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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 in 23.1

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

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Complete Part Authoring Environment

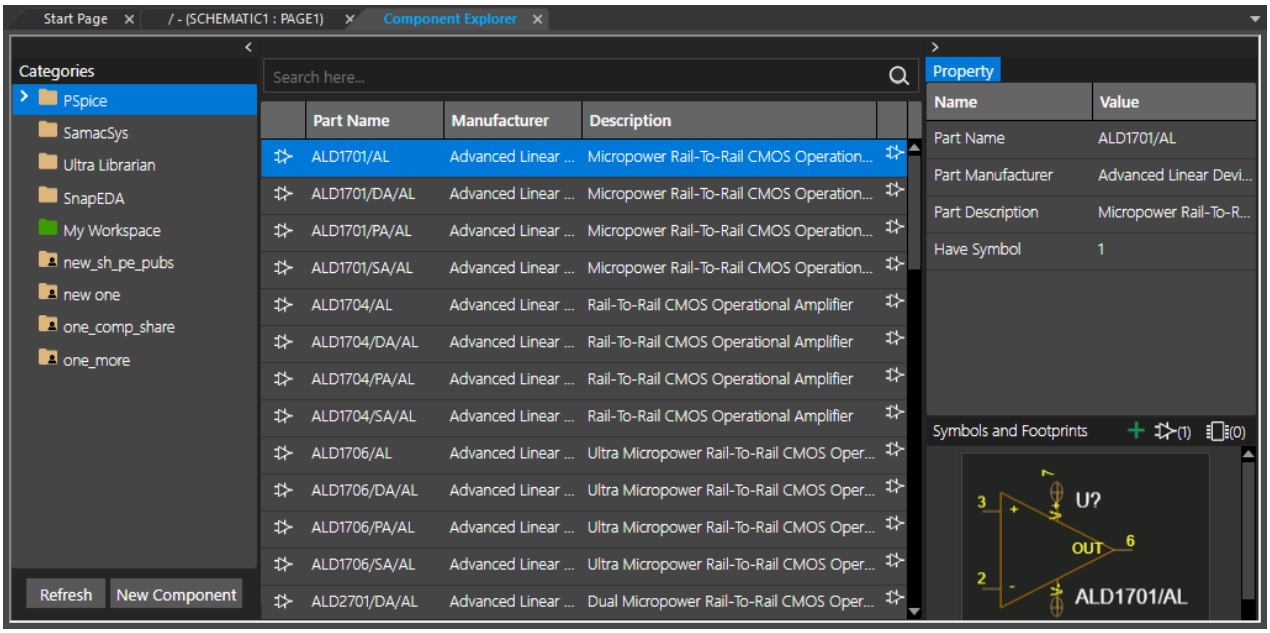
With the `OrCAD X Professional (POX200 Pro)` and `OrCAD X Standard (POX100 Standard)` licenses, you can create new components from scratch or add them from content providers. The complete part authoring solution provides the following functions:

- 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

- 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

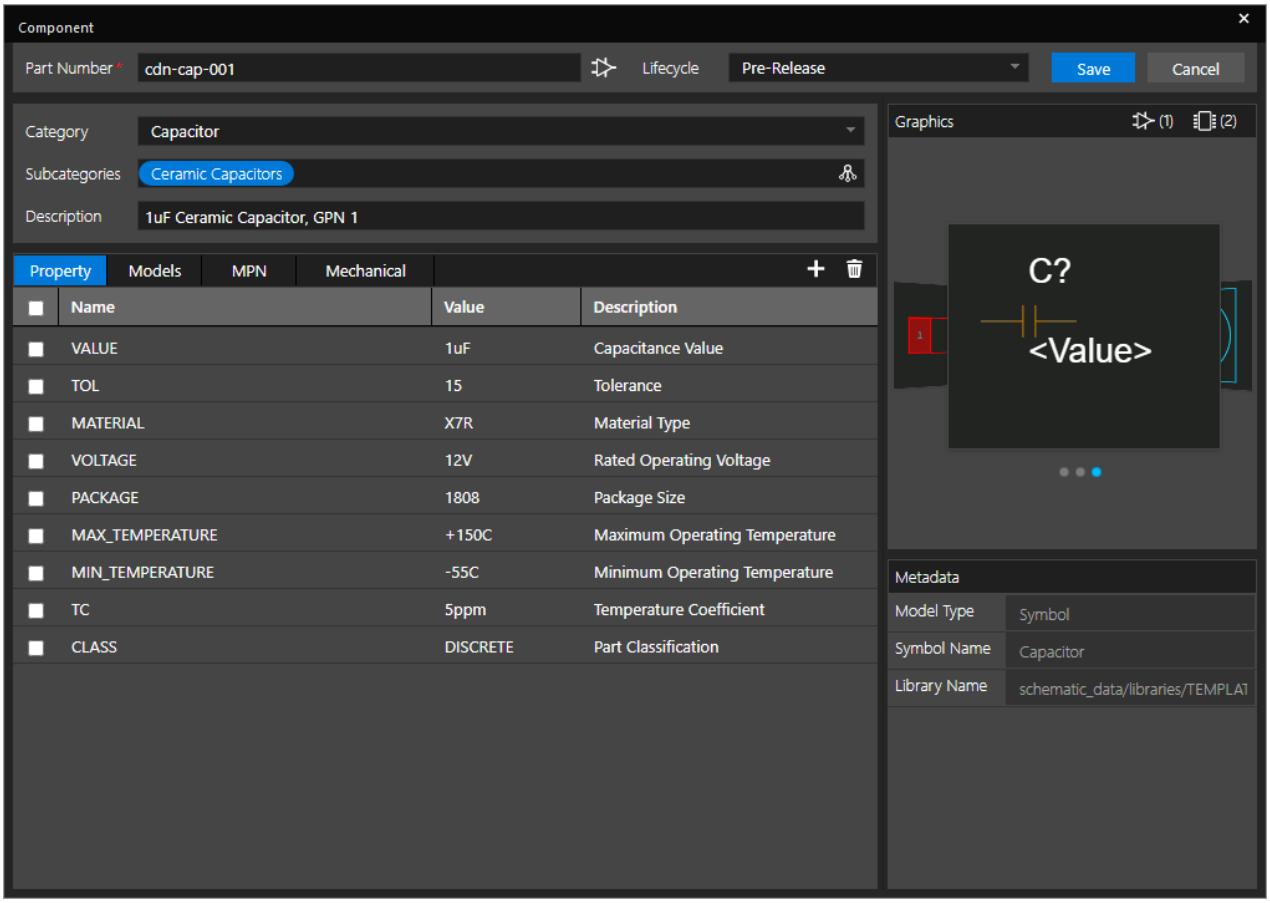
Component Explorer provides access to comprehensive part libraries from content providers to help you build faster designs. Prior to release 23.1, you could access components from SamacSys and Ultra Librarian. Now you can access components provided by SnapEDA as well.

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:

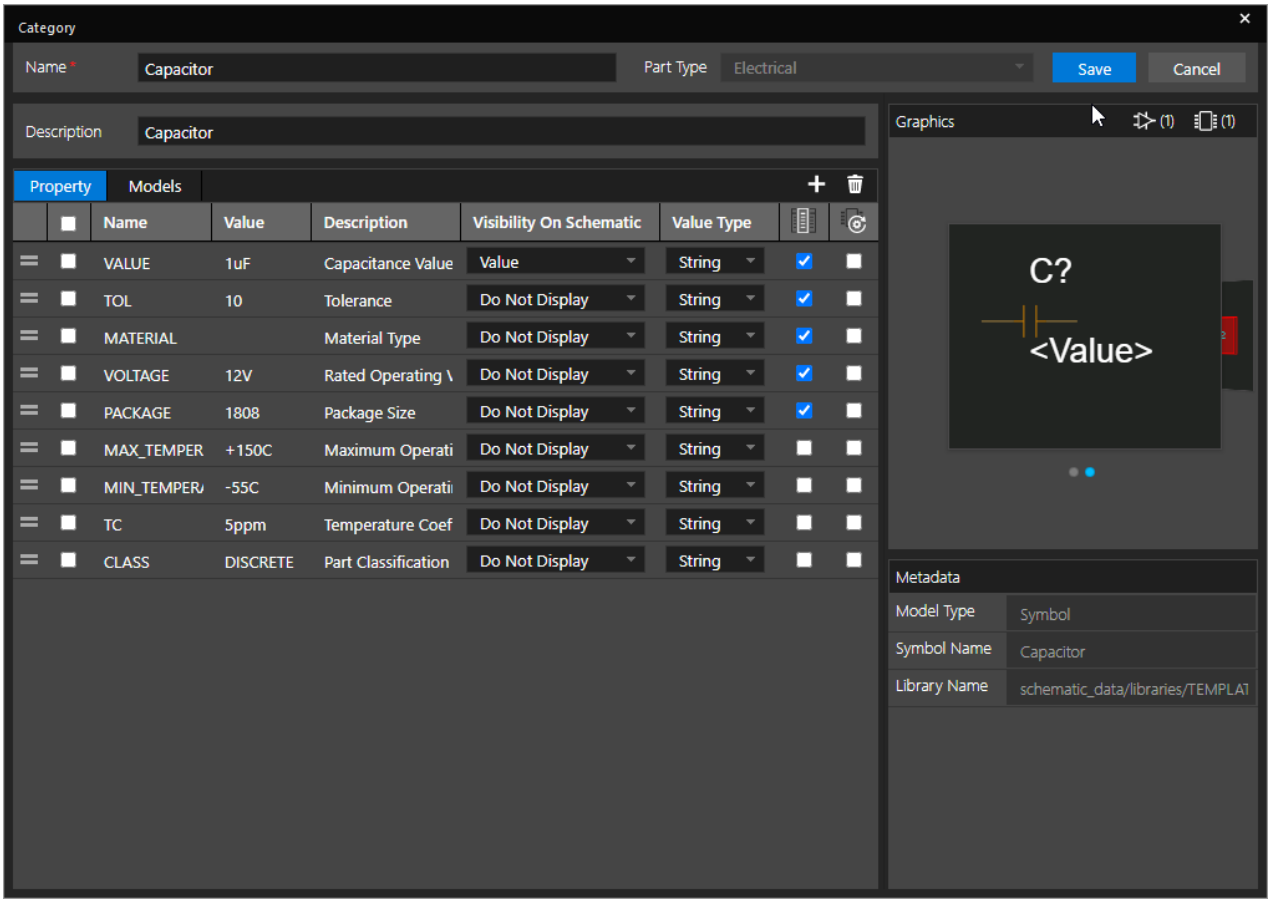
- Create a new component with:
  - Description
  - Category to organize the part in library database
  - Logical symbol
  - Footprint information
  - PSpice models
  - Electrical specification (properties)
- Use existing categories or templates for quick creation of parts with verified symbols, footprints, 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.

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



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

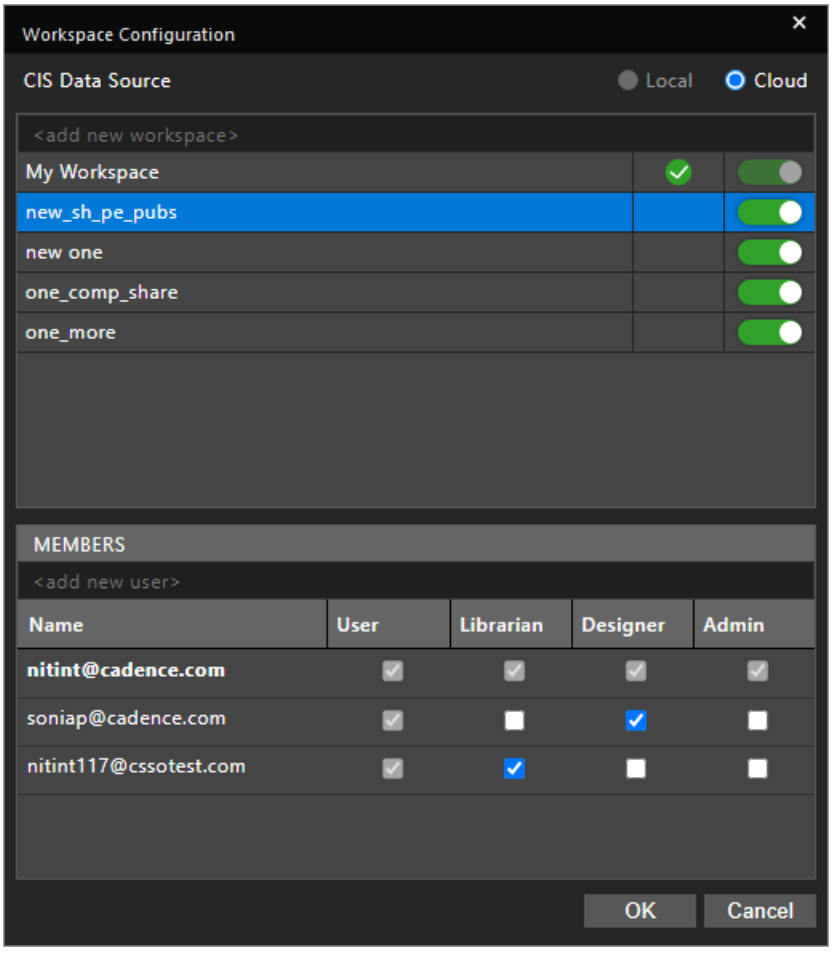
- Creating Components
- Sharing Components
- Component Explorer

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.



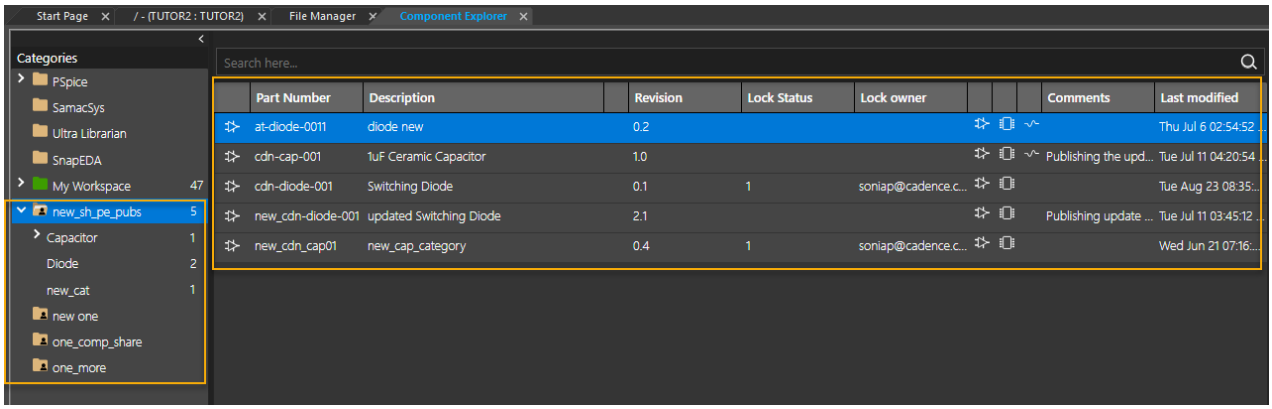
Related Documentation

- 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



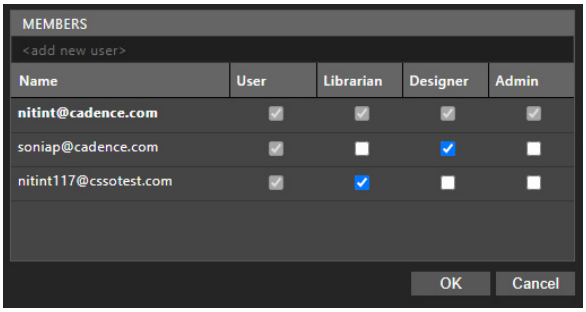
Related Documentation

- 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

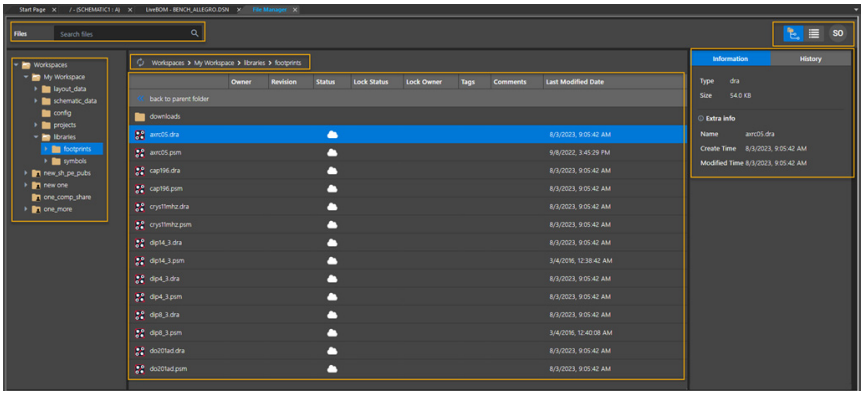
- Managing Libraries on OrCAD X Cloud
- Managing Workspaces

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.

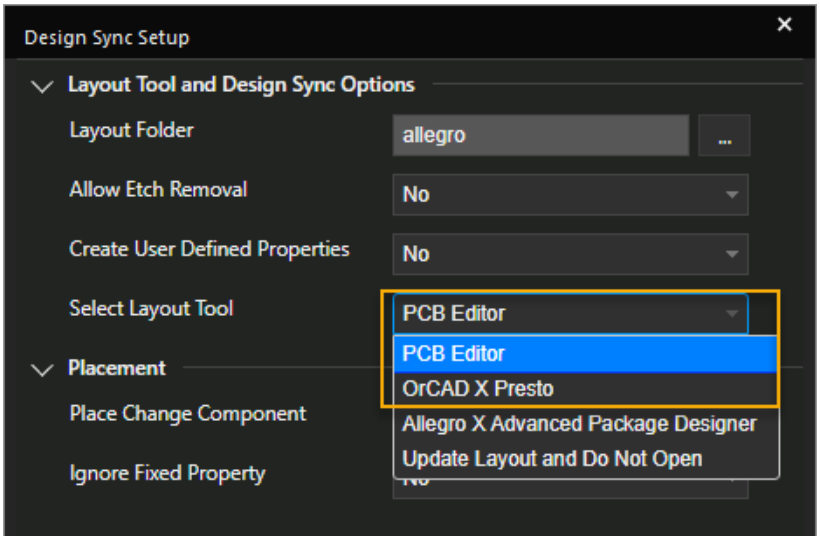


Related Documentation

- 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

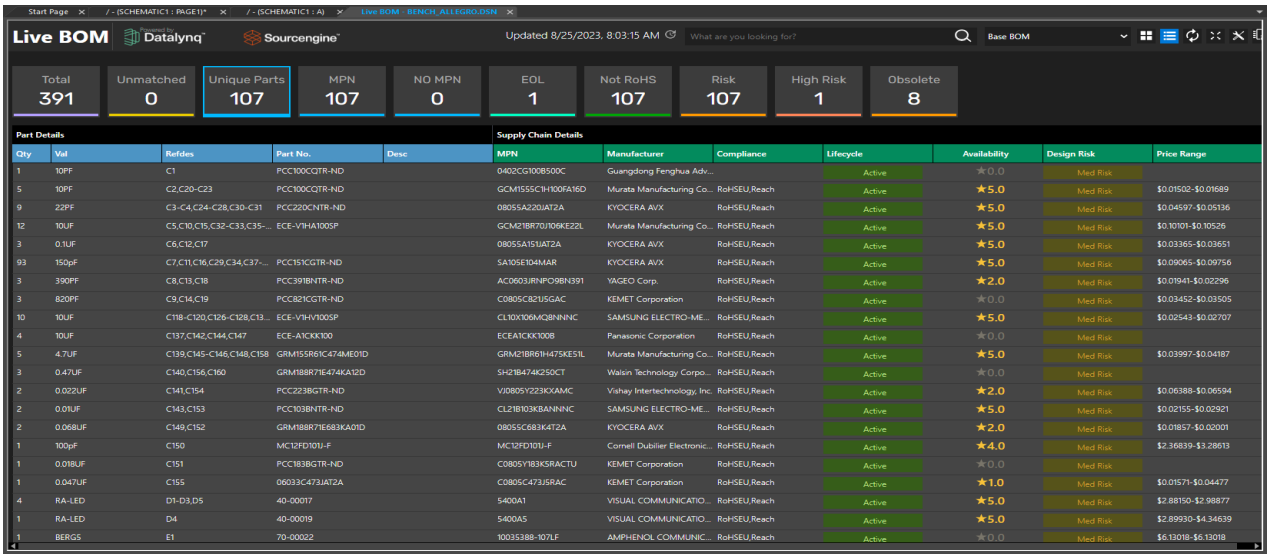
Live BOM is a dynamic bill of materials (BOM) that is generated using supply chain data from SourceEngine. Live BOM represents an always up-to-date view of the design BOM with zero

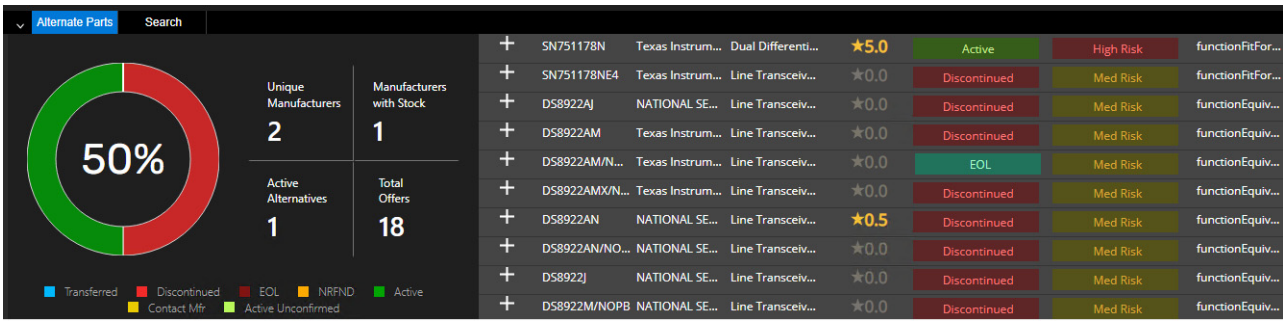
configuration. The rich user Interface provides easy access to the live part status from the Cloud libraries.

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

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





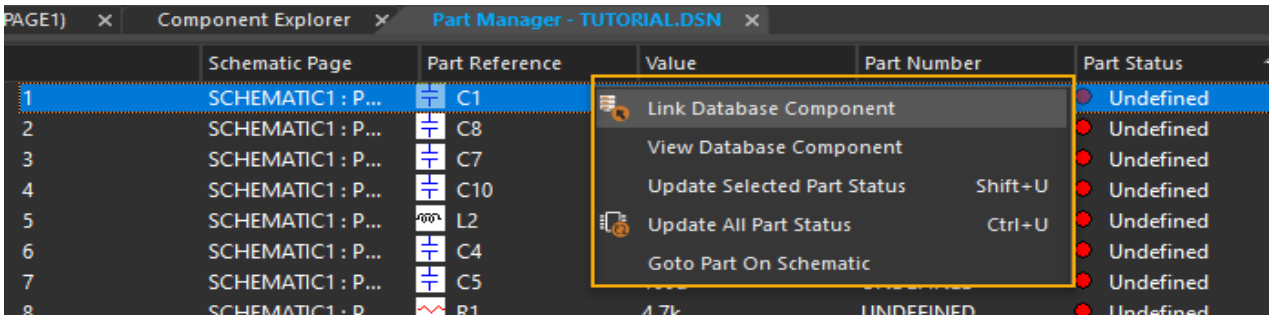
Related Documentation

Live BOM

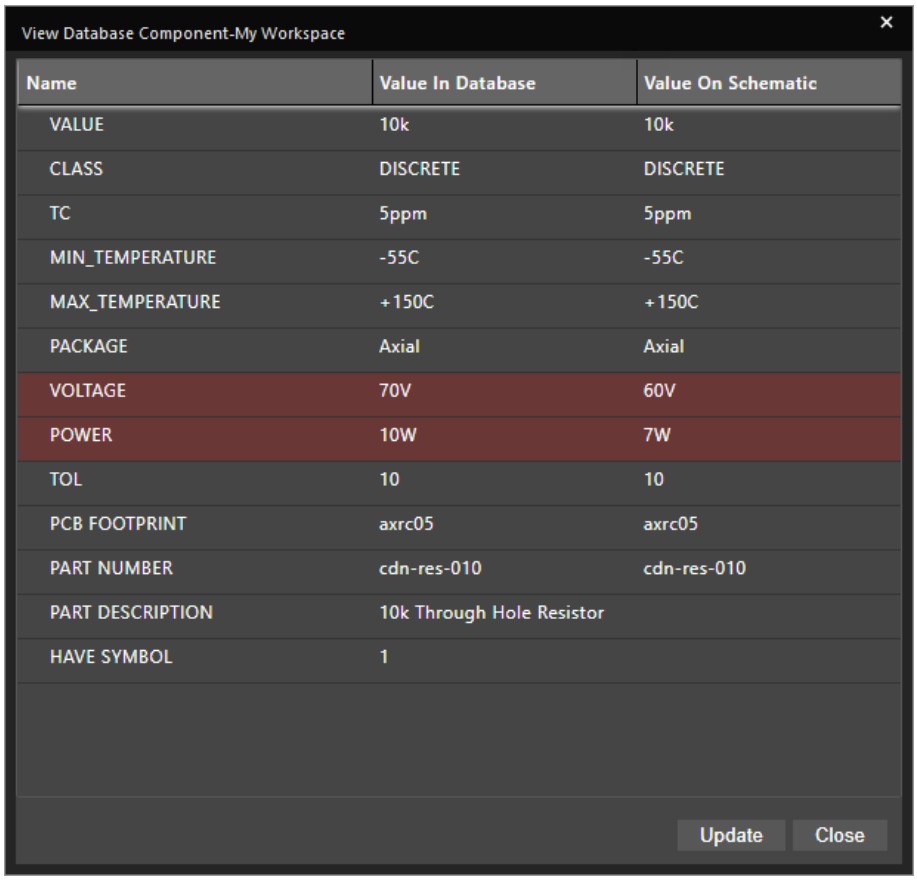
CIS-Specific Features for Cloud CIS

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

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.



Publish for Manufacturing

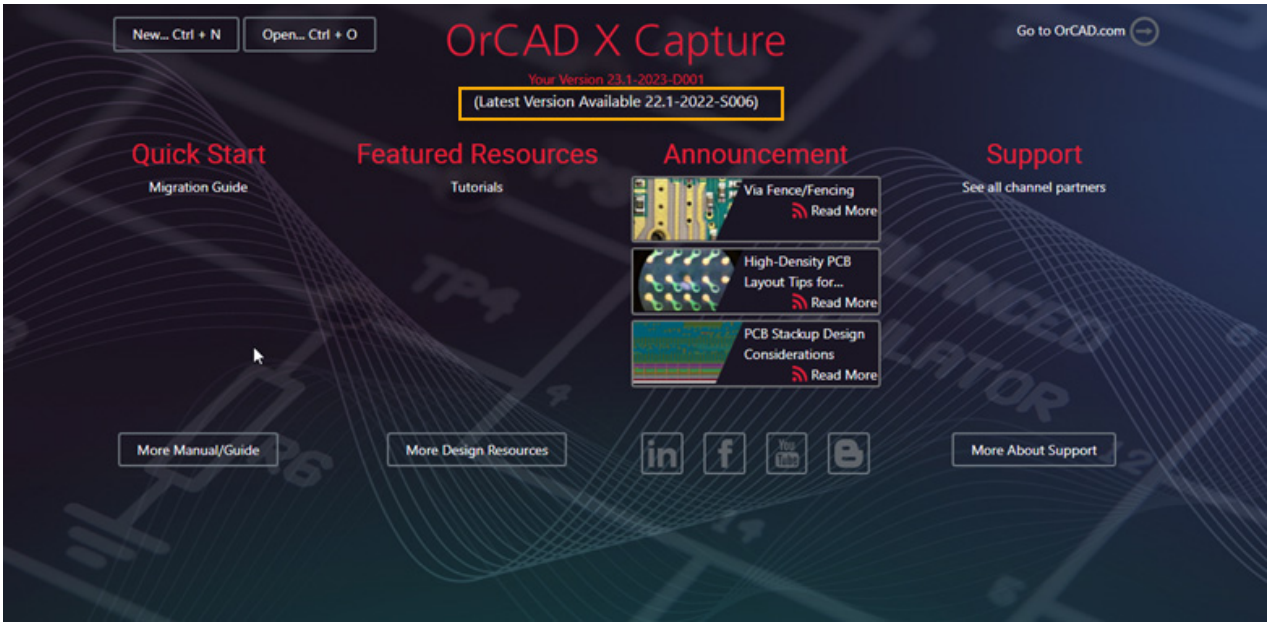
From OrCAD X Capture, you can quickly and easily publish your design data to a 3D EXPERIENCE PLM server to provide up-to-date design information to various stakeholders. To publish the data to the 3D EXPERIENCE PLM server or to the default file system, use the *Tools – Publish for Manufacturing* menu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

Related Documentation

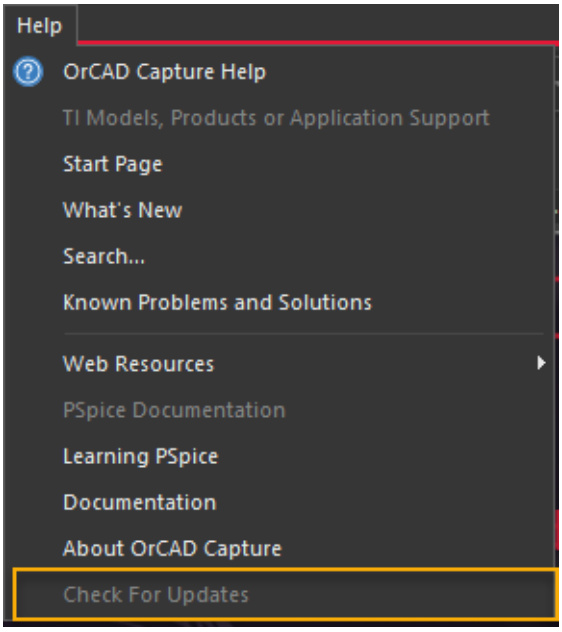
Publish for Manufacturing

Check for Updates

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



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