

What's New in Version 5?

(Up to and including Version 5.1)





Introduction

Welcome to 2020 Fusion Version 5!

Crossing several disciplines, the common theme of Version 5's feature set is improved user experience, speed and optimisation; this follows on directly from one of Version 4's goals to make the overall design process quicker and more intuitive.

The most significant enhancement to the application lies in the areas of printing, exporting, movie creation and 360° panorama generation, in which 2020 Fusion is now able to take advantage of multi-core processing and place these time-consuming tasks on the 'background', thereby saving designers a significant amount of time and freeing them up to create or edit other designs in the meantime.

Continued attention is also applied to the already highly regarded '360^o Panorama' feature, with further enhancements also anticipated in the near future.

Other key areas of development relate to dimensioning, annotation, linking and the 'Connect' customer management database.

Designers will benefit from several enhancements to the application's user interface and user experience, including further use of the real-time 'status bar' assistance for specific functions, improvements to the existing 'mirror design' functionality and a more direct means of managing invalid style options.

Many additional preferences have also been introduced across a range of areas, giving designers even greater flexibility in configuring the application to operate in the best way possible for their working environment.

Outside of general development, 2020 Fusion has also been tested and fully validated as being supported under new Microsoft environments, as well as having achieved the latest in a series of Microsoft certifications.

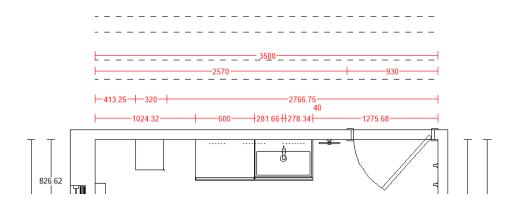
Details of the new features and enhanced functionality in 2020 Fusion Version 5 are listed under a series of general headings, as follows.

Dimensioning

Ability to Move Multiple Dimension Rails

2020 Fusion already has the ability for a designer to select multiple dimension rails which, for example, allows them to all be deleted via a single action.

Version 5 builds upon this functionality by now also allowing a designer to select and reposition (i.e. move in the same plane) multiple dimension rails, thereby avoiding the need to repeat the same action several times over.



Island Dimensioning: 'Minimum Distance from Wall' Value to Also Apply to Elevation Views

Fusion possesses a preference relating to island unit dimensioning called 'Minimum Distance from Wall'. This value is, essentially, a tolerance used to determine the minimum distance from a wall before which items placed in the middle of a design are treated as an island unit configuration and, as such, are then subject to different dimensioning rules to those placed on a wall.

In earlier versions of the application this value only affected plan view dimensioning; effective from Version 5, this preference will also apply to elevation views.

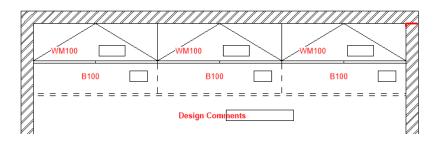
Dimensioning			
	Dimension Rail Settings		
Favourite Styles	Default Dimension Rail Gaps: Dimension Value Alignme	nt: Dimension Rail End Style:	~
Fusion 3D	Plan Elevation Align Value with Dimen	ision Rail in Plan View Island Unit Dimensions:	
General	Initial Gap 200 200 Align Value with Dimen	ision Rail in Elevation View Dimension Rails Behind in Plan View	
General Text	Subsequent Gaps 200 200 Dimension Rails Abov	e Walls in Elevation View Minimum Distance From Wall 100	
Info Bar	Angle Dimensions	Island	unit minimum distance from wall (enter a value of 1 or more)
inter bis str	Angle Dimensions		

Annotation

Ability to Move (Drag & Drop) Multiple Annotations

2020 Fusion already has the ability for a designer to select multiple annotations, which – for example - allows them to be rotated or deleted collectively via a single action.

Version 5 builds upon this functionality by now also allowing a designer to select multiple annotations and reposition them in any direction.



Printing & Export

Background Processing System: Printing, Export, Movie Generation & 360° Panorama

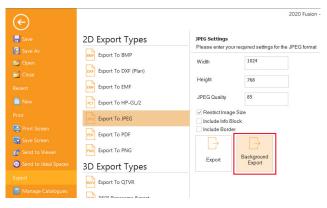
Printing designs, exporting images, generating movies and 360° panoramas within 2020 Fusion takes time, especially when performing these functions using higher quality render settings. In previous versions, these activities would fully occupy the application until they were completed; only afterwards would a designer be free to continue using 2020 Fusion for other tasks.

Version 5 introduces the concept of 'Background Processing' – this allows 2020 Fusion to take full advantage of multi-processor machines and for a designer to choose to generate any print, export, movie, or 360° panorama that is expected to take a long time as a background process - thereby allowing them to work on other design activities in the meantime.

In the case of printing, an additional 'Background Print' button has been added to the backstage view and can be applied to all print types (standard, tiling, worktop, installation symbol and batch print sets (including on-demand batch prints).

¢						
R Save			Print			
🔀 Save As	Print	Background Print	Copies: 1 🌲			
Close			ground print to the curr	rently selected print	ter	
	Printer					
📄 New	Send to P	DF	•			
	Printer Properties					
Print Screen	6 111					
Save Screen	Settings					
🚮 Send to Viewer						

The same approach has been applied to image exports, with an extra button being added to the 'Export' backstage view for all relevant export types:



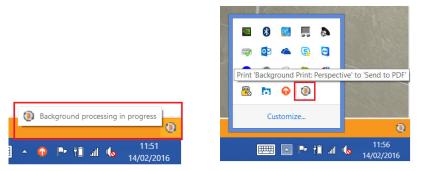
For movie generation, this will now be processed in the background by default, although a preference can be unchecked in 2020 Fusion's 'Options' ('Movie Generation Settings') to make this run in the foreground, if preferred.

					Options	5	
General Text	^	Movie Generation Set	tings				
Info Bar		Name:	Movie 1	~	Add	Rename	Delete
Info Block		Render:	Colour Fill	~			
Internet Settings		Resolution Width:	720				
Measurements		Resolution Height	576				
Movie Generation Settings		Bit Rate (kbit/s):	3072				
Named Views		Frames Per Second:	24				
Notification		✓ Hide Walls	Semi-Transparent Items	\sim			
Planning Defaults		General					
Predefined Views		Movie Location:	C:\2020 Fusion 5_2\				Browse
Pricing	Γ	 Background movie ge 	neration				
Render Settings							

For Quick Print and 360° Panorama generation executed from the perspective view, the default is for foreground processing to apply; however, hidden preferences can be added to the PPPrefs.ini file to always make these operate in the background. These will need to be entered under the [Customise] heading:

```
[Customise]
BackgroundQuickPrinting = "1"
Background360Panorama = "1"
```

Designers will be able to keep track of the progress of all prints, exports, movies and 360° panoramas via a complementary System Tray application found on the right hand side of the Windows taskbar. This can also be launched from within Fusion itself via the status bar at the bottom of the application.



If several background processing requests have been sent by the designer, the designer can manage the order in which they are processed via this interface – either moving tasks up or down the queue or deleting them altogether.

۱	Standard Priority	Low	Priority	
Task			Time added	Status
Print 'M 'Send t	Ir Smith Bathroom: Pers o PDF'	spective' to	04 March 201 10:58	6 Processing
Print 'M 'Send t	Ir Smith Bathroom: Pers o PDF'	spective' to	04 March 201 10:59	6 Pending
Print 'M 'Send t	Ir Smith Bathroom: Pers o PDF'	spective' to	04 March 201 10:59	6 Pending
	'Mr Smith Bathroom: Pe th Bathroom QTVR.mo		04 March 201 11:00	6 Pending
			- 🖻 🛍	₽ 🕩 11:01 04/03/2016

2020 Fusion automatically ranks some background processing tasks as higher than others: printing, exporting and 360° panorama tasks will be added to the 'standard priority' task queue; movie generation tasks will be added to the 'low priority' task queue.

Support for '2020 VR (Virtual Reality) Viewer'

The 2020 Fusion 360° Panorama Export feature has been updated to in order to accommodate support for '2020 VR Viewer' glasses. 360° Panorama exports from 2020 Fusion will now be fully compatible with this new technology, which means that - when viewing a 360° Panorama on a qualifying smartphone – there will be an additional viewing option that will allow customers an even more immersive experience when viewing a representation of their newly designed space, using 2020 VR Viewer glasses, or equivalent.

There is no change in the means of generating 360° Panorama exports in 2020 Fusion, only the resulting panoramas themselves will possess the additional viewing functionality.



The minimum requirements to be able to take advantage of the 2020 VR Viewer functionality for Android, iOS or Windows-Phone mobile devices are as follows:

- The mobile device/browser must support WebGL.
 - Only Android Browser V5 onwards supports WebGL.
 - Only iOS Safari V8 onwards supports WebGL.
 - Only Windows IE mobile V11 onwards supports WebGL.
- The device needs to have accelerometer and gyroscope sensors.

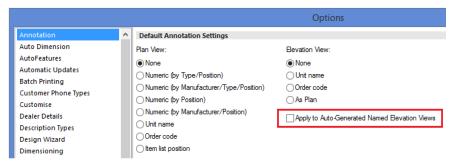
If the minimum requirements listed above are not met, then the panoramic image will still be available to view and navigate on the mobile device, but the specific '2020 VR Viewer' option will not be accessible.

Viewing, Lighting & Rendering

Predefined Settings for Print Views - Named View Enhancements (Virtual Walls)

New behaviour has been introduced for virtual wall named views, with newly created virtual wall named views now being effectively regarded as automatically generated named views and therefore behaving in a similar way to these.

As such, the virtual wall names (numbers) will now be generated automatically and the numbers themselves synchronising with the numbering of 'real' walls. Virtual wall annotation and dimensioning will now follow the same preferences used for automatically generated named views (the previous virtual wall specific preferences have therefore been retired).



				Options
Annotation	^	Default Item Dimensio		
Auto Dimension		Dimension Display Defaul	t:	
AutoFeatures		None		
Automatic Updates				
Batch Printing		Dimension Types Defaults	S:	Rail Options Defaults:
Customer Phone Types		✓ Base Units	Comice	✓ Gap Dimensions
Customise		✓ Wall Units	Pelmet	Witness Lines
Dealer Details		✓ Fixtures	Worktop	Guide Rails
Description Types		Wall Angles	Worktop Radius	Order Codes
Design Wizard		Ceiling Filler	Worktop Angles	Height From Floor
Dimensioning		Island Units	Tile Zones	
Favourite Styles			_	
Fusion 3D		Apply to Auto-Generate	ed Named Elevation Views	
General		Default Installation Sy	mbol Dimension Settings	
General Text		Rail Placement Defaults:		Rail Options Defaults:
Info Bar		None		Witness Lines
Info Block		As Added		Guide Rails
Internet Settings		From Nearest Corner	Order Codes	
Measurements		<u> </u>		
Movie Generation Settings			Height From Floor	
Named Views		From Right		
Notification		Apply to Auto-Generate	ed Named Elevation Views	
Planning Defaults				

A new preference has also been added which applies to all automatically generated named elevation/virtual wall views - 'Filter Items Behind Primary Wall', which allows the user to not display items behind the automatically generated named view. The default is for this preference to be turned off.

Movie Generation Settings	Automatic Creation Of Named Elevation Views Settings
Named Views	Show Corresponding Wall Annotations In Plan View
Notification	Filter Items Behind Primary Wall
Planning Defaults	Render Settings Wireframe
Predefined Views	Wienanie V
Pricing	
Render Settings	

In the elevation named views area, the virtual wall named views are now listed in the 'Automatically Created' section, directly underneath the auto generated named elevation views:

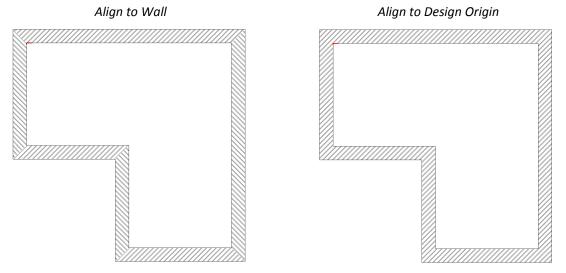
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		🎫 Item List 🔻	🛄 Setting 🝷 🔜 Bac	kgrounds 🔻	📩 Incline:	45
		📰 Report 🔻	Brightness:		Sunlight: —	
Plan Elevation	Perspective	Multi-View 🔻	Contrast:		Theme Scene: -	
😹 Elev	ation		Render			Li
Catale Nam	ned Views 🕨	Named Views				
		Elevation Colour	Fill			
		Automatically (Created			
Catalogue:	Advanced G	*Wall 1		*Wall 2		
Primary Type 💌	All Types	*Wall 3		*Wall 4		
Secondary 💌	All Types	*Wall 5		*Virtual Wall	6 A	
Item Name 🔻		*Virtual Wall 6 B		*Virtual Wall	7.0	_
Length 💌		New Named	I View	virtual wan		•

Design Creation

Hatched Walls Enhancements

Further enhancements have been made to the existing hatched walls feature, as a result of which the designer is now able to define the default wall hatching type for a new design (standard, single hatch, double hatch, cross hatch), as well as the default hatching method - either to align the hatching to each individual wall (existing functionality) or to align all wall hatching to the design origin (new functionality).

	Poly Add angle meas	Poly Add angle measurement type							
	Relative to horizontal	Relative to horizontal							
	ORelative to last unit	◯ Relative to last unit							
	Wall Hatching	Wall Hatching							
	Hatching Type:	Double Hatch	-	Hatching Method:	Align With Wall	-			
	Hatching Distance:	Standard			Align With Wall				
~	Single Hatch				Align With Design Origin				
		Cross Hatch							
	[Relative to horizontal Relative to last unit Wall Hatching Hatching Type: Hatching Distance:	Wall Hatching Hatching Type: Double Hatch Hatching Distance: Standard Single Hatch Double Hatch	Relative to horizontal Relative to last unit Wall Hatching Hatching Type: Hatching Distance: Standard Single Hatch Double Hatch	Relative to horizontal Relative to last unit Wall Hatching Hatching Type: Double Hatch Hatching Distance: Standard Single Hatch Double Hatch	O Relative to horizontal Relative to horizontal Relative to last unit Wall Hatching Hatching Type: Double Hatch Hatching Distance: Standard Single Hatch Double Hatch Double Hatch			



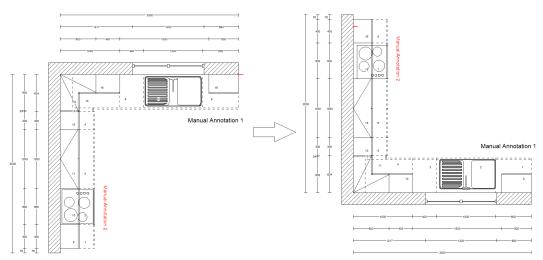
In addition, the designer can now change the hatching angle within any given design – simply type the desired angle into the 'Hatching Rotation' field and press 'Enter'.

	2020
- +	Wall Type Hatching Rotation: 45.0000
	Walls
	Hatching Rotation: Enter the angle of rotation for the
	hatching of the selected wall(s).

Mirror Design Enhancements (Print Areas, Annotations, Dimensioning)

2020 Fusion already allows a designer to create a mirrored version of an existing design - either vertically or horizontally. In previous versions of the product there have been several limitations as part of this process and, as such, some aspects of the design were not transferred during the mirroring process.

In Version 5, the mirror design process is now also able to automatically mirror all 'Print Areas', 'Dimensions' and 'Annotations' present in the design, thereby eliminating the need to reapply these elements in the mirrored design.



Note: it remains the case that 'autofeature' items are not transferred as part of the mirror design process; the designer will therefore still need to reapply autofeatures to the new version of the design after the mirroring process is complete.

Ability to Un/Link Existing Design Items

2020 Fusion possesses a variety of methods of linking one (or more) item to another (compulsory links, prompted links, manual links), but these only operate at the point of addition to a design. However, once any given item is present in a design, it has not been previously possible to select it and un/link it from/to another.

2020 Fusion Version 5 allows the designer to achieve this via new functionality available in the item list view.

Provided items are listed with 'Group by Links' turned on, any existing design item can be selected and linked to any other (at any selected point in the item list hierarchy). Or, if the design item is already linked to another - it can be unlinked from its existing parent to either become a main item in its own right, or it can even be linked to a completely different parent item.

el62btwaw	el62btwg	el62btww		Alert	Pos. Number	As Added	Item Name	Description
					1	8	CON6BTWCE	600MM BACK TO WA
				4	2	45	1000 SE	2440 X 1000 SHOWE
				4	3	46	1200 SE	2440 X 1200 SHOWE
en1200aw	en1200g	on1200w			4	36	BYWHMD771	Mono 1700x700 Bath
	CITZODAW CITZODG		~		4.1	37	BYWHMD781	Mono Front Panel
Description 👻					4.2	38	BYWHMD791	Mono End Panel
	Walnut				5	43	@BYSE120QL	1250 Offset Quad + S
2020 Cloud	🛄 Catalogue It.	🛛 Navigate Vi	ew 📗		6	40	BY-BCPCU003	Cube Basin Mono
CTRL to link, SHI	FT to unlink BYW	/HMD791 will be u	Inlinke	d.				

The designer is assisted during this process by the 'real time' guidance displayed on the status bar at the bottom of the screen.

Clicking and holding the CTRL key whilst dragging an entry in the item list allows the designer to link it to another item; clicking and holding the SHIFT key allows the designer to unlink an item from another.

When the linking/unlinking action is complete, the item list is rearranged according to the sorting method currently in use (e.g. type/position, order code, etc.).

Minimum/Maximum Parameters (Unit Properties)

In 2020 Fusion, it is possible to change the parameters of many items within the 'Properties' dialog.

In Version 5, it is now possible for minimum or maximum limits for these parameters to be defined at the point of catalogue creation. This means that - within the existing Edit Unit Properties dialog - a parameter's value would be restricted to an amount between the minimum and maximum values (if) defined in the manufacturer's catalogue.

In terms of user-interface, the tooltip indicating both the original and the modified values will now also advise of the minimum and maximum values permitted, if defined.

	Unit Properties
Unit Properties Office Information Property Information Base Adjustable Void for Carcase Depth Pinth SetMack from Front Door/Drawer Inset (Top Bottom) Frame Type Size Door/Drawer Inset Shef Thukness	OPlan Perspective 90 I 1.5 Plinth Setback from Front changed from 25mm to 50mm. (No Min, No Max) 1
Handing: Link Unit Link Unit Type: None Description:	
Purchase Price:	Reset Default View OK Cancel

Change Catalogue: Optimised Display of Catalogues

The 'Change Catalogue' mechanism has been made significantly more efficient by now only adding the source (non-mapped) and target catalogues to the new design. As a result, the 'add palette' in the replacement area now only shows the new target and any non-mapped source catalogues, as opposed to all 'installed' catalogues, making the process much quicker and easier to navigate.

Ability to Set Default for 'Show Preferred Only' Checkbox in Style Details

A new preference has been added to the 'Style Details' section of 2020 Fusion's 'Options' which allows users to set the default state of the 'Show Preferred' checkbox in the 'Style Details' dialog.

firstion General 10 Cream Black ning Defaults Image Prompt for Style Options Display Default Style Dialog 11 Magnolia White ag Hide Invalid Options Show Prefered Only 13 Oak Dayray Green ag Default Sort Method: 14 Orange Grey thr Image State Stat		Options	8 Cornflower Oak 9 Country Pine
Publish - Send to Viewer D () b D () D (otification anning Defaults defined Views icing moder Settings sports sports scource Profiles poom Defaults we	Central Prompt for Style Options Hide Invalid Options Show Preferred Only Default Sort Method: ©Catalogue @Catalogue Description Descending Sort Code	10 Cream Black 11 Magnola White 12 Mahogany Green 13 Oak Dark 14 Orange Grey 15 Peach Grey 16 Sugar Almond 17 Teal White
			Show Preferred Only

User Interface/User Experience

Item List View: Simplified Column Removal

Historically, the addition and removal of Item List column headings has only been possible by launching the 'Field Chooser' pop-up and dragging the column headings between this and the Item List view itself.

In version 5 it is now possible to remove unwanted column headings without the need to recall the field chooser first – simply click and drag the option no longer required away from the other headings and release the mouse once a cross appears on top of the heading name.

Alert	Pos. Number	As Added	Handing	Item Name	Description
٩	1	10	×	P100	1000mm Drawerline Base Unit
	2	11	Han	ling	800mm Drawerline Base Unit
	3	12	Right	850	500mm Drawerline Base Unit
	4	83		B2DP10IF	1000mm 2 Drawer Base In-Frame
	5	13	Left	BC8040L	800mm Drawerline Corner Base Unit (400mm Door)
	6	21		BS100	1000mm Drawerline Sink Base Unit
	7	22	Right	B30	300mm Drawerline Base Unit
•	•	00		00	B 11.00

Note: it is still necessary to launch the field chooser in order to add column headings.

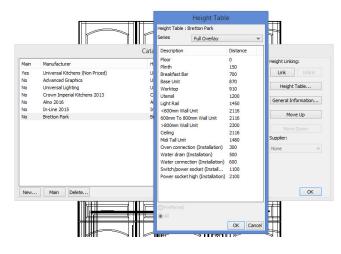
Speed and Stability Optimisation

A number of activities have been undertaken in Version 5 that collectively contribute towards an improved general operating speed as well as higher levels of stability and performance. Among other areas, users should experience the following:

- Designs opening more quickly
- Improved methods of allocating free memory
- Faster Block Evaluation
- More efficient import and export of 3D models, with some export file sizes reduced
- Optimisation of saving designs

Height Table Dialog: Display Current Series from Default Style Block for Each Manufacturer

When the Height Table dialog is opened from 'Catalogue Information', 2020 Fusion will now initially display the default series applicable to the selected style block. In addition, the dialog has been made wider in order to clearly display all information both in the drop-down menu and in the description/distance areas of the table itself.



Customer Management

Connect Support for SQLite/Retirement of MS-Access (Including Version 5 Installer Enhancements)

As part of the installation process for existing customers when upgrading to Version 5, the format of the Connect customer database will be automatically converted from MS-Access SQLite. SQLite is a more robust platform and is not limited in terms of its maximum size.

To the end user, the user interface and user experience when using Connect will be no different to before. Indeed, customers can expect improved speed of accessing records and opening/closing designs, as well a greater underlying level of stability and robustness.

Please consider the following important points when performing the MS-Access to SQLite migration:

- Ensure that no users are currently logged into the database (i.e. ensure that no one is currently using Connect/2020 Fusion).
- Ensure that nothing is currently checked out of the database.
- When migrating a multi-user database, it is recommended to initially migrate just one user, validate that the process has been successful and then, once confirmed, update the rest of the users.
- For older (and, by extension, larger) databases, the process may take a long time.
- Once the installation/migration is in progress, the installer should neither be interrupted, nor should the database utility tool be launched, nor should Connect/2020 Fusion be used at all.
- In the event of any doubts or concerns, please contact your local Support Team for advice.

Please note that any archived customers/designs can still be restored after a migration has taken place, so no specific action is required in this respect.

Display Multiple Telephone Numbers in Customer Details

Users of 2020 Fusion in 'Standalone Mode' (i.e. those not using the 'Connect' customer management system) now have the ability to enter multiple telephone numbers for their customers. The telephone numbers required can be defined in a new section of the 'Options' area, called 'Customer Phone Types'; the phone types available are identical to those offered in Connect mode.

The phone types selected in the Options are displayed as 'drop-down' menu entries in the Customer Details dialog, allowing designers to enter all required telephone contact information in this single dialog.

		Customer Details
Annotation Auto Dimension AutoFeatures Automatic Updates Batch Printing Customer Phone Types		Customer Details This raction displays your customer's details for this design. This information can be used for reporting and ordering purposes, is well as being accessible by the Info Block. Please ensure that all appropriate fields are populated and dick Next' to move onto the General Information' section. Contact and Sale Details
Customise Dealer Details Description Types Design Wizard Dimensioning Favourite Styles Fusion 3D General General Text Info Bar Info Bar Info Block Internet Settings Measurements Movie Generation Settings	Car Company Home 2 HomeFax ISDN Mobile Pager DeliveryFax Installation InstallationFax Invoice Cher	Name John Smith Reference Home 15 Hgh Street Delvery Mentoon
Notification Planning Defaults	OtherFax	< gad. Hext > Ensh Gancel

In addition, any of the phone types can be referenced in Info Blocks and Report Wizard reports.

For Connect users, any phone types defined for the customer in Connect will also be displayed against the drop-down menu, but as read-only entries.

Miscellaneous

Operating System-Specific Installers

Once Version 5 installed on an end user's system, for subsequent updates, they will be directed to the correct download location based upon the automatic detection of their operating system.

Support for Windows Server 2016

Following a full process of testing and validation, active support is now provided for the use of 2020 Fusion on Windows Server 2016 'with Desktop Experience' (64 bit). Please note that Windows Server 2016 'Nano-Server' is not a supported variant of this platform.

For full details of all supported operating systems for use with 2020 Fusion Version 5, please refer to the <u>Installation Support</u> page on <u>2020spaces.com</u>.

Support for SQL Server 2016

Following a full process of testing and validation, active support is now provided for the use of 2020 Fusion with SQL Server 2016 (Standard & Express editions), 64-bit.

For full details of the conditions of SQL Server support for 2020 Fusion, please contact your local Support Team.

Windows 10 Certification

20-20 Technologies Ltd currently enjoys the position of being a 'Microsoft Gold Certified Partner' and, as such, we continuously endeavour to pursue and attain all relevant testing certification from Microsoft for the 2020 Fusion product.

As a previous recipient of Windows XP, Windows Vista, Windows 7 and Windows 8 certifications, 2020 Fusion has also been submitted for, and has achieved, the status of 'Windows 10 Compatible'.

