

PRODUCT INFORMATION

# Share processes and data in your engineering value chain

Intelligent data sharing for end-to-end processes across organizational boundaries

Numerous partners such as suppliers and engineering firms contribute to the development of a product. But processes can only function effectively if the data is available across organizational and system boundaries. CONTACT's Collaboration Hub simplifies the flow of data thanks to intelligent data sharing and supports end-to-end processes. Collaboration Hub is particularly suitable for collaboration in joint ventures and projects and for the efficient integration of suppliers and partners.

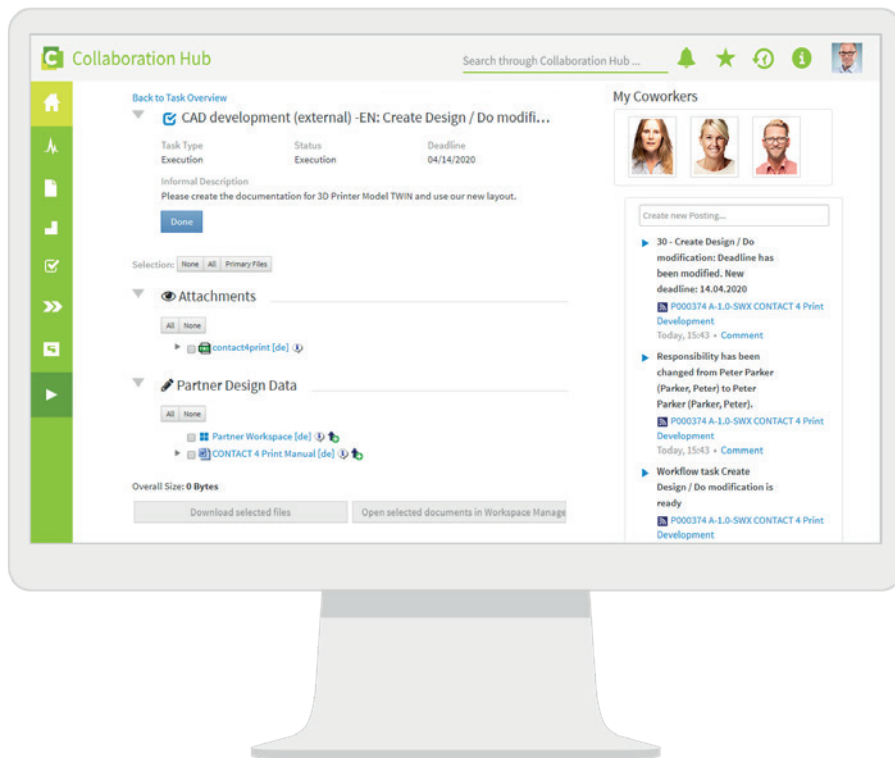
## Data sharing makes collaboration reliable

Although e-mails and sending messages are well suited for dealing with simple tasks, they are not reliable enough for demanding engineering tasks. „Do I have the latest version?“, „What thread can I find it in?“ are questions that employees often

ask themselves daily. That is why Collaboration Hub offers intelligent data sharing. The hub ensures that distributed teams always use the latest data and reference shared elements such as projects and processes.







## A collaboration environment designed for engineering processes

Engineering projects, which involve CAD model structures, product structures, variants, technical changes and configurations, as well as access control, have very special requirements. Collaboration Hub goes beyond conventional team space solutions such as Slack, MS Teams and Trello. The data, process and project models for our collaboration solution were designed for engineering from the bottom up.



## Comprehensive security and compliance mechanisms

Communication with other companies requires powerful interfaces. Companies impose exacting requirements when it comes to protecting their IT infrastructure against unauthorized access. Collaboration Hub's security architecture is based on the CONTACT Elements platform and provides reliable protection. For example, we provide a dedicated proxy environment, which is separated from the internal environment by a firewall, for collaboration with suppliers and partners.

## Using data across system boundaries

Business processes function smoothly if their data is available across different systems. Our Catalyst technology uses standard interfaces for enterprise applications such as ERP and PLM to ensure this data flow. We do this by working together with technology partners like PROSTEP AG, a leading specialist for PLM interfaces. Open data standards such as OSLC and ReqIF, API standards such as REST and its open, declarative data dictionary make Collaboration Hub easy to adapt.

## Challenges

- Data and processes are to a large extent located outside the company.
- The IT tools for executing the processes are not connected.
- Data is distributed over a wide range of different systems – using it is complicated and involves a considerable amount of effort.
- Collaboration with business partners is time-consuming.

# Using Collaboration Hub

Joint ventures and joint projects

## Joint ventures

A joint venture is a long-term undertaking, such as the merging of Daimler and BMW's mobility services. Joint ventures must

- synchronize data and processes across the systems used by the participating organizations
- provide a shared system environment to support the joint venture's employees in their day-to-day work
- prevent access to data not intended to be accessed (need-to-know principle and protection of intellectual property)

The core elements of Collaboration Hub for joint ventures are:

*legacy system interfaces, a dedicated application environment and the protection of intellectual property.*







## Joint projects

In joint projects, different organizations are pursuing a common goal, such as developing a new drive system. Focus is placed on special requirements such as advanced process and workflow concepts, context links to elements in the product structure, and special access rules, which team space solutions like Asana, Slack and MS Teams cannot meet. Joint projects must

- be able to set up a shared environment quickly and efficiently

- prevent access to data not intended to be accessed
- use industry standards such as the BIM standards or, in the automotive industry, STEP AP 242 and JT

The core elements of Collaboration Hub for cross-organization projects are:

*a dedicated application environment, out-of-the-box capability with on-premise or public/private cloud deployment, the protection of intellectual property, and industry standards.*



# Using Collaboration Hub

Value chain and system integration



## Value chain

In supply chains, suppliers and engineering service providers perform tasks on behalf of the engineering lead. These services require lightweight support with start-up times that are measured in hours and minutes, not days. Typical tasks include detailed design, validation and technical changes. Collaboration Hub provides support in this context with, for example, workflows for defining, confirming, executing and reviewing technical changes. Suppliers must

- be able to access all the relevant information via a 24/365 self-service web portal
- be able to easily download and upload complex

data such as CAx model structures and immediately identify subsequent changes

- be able to use collaboration functions such as activity streams, subscriptions, redlining and task management

The services provided by vendors build on the following core elements of Collaboration Hub: *self-service supplier portal, workspaces, triggers and alerts, lightweight collaboration, workflows, on- and offboarding, access control according to context and security.*



## System integration

Collaboration Hub supports system integration.

Typical examples include different PLM systems in joint ventures. The challenge here is to merge fragmented resources to create services that these systems alone cannot provide. Enterprise application integration (EAI) is the use of architectural principles, software and services to integrate different enterprise applications. An EAI environment must

- synchronize data and processes across systems
- be able use state-of-the-art standards for APIs (REST, etc.) and conceptual data models (OSLC, STEP, etc.)

- provide a shared system to support tasks and processes for which existing legacy systems are not well suited

EAI support builds on the following core elements of Collaboration Hub:

*legacy system interfaces, a dedicated application environment and API standards.*



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