

# A12 Backstage Session - September 2025

Sneak Peak into selected development streams

Basic information about A12  
<https://www.mgm-tp.com/a12.htm>

## What is A12?

A12 is a platform for developing enterprise applications in complex IT landscapes. It relies on model-driven software engineering (MDSE) and brings the low-code principle to the world of enterprise software. As an open platform, A12 simplifies the integration of best-of-breed solutions and the use of AI at all levels. A12's Modeling Environment provides tools to create and maintain parts of an application over the

long term as independent business logic modules without programming experience. A12's Runtime Platform provides the flexibility needed to evolve business-critical applications with professional individual software development, AI support and system integration into fully integrated enterprise applications.

EXPERIMENTAL

SME

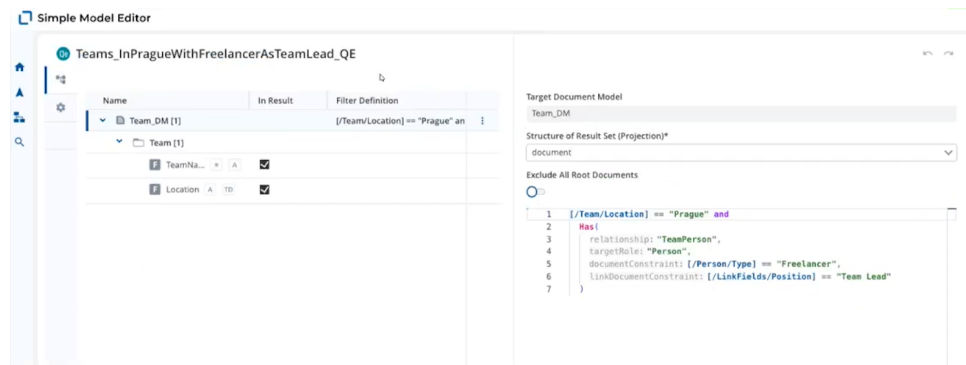
QUERY API

Planned for  
2025.06-ext2

## Query Editor Unlocks Query API for Modeling

The innovated Query API introduced in A12 Release 2025.06 enables flexible and efficient access to A12 documents and links. With the help of the new Query Model Editor in the Simple Model Editor (SME), modelers can now conveniently express queries. The Query Model bridges the gap between the technical API and the business requirements. With the help

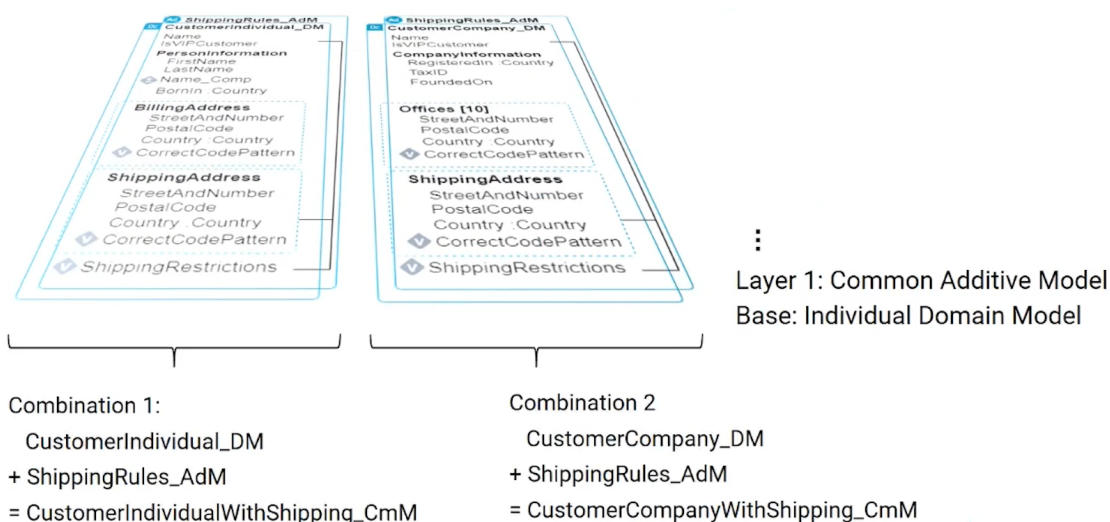
of a clearly structured syntax and convenient functions such as autocomplete, filter definitions can be expressed easily - whether for display in tables using the Overview Engine or for custom implementations. We are extending the features of the first iteration of the editor which will be released in October.



## Additive Models: New Mechanism for Central Definition of Business Logic

To keep complex models representing the business logic of an A12 application manageable, the motto is: avoid duplication. All important definitions should be modeled as cleanly as possible in one place. To this end, the A12 modeling ecosystem has been providing techniques such as type definitions and so-called includes for years. These allow modeled entities to be defined in one place and reused as desired. The new additive models establish a new mechanism

that serves the same purpose. They can be thought of as additional layers. Individual base models can be specifically extended with additional rules or functions without having to adapt existing models. Example applications include use-case-specific adaptations of Document models, for which another team is responsible, or separating UI helper fields and core data. This ensures greater reusability, maintainability, and flexibility in modeling complex business logic.



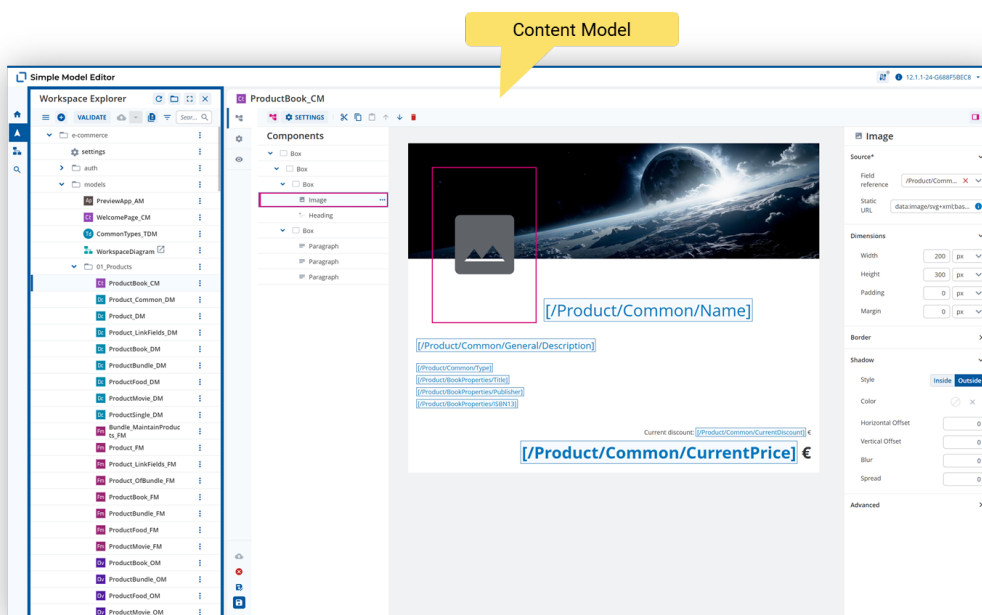
## More News in a Nutshell

- A **DevApp** is available for almost every A12 component and is used for **development, learning, and testing purposes**. There are plans to **publish** these DevApps on **GitHub** in the future to improve knowledge transfer.
- If certain aspects of business logic cannot be represented using existing modeling tools, **scripting languages such as Python or Typescript** offer a possible solution. The A12 team is therefore **evaluating** the **development of a scripting API** to open up **new expressive possibilities** for modelers with basic programming skills.

## Content Engine Supports Dynamic Content

Until now, the Content Model and Content Engine only supported static pages. Users could arrange content such as text and images to create an imprint or help page, for example. Starting with the 2025.06-ext2 release in October, it will also be possible to access data from an A12 application and use it to design dynamic pages. This significantly expands the

modeling scope of A12 by combining the design flexibility of the Content Model with access to data from Document Models. For example, the Content Editor can now be used to implement special requirements in complex forms or to design product pages that draw on underlying data.



## Persistence Alternative: A12 Supports Classic Relational Databases

By default, A12 uses a document-oriented approach for the persistence of data in an A12 application. JSON documents are persisted. However, there are use cases where classic relational persistence is desired — either because an A12 application accesses a large amount of relationally stored historical data or because the customer organization wants to leverage its existing expertise with relational database management systems and SQL within the A12 application. A new backend component now supports this scenario. It enables

the storage and processing of application data in relational databases instead of the traditional document-oriented approach. By mapping A12 document models and relationship models to SQL schemas and automatically generating JPA entities, existing database tools, legacy systems, and established procedures can be seamlessly integrated into the A12 platform. The component is still in an early stage of development but is already being used successfully in projects.

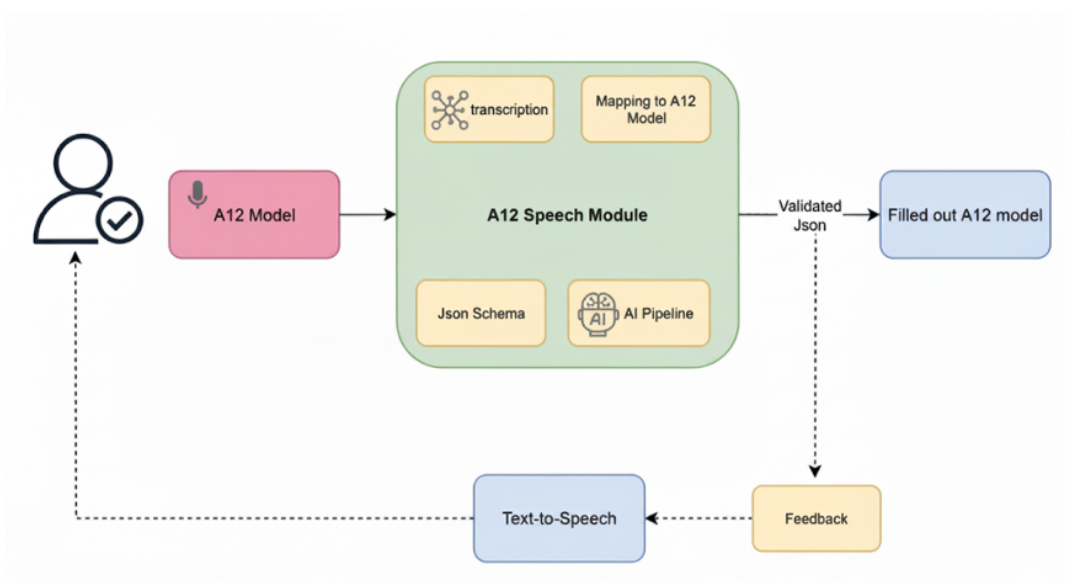


## Speech-Driven A12 Low-Code Forms: Fill out Forms Using Voice Commands

Speech-Driven A12 Low-Code Forms allows data to be entered via voice input. There are plans to introduce integrated automatic speech recognition and voice feedback to assist users when filling out forms. Form entries can thus be processed verbally, violations of input conditions can be addressed directly, and questions can be asked in case of ambiguity. The feature is currently in an experimental stage. The aim is to gain experience with voice-controlled form operation and explore possible areas of application, such as in dynamic or mobile scenarios. The main focus is on testing the potential for barrier-free and intuitive data entry.



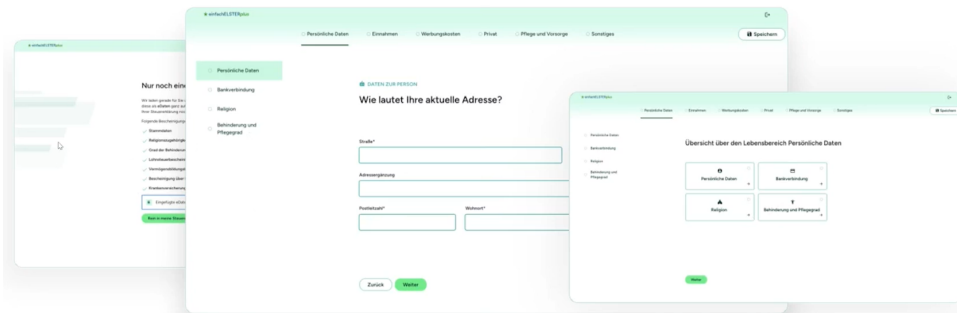
### Architecture



## Modeling Dialogs With UI Flows

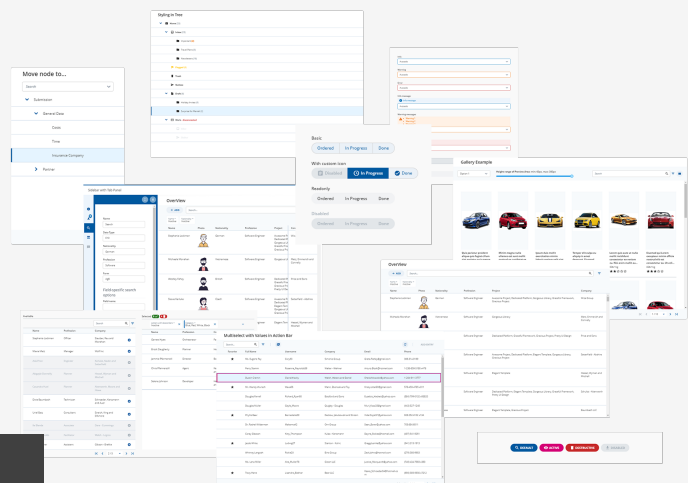
Are large, extensive forms in business applications still appropriate today? In many cases, information can be retrieved more conveniently and clearly for users in individual steps—in the form of a simple dialog. This is exactly the type of information retrieval that can be achieved with the new UI Flow Model from A12. It enables the definition of query flows

that include selection options and decisions as well as loops and sub-flows. UI flows are not yet part of the regular A12 platform release, as the editor is still under development. However, the engine for this new model already exists. If a project is interested, we would be happy to hear from you.



## A12 Widgets

A12 Widgets is a comprehensive collection of prebuilt components designed to provide a pleasurable and accessible user experience.



A12-Widget-Showcase  
<https://www.mgm-tp.com/a12.htmlshowcase/>