

A12 Release 2025.06-ext2

October 2025

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

What is A12?

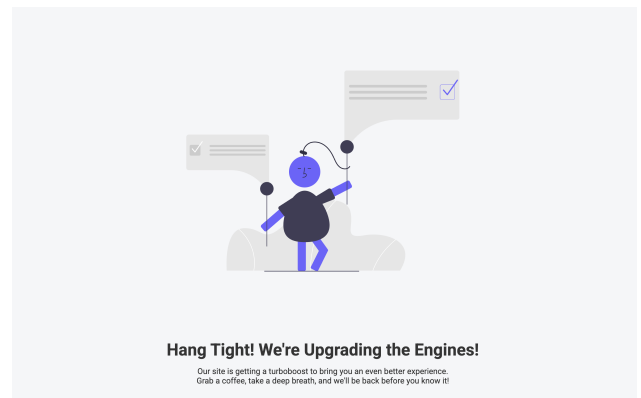
A12 is a platform for developing enterprise applications in complex IT landscapes. It relies on model-driven software engineering (MDSE) and brings the low-code principle to the world of enterprise software. As an open platform, A12 simplifies the integration of best-of-breed solutions and the use of 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.

BUILD & DEPLOYMENT **HELM** **MAINTENANCE**

A12 Helm Stack Introduces New Configuration for Maintenance Mode

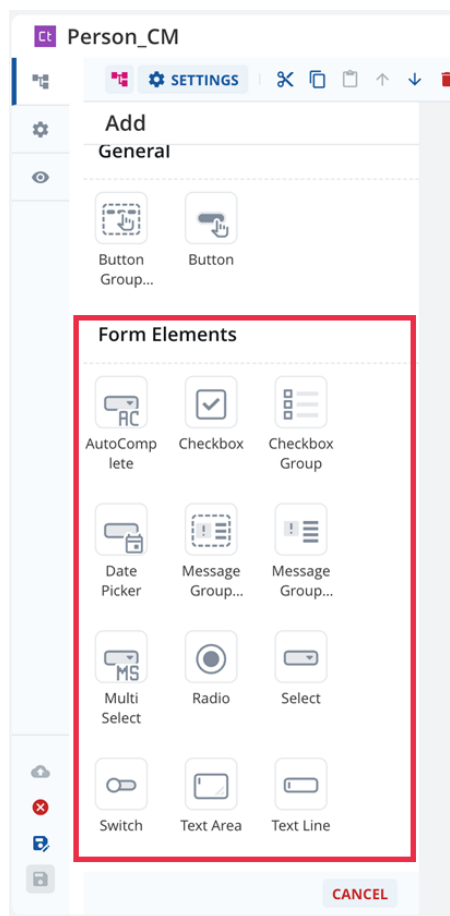
Even in the era of continuous delivery and zero-downtime deployments, there are still situations where extensive maintenance work on web applications is required—for example, when working on the database or performing major version upgrades that include breaking changes. To temporarily take A12 applications offline in a controlled and secure manner, A12 Helm Stack Charts in version 7.1.0 now offer a new configuration option to activate maintenance mode. When this mode is activated, users are redirected to a maintenance page that can be customized. Details about the new configuration and maintenance mode can be found in the A12 documentation at [GetA12.com](https://www.geta12.com).



CONTENT MODEL CONTENT EDITOR

More Than Static Pages – A12 Content Becomes Dynamic and Interactive

In addition to static content such as text and images, the A12 Content Engine now also supports dynamic content fed from application data. The Content Editor enables modelers to link Content Models to Document Models that represent the data and business logic of the application. Any fields from the Document Model can then be integrated into elements of the Content Model, such as headings and paragraphs. This allows, for example, dynamic product pages to be designed that combine a static underlying structure with variable product data such as price, name, description, and image. Pages with interactive features can now also be easily modeled with the Content Editor. The editor integrates the familiar design and interaction elements of the Form Engine – from input fields and checkboxes to buttons and date pickers. In addition, project teams can also upload project-specific content elements as an experimental plugin feature of the Simple Model Editor. These elements then become available directly in the Content Editor, where modelers can see their actual UI rendered in the WYSIWYG view (instead of generic placeholders) and can insert, delete, or adjust their settings.



QUERY MODEL COMBINATION MODELING

SME Introduces Support for New Model Types

Modellers now have two new model types available in the Simple Model Editor (SME), including dedicated modelling views: the *Combined Document Model* and the *Query Model*. The former introduces new mechanisms for reusing modelled entities and initially supports *Additive Document Models*, which can enrich a base *Document Model* with additional content. The latter opens up the possibilities of the new Query

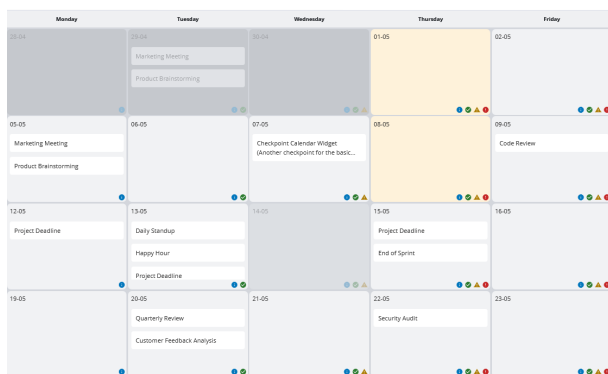
API to modelers. This allows you to model filter definitions for data sets that are fed into tables in an Overview Engine, for example. Both innovations were already announced in the [A12 Backstage Session](#) in September and are now available in the modeling environment. They are currently in an experimental state and will be successively refined and improved in future releases.

More News in a Nutshell

- The **A12 Project Template** now **supports the dynamic content engine** out-of-the-box and **introduces** a new client-side **setup for custom themes**.
- For a more consistent display of the **Button Group Widget**, there is now a **new property called *preserveSemanticStyles***. It ensures that the **defined styles** are also **applied in pop-up menus**.

A12 Widgets Expanded with New Calendar Component

In enterprise contexts, organizing tasks such as resubmission of forms, material deliveries, absences, or deadlines often require more than a simple reminder in a standalone calendar app — it calls for integrated functionality within the specific context of an application.



With the new calendar widget, the latest A12 release provides the tool to meet these needs within an A12 application — in a style that harmonizes with the rest of the UI elements. The calendar widget is fully customizable for date selection and interaction, supports both month and week views, and includes built-in localization and date format support for applications with an international user base. To seamlessly integrate this new widget into an application, its API-exposed properties can be adjusted. An example of the calendar widget, along with the corresponding code, is included in the [Widget Showcase](#).

New Query API Enables Fine-Grained Filtering When Loading Complex Data Structures

In modern business applications, data structures are often highly interconnected for example, customers who are linked to specific branches through contracts. Composed Document Models (CDM) have proven effective for modeling such relationships: they integrate individual document models, such as those for customers or branches, into a unified model where data, including contract details and branch assignments, can be centrally managed. When processing data, the A12 Data Service creates so-called Composed Data Documents (CDD) from these models. These are comprehensive document graphs that include all relevant entities and their links. Until now, however, these projections and their data links could not be restricted in a granular way

from the client, meaning that at runtime, the entire graph structure defined in the CDM was always loaded. With the new Query API, which was already introduced in the previous release, there is now a convenient way to apply precise filters and restrictions directly to the links in complex data structures. For example, it is easy to retrieve only customer data assigned to a Hamburg branch. This avoids unnecessary data transfers, increases performance, and better meets data privacy requirements. Additionally, the Query API makes it easy to implement custom server-side projection mechanisms if needed and to give them precedence over the default projections.

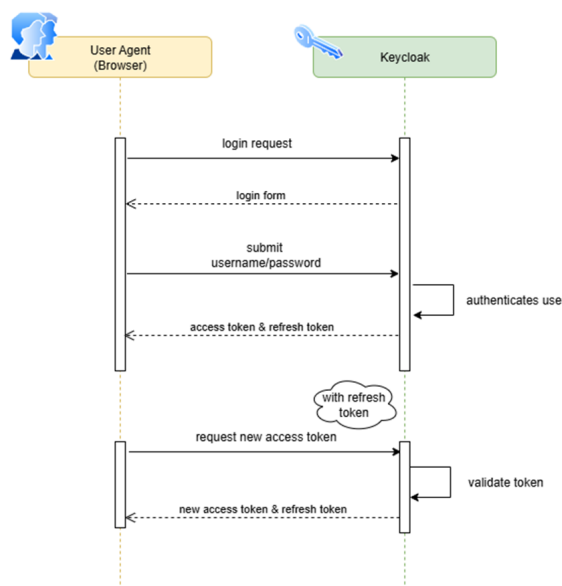
Data Services Offers Option for Static Validation Code

In the standard case, A12 applications are designed for dynamic model adjustments. Models can be changed during runtime. However, this option comes at a price. Depending on the design and scope of the models, the initial code generation per model can take several seconds and add up to several minutes for many models. The A12 Data Services component uses the kernel API by default to generate the

validation code. To avoid unnecessary generation, Data Services creates a cache after the server is started. Static validation code is now also supported as a new configuration option. Instead of generating the code at runtime, it is generated once in advance. The new option offers significant performance advantages for A12 applications that explicitly do not require dynamic models.

UAA Supports Refresh Tokens, an Additional Mechanism for Long User Sessions

When users log in to an A12 application that uses OIDC for authentication and authorization, they receive access tokens in the background. These control the access to data on behalf of the users, but for security reasons, they are only valid for a few minutes. To prevent users from having to constantly log in again, the access tokens are renewed in the background. UAA typically uses a so-called “hidden iFrame” approach for this purpose. However, this only works under certain conditions. Problems arise, for example, with restrictive cookie settings in browsers such as Safari and Chrome. To enable users to have a long session without having to manually log in again in these cases, UAA now supports another mechanism with refresh tokens. The refresh token works like a longer-lasting key that can be used to produce fresh access tokens in the background. The documentation for the UAA component summarizes how the mechanism is activated and which accompanying security measures need to be taken into account.



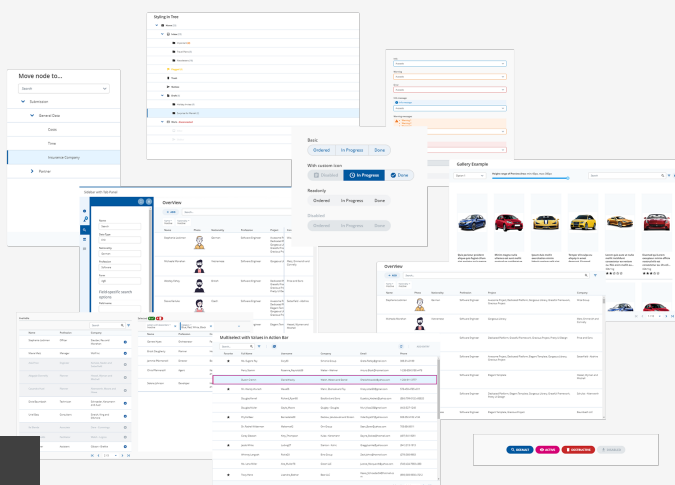
New Filter Options for Targeted Searches in Subtypes

Whether an online shop user wants to search for products from a specific franchise but only within a certain category such as "Book" or "Film", or a caseworker wants to retrieve applications from a specific date but only those under "Funding Application": the ability to narrow down search results accordingly is essential for a good user experience. With the new option to model filter fields in overview models specifically for subtypes, A12 now offers this capability for heterogeneous data structures. To achieve this, the relevant subtypes and their desired fields must be defined in the filter configuration of the overview model of the subtype. For example, in the overview model of a super-type Product, you might specify the Title field for the subtypes Book, Film, and Series. The filter options will then be displayed, as usual, in the search options of the overview model.

The screenshot shows a configuration interface for filters. It is divided into two main sections: 'Filter Selector' and 'Department Code'.
 - **Filter Selector:** Contains a search input field labeled 'Filter Search', a 'De/Select all' checkbox, and a list of filter options under 'Department info' and 'Other Department info'. The 'Department Code' option is currently selected and highlighted in blue. Other options include 'Department Name', 'Number', '[D] Date', and '[D] DateTime'.
 - **Department Code:** Contains a search input field labeled 'Value Search', a 'De/Select all' checkbox, and a list of department codes: 'Empty', 'A12RE', 'A12CE', 'A12FE', and 'A12OE'.
 - An 'APPLY' button is located at the bottom right of the configuration area.

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/>