



CADLink for Infor CloudSuite Industrial User Manual

Version 1.0

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Contents

Overview 5

Launching CADLink..... 6

Bill of Materials Grid 7

Operations/Routing..... 10

BOM Changes..... 11

CAD System Document Properties 12

CADLink Messages 13

Infor CloudSuite Industrial Connection Settings 14

CADLink Configuration..... 15

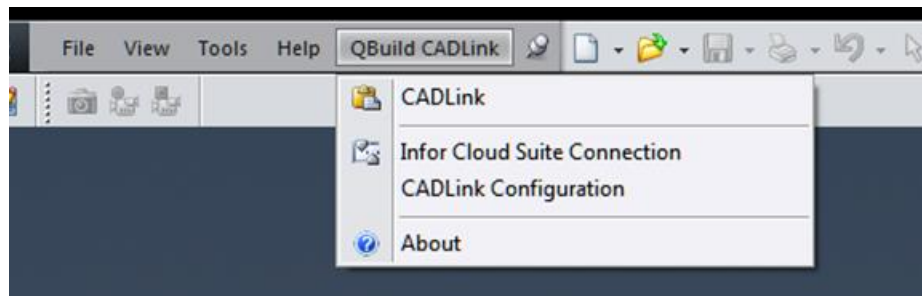
Overview

CADLink serves as a bridge between a CAD system and Infor CloudSuite Industrial. It allows the user to automatically create, update, and modify Bill of Materials (BOM) and Part data within Infor CloudSuite.

CADLink simplifies and streamlines the process of transferring engineering data between CAD and Infor CloudSuite. The purpose of this document is to outline the capabilities of CADLink. If any of your questions are not answered, please feel free to reach out to infor-support@qbuildsoftware.com for assistance.

Launching CADLink

CADLink can be launched directly from your CAD system toolbar, or as an external program. Upon launching, CADLink will begin to work with the current active CAD file open in your CAD system.



After launching, a CADLink splash screen will appear. In this screen, you can see CADLink examine the entire Bill of Material (BOM) structure of your active CAD file, as it pulls BOM and Part data from both your CAD file and from Infor CloudSuite.

Once it has completed this process, it will display the CADLink BOM Grid which highlights and compares the differences between the CAD and Infor CloudSuite BOMs.

Bill of Materials Grid

CADLink will open up to the BOM Grid after launching:

No	Save	ITEM	Description	Revision	UOM	Oper num	Qty	Product Code	Source	Stocked	Matl Type	ABC Code	Cost Method	Cost Type	Mit
1	<input checked="" type="checkbox"/>	QB-BEZ_001	Bezel Moldbase	A	EA		1.0000	FG-CUSTOM	M	<input type="checkbox"/>	M	A	S	A	
1.1	<input checked="" type="checkbox"/>	QB-BEZ_008	Bezel Moldbase - Moving Half	A	EA		1.0000	FG-CUSTOM	M	<input type="checkbox"/>	M	A	S	A	
1.1.1	<input checked="" type="checkbox"/>	QB-BEZ_009	Side Core Clamp Plate		EA	10	4.0000	FG-CUSTOM	P	<input type="checkbox"/>	M	B	S	A	
1.1.2	<input checked="" type="checkbox"/>	QB-BEZ_010-B	Cavity Plate B	B			1.0000			<input type="checkbox"/>					ZAL-100
1.1.3	<input checked="" type="checkbox"/>	RB-HASCO-02	HASCO Metric Intermediate Plate				1.0000			<input type="checkbox"/>					
1.1.4	<input checked="" type="checkbox"/>	QB-BEZ_011	Spacer Block		EA	30	2.0000	FG-200	P	<input type="checkbox"/>	T	B	S	A	
1.1.5	<input checked="" type="checkbox"/>	RB-HASCO-01	HASCO Metric Clamping Plate		EA	10	1.0000	PP	P	<input checked="" type="checkbox"/>	O	C	S	S	
1.1.6	<input checked="" type="checkbox"/>	QB-BEZ_012	Guide Bushing				4.0000			<input type="checkbox"/>					
1.1.7	<input checked="" type="checkbox"/>	QB-BEZ_013	Clamping Sleeve				4.0000			<input type="checkbox"/>					
1.1.8	<input checked="" type="checkbox"/>	QB-BEZ_007	Connecting Nipple		EA	20	4.0000	FG-200	P	<input type="checkbox"/>	M	B	S	A	
1.1.9	<input checked="" type="checkbox"/>	QB-BEZ_010	Cavity Plate B	A	EA	20	1.0000	FG-CUSTOM	P	<input type="checkbox"/>	M	B	S	A	

In this screen, line items or fields may be highlighted in different colors to indicate differences between the two BOMs. The default color scheme is described in 5 colours:

- White: Part already exists in the Infor CloudSuite part master.
- Green: Part does not exist in Infor CloudSuite, and will be created by CADLink after saving.
- Grey: Part is not present on CAD BOM, and will be removed from Infor CloudSuite BOM
- Blue: Part is not present on CAD BOM, but will not be removed from Infor CloudSuite BOM
- Yellow: There is a discrepancy between CAD and Infor CloudSuite data.

Right-clicking on a yellow field will open a small window showing the different pieces of data from CAD and ERP:

Side Core Clamp Plate		EA	10
Cavity Plate B	CAD Description : Clamp Plate, Side Core		
HASCO Metric Intermediate P	ERP Description : Side Core Clamp Plate		
Spacer Block	CADLink Description : Side Core Clamp Plate		30
HASCO Metric Clamping Plate		EA	10
Guide Bushing			

The user can select a description to use, or type a new description that CADLink will write to both the CAD system and Infor CloudSuite. Yellow fields will be resolved and synchronized upon saving.

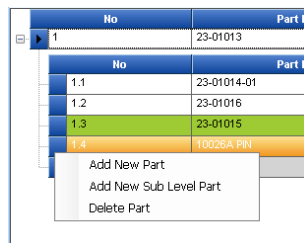
Important Part data such as Part Number, Description, Revision, etc. will also be exposed in this grid.

- Infor CloudSuite-specific fields such as Unit of Measure, Product Code and Part Type can be chosen for new parts.
- Some data cannot be changed for existing parts, such as UOM.

Raw materials can be assigned directly through the CADLink interface. Right clicking in the 'Mtl Part Number' column and selecting 'Add Material' will open a search window into your Infor CloudSuite Item master. There, you can search for the correct raw material by Item Number or Description, and then provide a quantity in the Mtl Qty column. Materials can be replaced or removed by right-clicking again on the material Item Number.

ZAL-100	Aluminum,Sheet,1/8" (STD-STANDARD)	FT
Add Material		

Similar to raw materials, line items can be added to the Infor CloudSuite BOM manually without modelling them in your CAD. Right-clicking on a blue square on the far left of a line item will open a menu to add new parts.



Adding a new part will create an empty row in the selected level or sub-level. Just as with raw materials, the user can right-click on the Part Number column and select 'Replace Item' to open the part search window. After selecting a part, a quantity can then be typed into the BOM Qty column for the selected part. These items show up in blue, and are called Manual Parts.

No	Part Number
1.1	23-01014-01
1.2	23-01016
1.3	23-01015
1.4	10026A PIN
1.5	23-01014
1.6	

Grey rows (parts to be removed from the BOM) can be converted into Manual Parts by opening the Manual Parts menu on that line item.

The Save column can be used to ignore changes to specific line items in CADLink. When you save the BOM, CADLink will ignore any lines where the Save checkbox is deselected. This

is helpful for transferring long lead-time items into Infor CloudSuite even if the full design is not yet complete.

	Save	Rd
	<input checked="" type="checkbox"/>	000
	<input checked="" type="checkbox"/>	D
	<input checked="" type="checkbox"/>	C
	<input checked="" type="checkbox"/>	F

Operations/Routing

CADLink facilitates the assignment of operations and routing through the Operations tab.

For existing parts, the operations and operation sequences will be loaded from Infor CloudSuite.

For new parts, a sequence template will be loaded from your CADLink settings, which can then be edited for each specific part.

The screenshot shows the CADLink interface. On the left is a navigation pane with tabs: Bills Of Materials, Operations, BOM Changes, CAD System Document Properties, and CADLink Messages. The main area displays a BOM tree for part MC-00129ASM-01. The tree includes sub-assemblies: CRT-00112ASM, AL-00132ASM, ALH-00123ASM, CR-39102ASM, INWA-01231ASM, and INW-17392ASM. On the right, there is an 'Add Operation' table with columns for OPER_NUM, WC, and Description. The table contains the following data:

OPER_NUM	WC	Description
5	ENG-10	Engineering
10	PNT-10	Painting Area
15	DRY-10	Drying Area
16	INS-20	Inspection Center
18	AS-500	Assembly Area
20	INS-20	Inspection Center
30	PKG-10	Packaging Station
40	INS-20	Inspection Center
50	ST-100	Warehouse Staging
60	Paint	Paint Booth

The available operations are taken directly from your Infor CloudSuite database.

After you have finished assigning operations to the sequence, you can assign component parts to Work Centers from the BOM Grid tab:

The screenshot shows the BOM Grid tab. It features a dropdown menu for 'Operation' with '18' selected. Below the dropdown is a table with columns for OPER_NUM, WC, and Description. The table contains the following data:

OPER_NUM	WC	Description
5	ENG-10	Engineering
10	PNT-10	Painting Area
15	DRY-10	Drying Area
16	INS-20	Inspection Center
18	AS-500	Assembly Area
20	INS-20	Inspection Center
30	PKG-10	Packaging Station
40	INS-20	Inspection Center

If no Work Center is assigned for a component, CADLink will automatically use the first Operation in the parent part's Operation Sequence.

BOM Changes

The BOM changes tab is a snapshot summary of the changes CADLink will be making upon saving. It is read-only, but updates live as you make changes in the BOM Grid and Operations tabs.

	PART	DESCRIPTION	CAD QTY	ERP QTY	OPSEQ	ERP OPSEQ	NOTES
Bills of Materials	MC-8812ASMB-01						
Operations	CRT-8812ASMB	Mechanical Advance Assembly	1	0			Insert to Bill of Material.
BOM Changes	HWA-91231ASMB	Numbering Wheel 4Digits Assembly	1	0			Create New Part and Insert to Bill of Material.
	HW-41232ASMB	Numbering Wheel Housing Assembly	1	0			Create New Part and Insert to Bill of Material.
	AS-91020B	Counter Advance Spring	2	0			Create New Part and Insert to Bill of Material.
CAD System Document Properties	CRT-8812ASMB						
CADLink Messages	ALH-8812ASMB	Advance Latch Housing Assembly	1	0			Create New Part and Insert to Bill of Material.

This tab is particularly useful for record keeping purposes, or if you are making minor changes to a large assembly.

CAD System Document Properties

The CAD properties tab is another read-only tab. It is simply a window into the CAD properties of the active CAD file, to avoid jumping between CADLink and your CAD system frequently.

The screenshot displays the CAD System Document Properties interface. On the left is a tree view showing a hierarchy of CAD assemblies: MC-00129ASM-01, CRT-00112ASM, AL-00132ASM, AL-400291, SS-00012834, ALH-00123ASM, ASS-029311-001, AL-192312, and ALH-4002817. On the right is a table titled 'Current CAD Properties' showing 10 custom properties.

No	Property Name	Property Value	Property Raw Value
1	PartNo	AL-400291	AL-400291
2	Description	Advance Latch, 4 Digit	Advance Latch, 4 Digit
3	Revision	2	2
4	Material	6504-040	6504-040
5	Product_Code	GENERIC	GENERIC
6	Commodity_code	COMPONENT	COMPONENT
7	ABC_CODE	A	A
8	Length	20	20
9	Width	5	5
10	UNIT_OF_MEASURE	- none -	- none -

To make changes to these properties, you must save new properties using CADLink or exit and change them manually in the CAD system.

CADLink Messages

CADLink Messages is an important validation step. Here, the user will be notified of any warnings or errors.

Warning: Alerts the user of a low-impact issue.

e.g. Description exceeds character limit and will be truncated

Error: A more serious issue where the save function is disabled to preserve data integrity

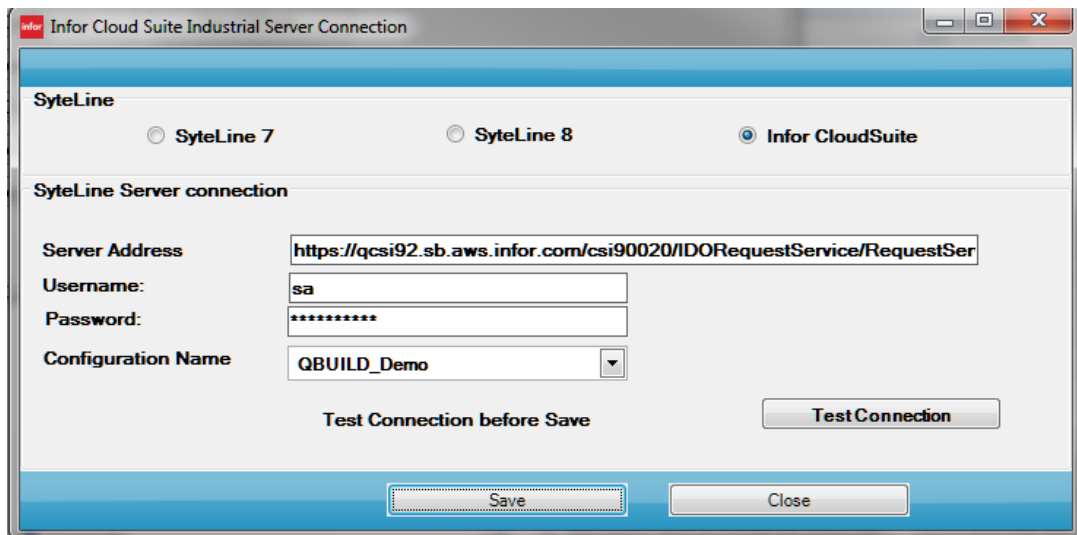
e.g. A part cannot have the same Part Number as its parent

In order to save a BOM, the user must resolve all error messages or ignore (i.e. uncheck the Save box) the line items before saving.

Infor CloudSuite Industrial Connection Settings

CADLink connects to your Infor CloudSuite database using an automation license. The proper credentials with read and write access must be provided for CADLink to access the Infor CloudSuite data.

To test the connection, press the Test Connection button to confirm that the connection is established.



The screenshot shows a dialog box titled "Infor Cloud Suite Industrial Server Connection". It features three radio buttons under the "SyteLine" header: "SyteLine 7", "SyteLine 8", and "Infor CloudSuite", with "Infor CloudSuite" selected. Below this is the "SyteLine Server connection" section, which includes four input fields: "Server Address" (containing a long URL), "Username:" (containing "sa"), "Password:" (containing "*****"), and "Configuration Name" (a dropdown menu with "QBUILD_Demo" selected). At the bottom of the dialog, there are three buttons: "Save" (highlighted with a dashed border), "Test Connection before Save", and "Test Connection".

CADLink Configuration

The CADLink Configuration settings allow you to choose field mappings, color-coding, and Item templates.

General Settings: Basic settings for CADLink such as default data, Manual Part database field, etc.

Field Mapping: These are used to define where CADLink should search to find part data, such as Part Number, Part Description, Revision, etc. from your CAD files. Your Infor CloudSuite Part UOM and Raw Material UOM are written to your CAD properties.

Color Codes: Choose the color scheme CADLink uses to highlight BOM differences