

## Web based inspection and assessment forms – Realized by the customer with the mgm tool chain A12

**Control Union offers global services, covering different parts of its customer’s supply chains. To guarantee swift and reliable service Control Union operates offices in most major ports and business areas. The company is present in more than 70 countries. Local management has in-depth knowledge of the special conditions that apply in these countries. Control Union firmly believes in a decentralized organization in order to give room for creativity and entrepreneurship. This approach enables the group to develop innovative and flexible solutions for its clients. This high degree of innovation and flexibility needs to be reflected in the software and the IT solutions Control Union uses. Since Control Union operates in remote areas and demanding environment, IT systems have to be robust with minimum requirements on network bandwidth.**



*“The mgm A12 tool chain facilitates fast reliable specification and generation of web applications. The entire cycle of definition, development and deployment is performed by domain experts rather than IT specialists.”*

**Jan Vogt**  
System Architect at Control Union

**Control Union facilitates trust and control in global supply chains.**

As an independent global service provider, Control Union offers a wide range of specialized logistic solutions, inspections, laboratory and certification services. We are non-stock listed and family-owned. We offer our services in a safe, reliable and sustainable manner at the highest possible level while offering good conditions to our employees. Control Union is present in more than 70 countries.

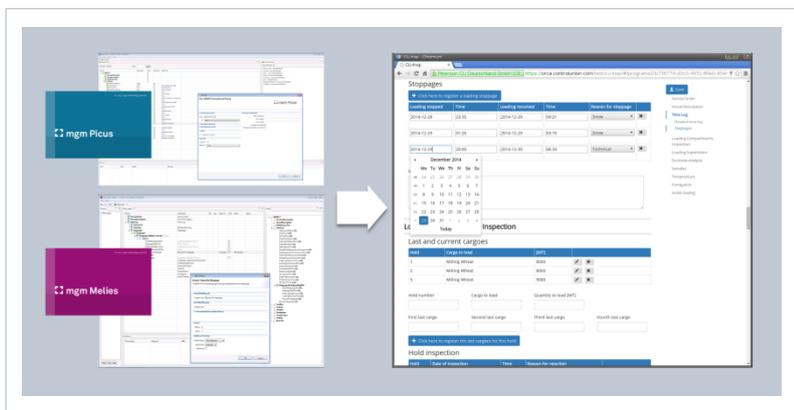
mgm technology partners, known as expert for the development of highly scalable, integrated and secure online applications, was commissioned with the provision of a solution providing the required flexibility and variety. Thus, rather than developing each application by programming, a generic approach was chosen: mgm’s A12 methodology and tool chain for web application generation. Using A12, Control Union designs its own web applications in its own application domain. This is done by CU experts using A12 modeling tools (specific editors). Requirements are specified and pursued by the domain experts on modeling level – rather than by analysts and programmers in the conventional development cycle. For each launch, the needed system updates are automatically generated from those models. The created information systems are internationally used for audits and inspections. These information systems manage several hundreds of input fields and support multiple variants with country-specific business logic.

## The innovative mgm tool chain A12: We empower customers!

A12, a tool chain and methodology developed at mgm technology partners is designed for modelling and automatic application generation. It consists, besides others, of a data modelling tool as well as a user interface modelling tool. Domain experts with no programming skills can use A12 to specify their requirements themselves - iteratively from prototyping to the final product. Since the gap between requirements and coding simply vanishes, the conformity to specification is always guaranteed and development becomes very reliant and fast: New web client software versions are generated and deployed in a few minutes.

## The benefit: A powerful new information system designed by the customer

“We empower customers to model their domain on non-technical level and to automatically generate software themselves: Specialists can exactly, simply describe what they need and immediately explore the changes in the running applications”, summarizes mgm project manager Dr. Jürgen Knopp A12’s advantages.



**Figure 1:** The A12 modelling editors (left) and the thereby generated web form (right).

“Furthermore”, he states, “because domain experts now perform the entire cycle from definition to deployment, no other groups like analysts and programmers are involved in the development of forms anymore. This greatly reduced cycle time and error rate.”

“By minimizing the need for programming and thanks to the ability to directly involve our domain experts by using mgm’s tool chain, building and maintaining our inspection and assessment forms has been very time and cost efficient. We will continue using this approach in the future”, confirms Jan Vogt, systems architect at Control Union.

### The main services offered by Control Union are:

- Commodity inspections and laboratory analyses for agricultural, mineral and consumer products in dry or liquid form.
- Certification of processes and systems relating to food, feed, fibers, textiles, forestry, bio mass and biofuel products for traceability, safety and sustainability.
- Collateral management for financed goods.
- Industrial inspections related to the oil and gas industry for production and exploration, both onshore and offshore.

Combinations of services are also offered. Consistency and a high level of quality service is achieved through management systems, quality assessment, internal auditing, professional training and the exchange of know-how as well as expertise between operational units worldwide.

Control Union is a member of and recognized by the main national and international professional organizations governing superintendence and logistics and a founder member of the International Federation of Inspection Agencies (IFIA).

## Cooperation in practice

The cooperation of CU and mgm technology partners proved to be synergetic in several respects. First, the platform functionality provided by mgm, being already very powerful, rapidly evolved by the addition of new functionality driven by CU feature demands. Moreover, Control Union applications needed to cope with instable internet connections on remote sites during the auditing and inspection process and especially with the use of mobile devices. These devices support specific mobile use cases such as taking pictures and dealing with GPS coordinates in the auditing and controlling process. Hence mgm carried out platform extensions for such scenarios. All above-mentioned additional requirements could, in joint CU and mgm effort, be covered by adding enhancements both to the platform and the application - for the benefit of CU's projects and their customers.

Could we catch your interest in our know-how?

Enter into dialogue with us then:

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