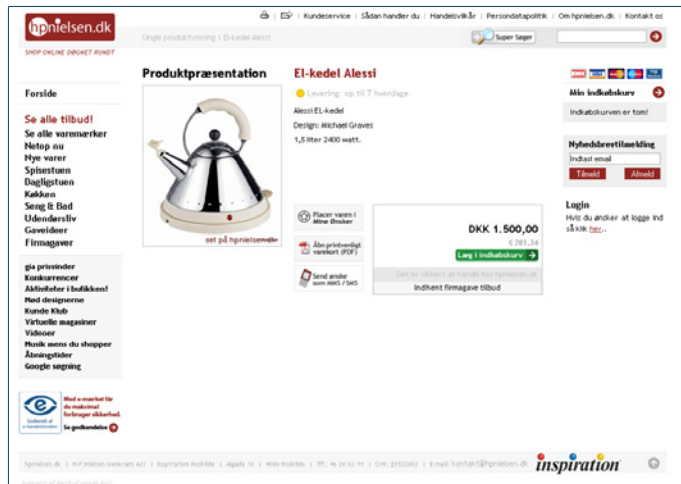


Ingo Schmitt

Online Shop Extension for TYPO3

TYPO3 Commerce now available in TER

After more than two years of development, countless planning sessions and workshops as well as chat room discussions, the project team 'TYPO3 Commerce' has released the new TYPO3 shop extension in the beta version 0.9.0.



The Danish interior designer H.P. Nielsen is already using TYPO3 Commerce.

The long planning phase, in which technical fundamentals as well as database and class designs were discussed and decided on, has led to a thoroughly conceived extension. Along the way, the fundamental technical design has seen to it that as many TYPO3 mechanisms as possible were taken over or adapted. Thus, with TYPO3 Commerce, products and categories can be presented in different language versions. These can be administered in a single-branch as well as a multi-branch presentation. In doing so, customers are added as `fe_user` and addresses are added as `tt_address`. Records and prices are formatted with `moneylib`. This integration into the already present design allows you to add further extensions (e.g. for user registration) when you create a shop.

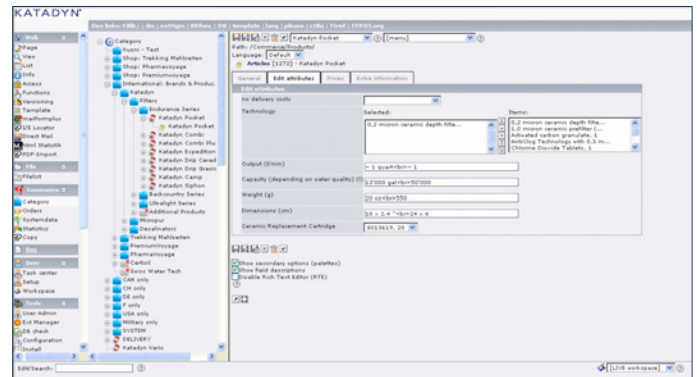


Detailed presentation in the frontend.

The product tree is divided hierarchically into categories, products and articles. All these elements may be further classified according to attributes and attribute values. These values may be used for the website's presentation as well as for the selection of articles on the basis of different values. For the presentation of these dependencies, further extensions such as Graytree and Dynaflex were developed in the framework of the commerce

development. These have now become available as independent extensions in the TER. The files created are saved in a SQL database structure, while the dynaflex forms which were applied are used to present the database relations in the backend.

When they are changed, the files may be written into the relevant database tables with hooks, with the result that these tables contain the actual files. The fields for the flexforms are only used



In the TYPO3 backend, the shop administrator can comfortably maintain the attributes of his products.

for the depositing of XML files and should not be taken further notice of. This structuring also allows a sufficiently fast search of the files on the basis of the SQL data. Thus simple and intuitive selection aids, such as those on Kneipp's homepage, may be created without any difficulty. The ad in the frontend is directed through a class library. A comprehensive documentation of these classes is available online at [1]. The completeness of this automatically generated documentation shows that the programming has been carried out in accordance with unified coding and documentation guidelines from the beginning. For the presentation of the frontend, Commerce offers a choice of five different frontend plugins:

Plugin	Description
PI1	Presentation of the product tree
PI2	Shopping cart
PI3	Checkout process
PI4	Address management
PI6	Invoice preparation

The fundamental configuration of these plugins can be directed with TypoScript constants. In case you would like to make specialised adaptations, it is worth looking at the TypoScript configurations or the hooks of the respective Commerce classes. TYPO3 Commerce installs four different modules in the backend:

Plugin	Description
Category	Processing of the product tree
Orders	Processing of the order
Systemdata	Maintenance of attributes, suppliers and manufacturers
Statistics	Statistical Analysis

Integration

The module 'orders' allows the editor to administer and process orders directly in the TYPO3 backend. To do so, TYPO3 Commerce installs various sys-folders for saving the orders. The processing of the order occurs through the transfer of the orders into a different folder. This can happen for each order separately, as well as for

Via drop-down menu the status of an order can be changed easily.

several orders in a block. The developers have already created the option (within TYPO3 Commerce) of initiating actions via hooks when the orders are moved. Orders may thereby be sent to merchandise management, or other actions may be performed. The sending of emails to customers or to any other addresses is also integrated into TYPO3 Commerce. The statistical functions indicate the turnover, the number of articles and the number of orders per sys-folder and for the entire shop. Because, in a large shop, too many files accrue for an 'on the fly' evaluation, an aggregation of files as TYPO3 CLI script has already been implemented.

Extendable and future-proof

Even at the planning stage, many ideas, applications and special applications were discussed in which TYPO3 Commerce could possibly be deployed. The necessary foundations for expansions and adaptations have already been created. Thus the classes for the ads have been kept so variable that further fields may be added with hooks. After defining these fields in TypoScript, they immediately appear in the frontend. At the checkout, the implementation of individual payment interfaces as independent extensions has been taken into account in just the same manner as the transfer of the order to external systems. TYPO3 Commerce has already been applied in many projects, as illustrated in the list at [2]. In these projects, specific requests to Commerce were sometimes tested and developed. The website hpnielsen.dk sells more than 40 000 products, while the heimwerker.de site sells in excess of 60 000 products. At www.kneipp.de a connection to Navision has been made, and further connections such as the transfer to After-Buy or generic transfers to payment service providers are also working successfully. Thus TYPO3 Commerce has already achieved a level of sophistication, at which it may be implemented productively.

The Future of TYPO3 Commerce

The development team is currently working through bugs and feature requests from the TYPO3 bug tracker [3] and from the English-language mailing list [4]. The latest developments are first

entered into the TYPO3xdev subversion repository [5] and tested on reference installations. Then bug-fixes and features are taken up into the official TER version. If you don't want to wait that long, you can test the nightly builds now [6]. On the TYPO3 Commerce Wiki site the most recent developments are summarised. Here you will also find a list of the current online shops using Commerce. In the future, the intense development efforts on TYPO3 Commerce will continue. At the top of the list is the launch of a website for the project. Here you will find a compilation of documents and a model shop. The team has several entries on its to-do list and is looking for sponsors for the following tasks:

- Creation of a library
- Creation of an affiliates system
- Integration of further payment service providers
- Creation of a voucher system
- Integration in workspaces
- Integration in IRRE
- New design of the checkout system
- Creation of frontend modules for a single customer domain

Sponsors

The main support for the development of Commerce came from Marketing Factory Consulting GmbH in Düsseldorf and enetconsulting KG and n@work Internet Informationssysteme GmbH in Hamburg. Many developers have taken part in the creation of the extension alongside the core developers Thomas Hempel, Volker Graubaum and Ingo Schmitt.

Links and Literature

Softlink 1771

- [1] Class documentation: <http://doc.typo3-commerce.org>
- [2] Wiki-Site: http://wiki.typo3.org/index.php/Ext_commerce
- [3] TYPO3 bug tracker: <http://bugs.typo3.org>
- [4] TYPO3 Commerce Mailing List: <http://lists.netfielders.de/cgi-bin/mailman/listinfo/typo3-project-commerce>
- [5] TYPO3xdev: <http://sourceforge.net/projects/typo3xdev/>
- [6] TYPO3xdev nightly builds: <http://typo3xdev.sourceforge.net/>

THE AUTHOR



Ingo Schmitt has been working since 1996 at Marketing Factory Consulting GmbH. As the technical director he is responsible for the continued development and adaptation of systems in the PHP and MySQL field. His specialty is the design and application of e-commerce applications in the linux field with open source technologies.