

GxP-compliant solutions for your digital documentation

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### **Company Digital Life Sciences**

Digital Life Sciences GmbH was founded in April 2007 by Mr. Thilo Gukelberger, Co-Founder of d.velop AG.

We are a provider of digital and GxP-compliant documentation solutions and have focused on the specific requirements of the life sciences industry since our foundation. Our solutions build on the ECM/DMS system of d.velop AG, namely

d.velop documents (formerly d.3ecm), and extend the platform with the special aspects of controlled document and quality management. With many years of experience as a digitizer in regulated environments, we offer our customers not only a broad portfolio of solutions but also a comprehensive range of services (e.g., customer-oriented process consulting, validation services, specific migration consulting, and much more).

# Compliance our mission

The concepts of life sciences solutions for quality management of GMP-relevant processes can be found in the GMP Advisor published by Peither, among other sources. Thilo Gukelberger and other employees of the company are authors for the GMP Advisor and have published the following chapters, among others:

- Chapter 1.H: IT systems for the optimisation of quality management processes
- Chapter 2.C: Training management
- Chapter 9.B: Regulatory requirements for computerised systems and the validation process
- Chapter 9.D.2: Risk management in the validation of computer-based systems
- Chapter 9.E: Qualification and validation of computerised systems
- Chapter 15.G: Document management systems



### **Facts and figures**



### Founded in 2007

... and thus with nearly 20 years of experience in the (GxP) regulated environment



**Validation Services** 

**Professional Services** 

**Support Services** 



more than 90

employees



### Industries in a regulated environment

Bio technology

Pharma

Food

**Medical technology** 

**Chemistry** 

**Cosmetics** 

**Laboratories** 

...and other companies with a strong focus on quality management



more than **65.000** 

happy users use our software every day



**Certified according to** 

ISO 9001:2015



more than 165

...customers in a regulated environment



**GAMP** audits

Successfully audited as a supplier to our customers (by mail, in person, remotely)

### Modular eDMS & eQMS

**Comprehensive DMS and QMS solution** 



#### **Solutions**

Our digitization solutions primarily address document-based processes in quality management and manufacturing/production.

The basis of dls | eQMS is a comprehensive ECM/DMS. All software solutions can be introduced as modular building blocks and can be expanded like a building block model to a complete GxP-compliant eQMS suite. The blocks highlighted in turquoise illustrate this aspect.

The ECM/DMS system can also be extended to include non-GxP applications and can be linked to your existing ERP system (e.g. SAP), thus enabling you to implement almost all document-based processes in your company.

You already have an ECM/DMS in use? No problem, it is also possible to deploy only the eQMS modules. Please feel free to contact us.

#### Let us introduce ourselves

Immerse yourself in the world of digital transformation with the eQMS Suite. Find out more about Digital Life Sciences and our solutions in this video. Learn how you can redesign your document-based processes with customised GxP-compliant software solutions and discover the possibilities of digital transformation.



### Cloud, on-premises, or hybrid?

#### **Our delivery options**

In order to be able to offer you the ideal mode of operation for our software solutions, we are strategically aiming to give you, our customers, the choice. We want you to be able to decide for yourself which delivery method is best for your needs. In addition to the classic on-premises operation, in which the eDMS | eQMS Suite is operated in your own infrastructure, we offer you the use of our Suite in the cloud as an alternative, either as software as a service (SaaS) or as an application service provider (ASP) in a state-of-the-art and secure data centre, or in combination as a hybrid model that flexibly combines cloud and on-prem-

ises solutions. Our data centre partner is accessible to customers and interested parties and has many years of GxP know-how. The data is of course stored and mirrored in Germany. The qualified data center meets all current IT security standards and has been awarded certifications and conformities such as ISO 27001, FDA 21 CFR Part 11, Compliance, GxP Compliance, and many more.

#### Three ways to use the system:



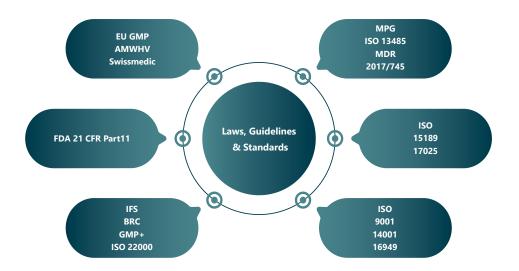
### **Addressed Regulations**

#### **Regulatory requirements**

The product development process with respect to regulatory requirements demands a very high level of quality. Our software solutions take into account the relevant laws, guidelines and standards in the regulated environment and have been developed specifically with this in mind. Our products have also been introduced and successfully validated by numerous companies in the life sciences sector.

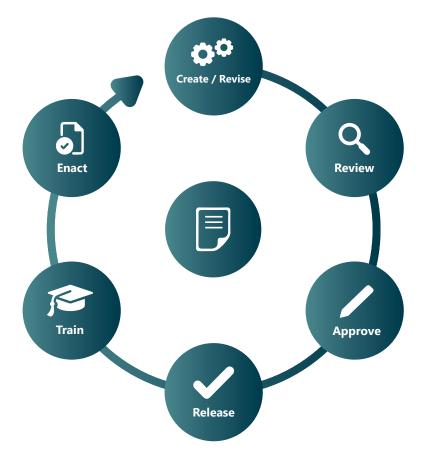
#### **Audits**

As a supplier of software for companies in the GxP environment, conducting supplier audits is standard practice (e.g. in accordance with GAMP® 5). In addition, our products have been successfully inspected by regional and district authorities as well as during TÜV audits in accordance with ISO standards 9001 and 13485. Regular audits by our customers and interested parties also contribute to the continuous improvement of our process and product quality.



dls | document control

Whether SOPs, work and process instructions, test specifications, operating instructions, guidelines, manufacturing documents, contracts or any other type of document - you can create, revise and sign them all completely digitally with our "dls | document control" module.





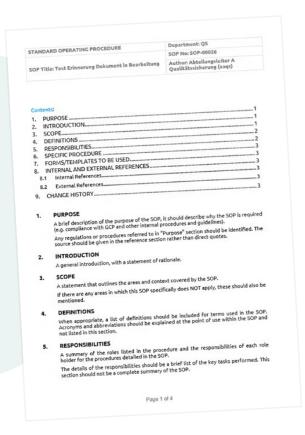
#### **Your benefit**

- > Create new documents based on approved templates or use existing documents as templates
- You confirm the review, approval and release of your documents with the integrated and GxP-compliant signature
- The system provides further applicable documents and links to other documents as well as the "Periodic Review" function
- **>** Compare the different versions of a document and view the changes directly
- Your paper printouts (if necessary) are controlled and logged by the system depending on the process. Of course, printouts will be marked with a meaningful watermark.
- The integrated reporting facilitates your evaluations and provides an overview of documents and processes (e.g. process cycle times)

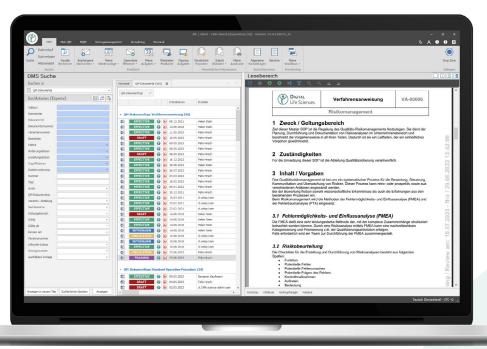
#### **Regulatory requirements**

- ISO 9001:2015, chapter 7.5
- ISO 13485:2016, chapter 4
- EU-GMP guideline, annex 11
- FDA 21 CFR Part 11
- WHO: "Guidance Document on Good Data and Record Management Practices"
- EFG Vote V11002: Requirements regarding the electronic data storage
- EFG Vote V11003: Requirements regarding electronic signatures and initials

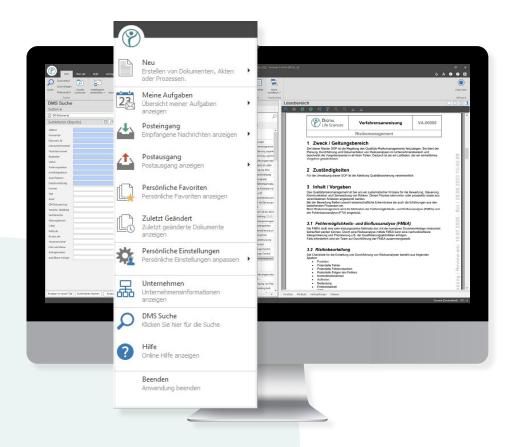
### From the paper document...

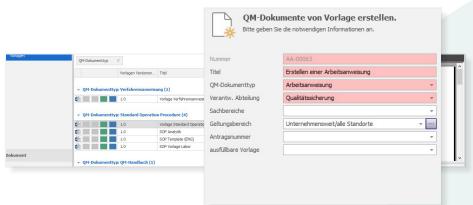


### ... to the digitally controlled document!

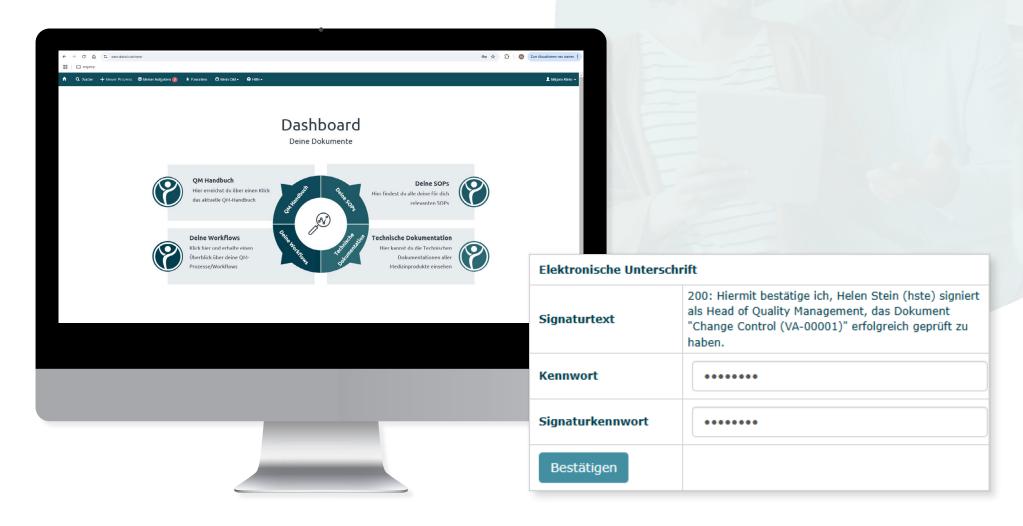


### **Creation via integrated template management**





**Document circulation: Review, Approval, Release** 



Use document circulations/workflows that can be adapted to your needs and procedures. Different (single or multi-level) document circulations can also be used for your different document types, if required. Participation in the automated document circulation is confirmed by means of a digital and GxP-compliant signature. Periodic Review tasks as well as other task types are sent automatically by the system, of course also with corresponding notification by e-mail. An integrated deputy function as well as reminder and escalation management ensure that tasks are completed on time and that your documents are made available to the relevant employees as quickly as possible.



Increase in efficiency



**Increased transparency** 



Time & cost savings



**Ensuring compliance** 



Improving collaboration



**Risk minimization** 

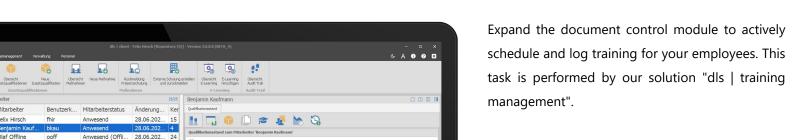


Flexibility and scalability



**Increased data security** 

dls | training management



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#### **Regulatory requirements**

- ISO 9001:2015, chapter 7
- ISO 13485:2016, chapter 6
- EU-GMP guidelines Part 1, chapter 2
- EU-GMP guidelines Part 2, chapter 3
- Medicinal Products and Active Ingredients Manufacturing Ordinance (AMWHV) section 2, §4
- FDA 21 CFR 211 Subpart B



#### **Your benefit**

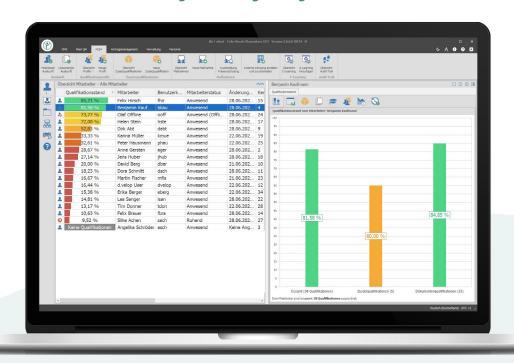
- Make sure that all employees have the necessary qualifications for their job
- Update the qualification level of your employees due to successful document trainings or (externally) completed trainings
- Training management supports you in the planning and confirmation of your in-house training or classroom training, including the creation of automatically generated participant lists and other training documents
- Automatically assign training tasks to affected employees when a new document version is released

- **>** Complete comprehension questions on selected documents and use an electronic exam
- Configure different repetition intervals for your classroom training as well as external advanced and further training courses
- > Check the qualification level of your employees at the push of a button based on a document, an employee or a job, role, department, etc. The resulting qualification matrix and integrated reporting tools provide you with information at a glance

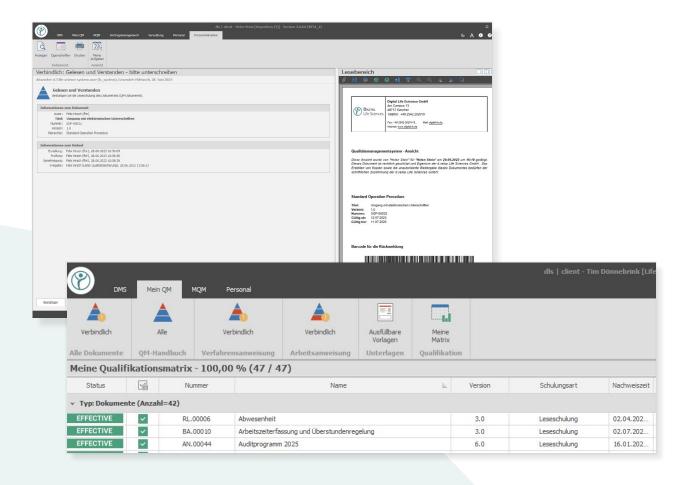
### From training list...



#### ... to digital training management



### **Training task & qualification matrix**

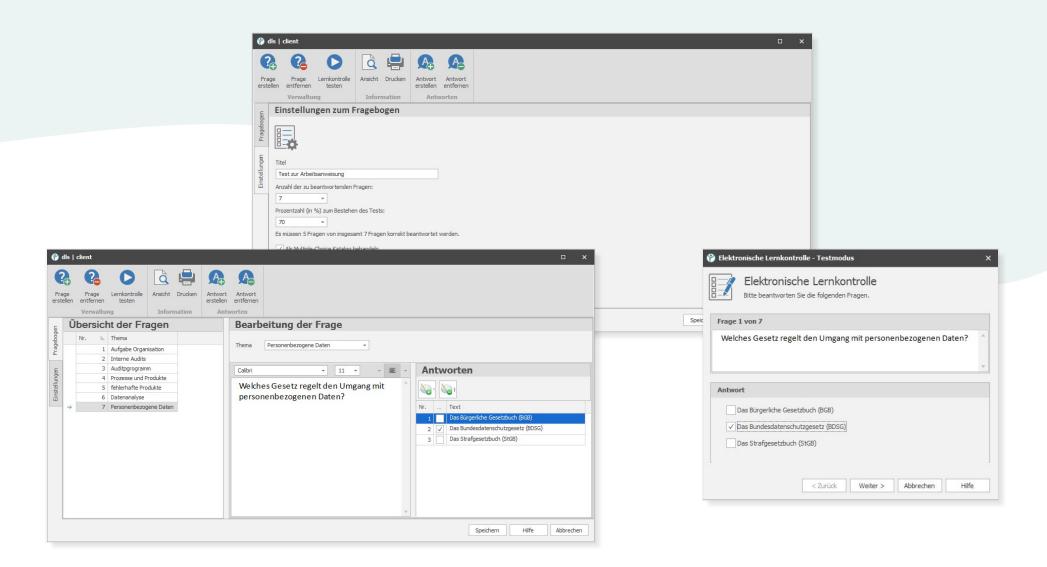


Define which employees should have which qualifications and easily assign them the relevant documents and further trainings. Choose from a variety of training types (Informative, Read and Understood training (including electronic exam), classroom training, e-learning, etc.) and plan customized training for your workforce. The constantly updated qualification matrix provides you with information about the current qualification status of your employees at the click of a button, based on proofs of qualification (target/actual comparison). Your employees are automatically informed about your training tasks. Benefit from features such as repetition intervals for trainings and individual training events (e.g., re-trainings).



#### **Electronic exam**

Test your employees' knowledge with the electronic exam function. This allows for the creation of individual question catalogs. After successful completion of the exam, e.g. multiple choice, the qualification status of your employees is automatically updated and immediately displayed in the qualification matrix.



### **E-learning**

### dls | e-learning

Use our module "dls | e-learning" to train your employees even more interactively. To do this, create an e-learning freely according to your wishes via Microsoft PowerPoint or integrate existing presentations. In addition, use audios and videos to make your trainings even more engaging. If you already use our module "dls | training management", the new training type e-learning is available here.





#### **Your benefit**

- Easily integrate content from the eDMS / eQMS, such as default and specification documents, into the e-learning
- In addition to documents, integrate audio files and videos to illustrate your learning content
- Participate in your e-learning via delivered tasks within the system or via the web-based training portal

- ➤ If our "dls | training management" module is also used, the successful processing of the exam automatically updates the qualification status of your employees
- Design your electronic exam individually using a variety of options directly in PowerPoint

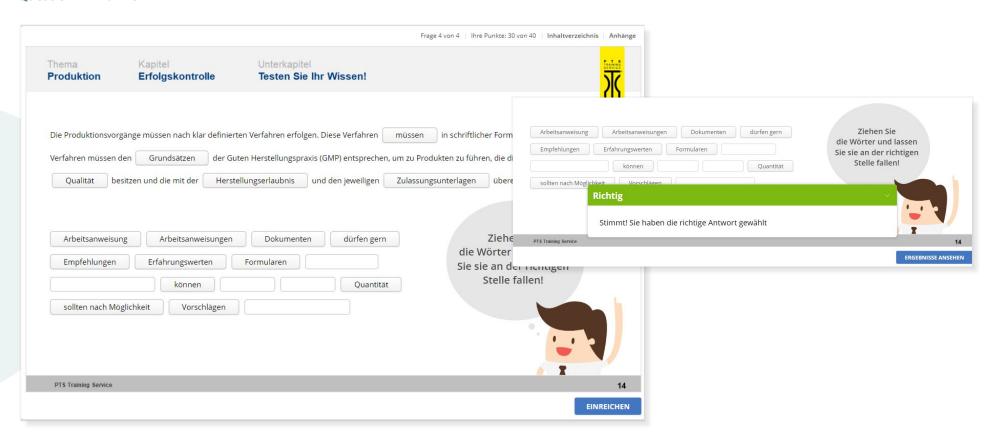
To the e-learning example



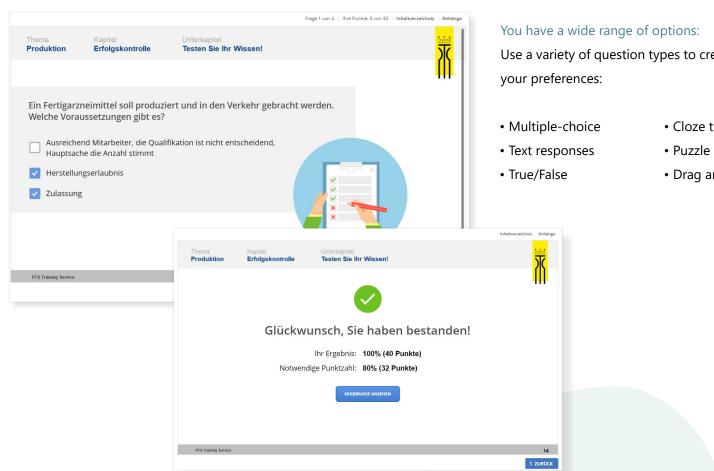
### **E-learning**

#### **Electronic exam**

#### **Question 1 - Puzzle**



#### **Question 2 - Multiple Choice**



Use a variety of question types to create your performance review according to

Cloze tests

Rating matrix

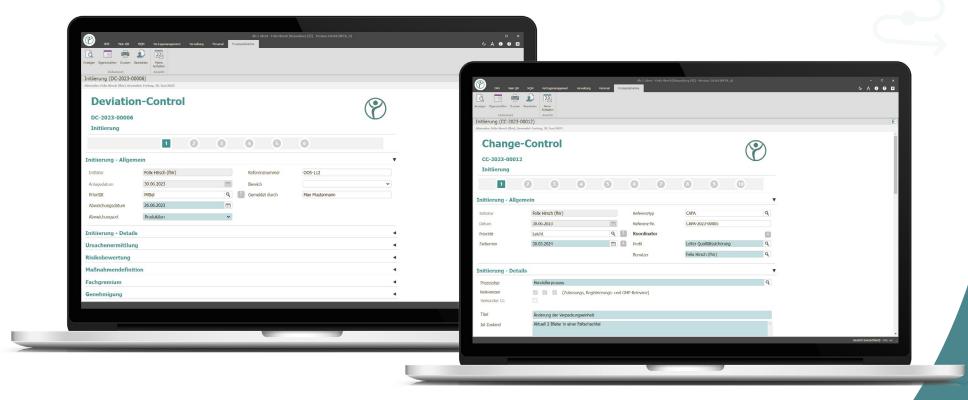
- Hotspot
- Drag and drop
- Order

### **QM** processes

### **Complaint, Deviation Control, CAPA, Change Control**

Control your production-related QM processes such as complaints, deviation control, corrective and preventive actions (CAPA) or change control with our digital workflows. Our integrated solutions manage your previously paper-based process from capture to completion completely digitally. The workflow system automatically forwards the digital form to the next instance; if deadlines are

exceeded, the reminder and escalation management system intervenes. Of course, an absence management is also included for the task routing.



#### **Your benefit**

- Records that you keep today in paper forms will no longer be lost, as they are stored digitally from the start
- The administration costs and runtime of processes are reduced and the quality of results is increased
- ➤ Generate interconnected process chains, consisting of individual processes, to increase traceability
- > Create reports and statistics and keep track of your quality-relevant processes, even if you are not involved in the process
- **>** Of course, we have also added the electronic and GxP-compliant signature to these solutions

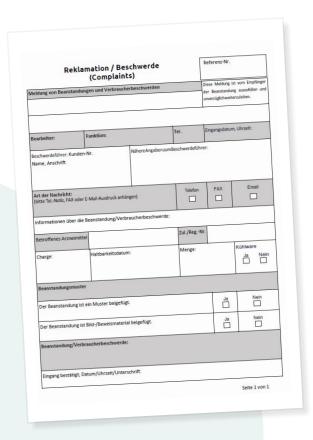
#### **Regulatory requirements**

- ISO 9001:2015, chapter 5.1.2
- EU-GMP guidelines Part 2, section 15
- FDA 21 CFR Part 211 & CFR 7 Subpart C
- AMWHV §19
- ISO 9001:2015, chapter 8
- ISO 13485:2016, chapter 8
- EU-GMP guidelines Part 1, chapter 8
- ISO 9001:2015, chapter 8.5.6
- ISO 13485:2016, chapters 4 and 7
- EU-GMP guidelines Part 2, section 13

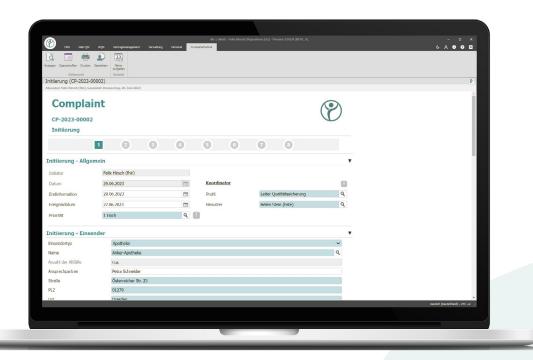
### **QM** processes

### **Complaint, Deviation Control, CAPA, Change Control**

### From a paper form...

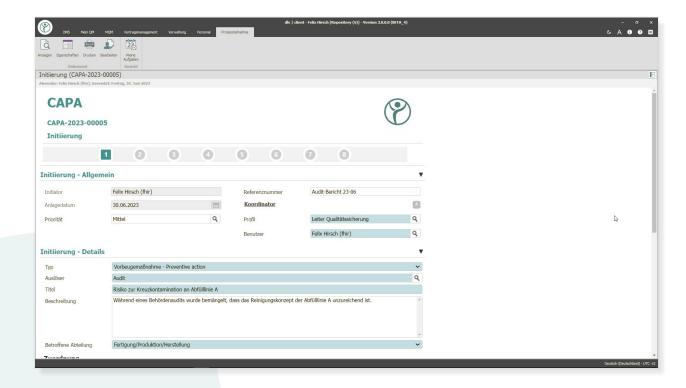


#### ...to the digitally controlled process



### **QM** processes

#### **Control your QM processes digitally**

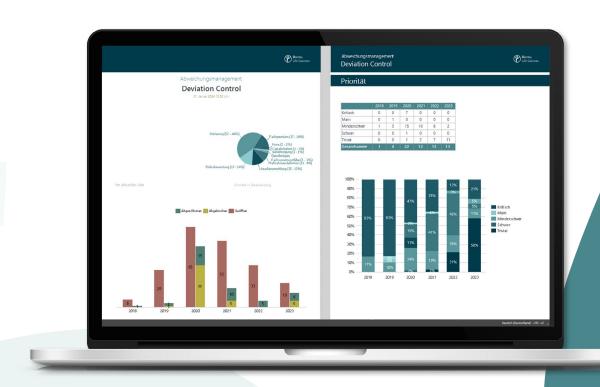


#### **More features**

- Adding documents/attachments
- Audit trail and master data reference
- Addressing roles and users
- Connection to document control
- Automatic PDF creation and storage
- Consistent design elements and functions
- Clear status tracking

### Reporting

In the dynamic world of quality management processes, it is crucial not only to maintain an overview, but also to be able to respond proactively to changes and challenges. Our standardised and integrated reports are designed to support your decision-making with accurate, timely, and meaningful data.



#### **Your benefit**

- Clear quality management metrics for immediate insights into your quality metrics
- Detailed QM reports that provide specific insights for every aspect of your QMS
- Time savings and cost efficiency thanks to automated analyses
- Assured decision quality through access to your precise real-time data
- Quality improvement through targeted identification and management of potential for improvement

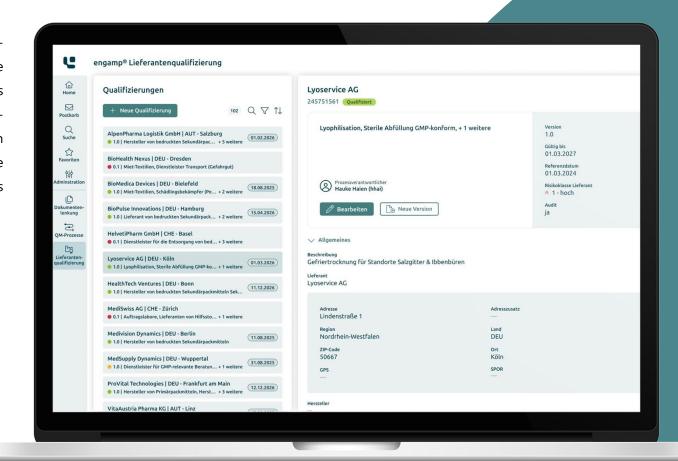
#### Integration

Our reporting module integrates seamlessly with all core functions of your eQMS to ensure a smooth flow of data and a consistent user experience.

### **Supplier Qualification**

### engamp® | supplier qualification

In order to limit negative effects on product quality caused by international supply chains and the outsourcing of services, supplier qualification is becoming increasingly important. With the "engamp® | supplier qualification" module, you can document the risk-based process and always have access to up-to-date information about the status of your suppliers.



#### **Your benefit**

- > 'Single point of truth' about the status of your suppliers
- Representation of the supply chain based on your material numbers with reference to your end products
- > Specification of the required documents according to the risk classes of your suppliers
- > Templates for questionnaires, audit reports, evaluations and much more.
- Document dossier per qualification
- **>** Efficient planning and management of audits
- Monitoring the validity of certificates and qualifications

#### **Regulatory requirements**

- GMP guideline chapter 1 & 5
- MDR 2017/745 article 10(9) d
- ISO 13485:2016 7.4.1
- FDA 21 CFR 820.50
- AHMWHV §11
- ICH Q10 2.7

### **Technical Documentation**



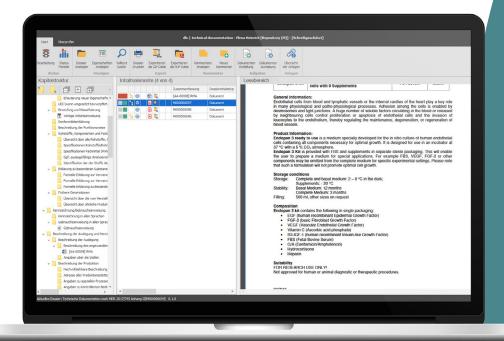
### dls | technical documentation

From individual documents to our document management system to process-oriented dossier management, our "dls | technical documentation" module supports and simplifies the creation, updating, and management of your technical documentation, e.g., in accordance with the requirements of the Medical Device Regulation (MDR). Our process-oriented dossier management can be used in a variety of ways, e.g., for creating site master files, drug master files, QM documentation, project folders, validation documentation, and much more.

### From the disorganised file server..



#### ... to the structured dossier!



#### **Your benefit**

- Manage templates for different structures of your dossiers
- Manage tasks for the editors of individual chapters of a dossier (workflow)
- > Seamless integration into our Document Control module
- > Control of the current editing status of your dossier
- Versioning of your dossiers and easy access to all previous version statuses
- > Create comments with different priorities

- > Export of the entire dossier or selected parts of it to a PDF or ZIP file
- > Print of the entire dossier or selected parts of it
- Integrated electronic and GxP-compliant signature as well as an audit trail feature
- > Classification of files based on characteristics relevant to you

### References

#### **Excerpt**





## Success Story ChemCon GmbH

ChemCon saves up to 40% of working time on documentation with digital document management.



# Success Story Hennig Arzneimittel

Family-owned company Hennig
Arzneimittel successfully migrates its
legacy system and now benefits from a
modern eDMS/eQMS.

# To our success stories:





### References Excerpt



"We have been customers from the very beginning, and Digital Life Sciences provides us with reliable, long-term support with its products, helping us to further develop our QMS and map electronic solutions/workflows while taking data integrity requirements into account."

Silke Schwiertz, Head of QM/QA/QP - MEDICE Arzneimittel Pütter GmbH & Co. KG





"Digital Life Sciences GmbH supported us with professionalism and expertise in record time during the transition to a new electronic quality management system. In the process, six independent document management systems were transferred to a harmonized central d.3 eQMS. The support for the implementation of validation requirements for computerized systems according to GxP and ISO requirements is excellent."

Christine Strubel, Head of Management Systems Quality & EHS, SCHOTT AG





"A high level of consulting expertise and the partner-like performance characterize the successful collaboration. We therefore see Digital Life Sciences GmbH as a long-term partner of our company."

Silke Sobek, Group Manager ECS - Holopack Verpackungstechnik GmbH





"Prior to 2016, we did have an electronic document routing system in place, but it was all not as clean and performant as it should have been. For example, we missed a good overview of which employee is trained to what extent. That's what we have today thanks to Digital Life Sciences. This is important, for example, for an external audit. With the old system, we still had to do many things manually. With Digital Life Sciences' eQMS solution, quality and speed have taken a leap upward."

Yvonne Kraska, Head of QM - amedes Group



Digital Life Sciences GmbH offers innovative and practical solutions in the field of digital document management and quality management. With our comprehensive industry knowledge and many years of experience in regulated environments, we can provide you with targeted support for your digital transformation. In doing so, we ensure that your processes meet the latest compliance requirements and meet the highest quality standards at all times.



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