.

If there is an existing project and solution on the Enterprise Server then the product catalogue needs to be locked for the model to be edited. For further details on how to lock and unlock features of a solution, please refer to section 3.4.

If new models are not added to the Product Catalogue at this stage, Architect will use generic descriptions for new devices until they have been added. This method will not allow a financial or environmental comparison to be run however.

5.5 Creating a New Catalogue

A new, empty Product Catalogue can be created by clicking the ‘create a new default catalogue’ button as shown in Figure 24. Note that this will remove the existing matrix and create a new blank one that does not contain any models. This blank catalogue will again be modelled on the current fleet population.



Figure 24. Create a new Product Catalogue

5.6. Undoing and reverting changes in the Product Catalogue

Any changes that have been made to the Product Catalogue can be undone when selecting the “Undo” button.

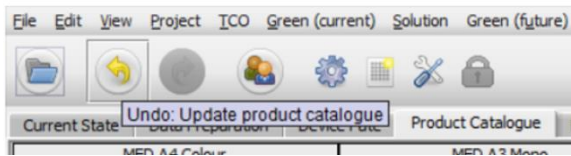


Figure 25. Undoing changes in the Product Catalogue

The redo button becomes available when a change in the Product Catalogue has been applied and one of these changes has been undone:



Figure 26. Redoing changes in the Product Catalogue

Please note that once a change in the Solution has been synchronised all changes are permanent and they cannot be undone.

5.6 Importing/Exporting Product Catalogues

Product Catalogues can be exported from Asset DB and then imported into other solutions. This means you can create and export a default Product Catalogue and then import and customise it for each solution. The exported catalogue will also include all costs entered within the Product Costs tab (as described in Section 6). To export a catalogue use the Solution>Export>Product Catalogue menu option (as shown in Figure 27).

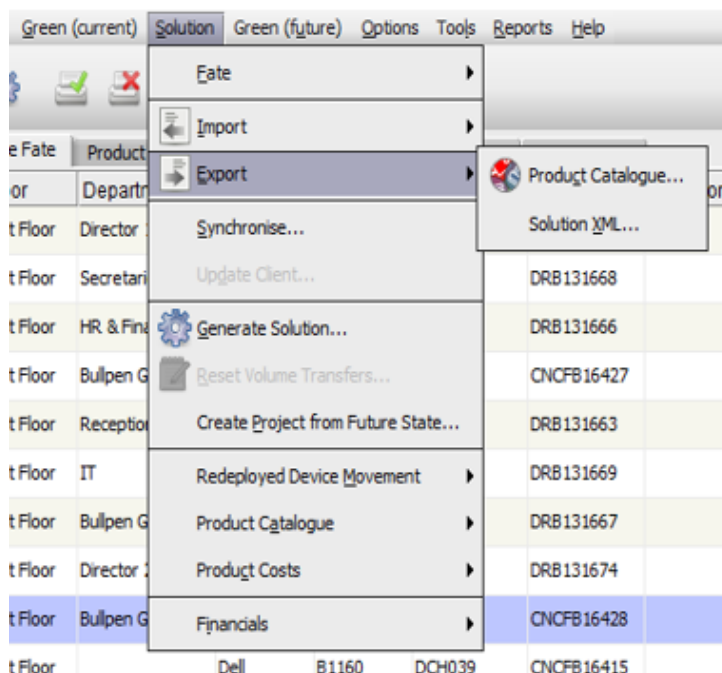


Figure 27. Export/Import Product Catalogue

To import a Product Catalogue use the Solution>Import>Product Catalogue menu option and then locate the desired .atp catalogue file. When a catalogue is imported, all the models that have been placed in it are also imported with it. Note that the imported catalogue will overwrite the existing one. This means that any re-deployed devices that were assigned to volume bands before the catalogue was imported will need to be re-assigned to their respective volume bands.

6 The Product Costs Tab

The Product Costs tab allows for the allocation of cost data to the future fleet models that will subsequently be used to determine the costs associated with the new print environment.

It displays the data information, any lease costs that have been added, as well as if the model is an existing model in the print fleet or if it has been added via the product catalogue. A checkmark in the status bar indicates that the model is present in the product catalogue, while an exclamation mark highlights any models that have the status of being redeployed but they have not been allocated to a volume band yet.

The screenshot displays the 'New Device' spreadsheet within the 'ABC 2013 11' project. The spreadsheet is organized into columns for device identification, status, and financial data. Two callouts provide context for the data:

- Devices still to be allocated to a volume:** This callout points to rows where the status is 'Existing', indicating devices that have not yet been allocated to a volume band.
- Devices that have been allocated to a volume band:** This callout points to rows where the status is 'New', indicating devices that have been allocated to a volume band.

On the right side of the spreadsheet, the 'Volumes' panel is visible. It shows a bar chart for 'Printer', 'MFD', and 'Fax' with 'Current' and 'Future' values. A warning message 'The Floor is incomplete' is displayed above the chart.

Figure 28. The Product Costs view

6.1 Entering Cost Data

The Product Costs tab lists all distinct new models that have been added to the Product Catalogue along with their capabilities. As mentioned previously, if multiple instances of the same model have been added to the product catalogue then they will each appear as a separate line item, differentiated by their unique capabilities. It also displays each individual redeployed and In-Situ device from the existing fleet along with its serial number.



Data can be entered for one or more rows by selecting them and then using either the right click menu option or the Edit button on the toolbar or to edit a single value clicking on it will allow the value to be edited. See Figure 29.

Serial Num...	Make	Model	Duplex	Scan	Fax	Finisher	Booklet Ma...	#Trays	HCI	Tri-Meter	Lease Cost	Lease Cos...	Recurring ...	R
DRB131668	Ricoh	Aficio2022	Y	Y	Y	N	N		4 N	N	£0.00 Monthly	£0.00 Monthly	£0.00 Monthly	
CNCFB16435	Dell	B1160	N	N	N	N	N		1 N	N	£0.00 Monthly	£0.00 Monthly	£0.00 Monthly	
CNCFB16437	Dell		N	N	N	N	N		1 N	N	£0.00 Monthly	£0.00 Monthly	£0.00 Monthly	
DRB131666	Ricoh		Y	Y	Y	N	N		4 N	N	£0.00 Monthly	£0.00 Monthly	£0.00 Monthly	
CNCFB16417	Epson		N	N	N	N	N		1 N	N	£0.00 Monthly	£0.00 Monthly	£0.00 Monthly	
Xerox			N	N	N	N	N		0 N	N	£0.00 Monthly	£0.00 Monthly	£0.00 Monthly	
Xerox	8830DD5	Y	Y	Y	Y	N	N		0 N	N	£0.00 Monthly	£0.00 Monthly	£0.00 Monthly	
Xerox	8830DD5	Y	Y	Y	Y	Y	N		1 N	N	£0.00 Monthly	£0.00 Monthly	£0.00 Monthly	
Xerox	ColorQube9...	Y	N	N	N	N	N		0 N	N	£0.00 Monthly	£0.00 Monthly	£0.00 Monthly	
Xerox	ColorQube9...	Y	Y	N	N	N	N		0 N	N	£0.00 Monthly	£0.00 Monthly	£0.00 Monthly	
Xerox	ColorQube9...	Y	Y	Y	N	N	N		1 N	N	£0.00 Monthly	£0.00 Monthly	£0.00 Monthly	
Xerox	ColorQube9...	Y	Y	Y	N	N	N		2 N	N	£0.00 Monthly	£0.00 Monthly	£0.00 Monthly	
Epson	DLQ-3000	N	N	N	N	N	N		0 N	N	£0.00 Monthly	£0.00 Monthly	£0.00 Monthly	
Epson	DLQ-3000	N	Y	N	N	N	N		0 N	N	£0.00 Monthly	£0.00 Monthly	£0.00 Monthly	
Epson	DLQ-3000	Y	Y	Y	Y	N	N		0 N	N	£0.00 Monthly	£0.00 Monthly	£0.00 Monthly	

Figure 29. Editing cost data

Each editable data item is explained as follows:

- **Lease Cost:** The lease cost of the device
- **Lease Cost time period:** The time period for the lease cost payments
- **Recurring Cost:** Any other recurring costs (maintenance etc.)
- **Recurring cost time period:** The time period for the recurring costs
- **CPP Mono:** The cost of printing a mono page
- **CPP Colour:** The cost of printing a colour page
- **CPP Colour Level 1:** The cost of printing a Colour Level 1 page
- **CPP Colour Level 2:** The cost of printing a Colour Level 2 page
- **CPP Colour Level 3:** The cost of printing a Colour Level 3 page

6.2 Importing/Exporting Product Cost Data

Should you wish to construct a new product catalogue or import a product catalogue that does not contain any product costs: these can be exported, edited and imported independently of the product catalogue. To achieve this, select menu option Solution > Product Costs > Export. This will create a .csv file, into which can be added leasing costs, cost per click costs and any other recurring costs as well as the billing intervals (monthly, quarterly or annual). Once these data have been entered into the .csv file, they can be imported back into the Product Costs tab via menu option Solution > Product Costs > Import. Any costs that were already present in your product catalogue will be present in the .csv file and are editable in this way.

7 The Solution Design Tab

The Solution Design view is the design studio for creating a new virtual print environment. Initially, this view shows the existing print fleet and augments each icon with volume information.

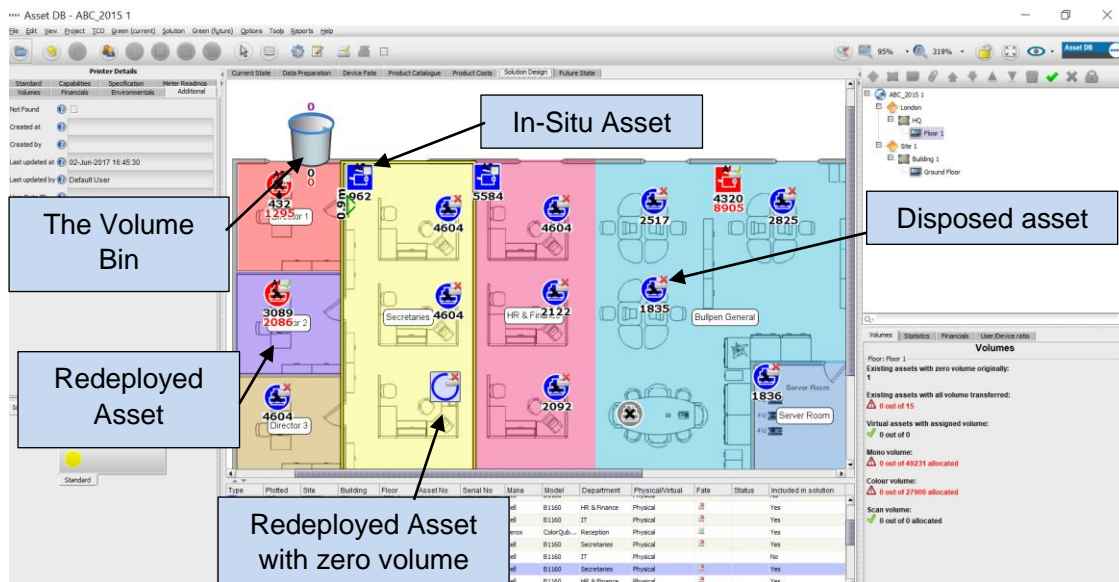


Figure 31. The Solution Design view

The print volume for a device is shown below it, mono volume in black and colour volume (if any) in red. Scan volume is shown above it in purple. Each icon will also be annotated with an icon that represents the fate of the device as determined earlier in the Device Fate tab.

Some devices may be shown as hollow circles or squares on the floor plan. Those devices have no volume data associated with them – before continuing you should check why they have zero volume. There will also be a bin icon on the floor, initially located in the top left corner. This is the volume bin and it is described in Section 7.7.

Finally, the table view will also be present at the bottom of the screen showing details of all the current devices. In addition to fields seen in the Current State view, the table view will also include extra fields that will aid you in the Solution Design process:

- **Physical/Virtual:** This will show whether a device is physical, i.e. a current state device or virtual, i.e. a future state device (described further in Section 7.1).
- **Status:** This column will show either OK or Error. If it shows as Error, there will be a problem preventing a complete solution that needs to be rectified. This is explained further in Section 7.13.
- **Fate:** For all devices that are included in the solution, this will show a symbol signifying the fate of each device (as chosen in the Device Fate tab).
- **Included in Solution:** This signifies if an asset is to be included in the solution design process or not. Assets that would be included are all in scope Printers,



MFPs, Scanners and faxes. Out of scope devices and non-print devices such as PCs and filing cabinets would not be included.

Note that the existing print fleet devices cannot be moved or otherwise modified in the Solution Design view.

7.1 Adding Virtual Devices to the Floor

The bottom left panel contains an 'Icons' tab that can be used to place new virtual devices onto the floor to create your future state fleet. A device is placed on the floor just as it is in the Current State tab (see Asset DB Manual). When a device has been placed onto the floor, it will be marked with a gold star that indicates it is a virtual device. It will also appear in the table with Virtual in the Physical/Virtual column. The virtual device will not have any attributes at this point – these will be determined by dragging them across from surrounding devices from the existing print fleet.

7.2 Volume Transfer

Once you have placed a virtual device, if you click on any existing device and start dragging the mouse away from it the cursor will change to show a stack of papers to indicate print volume being dragged from the device. You can transfer the print volume to a virtual device by releasing the mouse button over the virtual device. A dialog will appear that contains options for transferring volume and capabilities. Capabilities can be transferred/added to the virtual device by ticking/unticking the relevant tick boxes. Customised fields that contain information to be carried over to a solution will appear under "Other Values".

To transfer the volume, you can select one of the predefined percentages to transfer, or use the slider or volume field to manually enter the exact amount to transfer. The percentage of volume you are transferring will show beneath the volume (Figure 32).

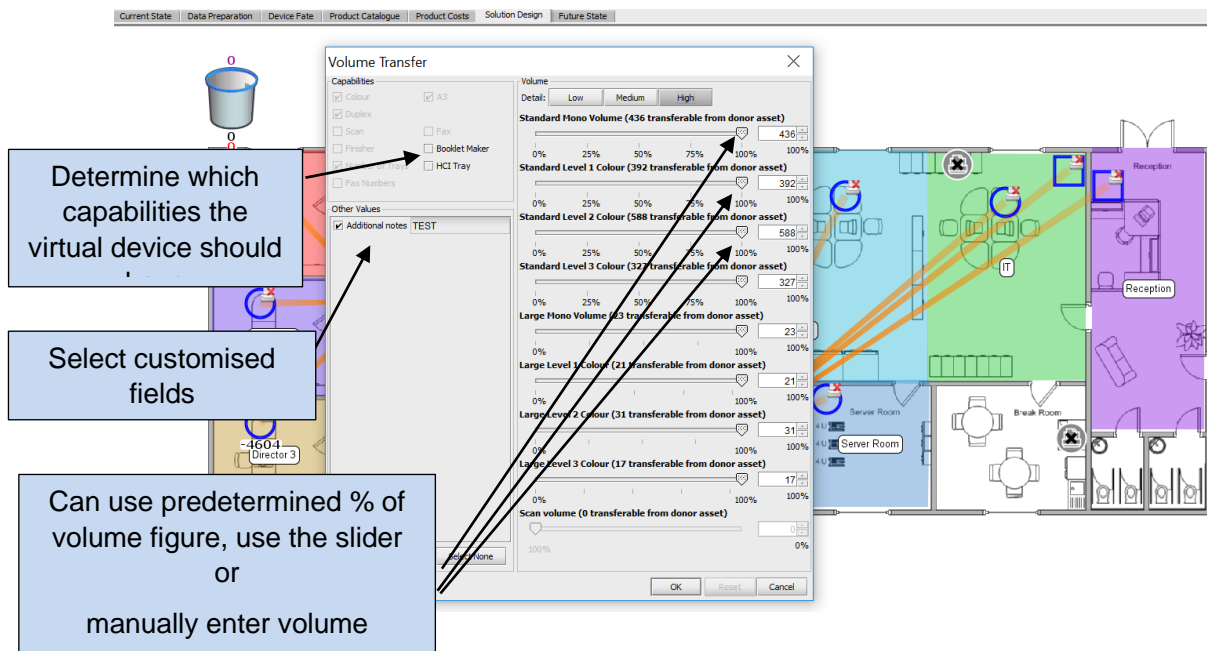


Figure 32. Volume transfer dialogue

Should you wish to transfer volumes into a virtual tri-colour meter device, you need to go to Medium or High volume level tabs by clicking the relevant button at the top of the Volume section of the window. Within those tabs, the volumes are divided into three categories and you will need to decide the volume percentage you wish to transfer from each category. Once the transfer is complete, Asset DB will allocate the volumes to the corresponding category.

If you are transferring volumes from a tri-colour meter device to a single colour meter virtual device, you should choose the Low volume button and it will consider mono and colour volumes as a whole.

Figure 33 shows the volume transfer window for each level of detail.

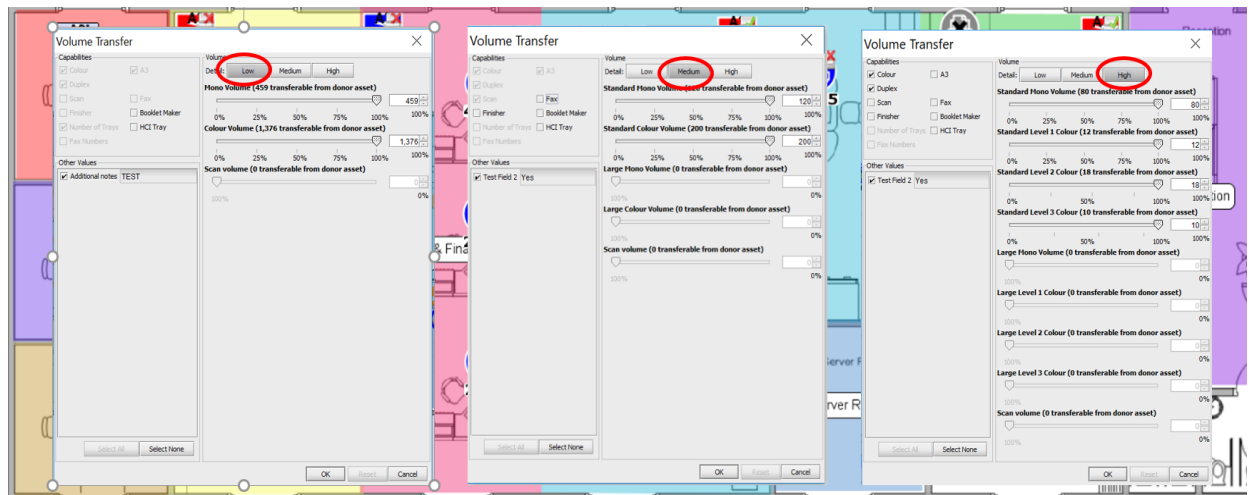


Figure 33. Volume transfer details

Once the volume has been transferred from an existing device to a virtual device, the volume path is represented by an orange arrow as shown in Figure 34. The Volume Transfer links can be turned on or off in the filters tab (described in Section 7.18).



Figure 34. Volume transfer link

If all the volume is transferred from a device, it will be represented as a hollow circle or square (see Figure 34). This feature allows the user to see at a glance which existing devices are yet to be addressed.

Dragging volumes and attributes from the existing print devices to new virtual devices is central to the entire Architect design process. The new virtual print environment is created by adding virtual devices to the floor and then dragging volumes and attributes from the existing print fleet to the virtual devices. By encouraging the user to design the virtual environment in this manner, Architect can guarantee that, at a minimum, the print volumes and attributes of the existing fleet are preserved.

7.3 Changing a Virtual Asset Icon Type

At any point during the Solution Design phase, it is possible to change the icon type of a virtual asset (i.e. from an MFD to a printer). This is done in the same manner as in the current state in that you should right click the device and then select Change Icon. This



will then show a pop-up where you can select any other solution icon to replace the current icon.

7.4 Transferring Volume from Virtual Devices

Sometimes it is necessary to transfer volumes and attributes from virtual devices either to other virtual devices or back to existing fleet devices. To initiate a transfer from a virtual device hold down the SHIFT key and drag the mouse from the device. If the mouse is dragged without holding the SHIFT key down, the asset will be moved instead of volume being transferred. If the volume is being transferred back to an existing device, the maximum value that can be transferred is equal to the amount that was transferred from the existing device to the virtual device originally.

7.5 Transferring Volume from Multiple Devices

Volume can be transferred from multiple devices in one of two ways.

Hold down the CTRL key and click on each existing device with the mouse. When all devices have been selected the transfer can be initiated by dragging the mouse from any one of the selected devices to a virtual device.

Use the Multiple Select button to select the existing devices and then initiating the volume transfer by dragging the mouse from any one of the selected devices.



Figure 35. Transferring volume from multiple assets

In the case that virtual devices are also selected with this option, the transfer would not be possible. To rectify this, the virtual device has to be deselected by holding CTRL and clicking on the virtual device.

7.6 Undoing Volume Transfers

It is possible to undo a volume transfer by manually dragging volumes back to their device of origin. The volume transfer link will help to see to where the volume needs to go back. However, Architect provides two much neater mechanisms to achieve this. The first of these is an Undo button.

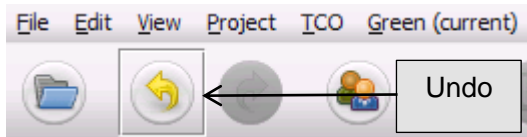


Figure 36. The undo button

After volumes have been transferred, they can be undone by clicking this button. Each volume transfer is undone separately, so the button may need to be used multiple times to revert back to the starting state. Note that the undo and redo buttons are not specific to volume transfers and can be used to undo/redo many of the Architect operations. To check which operations are next in line for undo/redo you can hover above the buttons with the mouse and a tooltip describing the operation will appear after a short pause.

A second more powerful function for undoing all volume transfers is the 'Reset Volume Transfers' button:

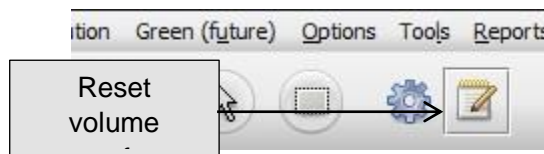


Figure 37. The reset volume button

This button will reset all volume transfers *for the whole project*. Pressing the undo button after using this feature will undo the reset operation and return the project back to the state it was in before the volume reset.

7.7 The Volume Bin

The volume bin is provided for three reasons: firstly, it captures volume when a virtual asset to which volume had been previously transferred is deleted. Secondly, it can be used as a store for temporarily holding volumes before they are transferred to their ultimate destinations and thirdly, it can be used to reduce the amount of volume on a floor in line with new print rules.

When a virtual asset is deleted, any volume assigned to it is automatically transferred to the volume bin. This is necessary to preserve the total volume in the environment. If this transfer to the bin did not take place, the volume on the deleted asset would be lost in the new virtual environment.

Volume is dragged to the bin for storage or volume reduction purposes just as if it were a virtual asset. Volume can be dragged from the volume bin in the same manner as for virtual devices (by holding down the SHIFT key).



7.8 Invalid Volume Transfers

Not all volume transfers are valid in Architect. It is not possible to transfer volume:

- Between existing devices, including onto an In Situ device; or
- From a virtual device to an existing device, that was not the source of the volume on the virtual device. It is only possible to “return” volume to the source, rather than transferring it to a different existing device.

7.9 Changing the Fate of an Existing Asset

As mentioned earlier. It is possible to change the fate of an existing asset within the Solution Design tab.

To set the fate, right click on an existing device and select the desired option from the Fate menu.

Alternatively, you can use the device fate buttons in the Asset DB toolbar (Figure 11).

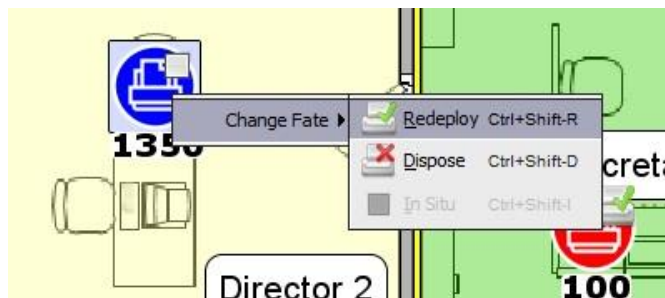


Figure 38. Change the fate of an existing asset in Solution Design view

7.10 Volume Transfer Statistics

The state of volume transfer from the existing print fleet to the new virtual fleet is displayed within the Volumes tab in the bottom right panel.

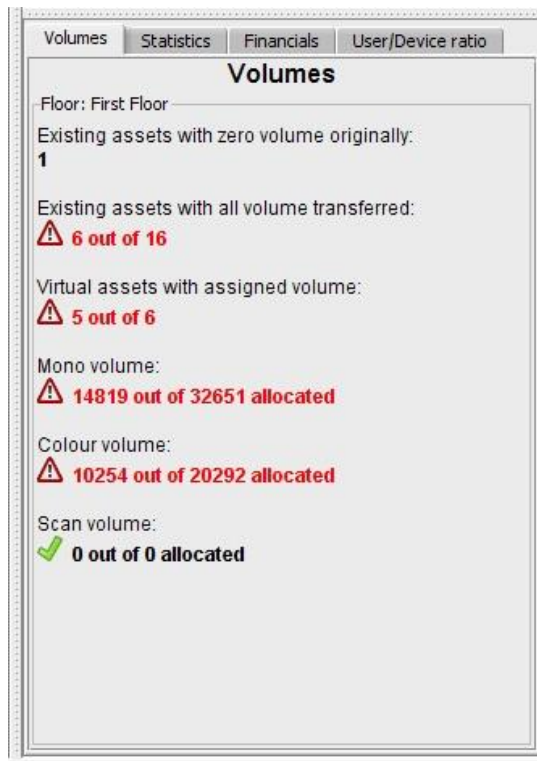


Figure 39. Volume Transfer Statistics

The statistics shown relate to the object (site/building/floor) selected in the navigation tree in the top right panel or the department selected on the floor.

- **Existing assets with zero volume originally:** The number of devices in the existing fleet with no volume data. These should be reviewed, as there may have been an error in volume generation.
- **Existing assets with all volume transferred:** The number of devices in the existing fleet that have had all their volume transferred into the new virtual environment. All virtual assets should have volume assigned to them.
- **Virtual assets with assigned volume:** The number of virtual devices that have had some volume transferred to them.
- **Mono volume:** The amount of Mono volume that has been transferred into the virtual environment from the existing fleet.
- **Colour volume:** The amount of Colour volume that has been transferred into the virtual environment from the existing fleet.
- **Scan volume:** The amount of Scan volume that has been transferred into the virtual environment from the existing fleet.

Each statistic is updated automatically.

Once all figures are shown in green with corresponding ticks, you are ready to generate your solution.



7.11 Generating the Solution

The new print environment that has been created thus far is a virtual environment. If you select any of the devices and look at their attributes in the top left panel, you will see that they are described in generic terms.

Architect contains an automated function for transforming the virtual environment into a real one that can be accessed via the 'Run Solution Generator' button in the toolbar as shown in Figure 40.

This Solution Generator function looks at the volumes and attributes of each virtual device in the future fleet and matches them with a model in the product catalogue.

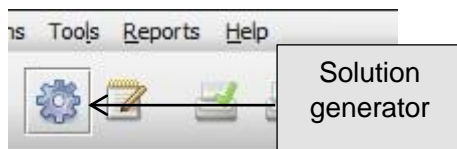


Figure 40. The solution generator button

When the Solution Generator is executed, Architect initially tries to place as many of the redeployed devices from the existing fleet as it can into the virtual environment. A redeployed device will only map to a virtual device if it is appropriately placed into the Product Catalogue and matches the requirements of that virtual device. If there is more than one device that matches, Architect will select the device that is located closest to the virtual device. The mapping process therefore intelligently matches redeployed devices to virtual devices based on similar capabilities while at the same time minimising physical movement of the redeployed fleet.

Once Asset DB has mapped all of the redeployed devices, there may still be virtual devices that have not had a device mapped to them. Architect will then assign a model to each such device by looking in the Product Catalogue for a suitable new model to use. Again, the suitability is determined by matching print volumes and capabilities. This is where the importance of selecting the capabilities of each device in the Product Catalogue comes into play.

Once volume generation is complete, if you select any of the devices and again look at their attributes in the top left panel you will see that they now contain specific make and model details. These details will also be shown in the table view.

7.12 Redeployed Device Movement

When allocating redeployed devices, Asset DB will by default look throughout your entire project for a suitable location.



This movement can be limited however to a Site, Building or Floor level. That is, a Redeployed device can only be deployed within the Site, Building or Floor in which it currently exists. This is done by selecting Solution>Redeployed Device Movement and then selecting the level of restriction you wish to enforce as shown in Figure 41.

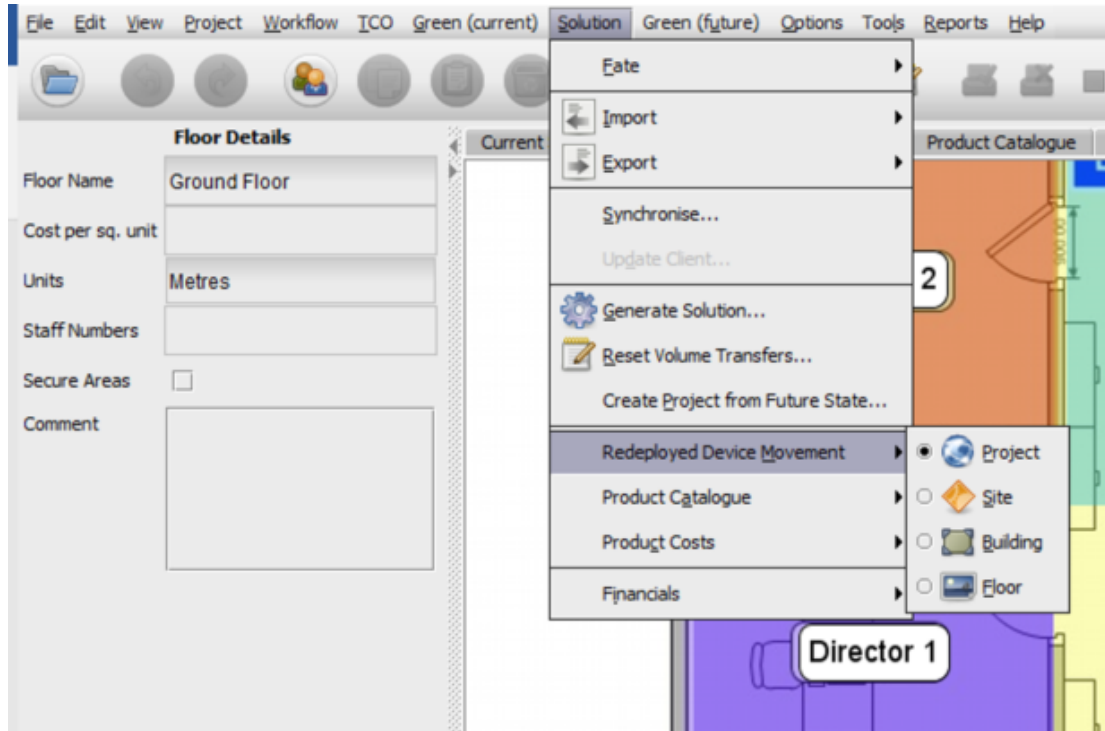


Figure 41. Restricting Redeployed device movement

7.13 Solution Generation Errors

It is possible that not all the redeployed devices from the existing print fleet can be utilised in the new virtual environment. Likewise, there could be virtual devices to which no suitable model can be assigned. If this is the case, Architect will indicate this in the dialogue that appears when the 'Run Solution Generator' button is pressed as shown in Figure 42. If this is the case then the solution will have to be amended to create a complete solution.

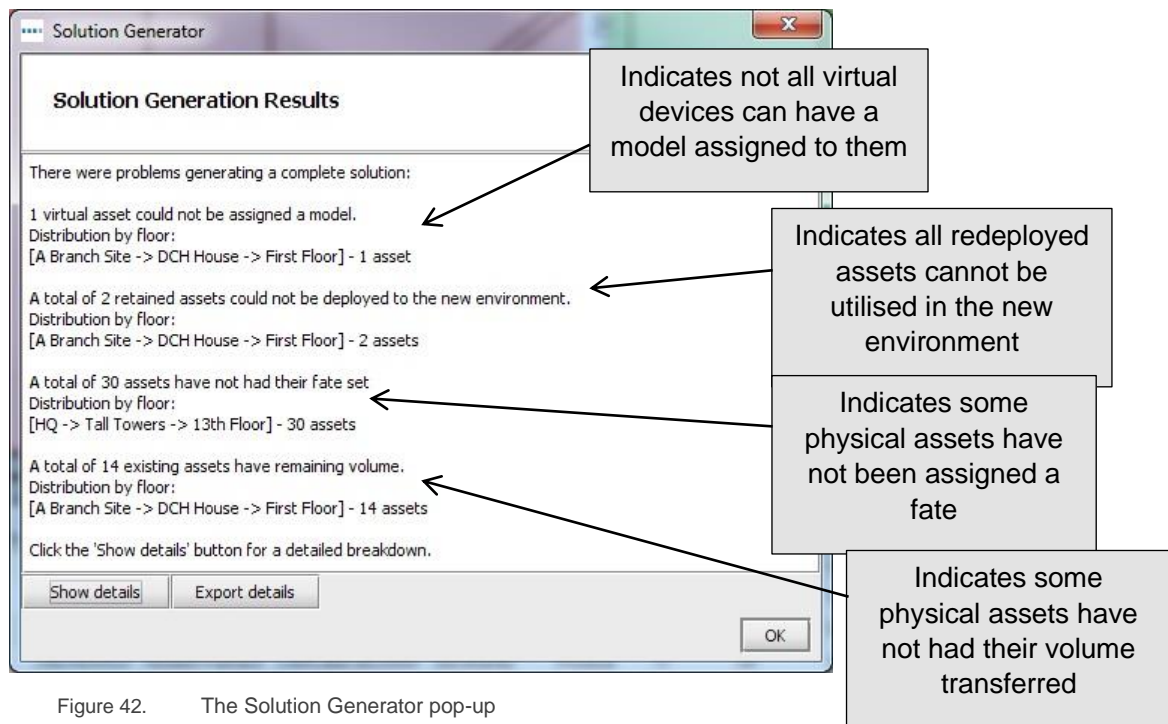


Figure 42. The Solution Generator pop-up

Further information detailing the specific devices with such errors can be shown by clicking on the Show Details button.

These solution generator errors are also displayed in the table view. The status column will show either "OK" for assets where there are no errors or "Error" for those that need amending before a complete solution can be generated.

If you hover over a row in the table that is showing as "Error" then this will show a tooltip with further details of that error. It will also highlight the device on the floor with an additional tooltip as shown in Figure 43. This also will allow you to identify the devices that need amending to enable you to create a complete solution.

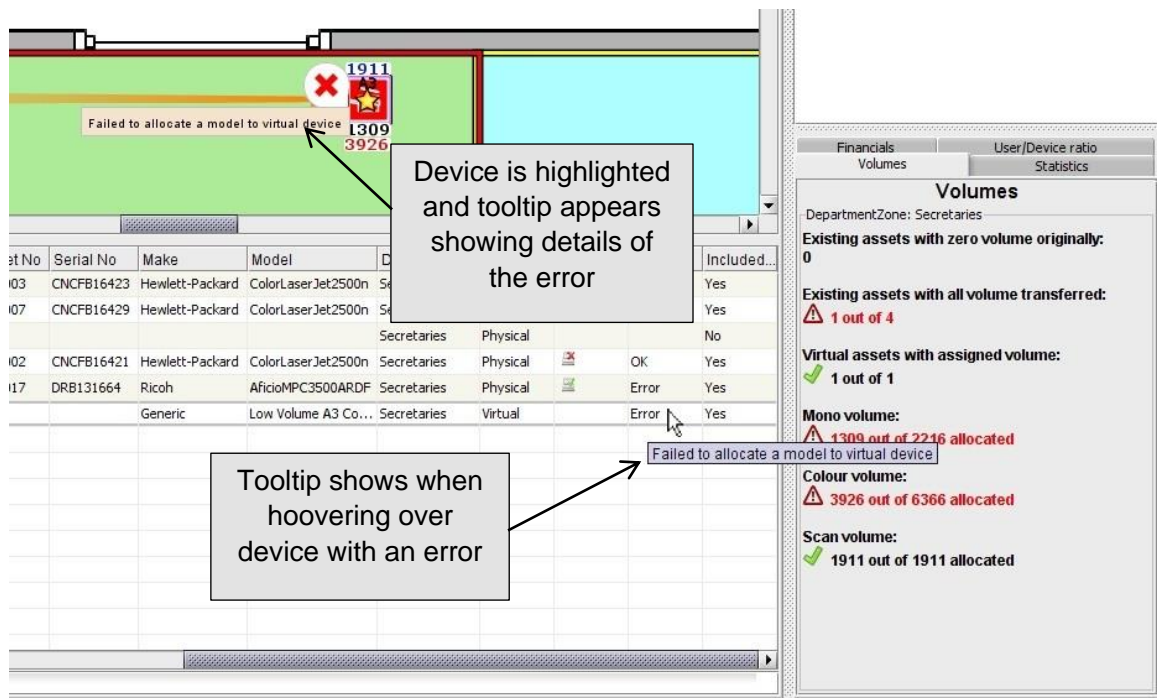


Figure 43. Table view error tooltips

7.14 Asset Status Labels

It is also possible to determine the status of redeployed devices in the existing fleet and the status of virtual devices in the new environment from the Asset Status labels.

Once the solution generator has been run, each device icon in the Solution Design tab will automatically display with a red cross or a green tick next to it to indicate its status as shown in Figure 44.

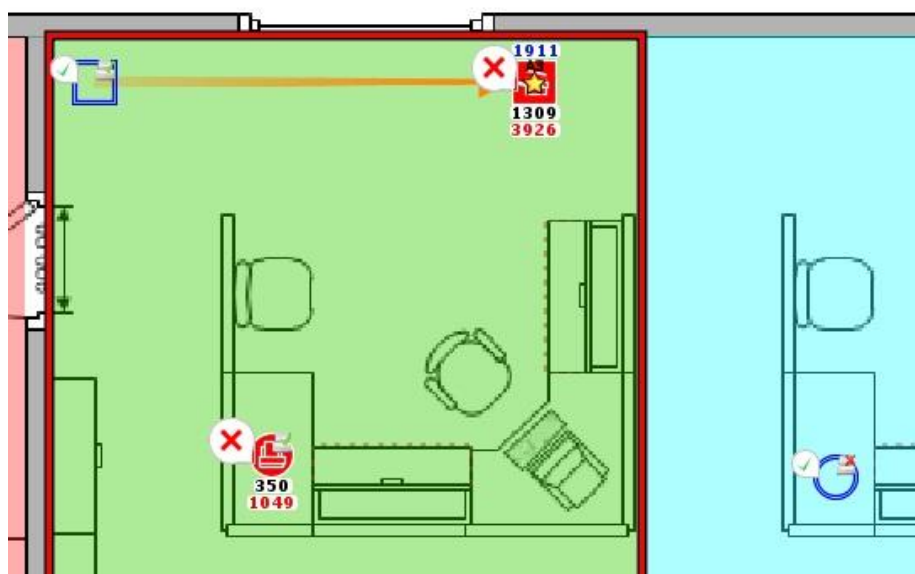


Figure 44. Device status during solution design



The meaning of each symbol varies depending on the asset type.

For existing redeployed assets:

- **Red Cross:** Device cannot be mapped to a virtual device
- **Green Tick:** The redeployed asset can be mapped to a virtual device.

For existing disposed assets:

- **Red Cross:** The asset still has volume that has not been transferred to a virtual device.
- **Green Tick:** All volume has been transferred to virtual device(s).

All In Situ devices will show a green tick as they cannot encounter the errors that would cause the red cross.

For virtual assets:

- **Red Cross:** No existing asset or new model can be assigned to it.
- **Green Tick:** An existing asset or new model can be assigned to it.

The presence of red crosses does not necessarily mean something is wrong as in some cases it may be a perfectly reasonable approach to create a solution in which virtual devices remain abstract and are described in generic terms. Likewise, it is also reasonable that some redeployed assets cannot be deployed in the new environment and will be kept in storage for spares/replacements.

To turn these labels on and off, simply select the Filter tab in the bottom left of the console, then tick/untick the Asset Status labels field.

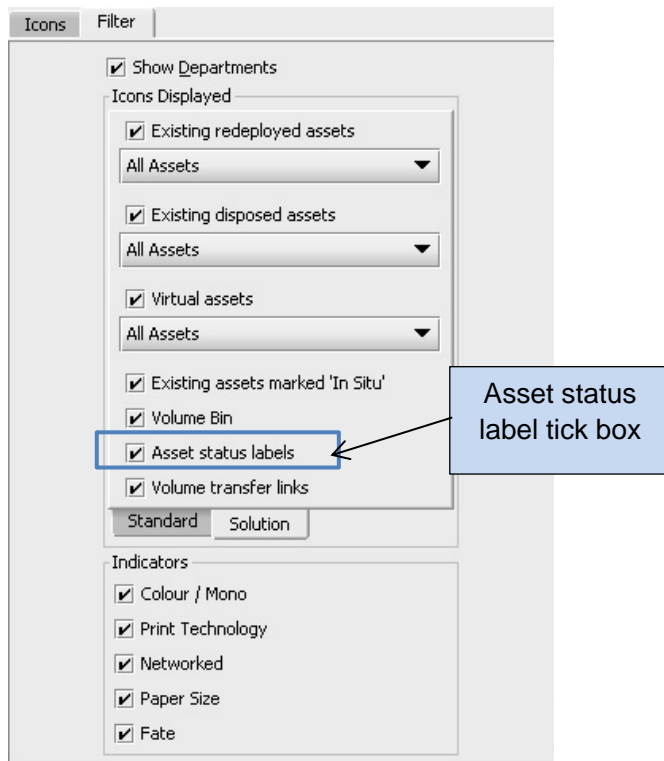


Figure 45. Filter tab in tabbed tool console

7.15 Overriding Architect Decisions

There are sometimes external constraints that cannot be taken into account by an automated function like the Solution Generator and require manual intervention from the user. Under these circumstances, it is possible to override the Solution Generator function and do some things manually.

7.16 Manually Assigning Make and Model to a Virtual Device

It is possible to gain control of a virtual asset by right clicking on it and selecting the 'Manual Changes Only' option.

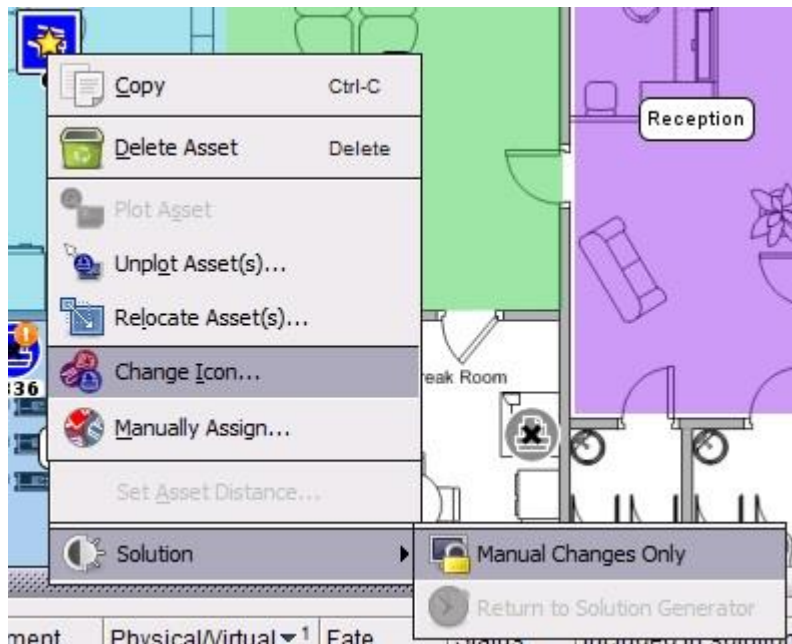


Figure 46. Gaining control of virtual assets

The gold star on the asset will change to white to indicate the asset will not be modified by the Solution Generator function. Now that the asset has been put under the control of the user, it is possible to alter its make and model by selecting a new device from the product catalogue.

This is done by right clicking the device again and this time selecting Manually Assign (shown in Figure 46). This will then bring up a pop-up showing all of the devices in your product catalogue. A device is then chosen by scrolling to find the correct model type, then expanding the relevant volume band and selecting the desired model as shown in Figure 47. If the device intended for use does not appear in the Product Catalogue for selection, go back to the Product Catalogue tab and add the device there. Cost information will also need to be added to the Product Costs for this newly added device. Any device in the Asset DB device database may be manually assigned to the virtual device, the above procedure will still be needed.

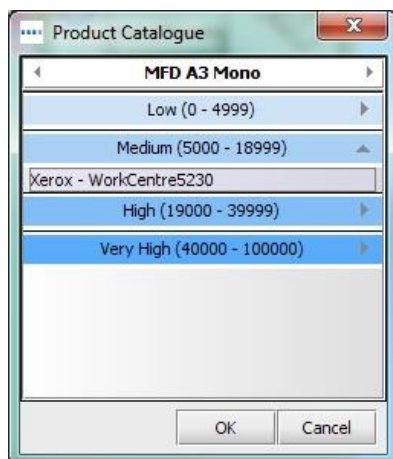


Figure 47. Manually selecting make and model



Note: This process is used to manually assign new devices only, not Redeployed devices. To manually assign Redeployed devices, please see Section 7.17 below.

7.17 Manually Mapping Redeployed Assets

It is also possible to manually map a redeployed asset to a virtual device. To accomplish this hold down the SHIFT key when initiating a drag operation from a redeployed asset. The mouse cursor will change to indicate an asset mapping operation has been started.

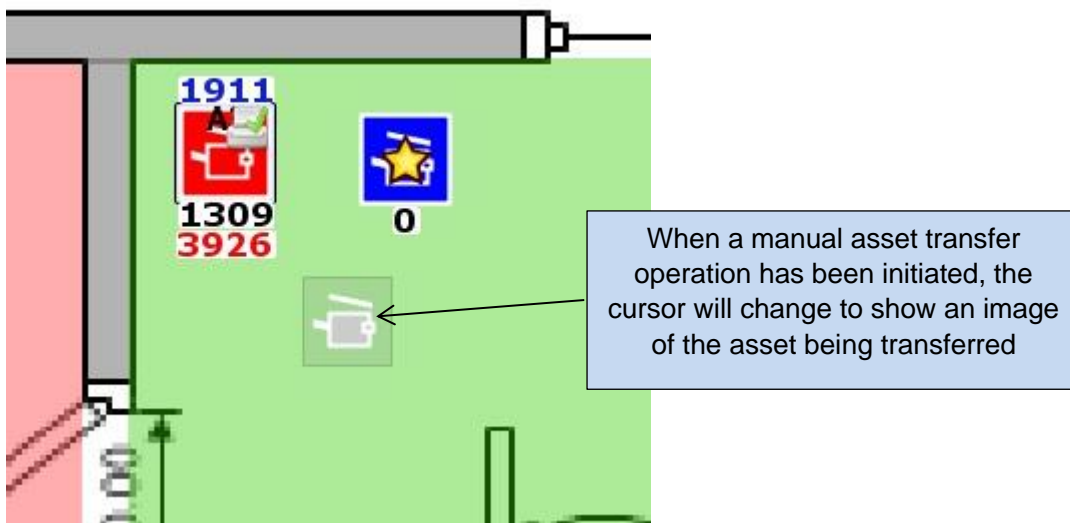


Figure 48. Initiating a manual asset transfer operation

If the shift key is not held down the cursor will show a standard paper icon, indicating a volume transfer has been initiated and not an asset transfer.

The asset can be dropped onto any virtual device provided the device is of the same type (e.g. printer or MFD). When the asset has been dropped a blue line will be drawn that will show the mapping between the redeployed device and the virtual asset. The virtual asset will change to show a white star instead of a gold star. It will also take on the attributes of the redeployed asset (for example Colour and A3 capability).

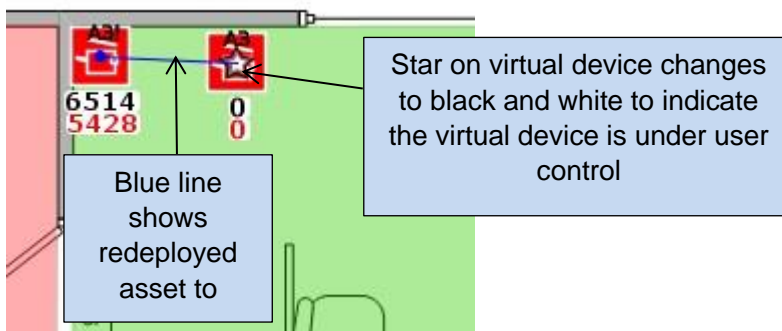


Figure 49. A manually mapped asset



An asset that is under user control is ignored by the Solution Generator function. When the function is executed it will leave the details of any user controlled assets alone and will not remap any redeployed assets that have been manually mapped by the user.

A manual mapping can be removed at any time by right clicking with the mouse on the virtual device and selecting the 'Return to Solution Generator' option.

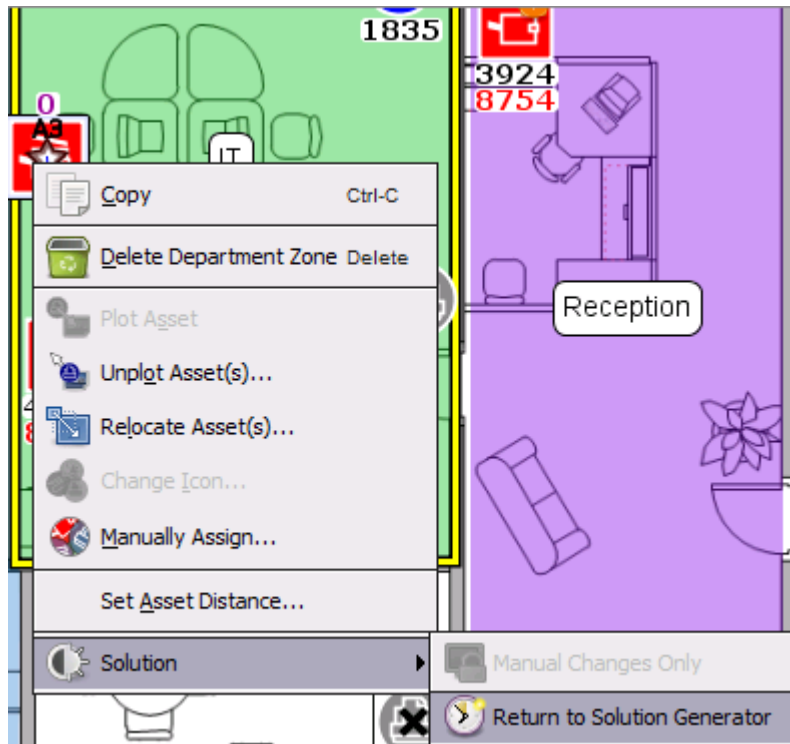


Figure 50. Returning a virtual device to the Solution Generator function

The virtual asset will now be back under the control of the Solution Generator function and the white star on it will change back to gold to indicate this.

Note that it is only possible to map a redeployed asset to one virtual asset. If a redeployed asset is manually mapped to a virtual asset (indicated by the blue line), it will not be possible to initiate another asset transfer operation from it.

It is also worth noting that a redeployed asset that has been manually mapped by the user cannot have its fate altered in the Device Fate view until it has been returned to the Solution Generator function.

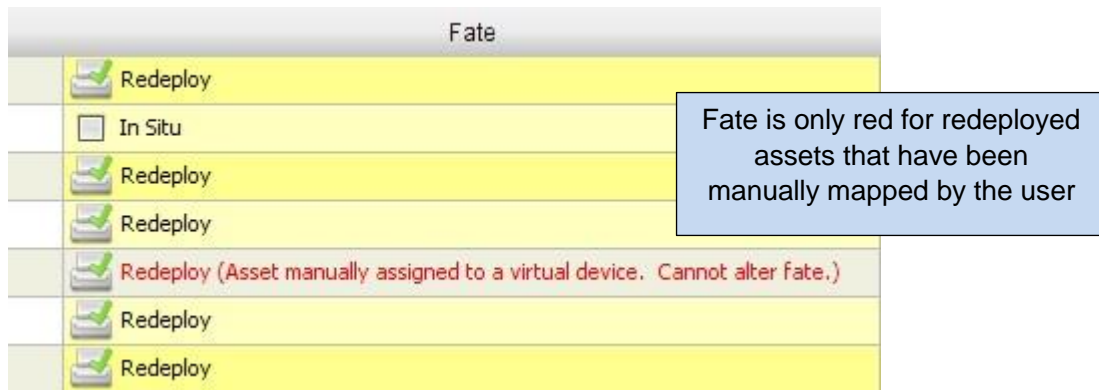


Figure 51. Fate for manually mapped assets

7.18 Using Filters

In addition to the base Asset DB filters (explained in the Asset DB Analyst manual) Architect provides a filtering capability that lets you display only particular devices relative to their solution status. The filters specific to Architect are located in the 'Solution' tab within the Filter tab in the bottom left panel.

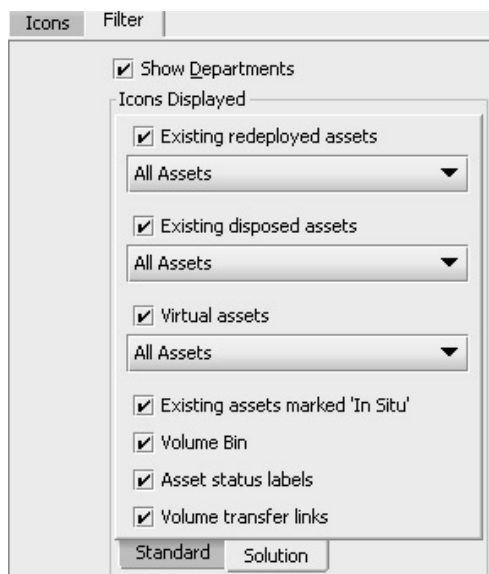


Figure 52. The Solution Architect filter tab

The tick boxes control the visibility of assets represented by the description as explained below:

- **Existing redeployed assets:** If unticked all redeployed assets will be hidden. If ticked, the assets shown depend on the drop down selection:
 - All Assets – all redeployed assets will be shown.
 - Assets with zero volume only – redeployed assets that have no volume on them will be shown.



- Assets with outstanding volume only – redeployed assets that have some volume yet to be transferred will be shown.
- **Existing disposed assets:** Tickbox and drop downs as per existing redeployed assets above.
- **Virtual Assets:** If unticked all virtual assets will be hidden. If ticked, the assets shown will depend on the drop down selection:
 - All Assets – all virtual assets will be shown.
 - Manual changes only – virtual assets that are under the control of the user will be shown.
 - Solution generator controlled only – virtual assets that are under the control of the solution generator will be shown.
- **Existing assets marked ignore:** If unticked all assets marked 'ignore' will be hidden. If ticked all assets marked 'ignore' will be shown.
- **Show Volume Bin:** Turns on and off the visibility of the Volume Bin.
- **Asset Status Labels:** As described in Section 7.14.
- **Volume Transfer Links:** Turns on and off the visibility of the volume transfer links as described in Section 7.1.

If a filter is in use, the title of the filters tab is shown in red to indicate it is active.

7.19 The Statistics Tab

The normal Asset DB statistics tab has been enhanced in the Solution Design view to show both existing and virtual asset totals.

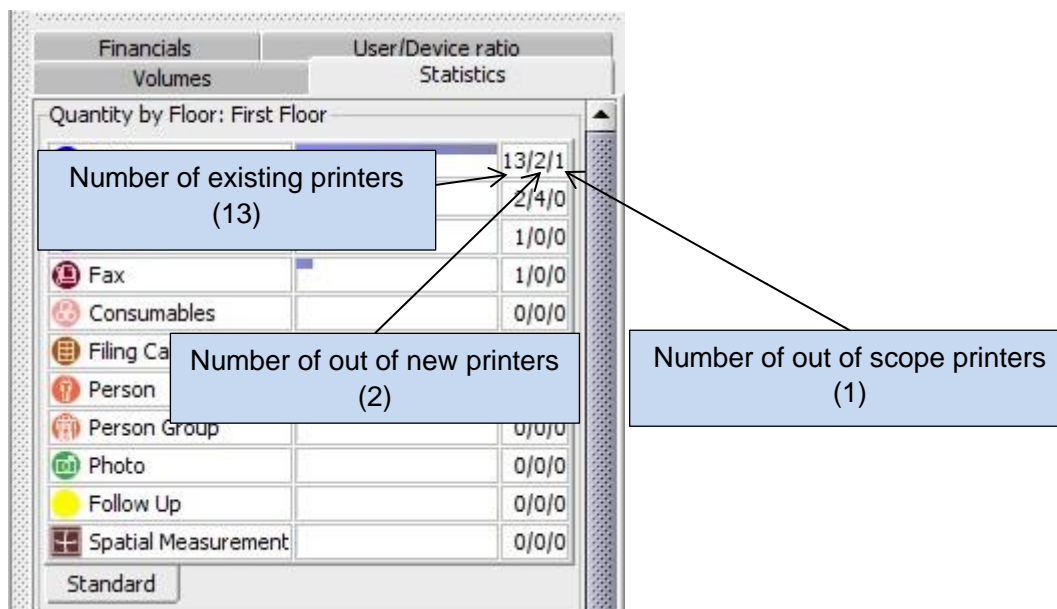


Figure 53. The statistics tab in the Solution Design view



7.20 The Financials Tab

If a TCO calculation has been created for the current state and results applied to the current state assets (details of this are in the Asset DB Analyst Manual) *and* Product Costs for the models making up the new fleet have been assigned (see Section 6.1) then the Financials tab will show a comparison between the current and Future costs. An incomplete solution will show a warning sign and the Future State costs are displayed as 0 until the solution is complete.

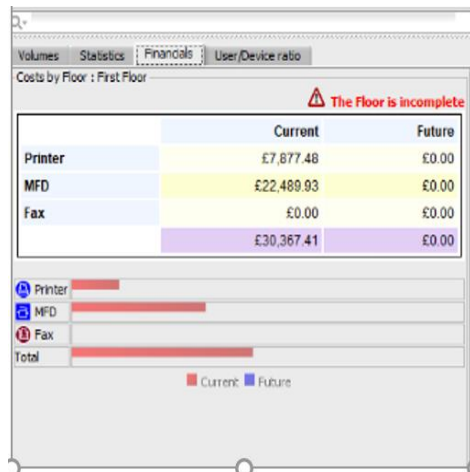


Figure 54. The Financials tab: incomplete solution for a selected floor

Once a solution has been run the costs for Current and Future State appear next to each other. It is possible to select an individual site, building or floor to review the costs for this floor only, or to select the entire project as shown in Figure 55.

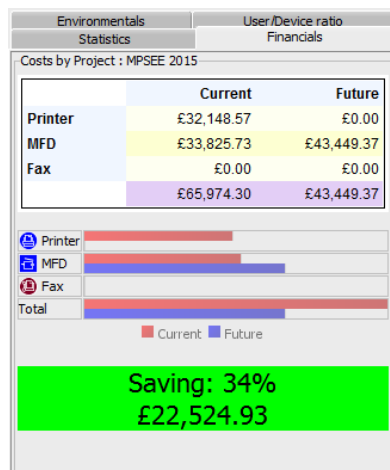


Figure 55. The Financials tab: complete solution for a project.

7.21 The User/Device Ratio Tab

The User/Device ratio tab allows you to set a target User/Device ratio and monitor whether or not this is met.



To set the target ratio either use the up and down arrows or manually type the value corresponding to the MFD or Printer target.

Next to these figures will appear a red cross if the target has not yet been reached (i.e. you have too many of this type of device on the floor) or a green tick if the target has been reached for the selected object (Floor/Building etc.).

The actual current and future ratios for the selected object are also shown. This function relies on data entered into the “Staff Numbers” fields at Floor and/or Building level. Dropping “Person” or “Person Group” icons on the floor plan does not affect the “Staff Numbers” field, which is used for the user to device ratio calculations.

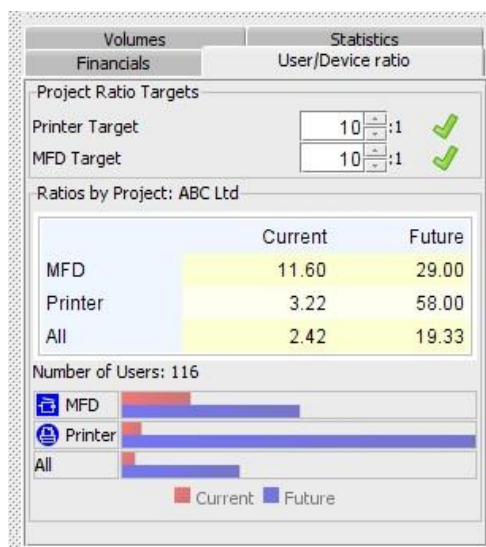


Figure 56. The User/Device Ratio tab

8 The Future State Tab

The Future State tab is the final view in Solution Architect and is used to show the new print fleet that was designed in the Solution Design view.

If your solution generator did not create a complete solution for a particular floor, you will get a warning of this as soon as you open the Future State tab for that floor. This will then give you the opportunity to return to the Solution Design tab and amend your solution to ensure it is complete.



8.1 Viewing a Summary of the Changes

A pictorial summary of the changes for the floor can be viewed by using the Show/Hide Changes button on the toolbar.

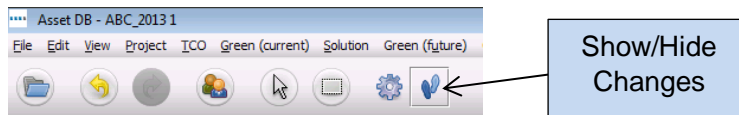


Figure 57. The Show/Hide Changes button

There are several different types of changes that can occur as a result of the design process and these are all represented as follows:

- **Assets marked with an 'X':** These are assets from the old fleet that were disposed.
- **Assets marked with a blue line:** These are assets from the old fleet that have been redeployed and have been moved on the floor. The start of the blue line indicates the origin of the asset (i.e. where it is currently) and shows where it has been moved to as a result of the redesign (the asset icon itself).
- **Assets marked with a '?':** These are assets from the old fleet that have been redeployed but they could not be mapped to any of the virtual devices created in the new fleet.
- **Assets marked with a red triangle:** These are assets from the old fleet that have been redeployed and are moving off the floor to a different floor, possibly in another site or building. To see where each asset is going place the mouse cursor over the asset and the destination floor and location of the asset will be shown.
- **Assets marked with a green triangle:** These are assets from the old fleet that have been redeployed and are moving onto the floor from a different floor. As above, to see where each asset has come from place the mouse cursor over the asset.
- **Assets with no markings and a gold star:** These are new assets that do not yet exist.
- **Assets with no markings:** These are devices which were marked as In Situ

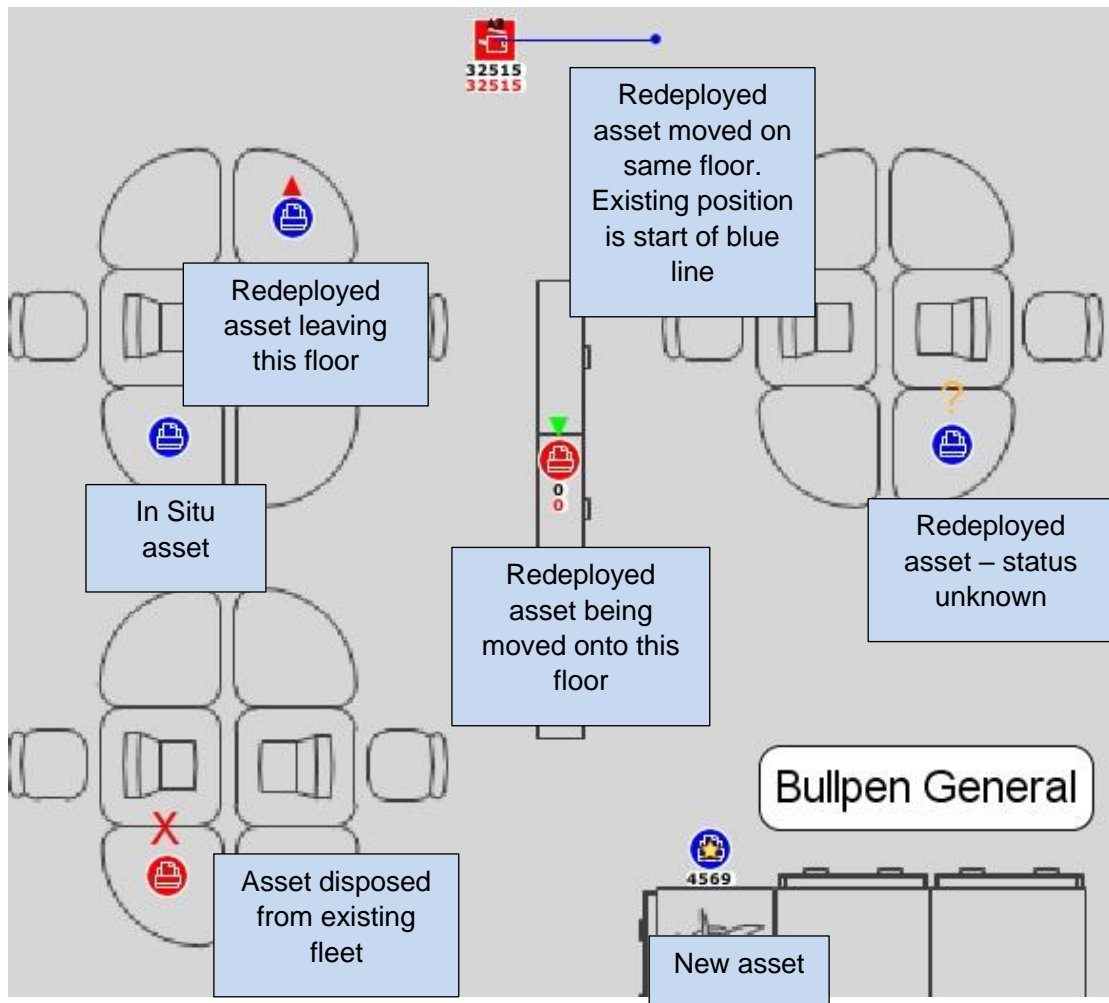


Figure 58. The change summary view

9 Creating a Future State Green Analysis

Just like for the current state, it is possible to create a Green Analysis for the future state assets.

To start a Green Analysis for your future state, click File > New > Green Analysis (Future State). This will then produce the Green Analysis (Future State) tab.

The basic process to run a Green Analysis on the Future State is the same for the process when running a Green analysis for the Current State. This is explained in the Asset DB Analyst Manual so will not be explained further in this manual.



9.1 Future State Assumption Sets

One main difference between the Green Calculation for the Future State and the Current State occurs in the Assumption Set. An additional option to add a duplex percentage is added as shown in Figure 59.

Assumption Set Details	
Name of Assumption Set	Green Assumption Set
Mono Coverage %	5
Colour Coverage %	5
Duplex %	30
Daily working hours	10
Days in working week	5
Turned off at night	<input type="checkbox"/>
Cost of electricity	0.08
Power to CO2 conversion rate	0.54
Standby Power %	15
Power save Power %	3

Figure 59. Future State Green Analysis assumption set

This allows you to assign a heightened duplex percentage should your design imply that this will occur.



10 Generating Solution Reports

Solution Architect has a report generation facility that can produce reports summarising the changes resulting from a fleet redesign. Select Reports > Run.

There are then three types of System solution reports that can be generated.

10.1 Moves and Changes Report

This is a complete summary of the changes to the existing print environment that result from the redesign. The output is generated in either PDF or Word format and includes floor plan images in addition to textual information. The textual information consists of a table organised by Site/Building/Floor that shows the fate of each asset in the existing fleet and lists any new assets that must be purchased as a result of the redesign.

For each floor, the following images are generated (if relevant):

- Floor plan with assets from the existing fleet that are to be disposed of.
- Floor plan with assets from the existing fleet that are to be redeployed. Any movement of the assets around the floor or onto/off the floor that is necessitated by the redesign is also shown.
- Floor plan showing the new devices that need to be purchased for the floor.
- Floor plan showing a change summary. This summarises all the changes in the previous three floor plans onto one page.

10.2 Device Fate Report

This report lists all devices from the existing fleet and all new devices that must be purchased as a result of the redesign. The output format is Microsoft Excel (.xlsm format). Devices are organised into a Disposed, Redeployed, In Situ and New Devices section, each on a separate worksheet. For each device all attributes are shown. Customised fields from the Current State, information will be displayed if the box “use in Solution Design” is ticked in the icon customisations. For more details, please refer to section 18.2 in the Auditor Manual.

10.3 Future State Proposal

Asset DB can also create a Future State Proposal Report showing details of the proposed future state which can be used to present to your customer.



The contents of this report mirror the Print Assessment Summary report, which summarises the current state. More can be found on the Print Assessment Summary report in the Asset DB Auditor Manual.

The report can be generated by going to Reports > Run in the top menu. You can then select the Future State Proposal from the list and select Run. Note that to generate a report Asset DB requires a complete solution and for a logo to be available.

The report can then be saved in various different formats including Word, PDF and PowerPoint using the options in the Save window. The report contains charts generated from the data in the Asset DB solution. Floor plans are also included based on what has been set up in the Future State Asset DB screen (i.e. whatever display options you have set up in Asset DB is what will show on the plans in the report).

10.4 Editing Solution Reports

It is also possible to edit the structure and style of the System Reports or to create new solution reports using the Asset DB Report Editor Tool. Please consult the Report Editor Manual for detailed instructions.

For further information on the Report Editor Tool please contact info@newfieldit.com.

11 Exporting and Importing Solutions

Solution data can be exported from Architect in three ways; as a stand-alone Asset DB project containing only the “new” devices; as a current state project and solution “pair” or as a single Solution file.

11.1 Exporting Solution to an Asset DB Project

A solution can be exported to an Asset DB project. This type of export will create a new Asset DB project that represents the redesigned fleet visible in the Future State view. To export in this manner select Solution > Create Project from Future State from the menu bar.

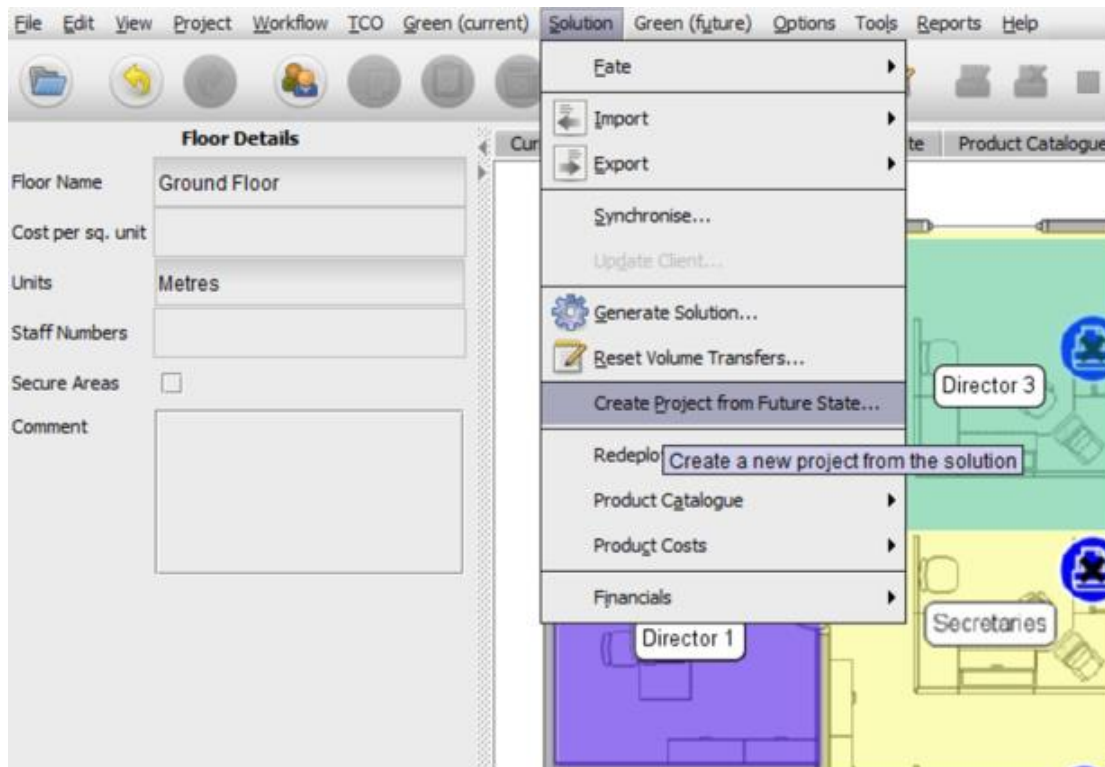


Figure 60. The export to project button

Note that the exported project is a normal Asset DB project and there is no solution related data present in the project. If you open the project you will see it is almost indistinguishable from other projects. Asset DB does maintain some very basic information about the origin of the project which is viewable by selecting the 'Show Project Details' menu option. This displays a dialogue that shows the ID of the user who created the project, the time of creation and the solution from which the project was created.

Top Tip: Creating a project from the Future State is critical to being able to show a Current State versus a Future State in CompleteView. Completeview can only reference Current State data, so to compare the Current to the Future, the Future State must be made into its own project.

11.2 Exporting Solution Data as a Project and Solution pair

Solution data can also be exported as a project and solution pair. This type of export will keep all solution related data and allow a subsequent import of the data. Both the underlying Asset DB project and the solution are exported.

To export solutions in this format use the Export Project and Solution menu option.

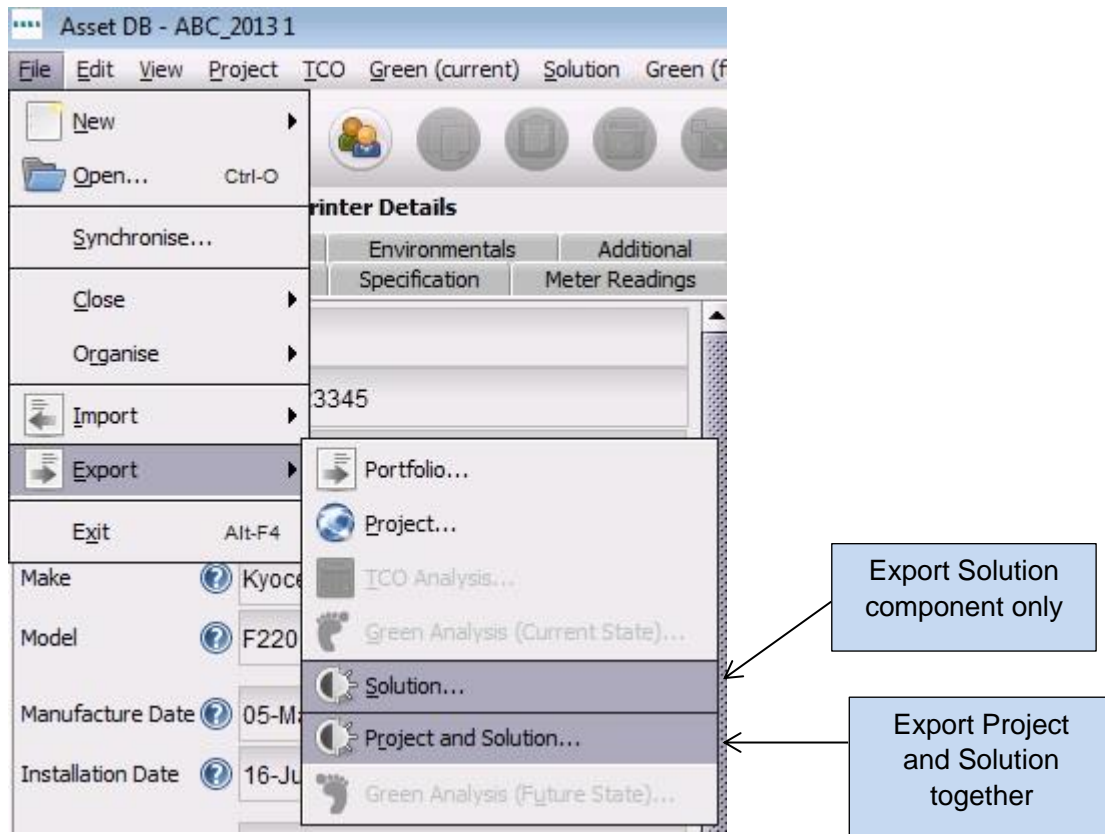


Figure 61. Exporting solution data

The exported data contains all information required to replicate the project and solution in another Asset DB Solution Architect instance.

Top tip: if you have access to the Asset DB Cloud, it is better to synchronise the project with the Cloud and export the solution only (see section 11.3) as a means of backing up your data. This will ensure the solution remains linked to the most up-to-date version of your project.

11.3 Exporting the Solution only

The final method of exporting the Solution data is to export just the solution element of the project.

To export solutions in this format, use the Export Solution menu option shown in Figure 61.



11.4 Importing Solution Data

Solution data that has been previously exported as a Project and Solution pair can be imported again by using the 'Import Project and Solution' menu option.

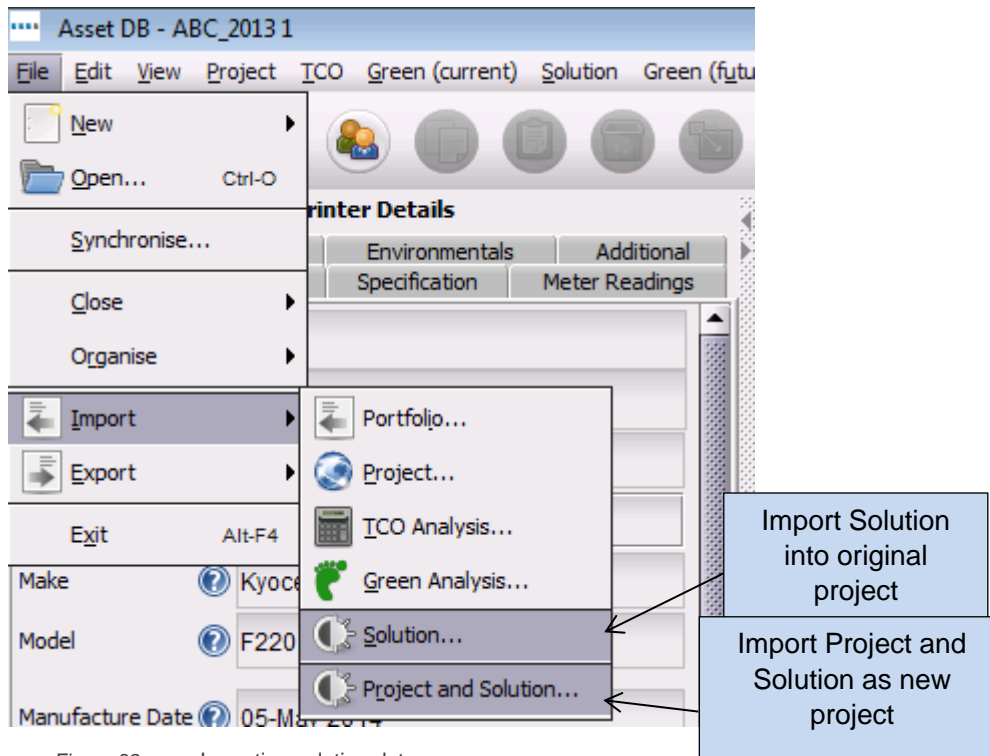


Figure 62. Importing solution data

The solution data is imported as a new Asset DB project and solution. This is an important point to understand – even if you export solution data as a Project and Solution file (.ats) and then import it back into the same Asset DB instance it creates a new project and solution. The new project will share a root name with the original project but will have '(Copy)' appended to it.

The solo Solution element can be imported back into its original project by using the 'Import Solution' menu option. It is important to note that the Solution cannot be imported into a different project than the one in which it was created.

It can, however, be imported to a synchronised version of the original project.

Note: if you have access to the Asset DB Cloud then it is always advisable to share your projects via the Asset DB Cloud and your solutions using the File > Export > Solution mechanism.



12 Invalid Changes

In general, it is not advisable to make changes to the current state data once the Solution Design process has started. If changes are made Architect keeps track of these changes and automatically performs any necessary adjustments. However there are circumstances in which an automated resolution is not possible and the solution will be invalidated without manual correction. The most likely causes of invalid solutions are described in the following sub-sections.

12.1 Adjusting Existing Fleet Volumes

If volume data is adjusted after a design has been started the following caveats apply.

Device volumes can be increased without any problems. Note that if you increase the volume on a device you will need to revisit the Solution Design view to transfer the extra volume onto a virtual asset. You will also need to rerun the Solution Generation function.

Device volumes can be decreased provided the amount to which they are decreased is not less than the amount of volume that has been transferred from the asset in the Solution Design view. For example, if the original volume on an asset is 500 and during the Solution Design process 200 has been transferred into the virtual print environment it is not advisable to adjust the volume of the asset to below 200. Adjusting the volume to less than this figure will invalidate the solution and cause the asset to show a negative volume figure in the Solution Design view.

12.2 Deleting Existing Assets

Removing a device from the existing fleet after a solution design has been started is fine if the device has been marked for disposal and the volume from that device has not been transferred to a virtual device. If a device marked for retention is removed the solution generation function will need to be run again because the device may have been distributed into the virtual environment and will need to be removed from it.

12.3 Changing Make and Model Data

If the Make or Model for a device is changed and the device has been marked for retention it is necessary to revisit the Product Catalogue and allocate the new Make & Model to a volume profile.



13 Frequently Asked Questions

Architect can be a very fluid and helpful tool, below are some of the topics that support receives inquiries about on a regular basis.

What is “In Situ”? I cannot add volume to “In Situ” devices?

“In Situ” is Latin. It translates to “on location” or “in situation”. Architect uses that designator to show that a device will not be changing in any way in the transition including adding volume, so volume may not be added to an “In Situ” device. To be able to increase the volume, use the “Redeploy” device fate.

How do I get a product catalogue?

Xerox does not keep or maintain Product Catalogues to provide to users so you will need to create one (see Section 5.4). Device configuration offerings and costing information for each group, company and user make this unfeasible. While it may take some time to develop the catalogue the first time, it can be saved and even shared with teammates using the Solution > Export > Product Catalogue and Solution > Import > Product Catalogue functions.

Why does the Current State cost for “Redeploy” and “In Situ” devices not carry into the Future State Product Costs tab?

Asset DB assumes that any devices in the Future State are going to be managed differently than they were in the Current State. Very rarely does a proposal use the same monthly cost and/or cost per page as was originally determined, therefore the costs do not carry over, and cannot be “accidentally” left unticked in the new scenario.