

OrCAD® X Capture CIS: What's New in Release 23.1

Product Version 23.1
September 2023

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OrCAD X Capture CIS: What's New

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The following new features are added in OrCAD® X Capture CIS for the release 23.1:

- **New Features**
 - ❑ [Complete Part Authoring Environment](#)
 - ❑ [Building Team and Workspace](#)
 - ❑ [Developing Team Component Libraries](#)
 - ❑ [Library and Design Data Management](#)
 - ❑ [Workspace Content Management](#)
 - ❑ [Seamless Integration with OrCAD X Presto](#)
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 - ❑ [CIS-Specific Features for Cloud CIS](#)
 - ❑ [Publish for Manufacturing](#)
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- [New Documentation](#)

Complete Part Authoring Environment

With the OrCAD X Professional (POX200 Pro) and OrCAD X Standard (POX100 Standard) licenses, you can create new components from scratch or add them from content providers. The complete part authoring solution provides the following functions:

- Place components from content providers in Capture designs
- Search for components in libraries from content providers
- Create a local library of components by adding components from content providers
- Create new components in a local workspace using available symbols, footprints, and PSpice models
- Link a manufacturer part number (MPN) with an existing library component

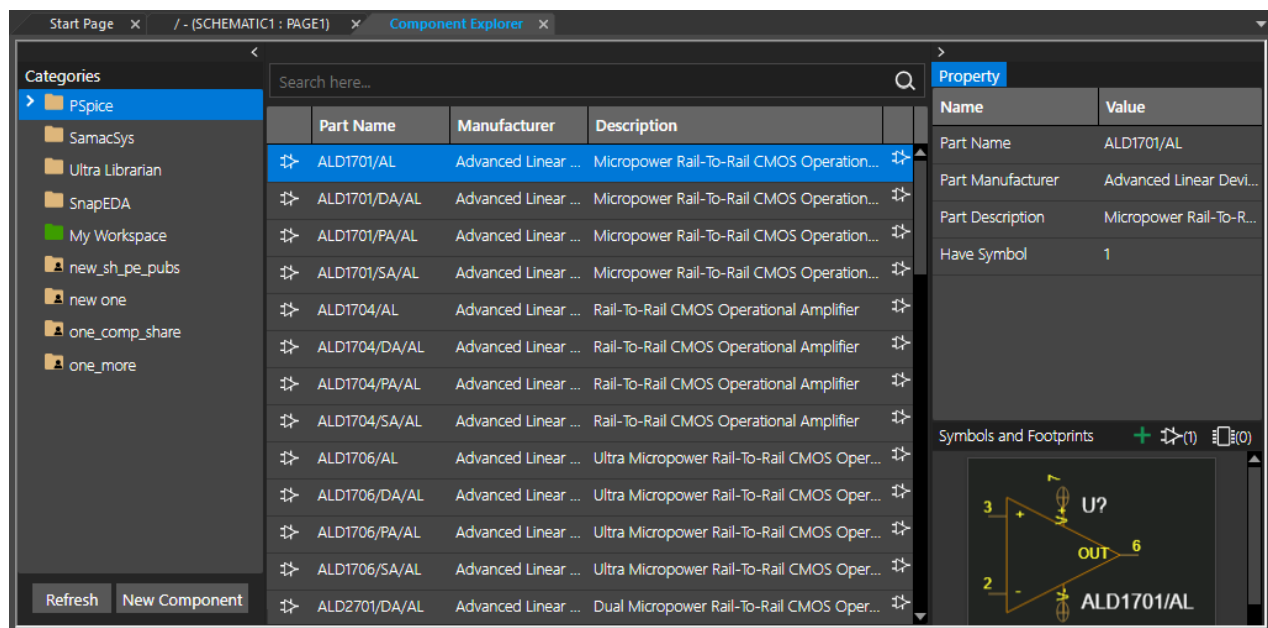
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- Publish components to shared workspaces
- Collaborate with other team members assigning them specific roles

Enhanced Component Explorer

The Component Explorer interface (previously, Unified CIS interface) provides a unified view of all the library sources along with complete part details. The intuitive user interface provides access to various sources including libraries supplied by Cadence and external content providers. In addition to the PSpice models and associated parts, you can now search, sort, filter, place parts, and create new parts using libraries accessible from OrCAD X Cloud.



Integration with Content Providers

Component Explorer provides access to comprehensive part libraries from content providers to help you build faster designs. Prior to release 23.1, you could access components from SamacSys and Ultra Librarian. Now you can access components provided by SnapEDA as well.

Part Authoring

Capture provides part authoring capability to create new components from scratch using available libraries or from existing parts available from content providers. You create a new component using the *Component* dialog box. From this dialog box, you can:

- Create a new component with:
 - ☐ Description
 - ☐ Category to organize the part in library database
 - ☐ Logical symbol
 - ☐ Footprint information
 - ☐ PSpice models
 - ☐ Electrical specification (properties)
- Use existing categories or templates for quick creation of parts with verified symbols, footprints, models, and properties.
- Specify lifecycle status of a component.
- Specify the reuse symbols and footprint information.
- Associate PSpice models and mechanical parts or assemblies.
- Add Manufacturer Part Number (MPN) and associate properties with access to:
 - ☐ The latest component data from partners
 - ☐ Streamlined library authoring from a single location
- Create a new component from content providers.

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- Link the components with manufacturer details provided by the content providers.

Component

Part Number: Lifecycle:

Category:

Subcategories:

Description:

Property	Models	MPN	Mechanical		
<input type="checkbox"/>	Name		Value	Description	
<input type="checkbox"/>	VALUE		1uF	Capacitance Value	
<input type="checkbox"/>	TOL		15	Tolerance	
<input type="checkbox"/>	MATERIAL		X7R	Material Type	
<input type="checkbox"/>	VOLTAGE		12V	Rated Operating Voltage	
<input type="checkbox"/>	PACKAGE		1808	Package Size	
<input type="checkbox"/>	MAX_TEMPERATURE		+150C	Maximum Operating Temperature	
<input type="checkbox"/>	MIN_TEMPERATURE		-55C	Minimum Operating Temperature	
<input type="checkbox"/>	TC		5ppm	Temperature Coefficient	
<input type="checkbox"/>	CLASS		DISCRETE	Part Classification	

Graphics

C?

<Value>

Metadata

Model Type	Symbol
Symbol Name	Capacitor
Library Name	schematic_data/libraries/TEMPLA1

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Template Creation

A template or category with verified symbols, footprints, models, and properties aids in quick part creation. You can create categories to organize the parts in the workspace (library database).

Related Documentation

- [Creating Components](#)
- [Sharing Components](#)
- [Component Explorer](#)

Building Team and Workspace

OrCAD X Capture provides a collaborative development environment where you can create shared workspaces containing work-in-progress components, projects, libraries, and design files. A workspace is a Cloud-based project storage location to manage all the library and design data.

You can create multiple workspaces for different projects and user needs, share the workspaces, and provide access rights to team members on shared workspaces by assigning specific roles, such as *User*, *Librarian*, or *Designer*. A member can subscribe to multiple workspaces, have different access privileges (roles) on different workspaces, and move across shared workspaces in the same session of Capture CIS.

Note: The OrCAD X Professional (POX200 Pro) license supports creation of up to ten workspaces.

CIS Data Source		
<input type="radio"/> Local <input checked="" type="radio"/> Cloud		
<add new workspace>		
My Workspace	✓	<input checked="" type="checkbox"/>
new_sh_pe_pubs		<input checked="" type="checkbox"/>
new one		<input checked="" type="checkbox"/>
one_comp_share		<input checked="" type="checkbox"/>
one_more		<input checked="" type="checkbox"/>

MEMBERS				
<add new user>				
Name	User	Librarian	Designer	Admin
nitint@cadence.com	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
soniap@cadence.com	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
nitint117@cssotest.com	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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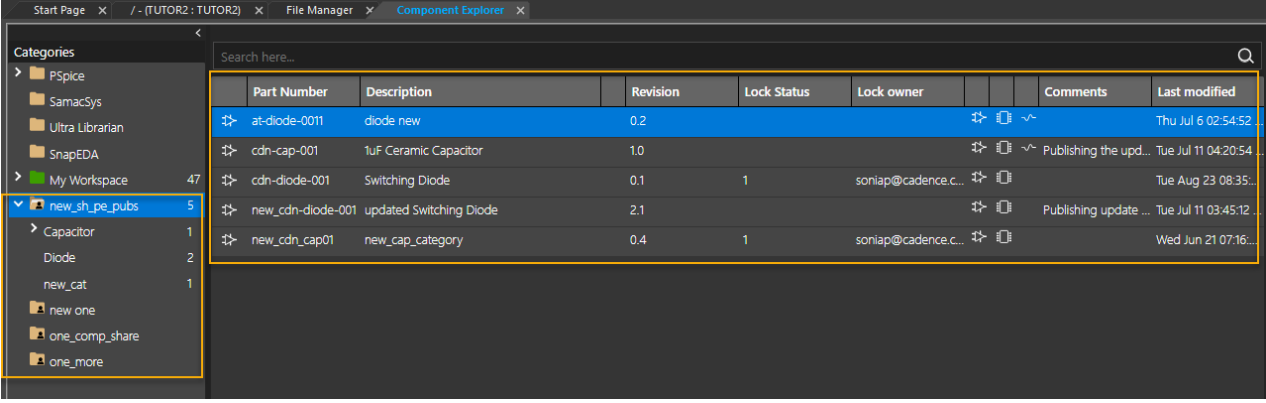
Related Documentation

- [Configuring Workspaces](#)
- [Sharing Workspaces](#)
- [Sharing Projects](#)

Developing Team Component Libraries

The Cloud workspace functionality provides you the capability to create component libraries for your teams by:

- Creating parts in your local workspace (My Workspace)
- Verifying details with part details from the manufacturers
- Creating shared workspaces and assigning specific roles to team members
- Publishing components to shared workspaces



The screenshot shows the OrCAD X Capture CIS interface with the Component Explorer open. The left sidebar shows a tree view of categories, including 'My Workspace' and 'new_sh_pe-pubs'. The main area displays a table of components with the following data:

Part Number	Description	Revision	Lock Status	Lock owner	Comments	Last modified
at-diode-0011	diode new	0.2				Thu Jul 6 02:54:52
cdn-cap-001	1uF Ceramic Capacitor	1.0			Publishing the upd...	Tue Jul 11 04:20:54
cdn-diode-001	Switching Diode	0.1	1	sonlap@cadence.c...		Tue Aug 23 08:35...
new_cdn-diode-001	updated Switching Diode	2.1			Publishing update ...	Tue Jul 11 03:45:12
new_cdn_cap01	new_cap_category	0.4	1	sonlap@cadence.c...		Wed Jun 21 07:16...

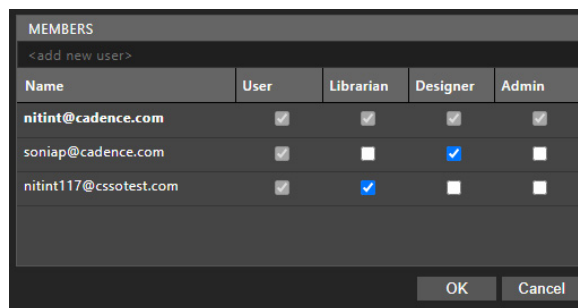
Related Documentation

- [Managing a Local Component Library](#)
- [Creating Components](#)
- [Sharing Components](#)

Library and Design Data Management

You share a workspace to share library and design data including components and design, library, project, and board files with your team members by:

- Creating a shared workspace
- Publishing a library, project, or design files to the shared workspace
- Making the project available to the team members (subscribers)
- Assigning access control in accordance with the roles:
 - ☐ *User* can only view the design data.
 - ☐ *Designer* can access all design data.
 - ☐ *Librarian* can access all library data.
 - ☐ *Admin* is the super user who has access to the entire data and can also assign access rights to other users.



A user with access rights can edit or check out the project or a specific file to exclusively work on it.

Related Documentation

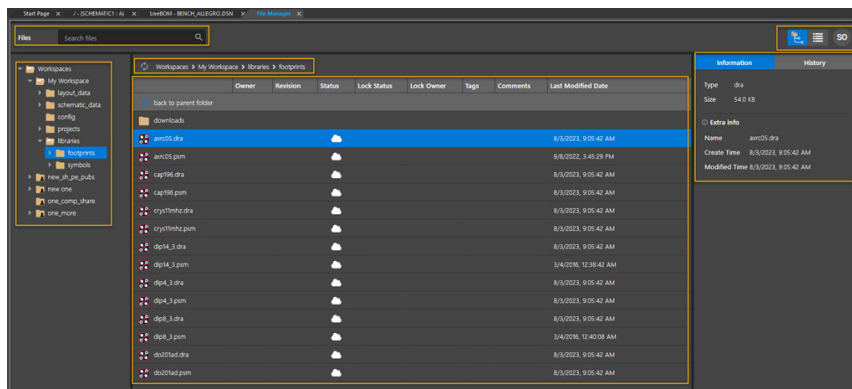
- [Managing Libraries on OrCAD X Cloud](#)
- [Managing Workspaces](#)

Workspace Content Management

The workspace data is Cloud enabled, accessible from anywhere, and always connected to the OrCAD X Cloud. The background data sync utility keeps the data in sync between the local disk and the Cloud.

You manage the libraries, projects, and design files in the workspaces using the File Manager user interface. File Manager displays the local workspace and all the workspaces shared by or with you. A project with its complete folder structure in a workspace displays just the way a local project appears in the project manager in Capture. You can perform the following tasks on the workspace content from File Manager:

- View the status of libraries, projects, and design files.
- Edit (check out) and lock libraries, designs, and complete projects to work exclusively on them.
- Publish (check in) files back to the shared workspace.
- View revision history of a file.
- Roll back to a specific revision of a file.

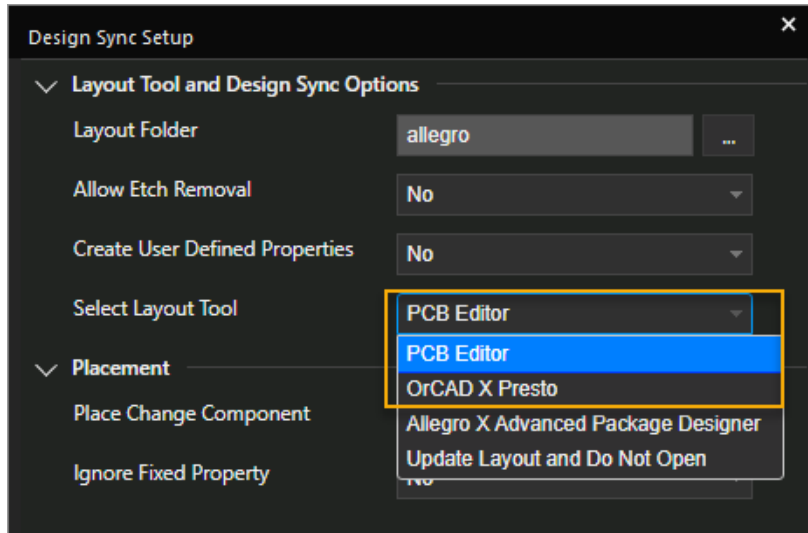


Related Documentation

- Managing Workspaces
- File Manager

Seamless Integration with OrCAD X Presto

The latest PCB layout editor by Cadence, OrCAD X Presto, is fully integrated with Capture CIS. You can perform design synchronization from schematic to PCB and from the PCB to the schematic. You can also cross-probe between the schematic and the layout designs.



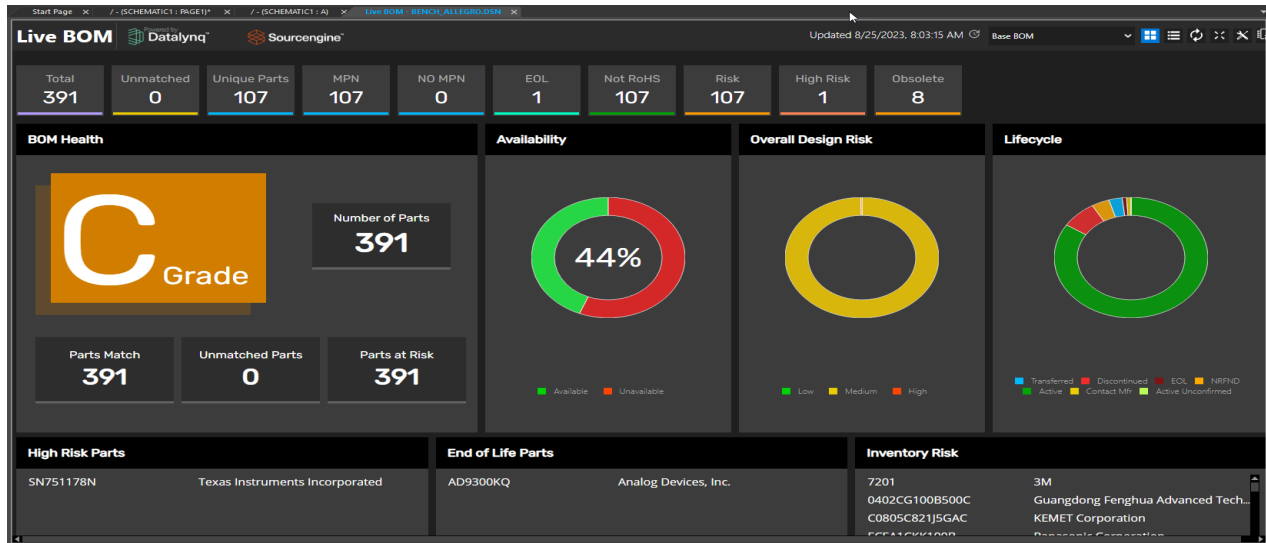
Live BOM

Live BOM is a dynamic bill of materials (BOM) that is generated using supply chain data from SourceEngine. Live BOM represents an always up-to-date view of the design BOM with zero

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configuration. The rich user Interface provides easy access to the live part status from the Cloud libraries.



The Live BOM feature of Capture CIS supports the following functionality:

- Real-time component availability and price data in the design environment
- Searching and replacing a part with alternative parts
- Viewing alternative parts
- Viewing real time data, cost, availability, and life cycle status of parts in a design
- Dynamic update or on-demand update of the part information
- Global update of the cost and availability data for a design or library
- Support for variant BOM
- Searching, sorting, filtering, and organizing parts in BOM

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- Displaying color-coded part rows based on suitability score derived from functional equivalence, life cycle status, and availability

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Alternate Parts

Search

50%

Unique Manufacturers

2

Active Alternatives

1

Manufacturers with Stock

1

Total Offers

18

Transferred

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EOL

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Active

Contact Mfr

Active Unconfirmed

+	SN751178N	Texas Instrum...	Dual Different...	★5.0	Active	High Risk	functionFitFor...
+	SN751178NE4	Texas Instrum...	Line Transceiv...	★0.0	Discontinued	Med Risk	functionFitFor...
+	D58922AJ	NATIONAL SE...	Line Transceiv...	★0.0	Discontinued	Med Risk	functionEquiv...
+	D58922AM	Texas Instrum...	Line Transceiv...	★0.0	Discontinued	Med Risk	functionEquiv...
+	D58922AM/N...	Texas Instrum...	Line Transceiv...	★0.0	EOL	Med Risk	functionEquiv...
+	D58922AMX/N...	Texas Instrum...	Line Transceiv...	★0.0	Discontinued	Med Risk	functionEquiv...
+	D58922AN	NATIONAL SE...	Line Transceiv...	★0.5	Discontinued	Med Risk	functionEquiv...
+	D58922AN/NO...	NATIONAL SE...	Line Transceiv...	★0.0	Discontinued	Med Risk	functionEquiv...
+	D58922J	NATIONAL SE...	Line Transceiv...	★0.0	Discontinued	Med Risk	functionEquiv...
+	D58922M/NOPB	NATIONAL SE...	Line Transceiv...	★0.0	Discontinued	Med Risk	functionEquiv...

Related Documentation

[Live BOM](#)

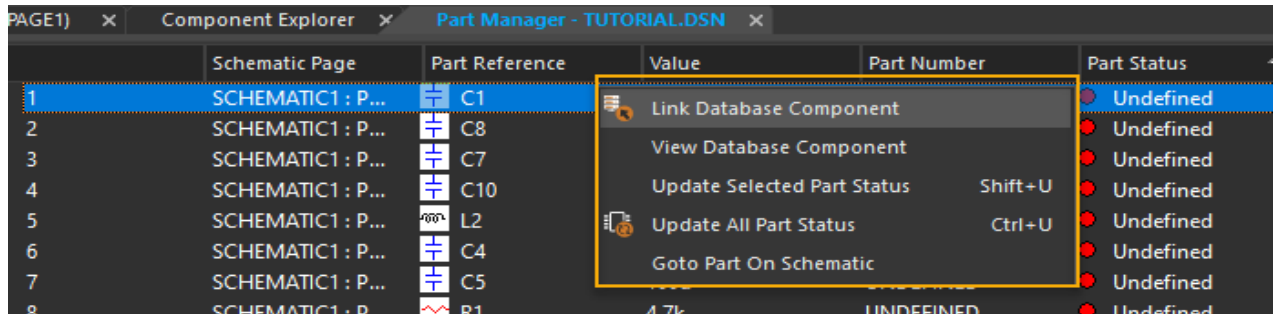
CIS-Specific Features for Cloud CIS

The CIS-specific capability of linking and viewing database parts from the CIS database is extended to the Cloud workspace (database) as well. You can now replace a part instance

OrCAD X Capture CIS: What's New

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and its properties with a workspace component by linking the schematic part to a matching workspace component.



You can also view the part instance with respect to the linked workspace component and sync the two if any differences are found.

View Database Component-My Workspace		
Name	Value In Database	Value On Schematic
VALUE	10k	10k
CLASS	DISCRETE	DISCRETE
TC	5ppm	5ppm
MIN_TEMPERATURE	-55C	-55C
MAX_TEMPERATURE	+150C	+150C
PACKAGE	Axial	Axial
VOLTAGE	70V	60V
POWER	10W	7W
TOL	10	10
PCB FOOTPRINT	axrc05	axrc05
PART NUMBER	cdn-res-010	cdn-res-010
PART DESCRIPTION	10k Through Hole Resistor	
HAVE SYMBOL	1	
Update Close		

Publish for Manufacturing

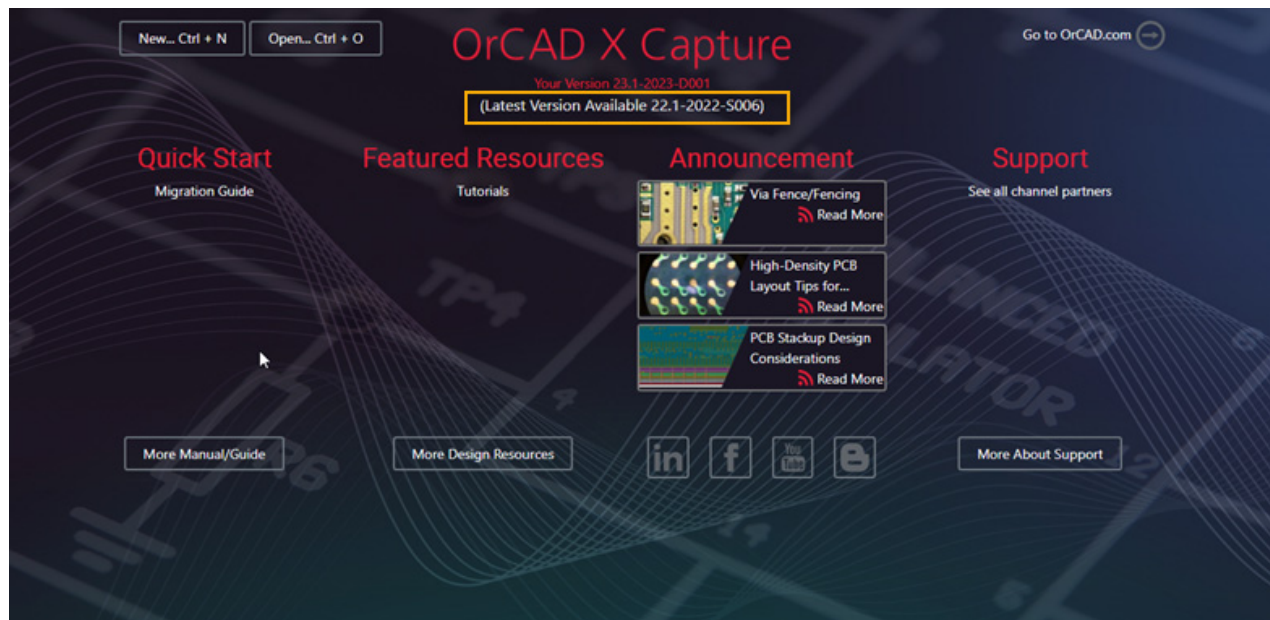
From OrCAD X Capture, you can quickly and easily publish your design data to a 3D EXPERIENCE PLM server to provide up-to-date design information to various stakeholders. To publish the data to the 3D EXPERIENCE PLM server or to the default file system, use the *Tools – Publish for Manufacturing* menu command.

Related Documentation

[Publish for Manufacturing](#)

Check for Updates

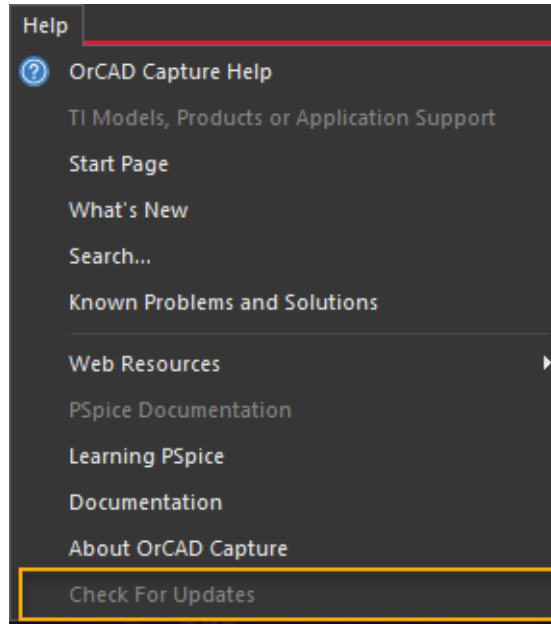
The Start Page now shows the latest version available for OrCAD X Capture. Click this link to download the newer version.



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You can also use *Help – Check For Updates* to check if newer updates are available.



New Documentation

In addition to the new feature documentation, the following new documents are added in release 23.1:

- Library and Part Management in OrCAD X Capture
- OrCAD X Capture Part Authoring Tutorial
- OrCAD X Capture with OrCAD X Presto Tutorial

OrCAD X Capture CIS: What's New

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