EASYLOGIX.DE

PCB-Investigator

PLM

01/2023

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Document Management System

The Benefits of Implementing a Data Management System"

1.Data storage: This involves safeguarding and managing the PCB design data to ensure it is readily available and secure.

2.Data preparation: This involves preparing the PCB design data for manufacturing and assembly, including creating manufacturing and assembly drawings, generating bill of materials and purchase orders.

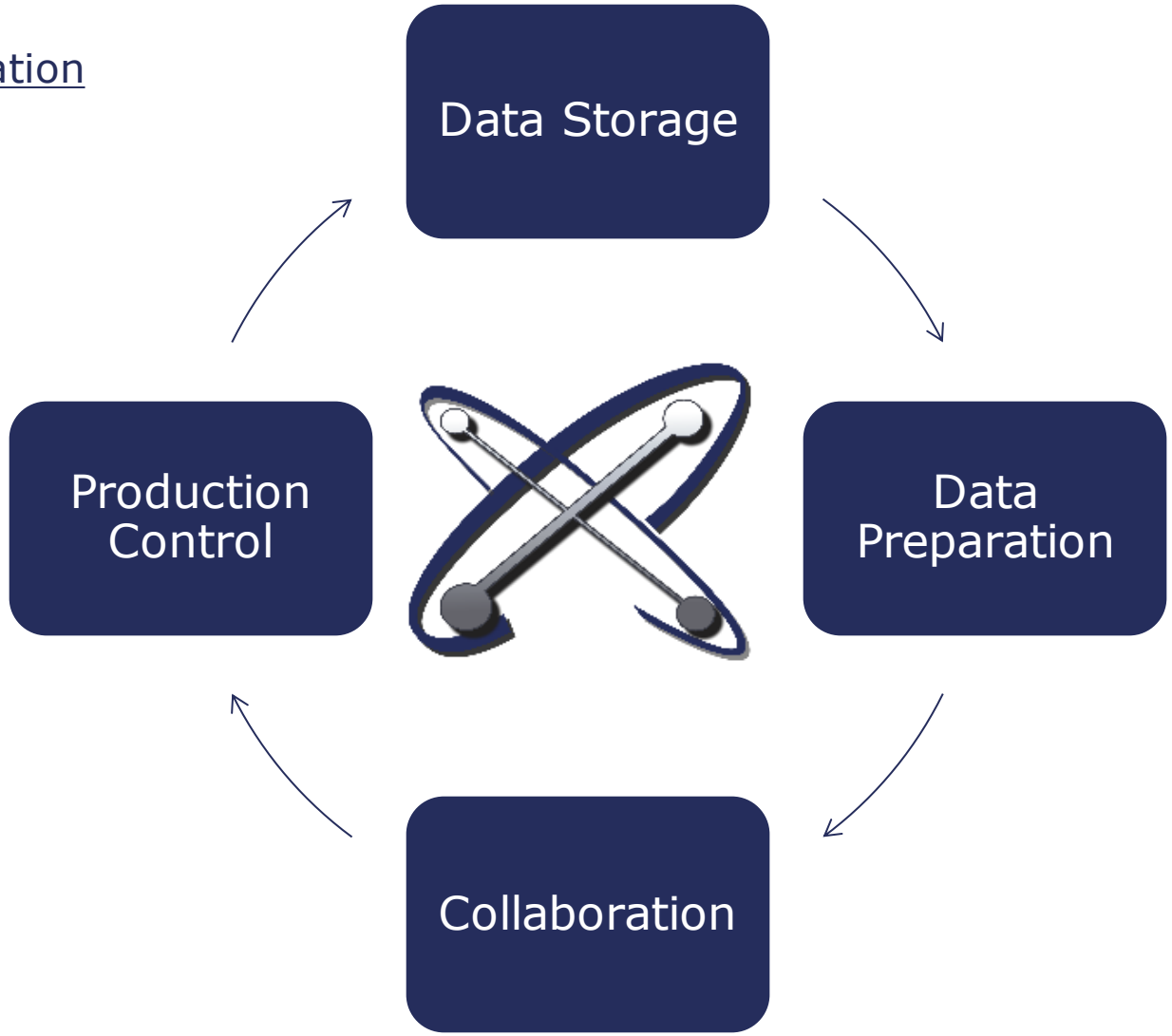
3.Collaboration: This involves working together between designers, engineers, manufacturing technicians and suppliers to ensure everyone is on the same page and issues can be quickly resolved.

4.Production control: This involves monitoring and controlling the production process, including monitoring production schedules, quality checks, and inventory levels to ensure the production runs smoothly and meet delivery dates.

Document Management System

Fields of Application

ODB++
IPC2581
Gerber
Schematic
Specification
DRC Rules
DFM Rules
DFT Rules
Machine Exports
…..



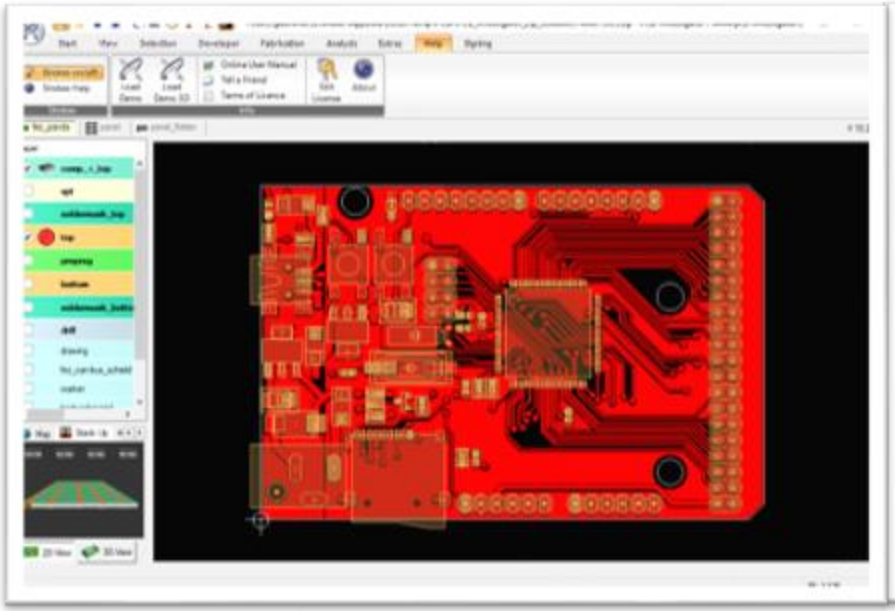
PCBI 365 / Desktop and Web

PCBI 365 helps you connect your dispersed teams, partners, and suppliers

Desktop and Online available

- CAM for PCB-Data
- ODB++, IPC2581, Gerber274X , DXF, Excellon, Sieb & Meyer …

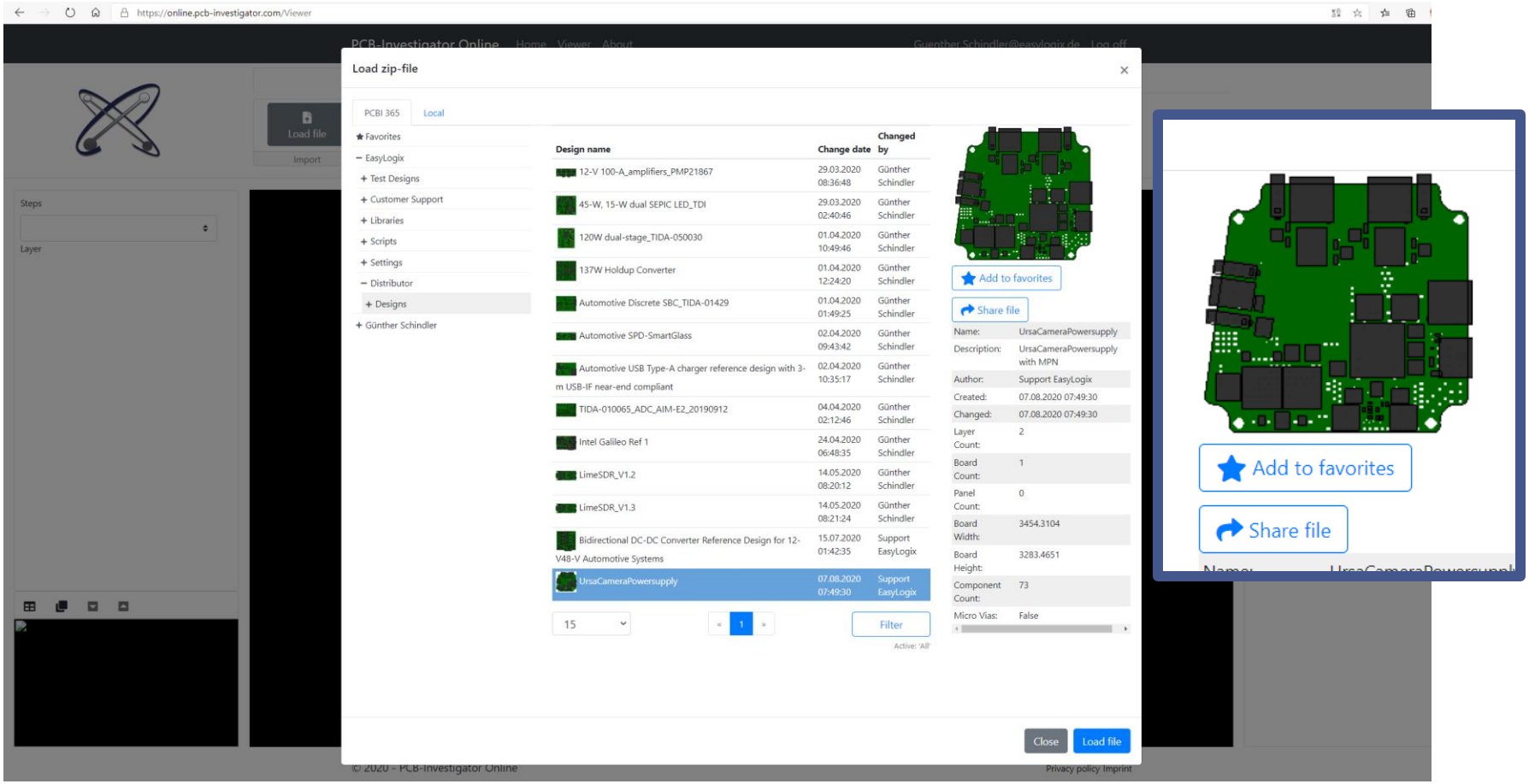
Desktop



Browser

PCBI 365

Data Management and Sharing



Secure Sharing

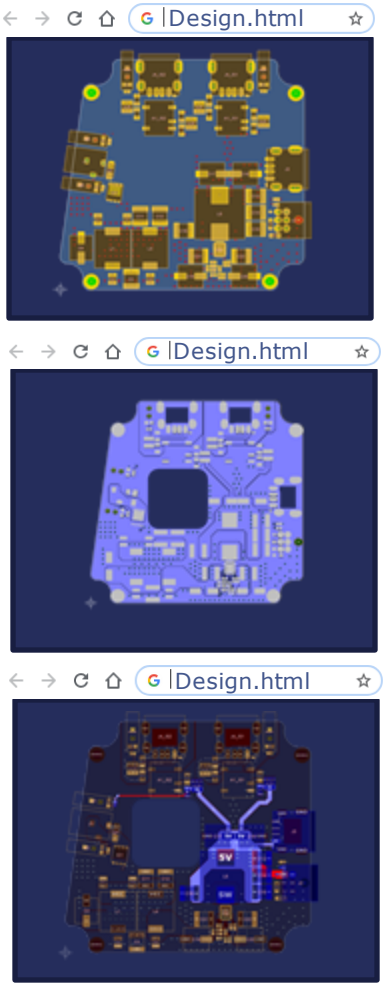
Secure Supplier connection with SSL

Protect your IP by sharing only necessary information.

Give you supplier access to the design for an offer without transferring the data.

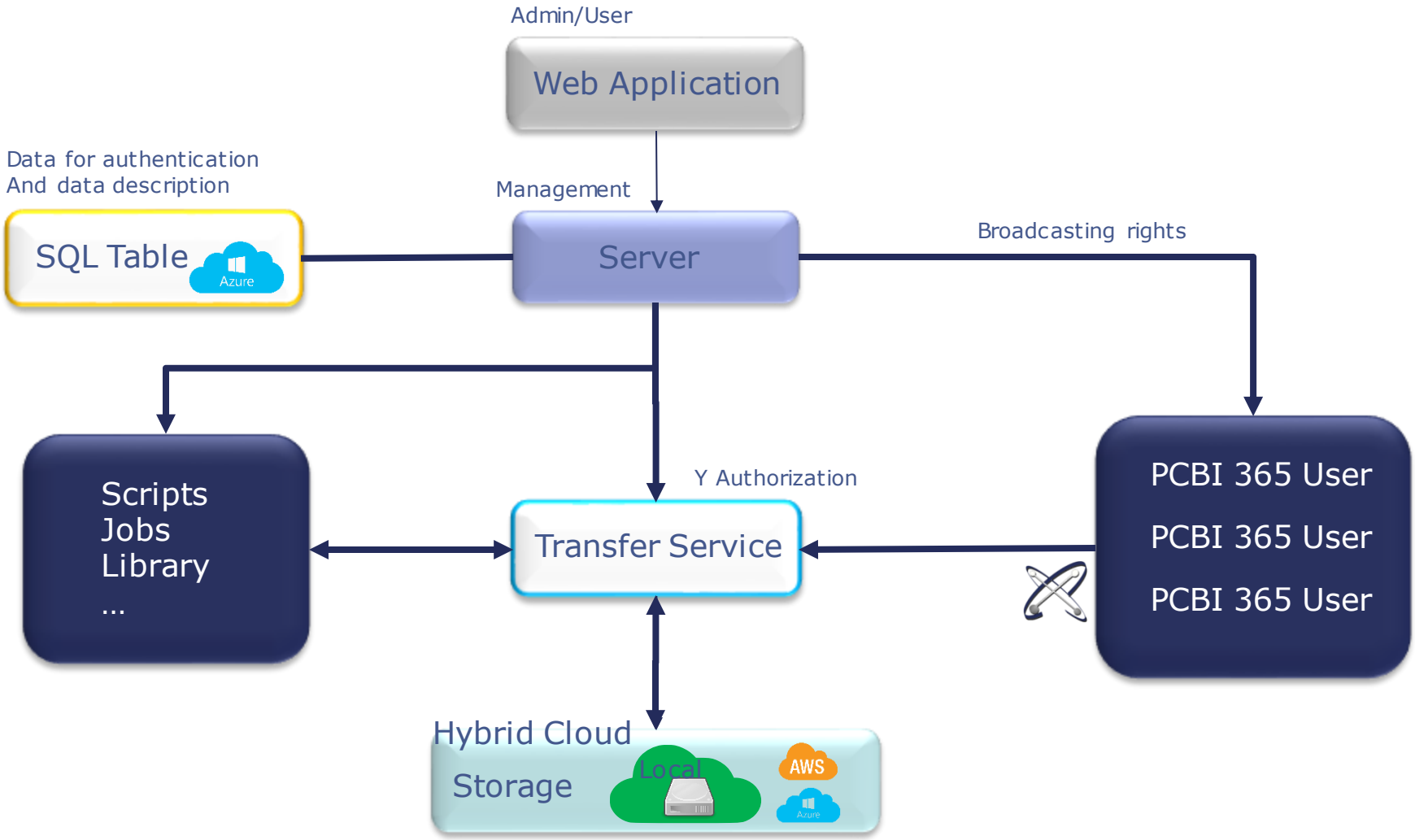
All suppliers will see the same. The different interpretation of PCB Data from different CAM Tools are gone. This will reduce unnecessary questions.

If you have chosen the right supplier, send out a second link including the Web viewer and the possibility to download the PCB Data.



Simply expand your customer portal with a PCB Web Viewer.

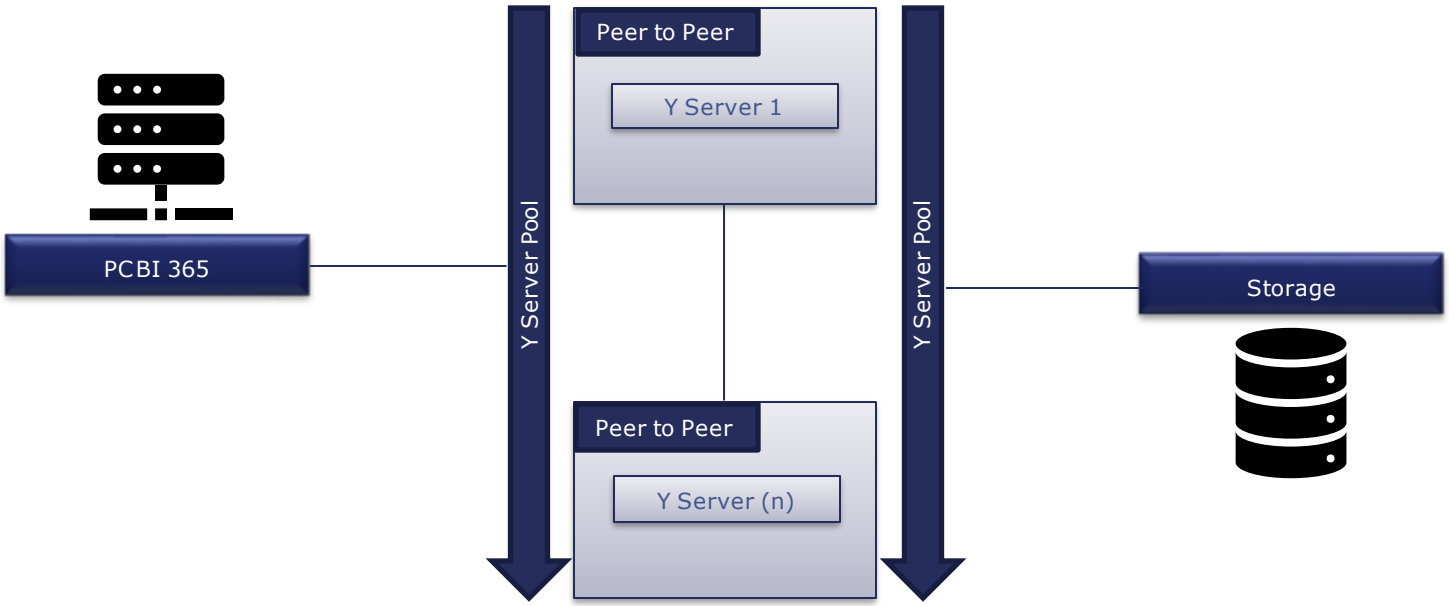
Data Organization



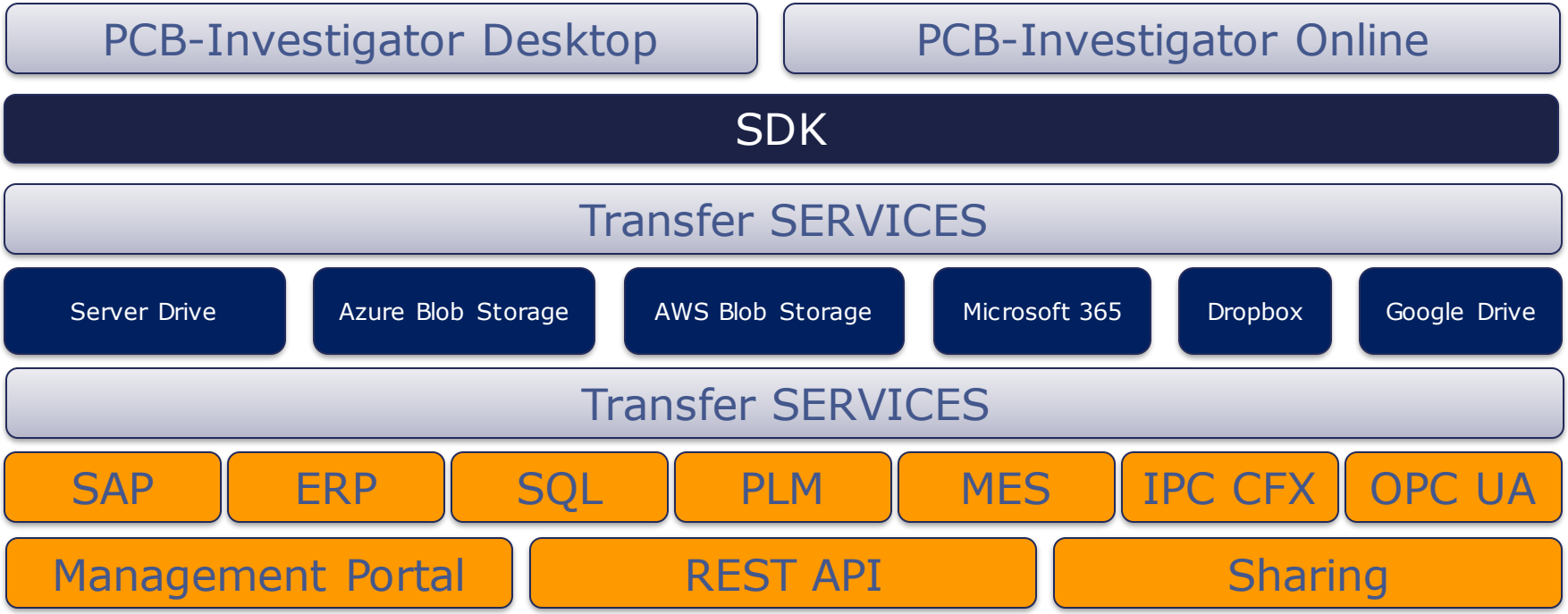
Y Data Organization for PCBI 365

Y Server Pool

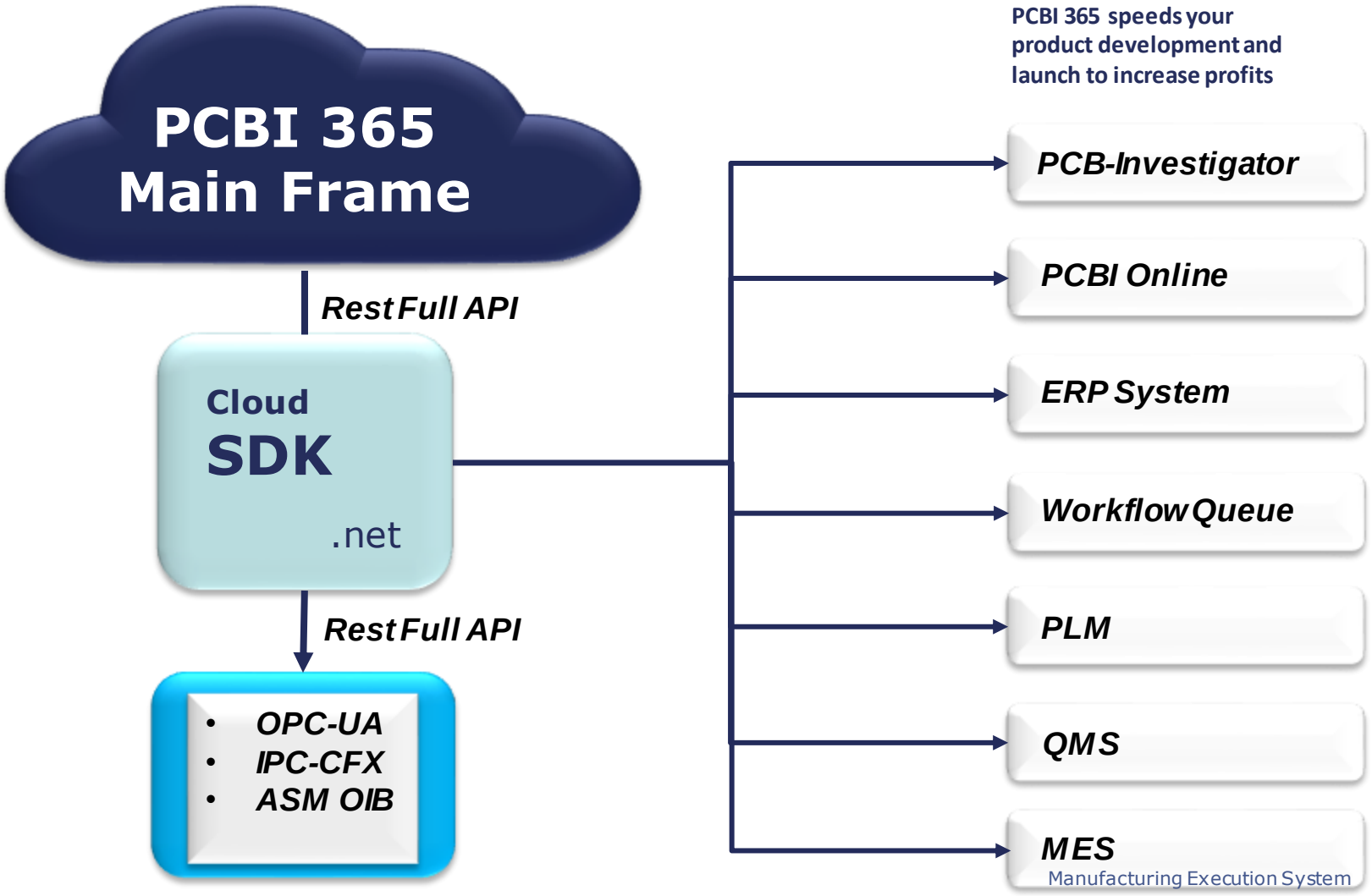
Internal Server Structure



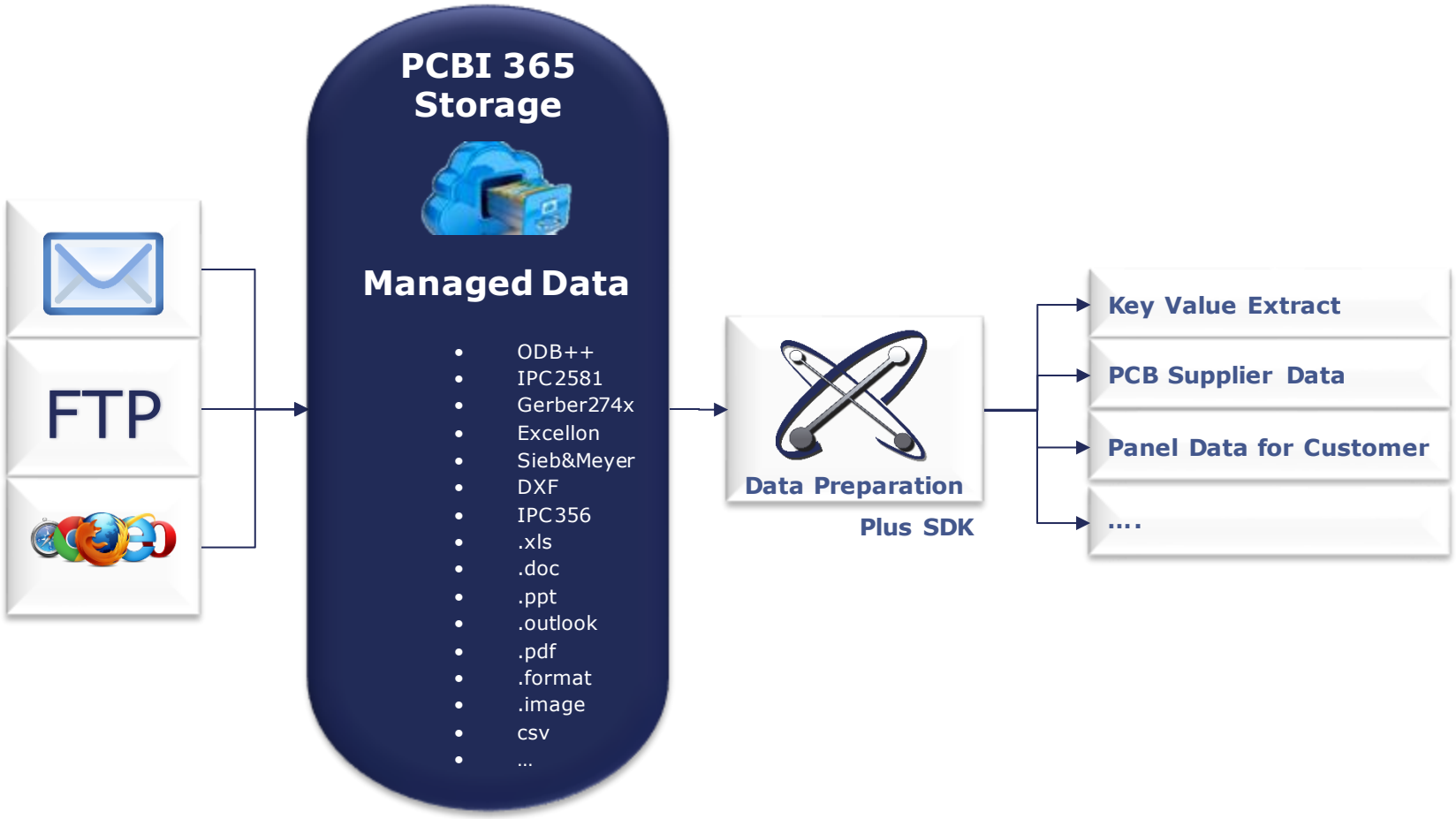
Architecture



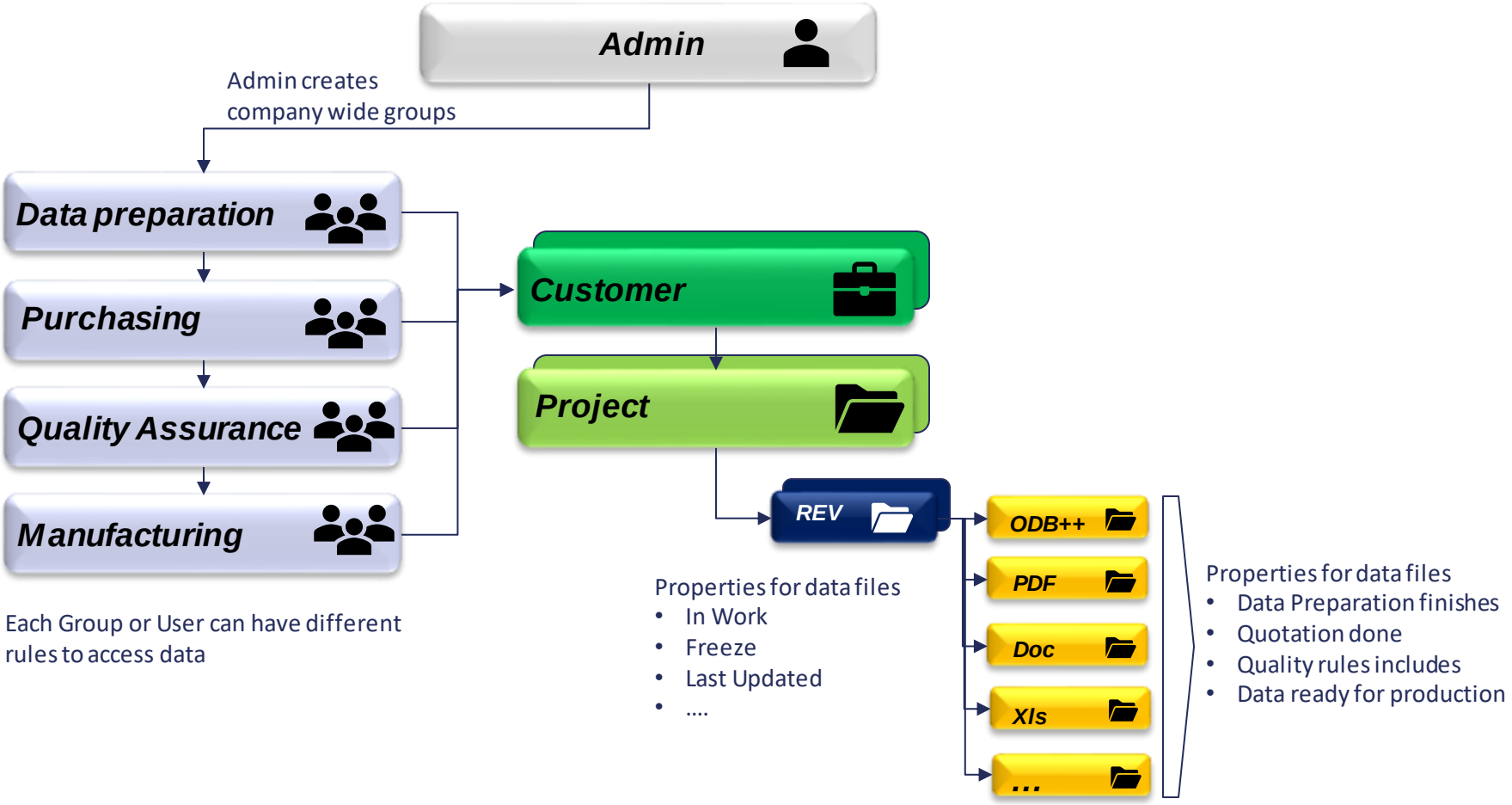
PCBI 365 SDK


PCBI 365 speeds your product development and launch to increase profits
PCBI 365 Main Frame
Rest Full API
Cloud SDK .net
Rest Full API
• OPC-UA
• IPC-CFX
• ASM OIB
PCB-Investigator
PCBI Online
ERP System
Workflow Queue
PLM
QMS
MES
Manufacturing Execution System

Sample Work Flow



Sample Usage of Groups



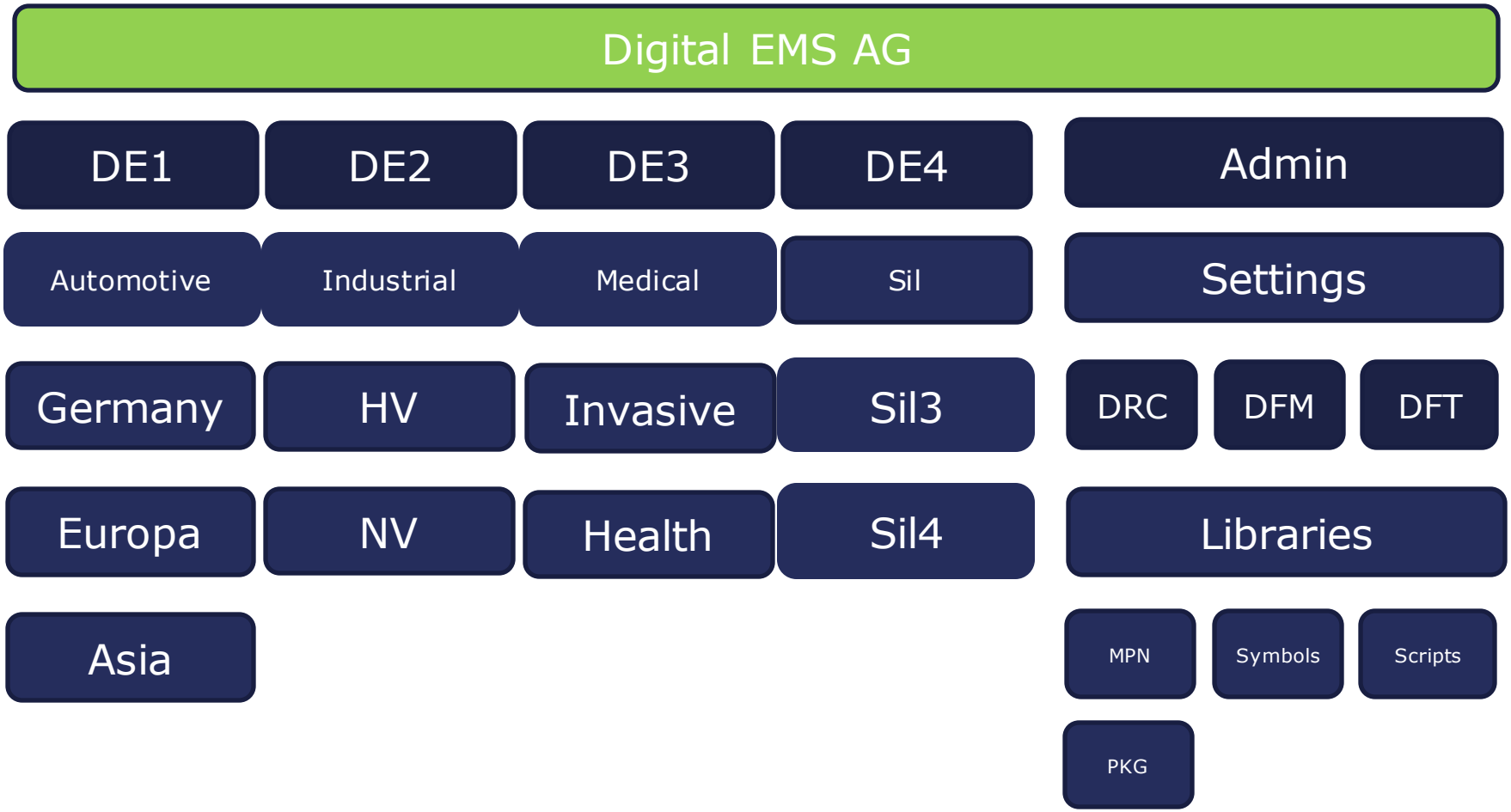
Data Management

PCB-Investigator Preparation Support

- Load PCB Data
- Load DRC Rule
- Load DFM Rule
- Load DFT Rule
- Load DFT Setup
- Symbol Library
- Component Library
- PDF Synchronization (Schematic, Assembly Drawing..)
- Script Engine
- Load Line

Data Management

Company Setup



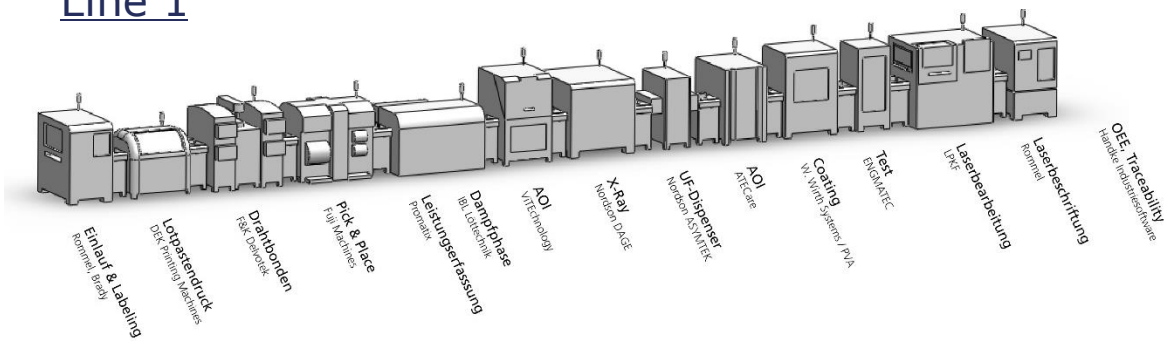
Data Management

Process Flow

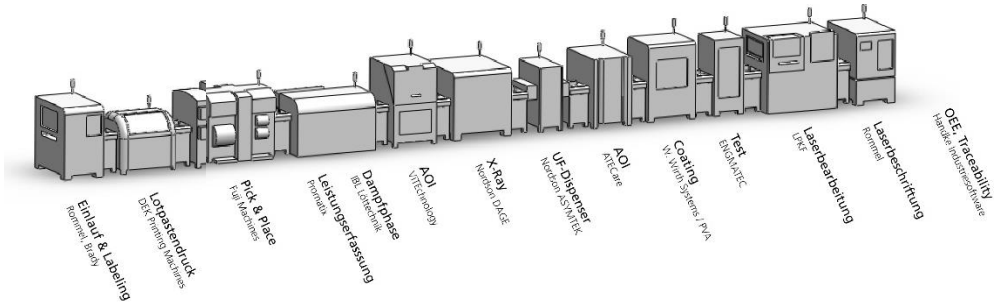
Process	Status	Done by
BOM Connect	Done	UID1234
DRC	5 Results	UID1235
DFM	1 Results	UID1236
AOI	No Results	UID1237
DFT Flying Probe	80% Testability	UID1238
DFT ICT	Open	UID1239
Pick & Place	Open	UID1240
Past Mask Preparation	Done	UID1241
Panel Creation	Done	UID1242
…		

Process Management

Line 1



Line 2



Digitized Configuration

Line 1

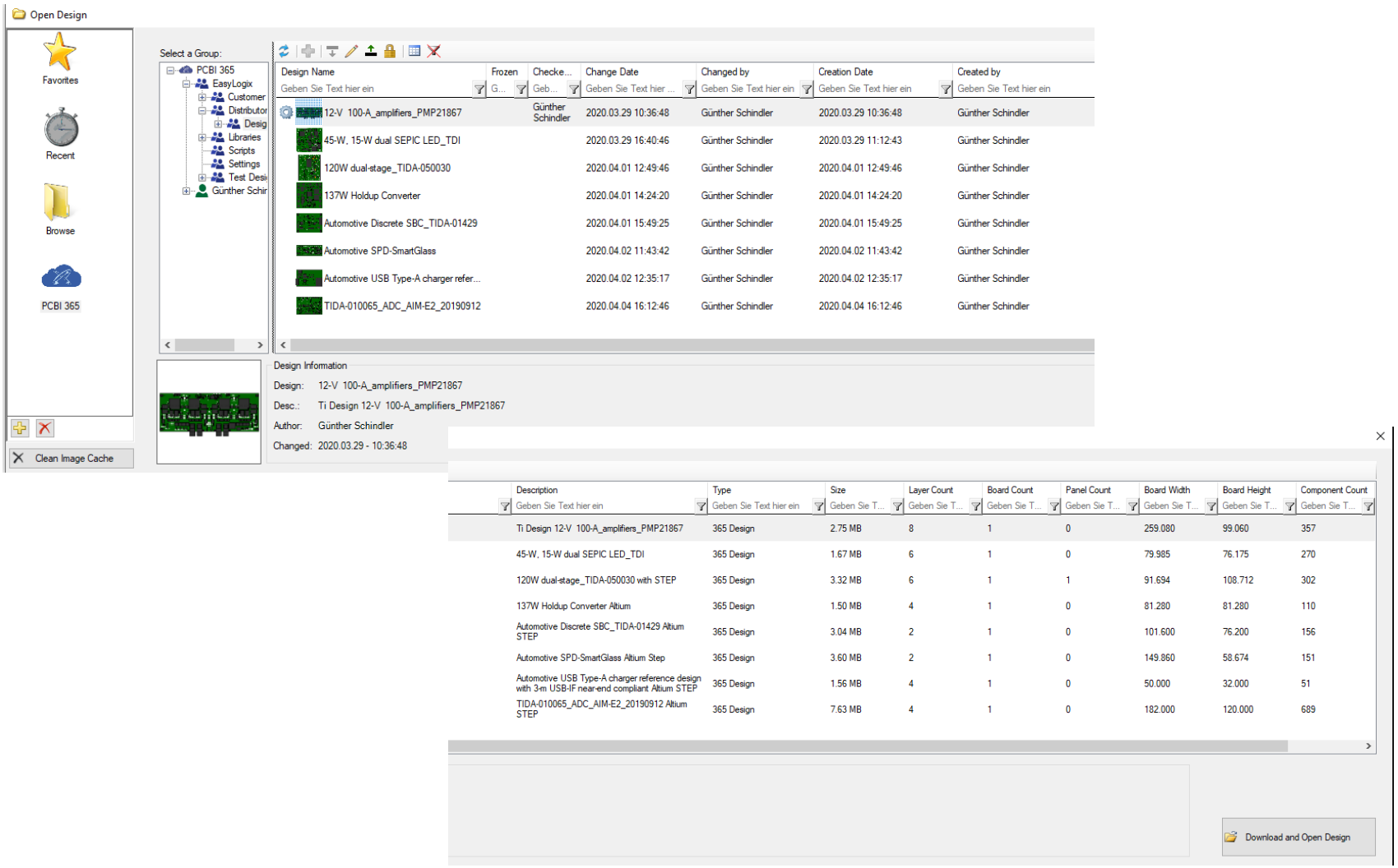
Panel Size 500*600
Feeders 24
Coating Green
....
....

Line 2

Panel Size 500*500
Feeders 18
Coating Red
....
....

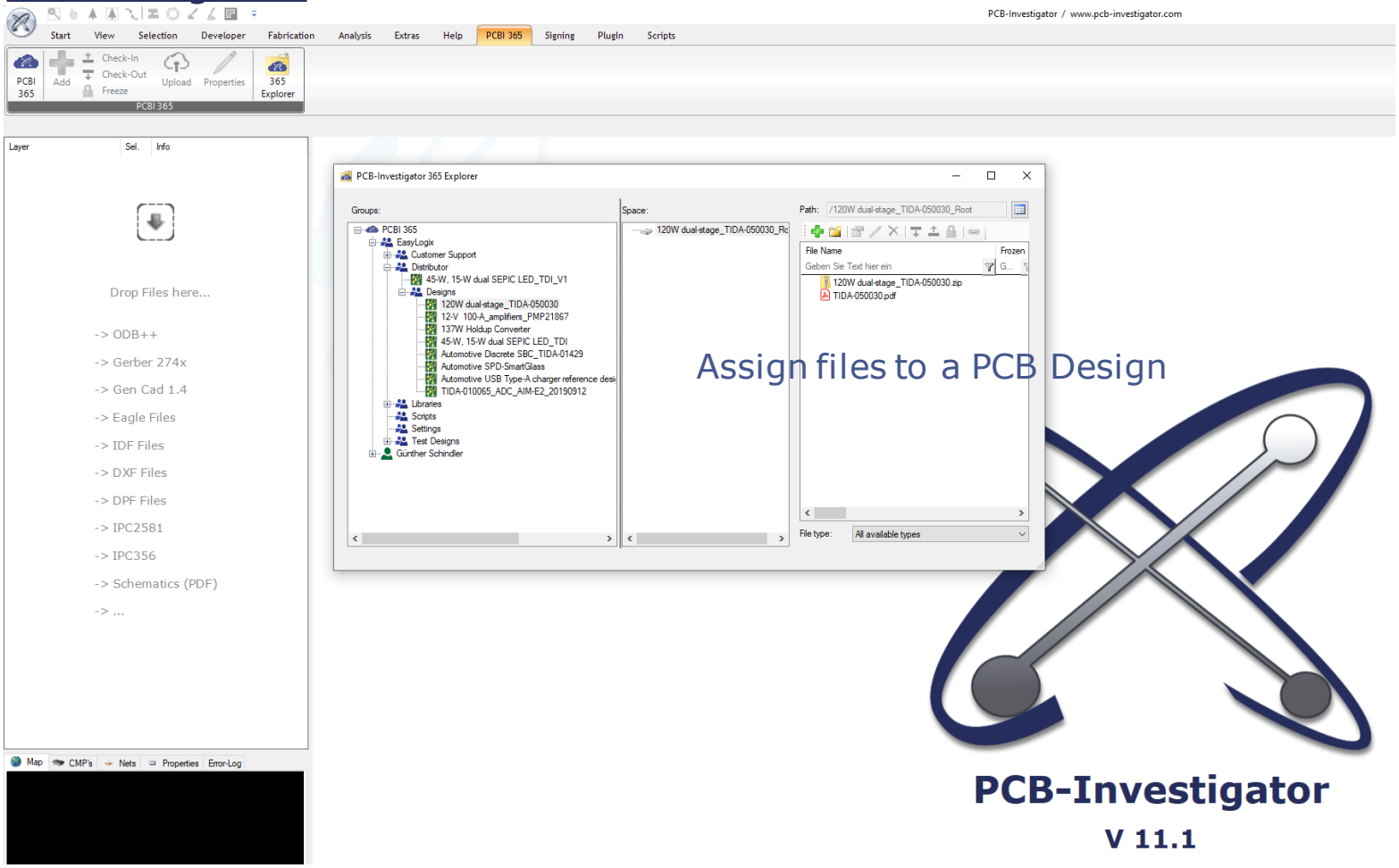
Create Analysis Rules out of Line configuration

Design Entry



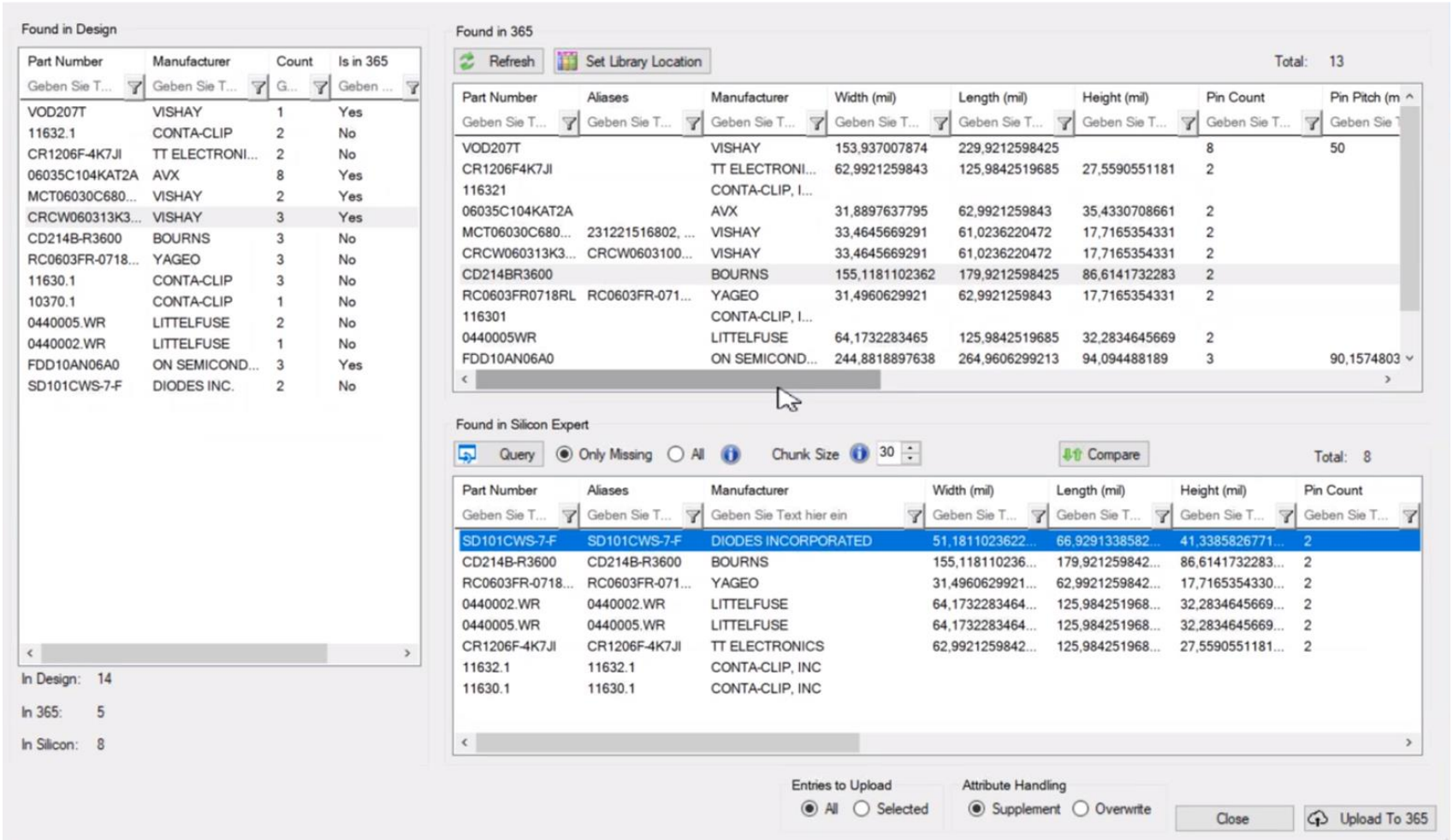
Design Management

File Managment



Component Library Import

Extend ODB++ Data with Attributes



Component Library Import

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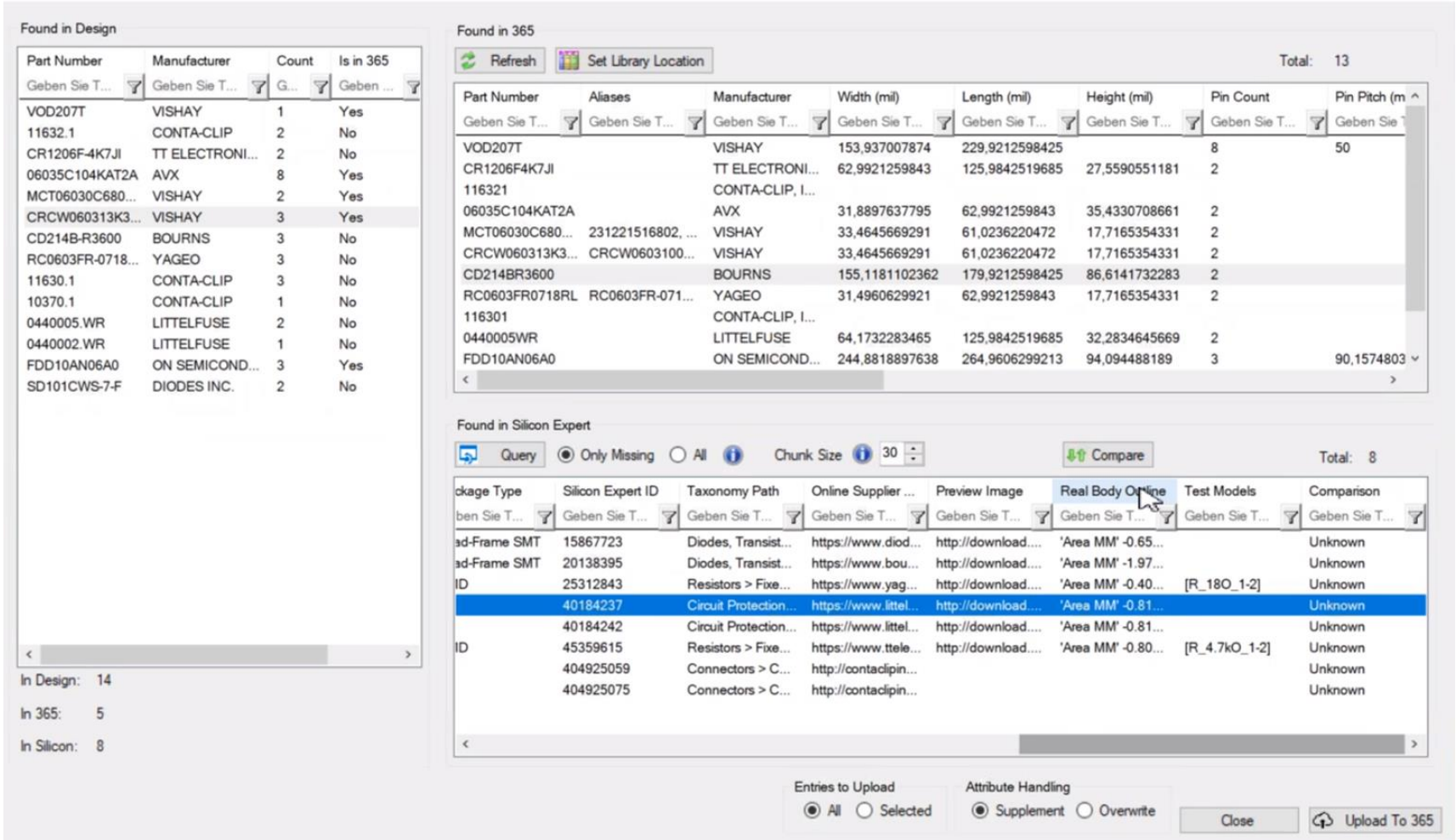
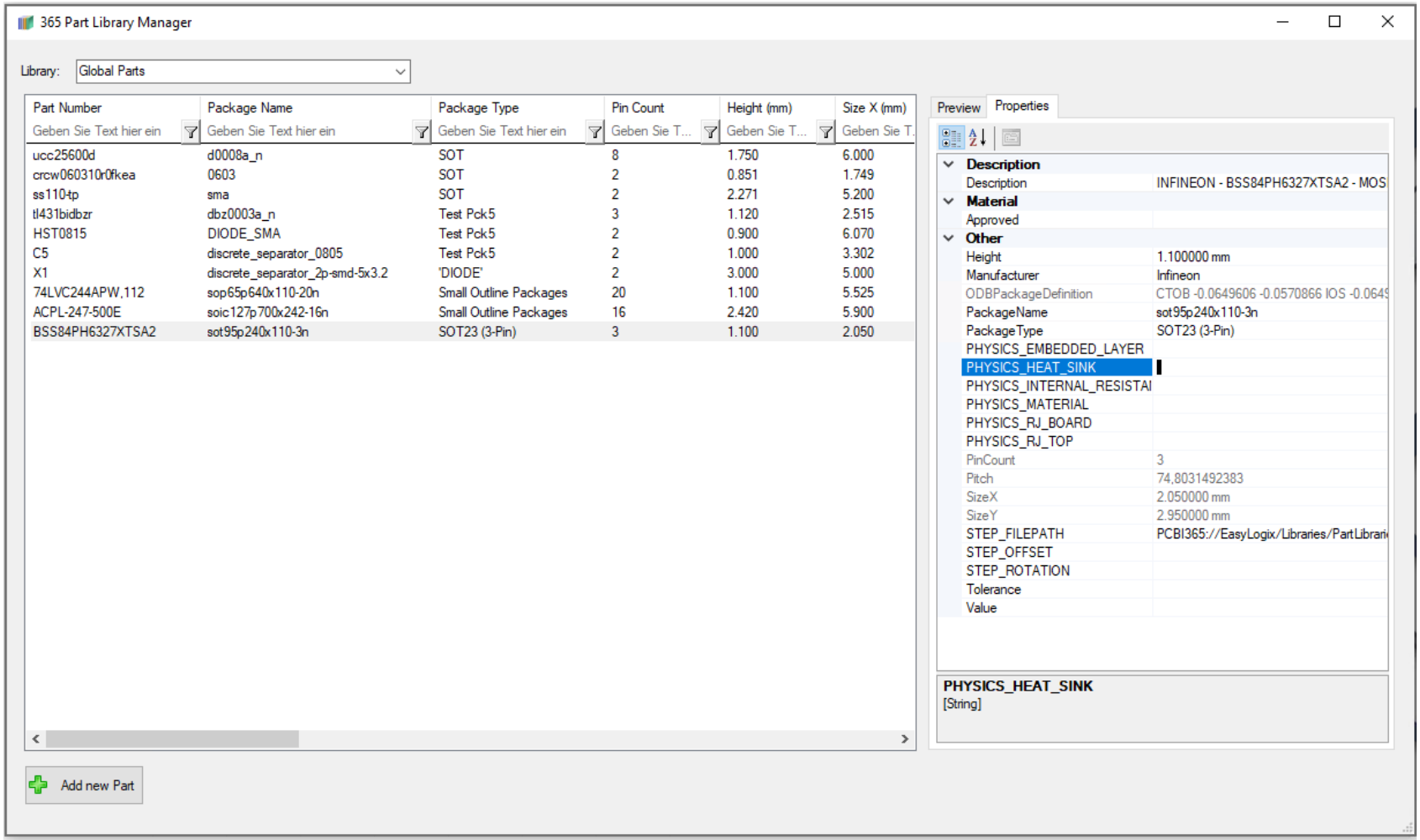
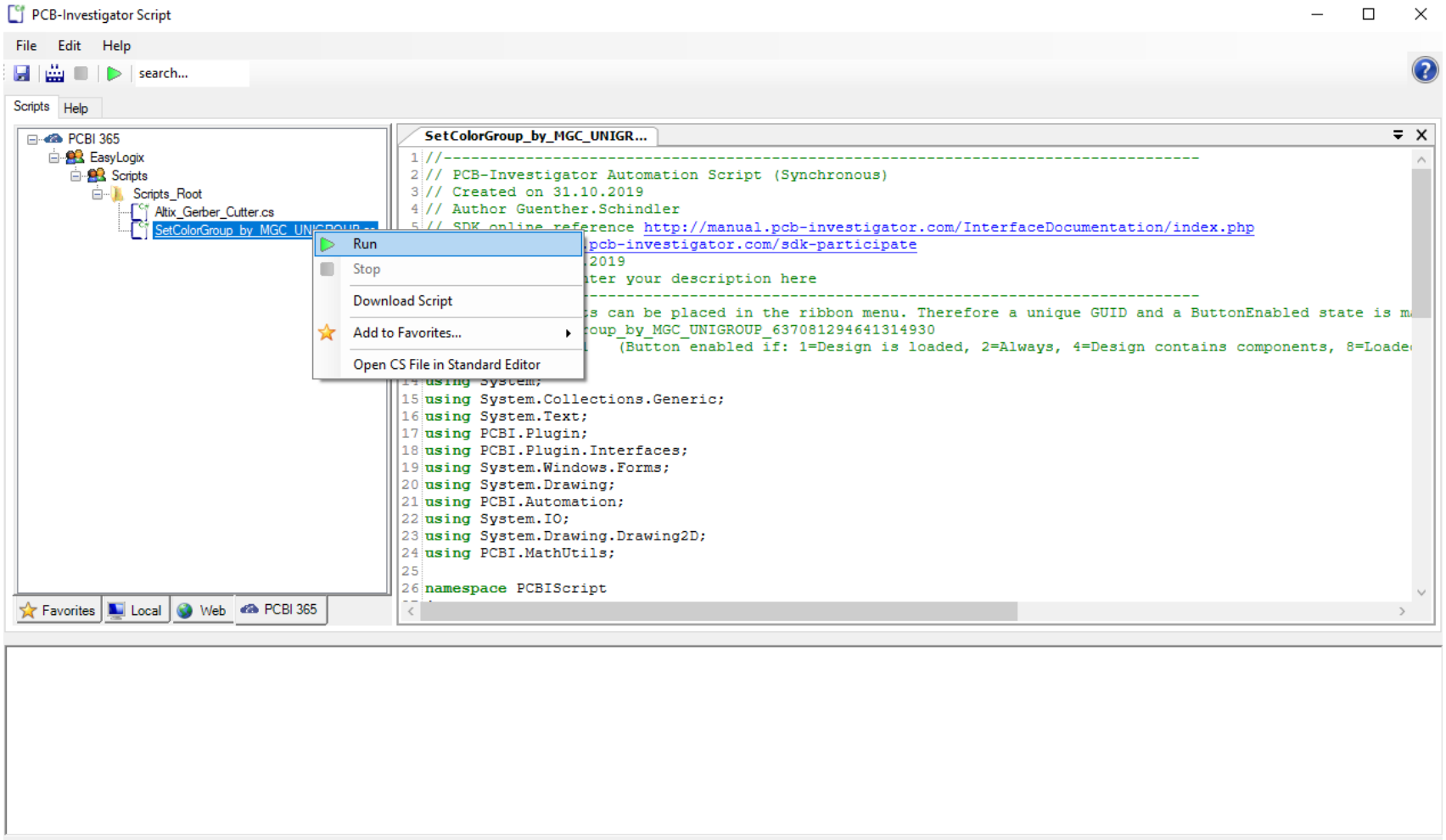


PCBI 365 Integration to the Library



PCBI 365 Script Integration

Automation



Smart OIB Integration

OIB Interface to your ASMPT Siplace machine

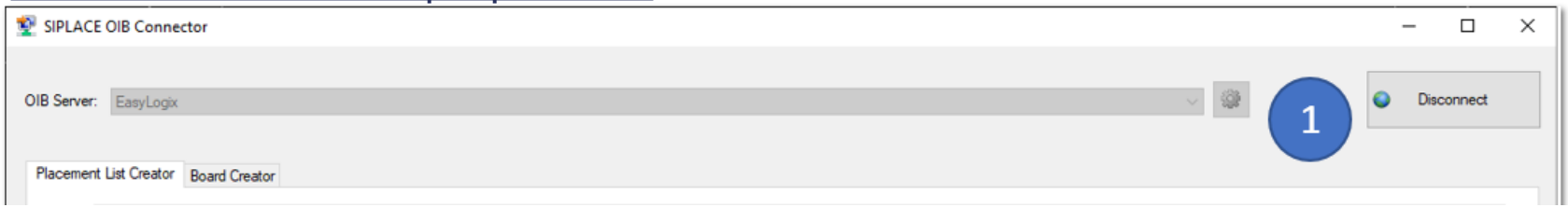
The PCBI Operations Information Broker (OIB) interface makes it easy to transfer all production-related data direct to the Siplace machine.

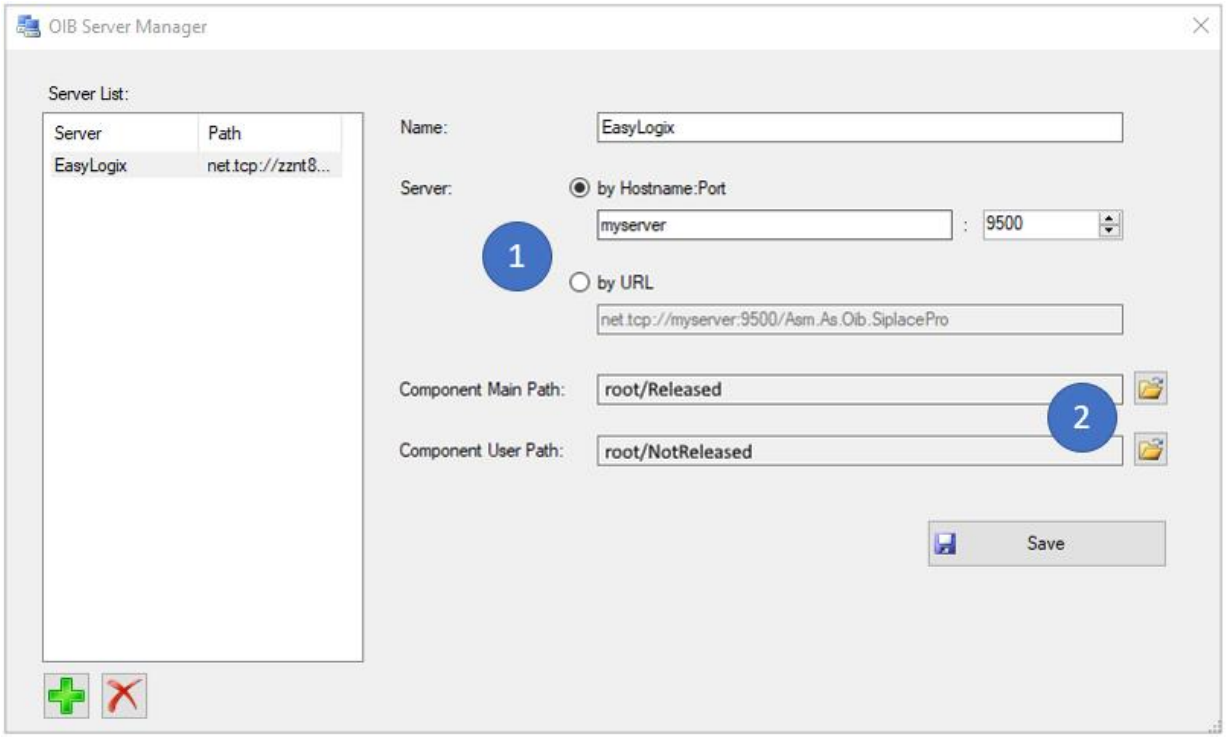
PCBI OIB also ensures process reliability by making sure all BOM setup is done correct and verified machine data and all process parameters are available.

https://manual.pcb-investigator.com/pages/siplace_oib_connector

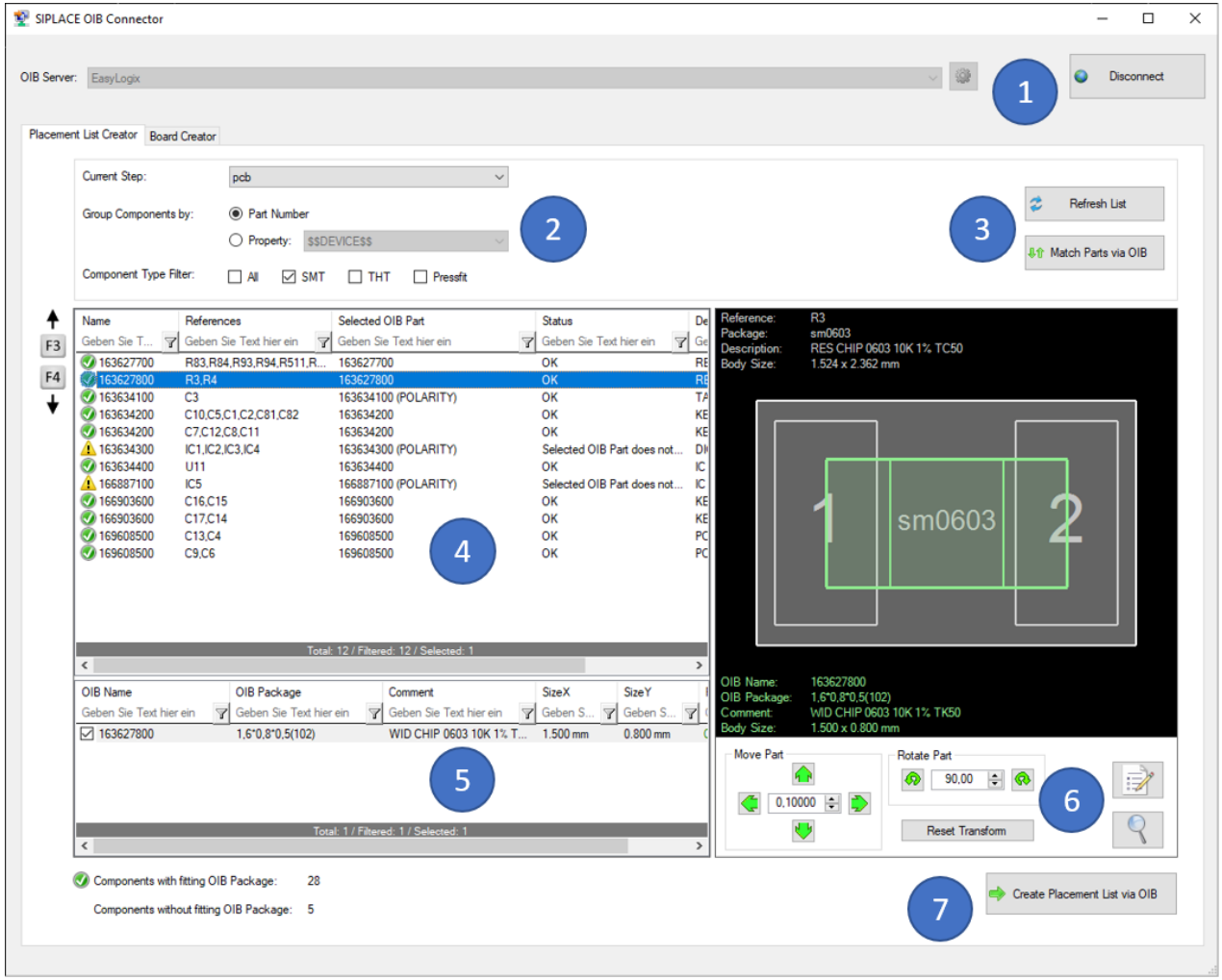
Smart OIB Integration

Pick&Place line data preparation





Smart OIB Integration



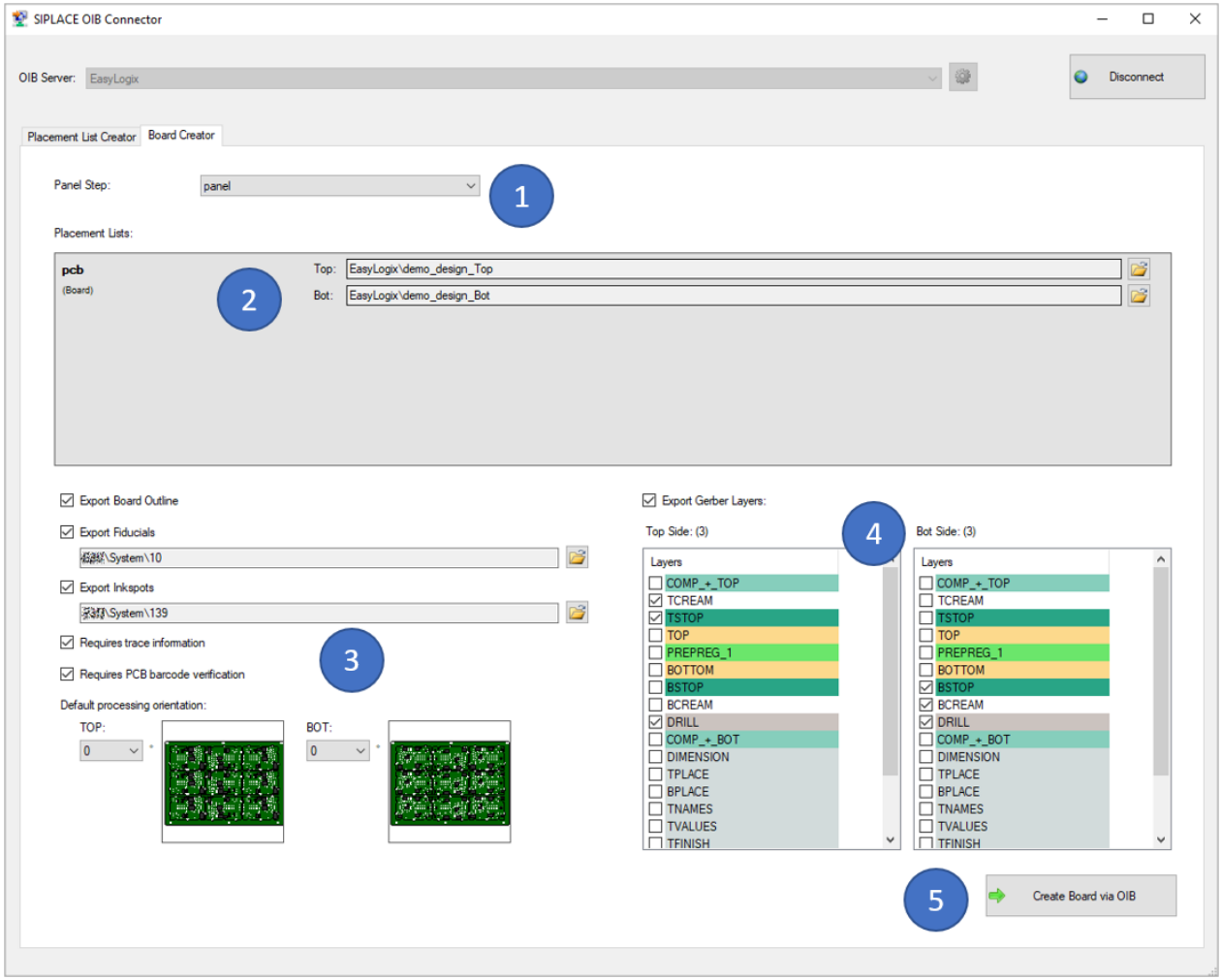
Sync all information during placement setup between the ODB++ design and the component definition on the ASM server

Smart OIB Integration

Adjust rotation mismatch during design preparation.
The major advantage is you have all information about the layout while you do the task.

Smart OIB Integration

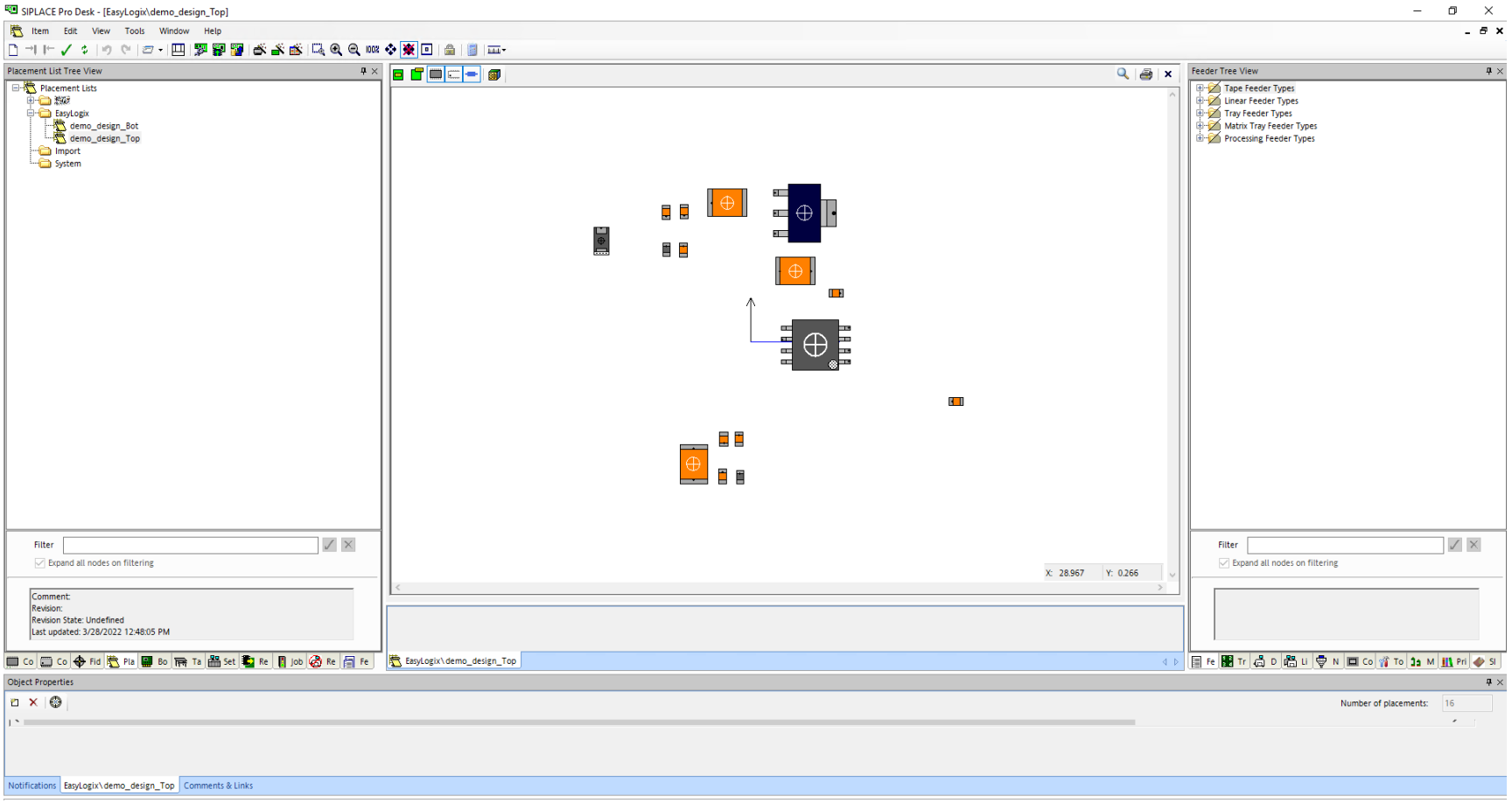
Connect PCB-Investigator with your ASM OIB Server



Define all the layers which should be available on the machine during production. This makes it easy to troubleshoot.

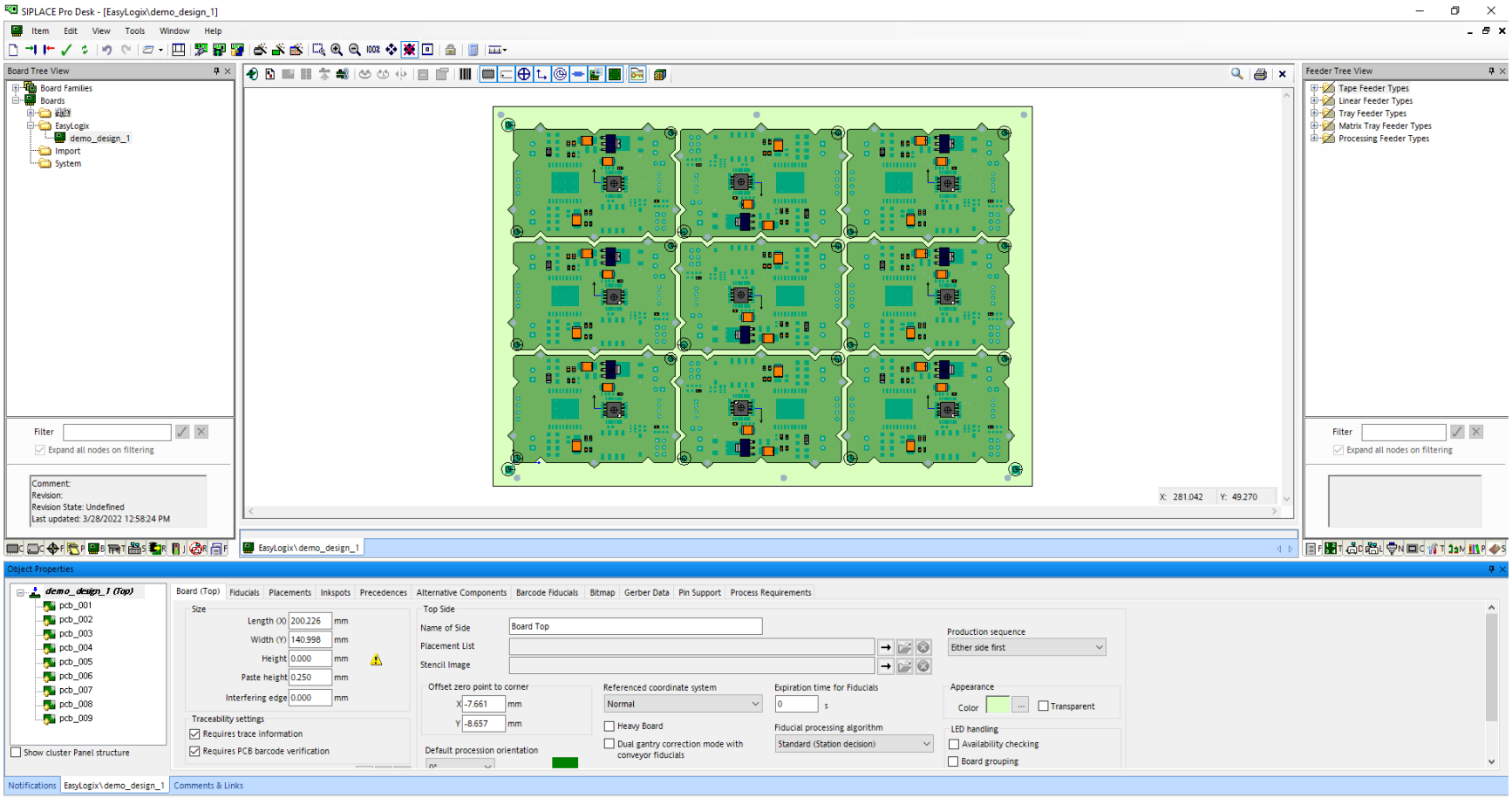
Smart OIB Integration

Transfer all component data to the machine.



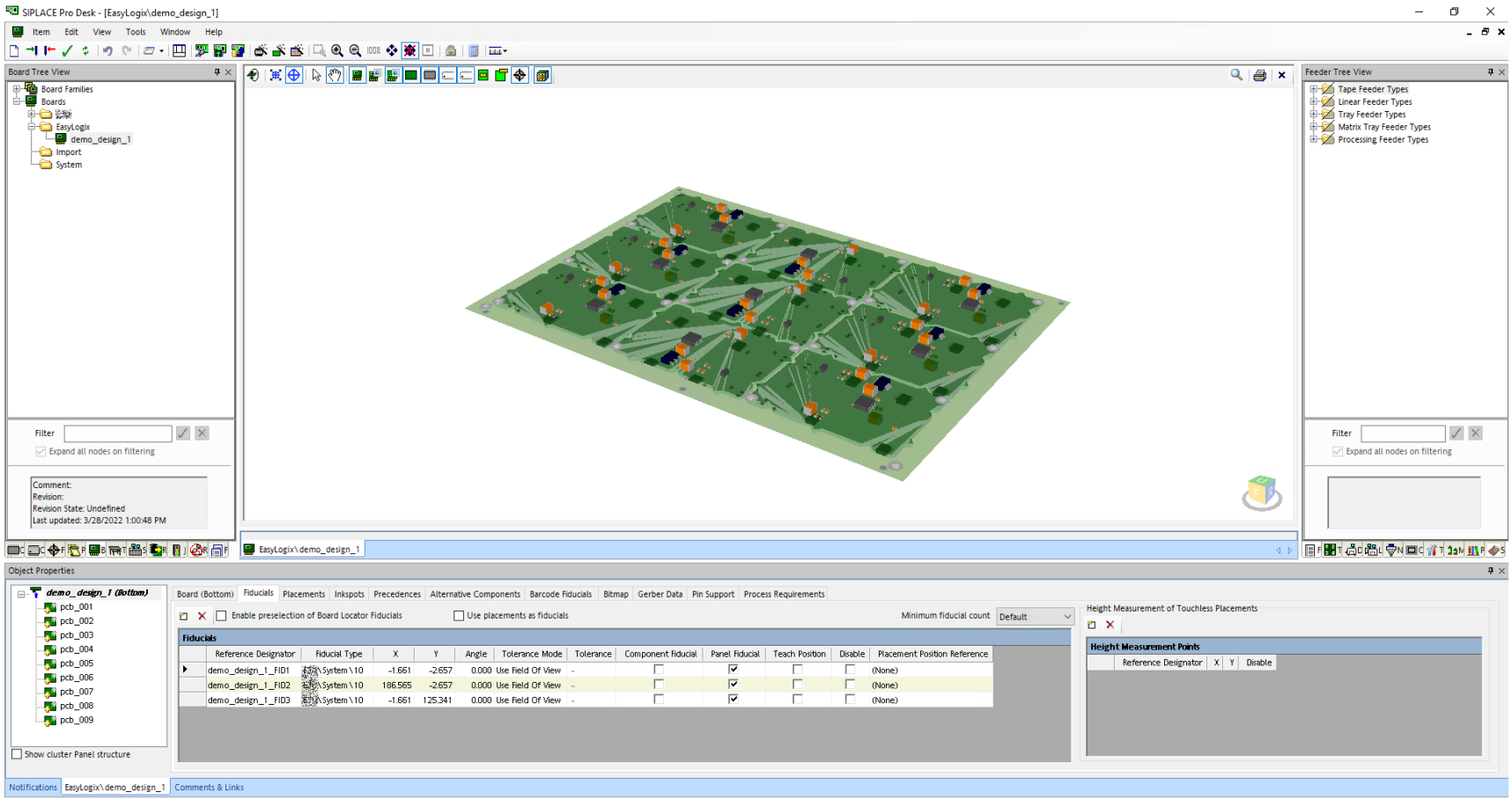
Smart OIB Integration

Set up further production parameters after transfer



Smart OIB Integration

Even all fiducials are set automatically.



PCBI PLM / Desktop and Web

Date security

All data is stored encrypted on a secure azure drive

The use of PCBI 365 Web allows to visualize data to suppliers and in the production, while keeping the data protected on the server.

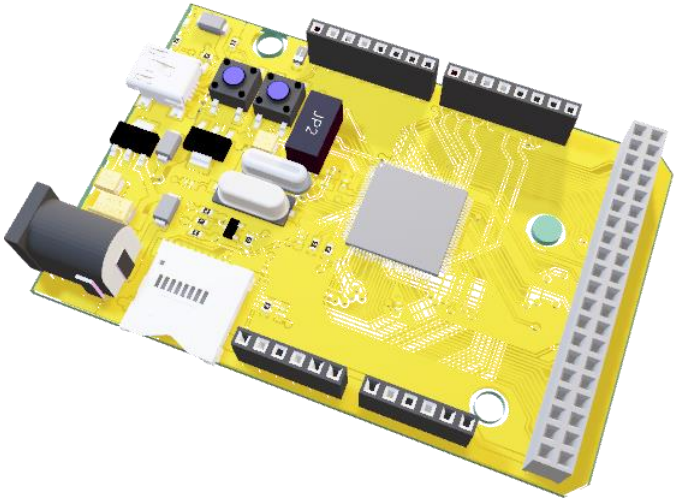
All services use SSL encryption

The data connection is established directly to the online storage and does not run on any other server. This saves server costs and increases security.

PCBI 365 / Desktop and Web

All data is stored in a managed version control environment

- Project data
- Analysis rules
- Customized automations
- Component Libraries
- Symbol Libraries
- Panel Libraries



Communication

Collaboration is a key aspect of PCB data management, and it can help to streamline the design and production process. A collaboration inbox allows for easy communication and coordination between team members and stakeholders, ensuring that everyone is on the same page.

Design reviewed acknowledgement is a tool that allows the designer to confirm that their design has been reviewed by the necessary parties and any feedback or suggestions have been taken into account.
Changes accepted feature enables the designer to approve any changes made to their design.
Return of suggestions feature allows stakeholders to provide feedback and suggestions on the design and for the designer to incorporate these changes.

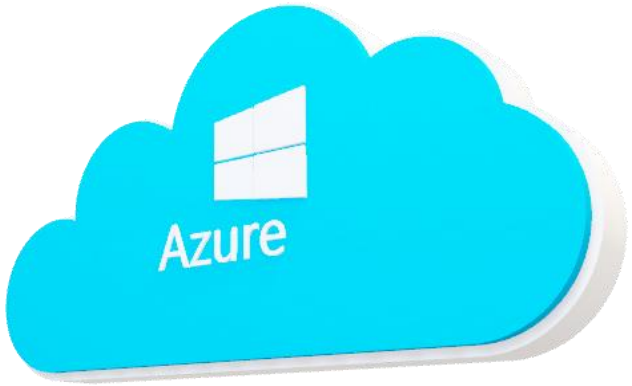
An E-Mail copy of information feature allows team members and stakeholders to receive updates on the design progress and any important information through their email.

All these features help to facilitate collaboration between team members and stakeholders, while also ensuring that the design is accurate and that any issues are addressed in a timely manner.

PCBI 365 / Desktop and Web

System

- Data access through Local Drive, Online Drive, Web Request or SQL Database
- Server Scaling auto or manual
    - Processor Type
    - Processor Count
- PLM Extension
    - Store Date on Web accessible place
    - Get Data from Customer storage

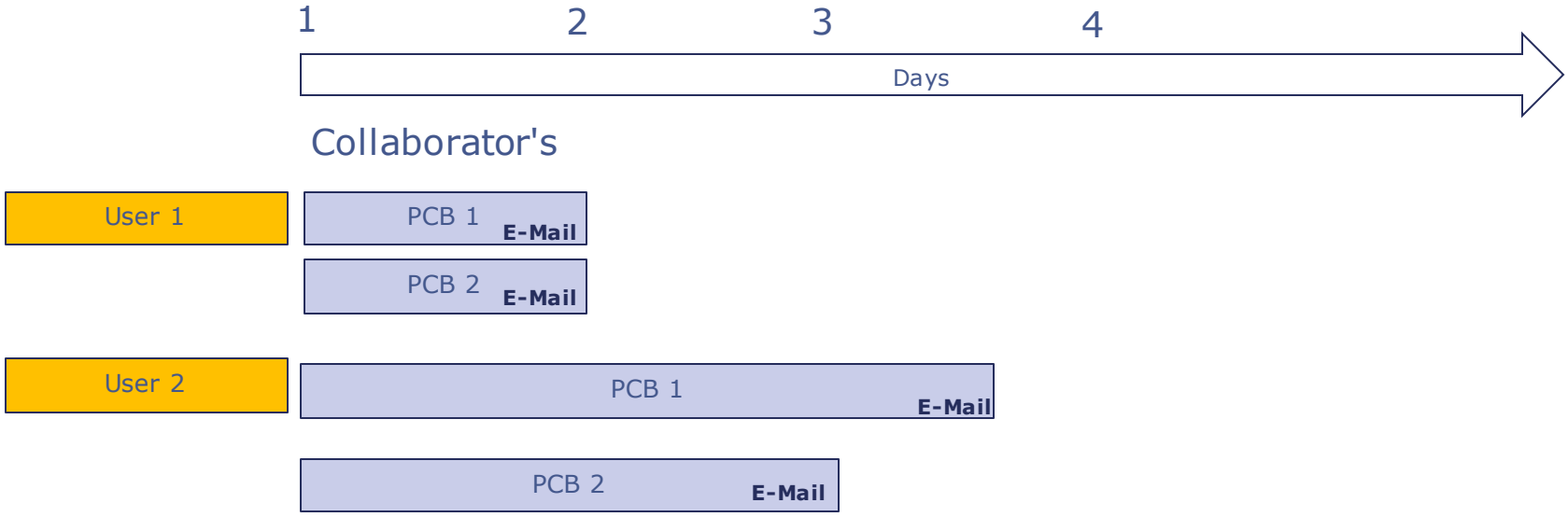


Advantages

- Administration
  - Only one License
  - Just one Server to Update
- Data
  - No need to share
  - Only one Version
  - Global availability
  - No visualization differences
- Security
  - SSL Protected
  - Managed Data Download

Designs Sharing

- Time restricted Design Sharing
  - Make a design available for a certain time
  - Admin can restrict the sharing period
  - Sharing through E-Mail without an Account
  - ->Receiver can view data online for the defined period
  - No registration necessary
  - Limiting accessibility to certain IP’s



License Management

- Server License
  - Amount of instances
  - Amount of Storage Space
- Available functions
  - Viewing
  - Data Download
  - DRC
  - DFM

Extensions

Request Customized Functions

Get in touch,

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Guenther Schindler

Tel. +49 941 568 136 26

Useful Links:

PCB-Investigator
www.pcb-investigator.com

PCBi-Physics
www.PCBi-Physics.com

Native Board Import (3D Interface to CATIA, SiemensNX, SolidWorks, SolidEdge)
www.sts-development.biz

GerberLogix
www.gerberLogix.com

Online Gerber Viewer
www.Gerber-Viewer.com

Software Development, CAD Converter, data connection
www.easyLogix.de