

What's New in Kentico CMS 7

Discover the new website possibilities in Kentico CMS 7 and Kentico Enterprise Marketing Solution







Introduction

Hi, my name is **Martin Hejtmanek**, **CTO** at Kentico Software, and it's my pleasure to introduce you **Kentico CMS 7**.

Kentico CMS 7 brings a lot of improvements in all aspects of the solution. There are many User experience improvements, improvements to the bussiness layer, and also new features that will help you increase your productivity in developing your web sites.



So, grab a cup of coffee; there are a lot of new interesting features in Kentico CMS 7.



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Content management

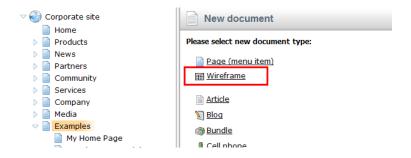
Wireframing

We managed to keep this secret until the last moment. Our Portal engine has evolved to the point where it is able to provide more functionality than just content displaying and publishing. No longer do you need to rely on external tools for wireframing. With this new module, you can also work as a team on wireframing just as you do in the development of new websites.

Our new wireframing module provides a whole new set of web parts designed specifically for wireframing with the option of positioning web parts to specific static locations on the page, hosted in a wireframe document type.

Its addition to the system truly makes Kentico CMS an all-in-one solution and I am sure there will be a lot of feedback on it. So do not hesitate to let us know what we can do to make it better.

You can now create new documents of type 'Wireframe':

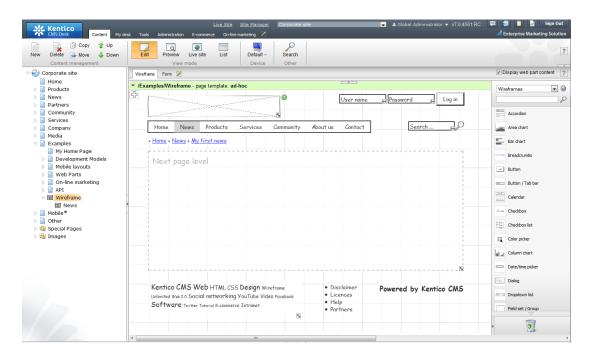


You can even use predefined templates or create your own ...

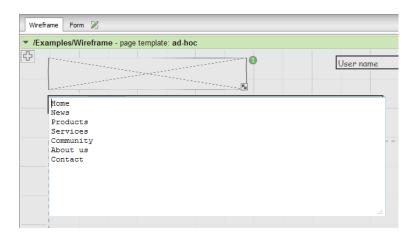




And then design the wireframe as you wish. The Web part toolbar on the right-hand side (also available for standard design mode) increases your productivity by enabling drag and drop of items onto the surface.



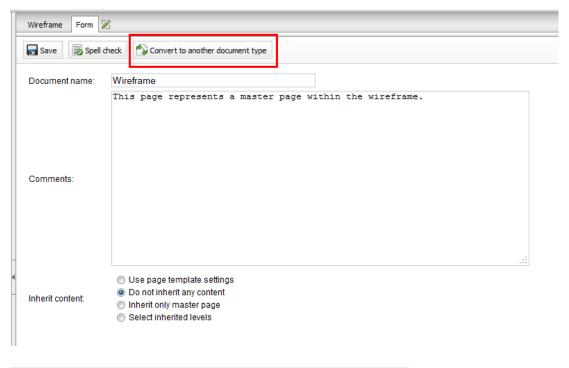
You can easily edit the content of each component by double-clicking it, which converts it to editing mode. In this example, components displaying a list of items present them all on a different line:

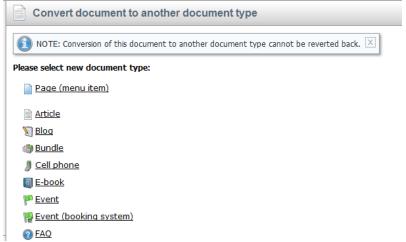






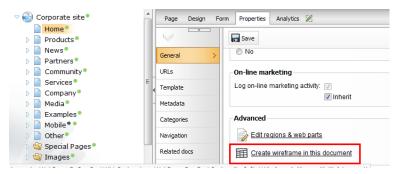
If you want to use the original hierarchy of the wireframe for the real hierarchy of the website, such documents can be converted to a standard document type.



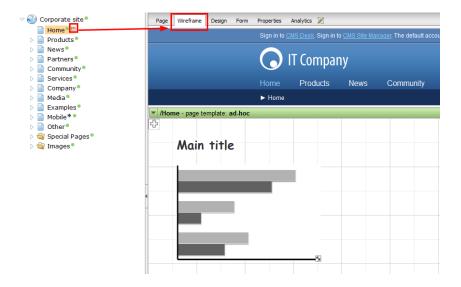




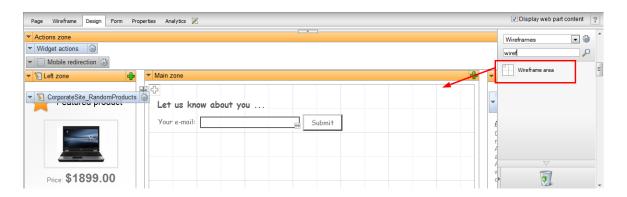
It is also possible to create a wireframe in an existing document:



Both will result in a document of a regular type which hosts the wireframe inside it. You may notice that this is indicated by the extra icon in the content tree and the document has an extra tab for it. Portal engine visual inheritance also allows you to have the wireframe displayed in the context of the existing website and used master pages:



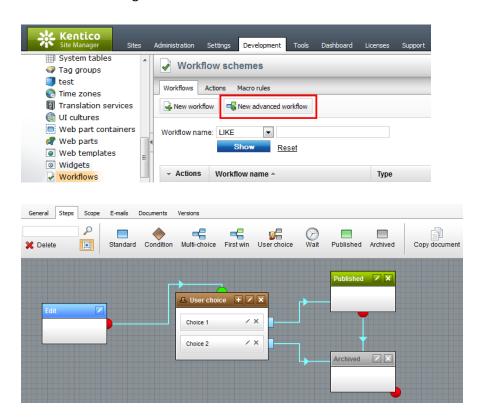
Another great option is being able to insert a special Wireframe area control to the template of an existing page that allows you to provide a wireframing place in any template:



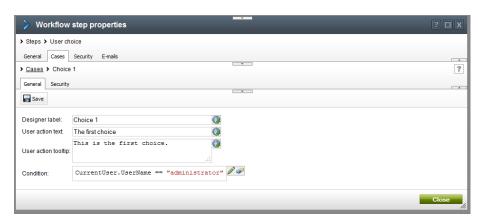


Advanced Workflow

Because larger companies usually need to make their processes more complex, including automated tasks or branching in workflow, we have built a new workflow engine to cover these options. No worries, the good old streamlined publishing workflow is still available. What is new is the Advanced Workflow option which lets you create a workflow using the new visual designer in which you can simply drag and drop workflow components and connect them using transitions:



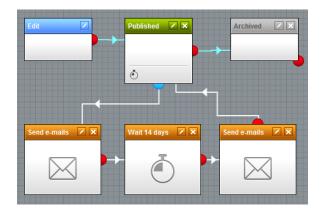
Workflow processes are entirely customizable so you can, for example, even configure the custom action texts that appear in your editing UI:







Here is an example of some automated actions:



Talking of automated actions, I should mention that we built the workflow engine to also serve purposes other than just publishing workflow; it will also power the Marketing automation feature that will be available in final version of Kentico CMS 7.

More information about Advanced Workflow options can be found here: http://devnet.kentico.com/Blogs/Jaroslav-Kordula/June-2012/Kentico-CMS-7-Advanced-Workflow.aspx

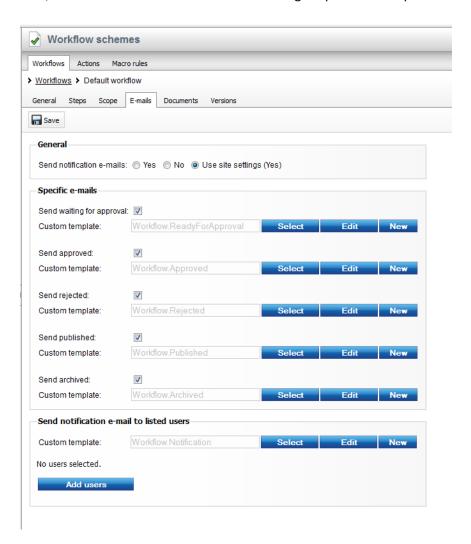


Other workflow improvements

In addition to Advanced Workflow functionality, we have implemented several other improvements to workflows to provide more flexibility:

E-mail templates can be specified for each type of notification e-mail

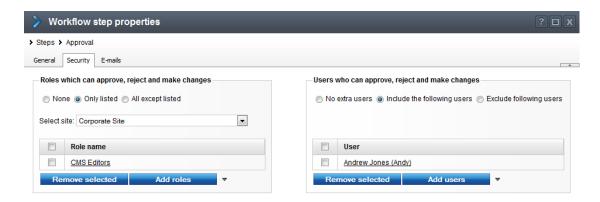
You can enable/disable e-mails, select templates for each type of workflow notification e-mail, and override the default workflow settings in particular steps:





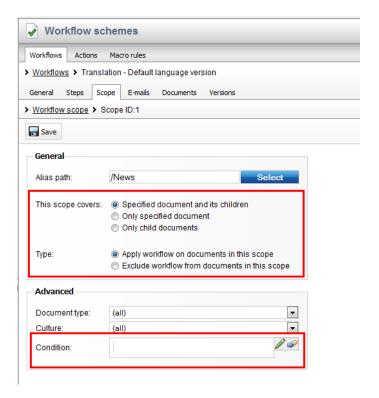
More options for step security

You can now define excluded roles in workflow security as well as include/exclude just particular users:



Scope definition granularity has been improved

You can now exclude items or sections from a workflow or define matching macro conditions to allow the start of the workflow of particular documents:



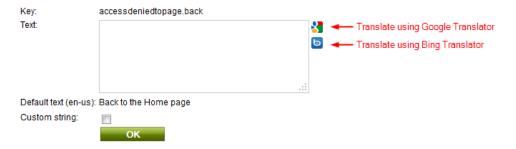


Translation services

We have prepared a framework for building translation service providers that you can leverage either in your manual content management processes, or even in Advanced Workflow as automated actions. This allows you to fully automate the translation of your website, or at least easily get a first version of the translation through a machine translation service. The following translation service providers are included in default installation:

Machine translation – Also available for translation of resource strings

- Google translator
- Bing translator

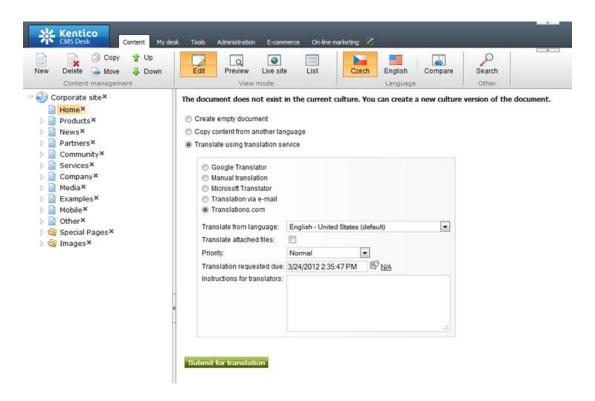


Manual translation – Documents in manual translation services are shipped in XLIFF format supported by common translation tools used by translation companies.

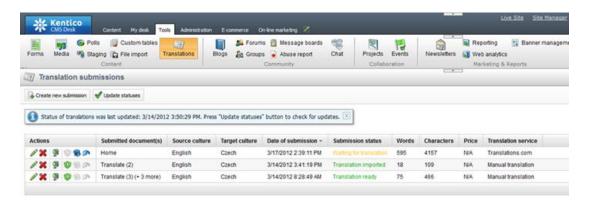
- Translations.com integration with Translation.com, one of the largest translation companies in the world
- E-mail An e-mail request is sent to a translator, who can then return translated text via a special upload dialog
- File system Similar to e-mail translation, but the transfer medium is a folder in a file system providing simple options for translations through shared disk space within a single company or FTP access.



The new culture version dialog has been extended to include integration of translation services:

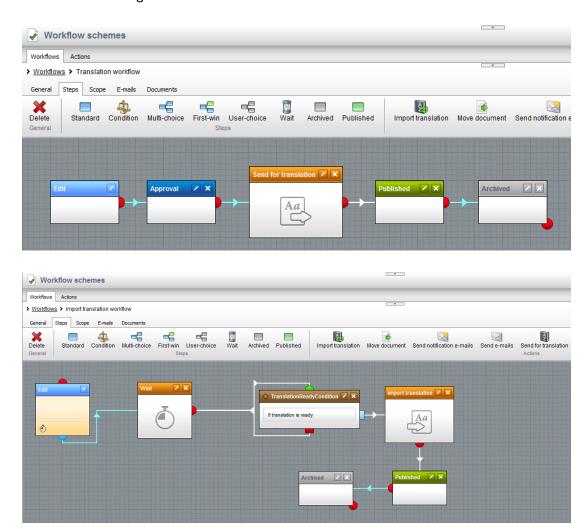


And each translation job can be managed in a special UI for translations:





You can also leverage advanced workflow features to automate the translation:



More information about translation services and workflow can be found here:

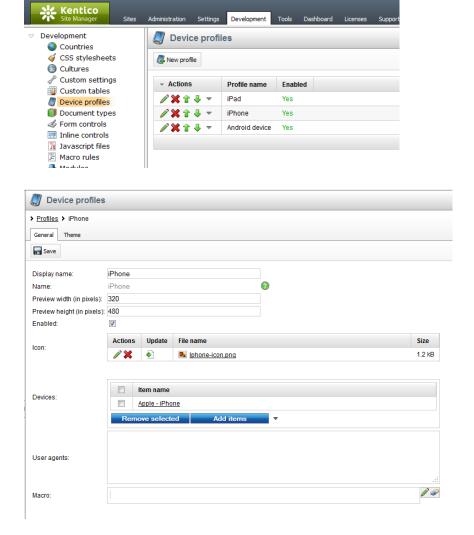
http://devnet.kentico.com/Blogs/Stepan-Kozak/June-2012/Kentico-CMS-7-Translation-workflow-processes.aspx

http://devnet.kentico.com/Blogs/Stepan-Kozak/March-2012/Kentico-CMS-7-Translation-services.aspx



Device profiles and layouts

It was already possible to develop a mobile version of your website as a separate sub-tree of the website. But when you only wanted to redesign the layout of the website, keeping the content, (for instance if you just want to turn 3-columns layout into 3-rows for iPad), this wasn't the most efficient option. We have therefore implemented an option to define Device profiles which can effectively group more device types into a single entity and, based on that, apply different layouts or components to your existing page templates without the need to define a special content hierarchy for it.

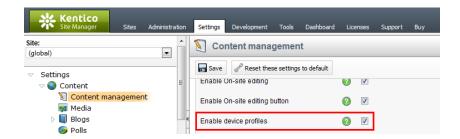


Device information is retrieved using FiftyOne mobile detection (http://51degrees.mobi). By default, we provide a set of the most-used devices, but you may purchase a premium package from them to be able to use all the details of device information they are able to provide.

We have also added a new Web analytics report for mobile devices.



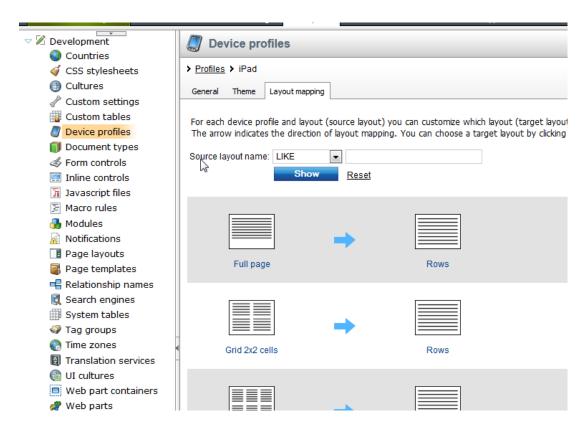
An example of how to use this is demonstrated in the sample Corporate web site -> Examples -> Mobile development. To be able to see it, you need to enable device profiles in settings:



There are actually several ways how to use this from which you can choose based on your particular scenario:

Mapped layouts

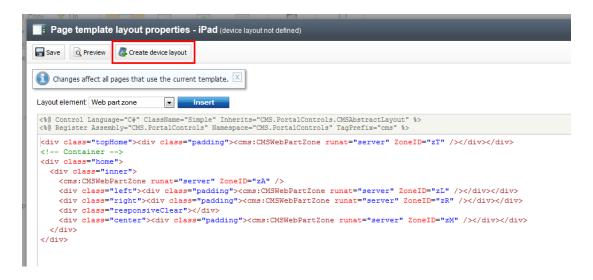
Mapped layouts are the simplest option if you only need to change the layout of the page or hide particular areas of the layout, but keep the content of particular zones the same. They are available in v7 final. The layout mapping is defined in the Device profile properties, and is automatically applied for that particular device:





Custom device layouts

In case you need to customize the page more heavily for the particular device, and mapped layouts are not enough for such task, you can use completely custom layout for that device. This is also available in v7 final. You can do it directly from the design mode of the page, while editing layout:



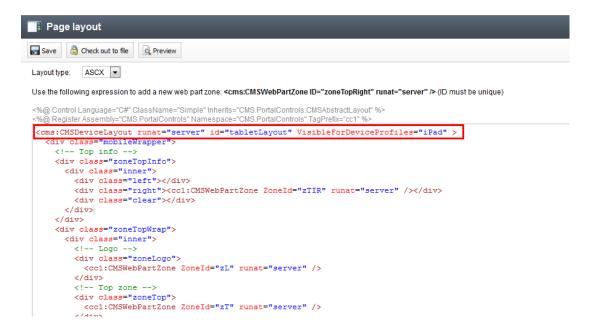
Then, similar to new culture version dialog, you can either start with a blank one, existing one or an existing device layout:





Device and conditional layouts

As the most developer-centric option, the layout for a particular device profile (the edit layout of that page) can be defined by a special component called **CMSDeviceLayout** which can be defined for each variant of the layout you want to have:



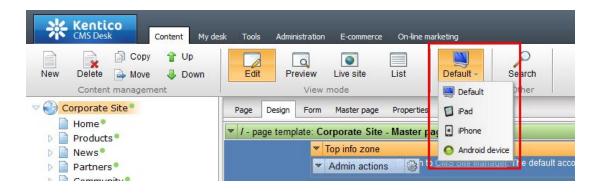
These components are evaluated in the order they appear in the layout. The device layout that matches the current device profile first is displayed; other ones are hidden for that particular device. Following is a definition for default layout as fallback for devices with no device profile defined:

The **CMSConditionalLayout** component is similar, just more general and can be used for displaying variable content.



Device preview

Part of the defined device profile is also its design in preview and live site mode in CMSDesk. While editing pages, you can select which of the devices you are editing content for or see the preview. Preview and live site may then display in the visual context and size of that particular device:

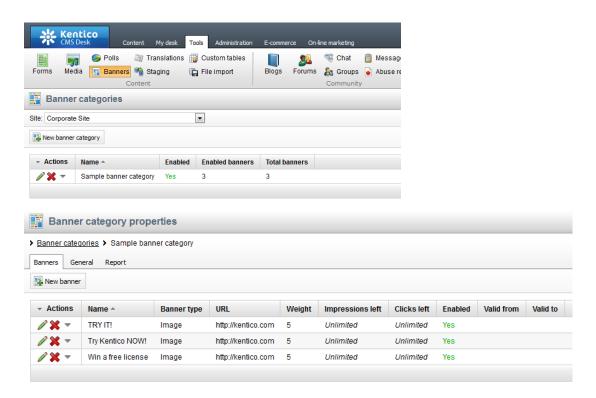


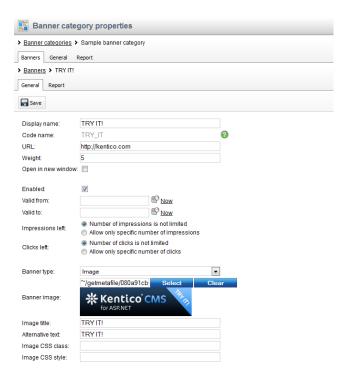




Banner management

As you may know, we prepared a Banner management module that we provide in the MarketPlace for version 6: http://devnet.kentico.com/Marketplace/Modules/Banner-Management.aspx This module is now fully integrated into version 7 and allows you to define Banner categories as groups of banners:







Banners can be then displayed using a Banner rotator web part:



Banners are able to track views and clicks and you can also limit the number of clicks and views allowed for particular banner.



Hits and clicks

(from 1/18/2012 10:46:41 AM to 1/24/2012 10:46:41 AM)



More information about this module can be found here:

http://devnet.kentico.com/Blogs/Juraj-Hrinik/January-2012/Banner-management.aspx

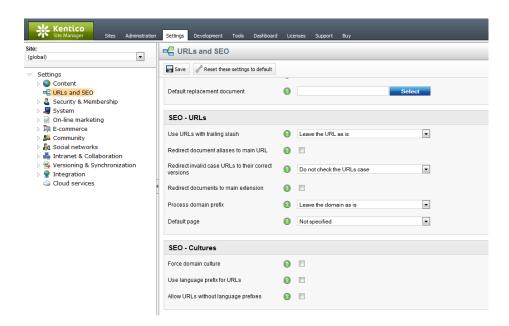


Improved SEO support

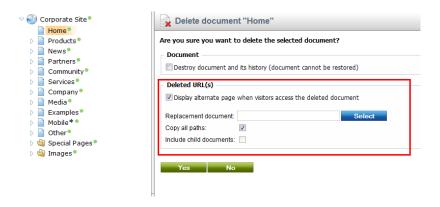
There are lots of new options regarding SEO. I am quite confident in saying that Kentico CMS 7 now covers most (if not all) SEO recommendations which makes it the ultimate tool for SEO of your website. A few SEO highlights include:

- Review of HTTP response codes to give proper values in all scenarios
- Support for document-based 404 pages
- Accessible URLs for deleted pages
- Avoiding duplicate content with more options for redirections
- Domains that enforce specific cultures
- Better XML sitemap and robots.txt management
- Securing user generated links with nofollow options
- Search crawler reports

All these are covered by new options in Settings:



And for deleted pages, they are covered in the delete document dialog in CMSDesk -> Content:



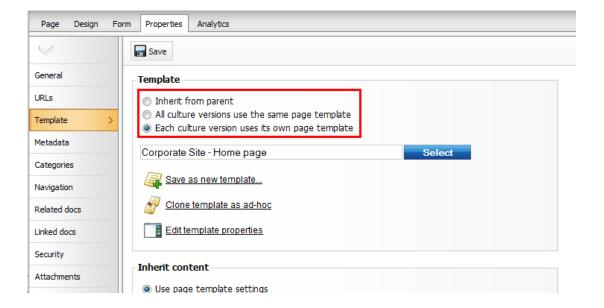


You can learn more about new SEO options here:

http://devnet.kentico.com/Blogs/Jakub-Oczko/April-2012/Kentico-CMS-7-SEO-Improvements.aspx

Shared vs. culture-specific page templates

In a typical scenario, a well-designed website requires no use of different page templates for different culture versions of a document. Previously, the system had only provided this option, which wasn't very flexible if you had multiple culture versions of the page and decided to change the template. We have made it simpler for end-users and have added the new option of sharing the page template through all culture versions of the document:



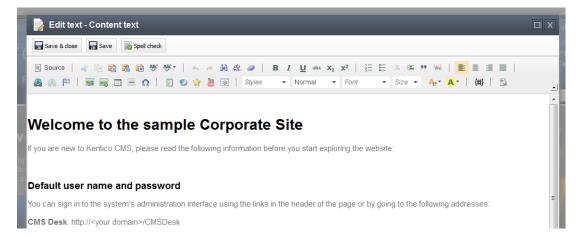


On-Site editing

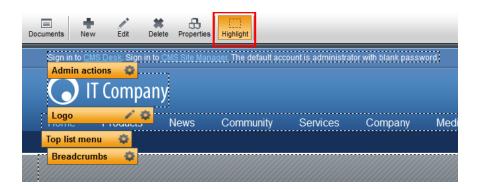
We finally managed to implement our most-wanted and long-awaited feature; On-site editing is a simplified UI that allows you to make changes to the content or create new documents within the existing site structure from the live UI without needing to switch to CMS Desk:





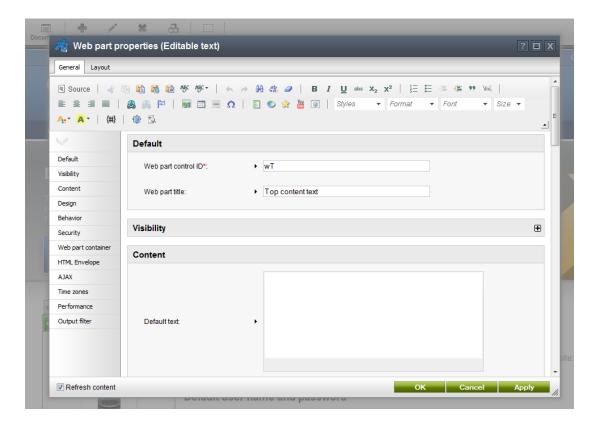


It also supports editing from mobile devices like iPad in its use of the Highlight option (because mouse-over behavior on touch screens is not available):





It also provides the ability to edit web part properties, so even changes to things like container texts or web part settings (e.g. how many items will be displayed in a repeater) are very simple:

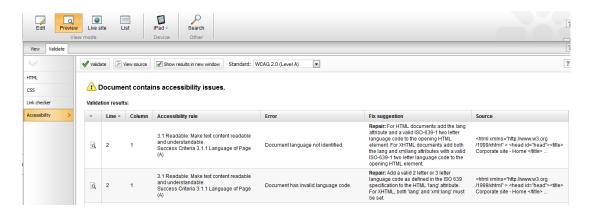


Of course all main content editing features such as multilingual editing or workflow are available in the on-site editing UI as well.



Accessibility validator

We have added integration with Accessibility validator in content preview and live site - the last important thing that Kentico CMS was missing in terms of validation tools.



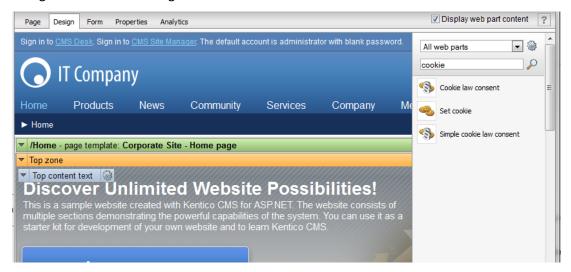
Validators are now also able to pinpoint the location of the error in the source code of the page (CSS):

```
View (X)HTML source code
                     er">
Label text is empty.
      <div class="zoneBreadcrumbs">
       <div id="p_lt_zB_wSB_pnlSearch" class="searchBox" onkeypress="javascript:return Web!</pre>
267
       <label for="p_lt_zB_wSB_txtWord" id="p_lt_zB_wSB_lblSearch" style="display:none;">Se
268
269
       <input name="p$1t$zB$wSB$txtWord" type="text" maxlength="1000" id="p_1t_zB_wSB_txtWord"</pre>
270
        cinput type="image" name="p$1t$zB$wSB$btnImageButton" id="p 1t zB wSB btnImageButtor
272
273 </div>
274 ► <span class="CMSBreadCrumbsCurrentItem">Home</span>
275
276
      </div>
    <div class="clear"></div>
      1/dim
```



Web part toolbar in Design mode

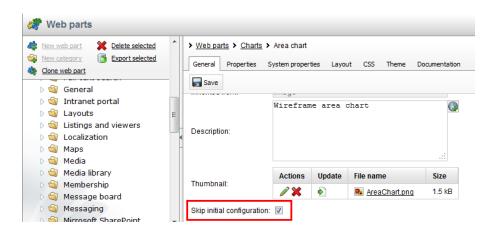
Kentico CMS 7 design mode improves your productivity by providing a web part toolbar which allows you to simply drag and drop items from it to your template as you are used to doing in Visual Studio design mode:



You can customize the location of the toolbar and place it on any side of the window:



We also added a new option to web parts, allowing the allocation of predefined settings without the need to display the web part properties dialog:





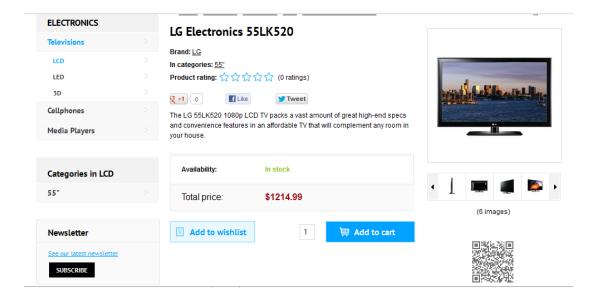
QR code web part

A must these days is support for QR codes, which makes mobile support even more flexible.

That is why Kentico CMS 7 provides a new web part that allows you to generate QR code images directly from your content:



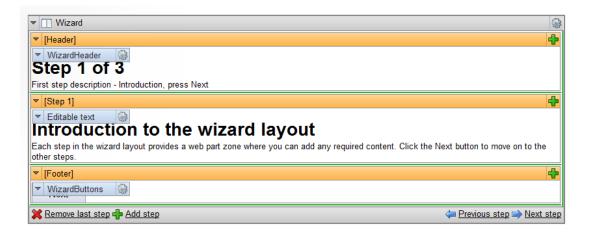
You can see an example of usage of this web part on our new E-commerce sample website:





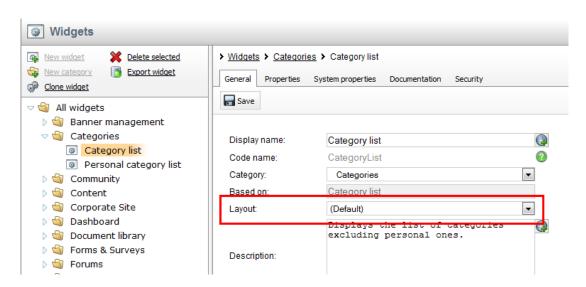
Wizard layout web part

Another web part (or actually set of web parts) that we have added is a Wizard layout. It gives you the power to create a wizard-like presentation with Next / Previous buttons where each of the steps is a web part zone to which you can add any content:



Improvements in widgets

You can now select a custom web part layout for a particular widget to make your components even more flexible:





Improvements in transformations

There are several improvements in transformation editing:

Support for advanced item selectors

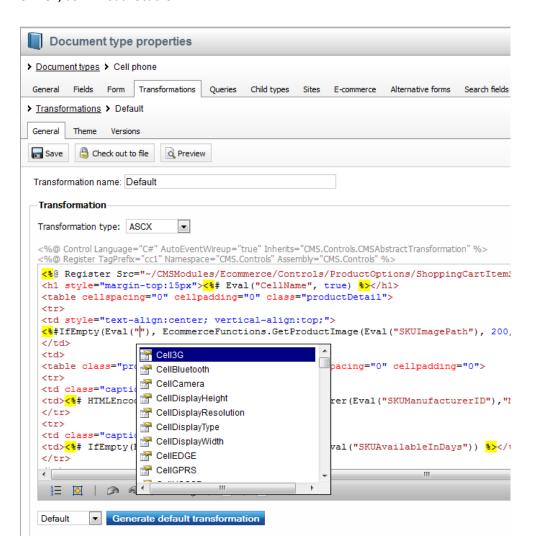
You can now use expressions such as:

Eval("SKU.SKUManufactures.ManufacturerDisplayName")

to display information related to the object displayed in the transformation.

Intellisense in ASCX transformation

Version 7 also provides Intellisense in ASCX transformations for available fields and objects. Note that this Intellisense doesn't popup automatically, because the engine itself doesn't know the current context. You can, however, display it with the key combination CTRL + SPACE, as in Visual Studio.



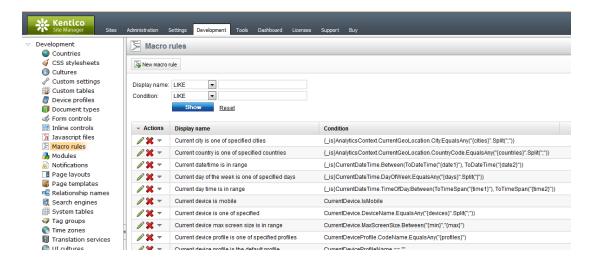


Improvements in macros

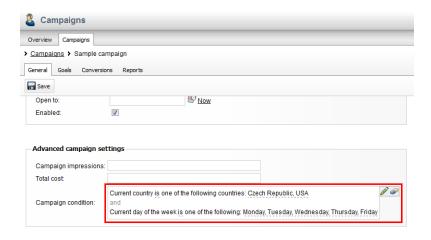
There are also several improvements in our macro engine (K#), which cover:

New visual rule designer for end users

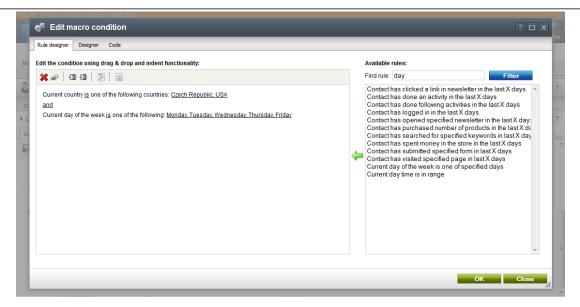
Lots of feedback from our clients indicated that editing of macro conditions in v6 wasn't intuitive enough for end users like marketers. That is why we prepared a new rule-builder that allows you to prepare conditions easier. You can specify a list of predefined conditions (or sentences) using parameters which then translate to a macro expression. There are several of these lists in various modules and one general, shared by all:



Then the end user can use these rules to define a condition which can be easily read and understood by non-technical person:

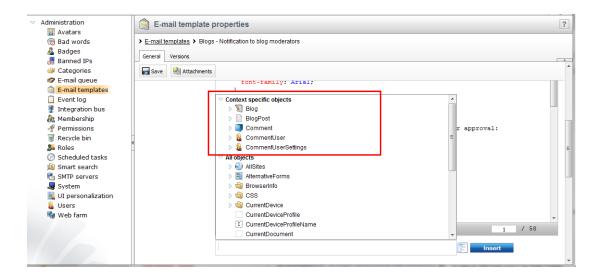






Improved intellisense (prioritized properties)

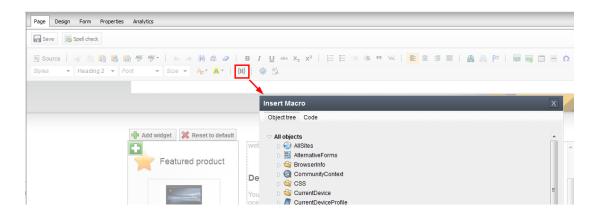
K# now provides "prioritized" properties in Intellisense that make most sense to be used in a particular context:





Insert macro plugin in WYSIWYG editor

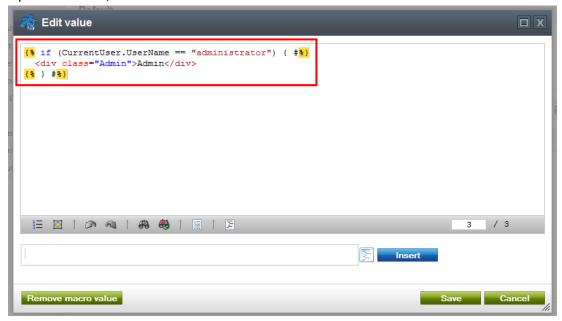
You can now easily insert macros into HTML text:



General K# improvements

On top of the visual features, K# now also supports:

- Support for DateTime manipulation
- Ability to register lazy loaded properties or modify settings of a master system resolver from which all resolvers inherit
- Improved debug options (more detailed macro debug)
- Open conditions, such as





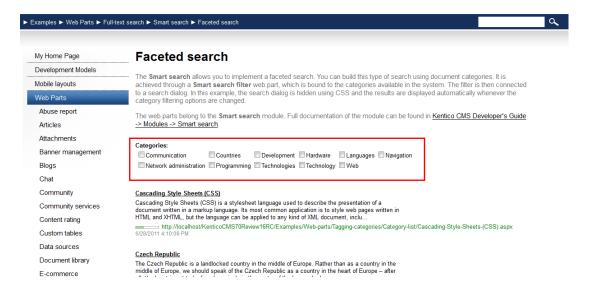
Smart search improvements

Smart search improvements cover mainly the UI of the search components.

Support for document categories (faceted search)

You don't need to require your site visitors to enter search text as they can now use faceted search. For an example see:

Corporate web site -> Examples -> Web parts -> Full-text search -> Faceted search



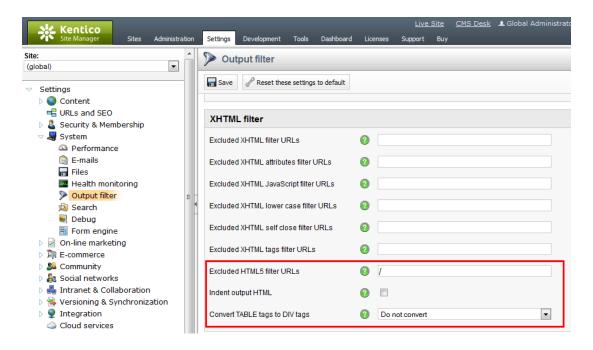
Filter web part has new text box type

Besides the current radio button list, check box list and the dropdown option in the Smart search filter web part, you may now also include text box type as a filter.



Output filter improvements

There are several improvements to the output filter that may help you to deliver your websites done by the book.



Support for HTML5 filtering

As you may know, ASP.NET WebForms may produce code that is obsolete in HTML 5. The Kentico CMS 7 Output filter is capable of converting some of the obsolete attributes to CSS classes so that the output HTML is valid, but you can still apply the correct styles. An example:



Support for conversion of TABLE tags to DIV tags.

It is now also possible to output every code as DIV tags instead of TABLE tags thanks to a new option in the output filter: Example:

```
  AB
```

Converted to:

Settings indicate default behavior, but you may override it using special CSS classes within your markup to explicitly allow/disable the conversion:

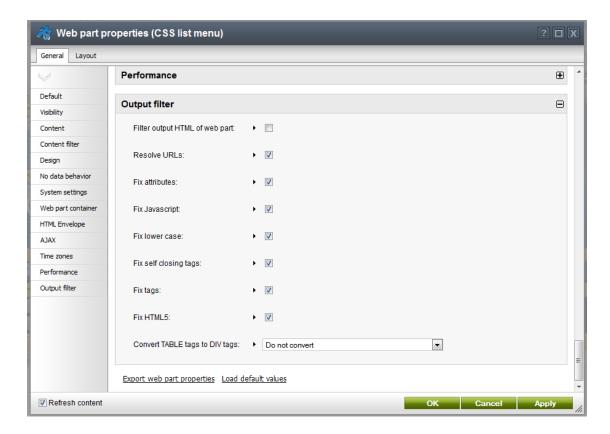
Enable conversion on the code block:

Disable conversion on the code block:



Support for output filtering per web part.

Because output filtering of the whole page is quite resource-intensive, we have also provided a new option to allow application of the output filter only to particular web parts through its properties:





Globalization improvements

There are several improvements to globalization to better support various scenarios.

Standardized country codes

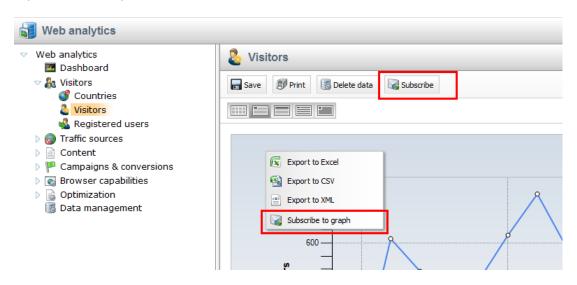
We have added 2- and 3-letter ISO codes to all our countries to make integration with external services and providers and synchronization with their data easier.

Full support for Turkish language.

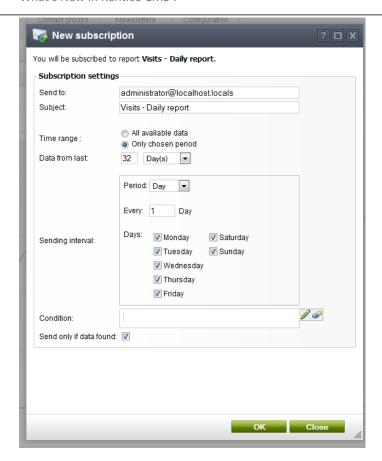
We have also finally been able to review all our code for Turkish culture string manipulations as some wasn't working correctly in certain situations. All these issues have now been fixed.

Reporting subscriptions

You can now subscribe to particular reports or report components and receive the current report data periodically via e-mail. They're easy to subscribe to from either the particular report or from 'report view' context menus:



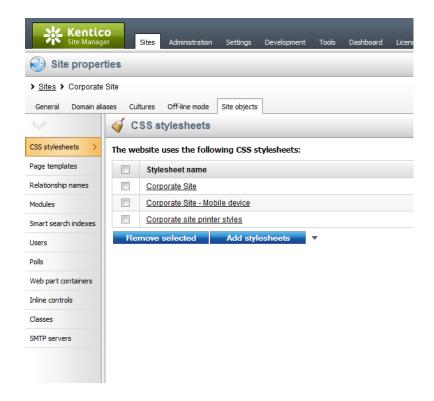






Improvements to site assignment

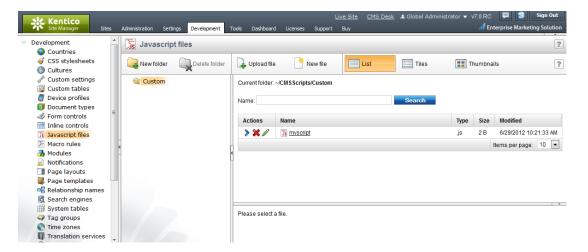
You can now manage objects assigned to a particular site from the site properties:





Javascript management

Because some projects may require inclusion of custom script files, we have provided an interface where you can manage these custom scripts files easily from the web interface. This UI is also integrated as a file selector in the properties of web part Javascript:



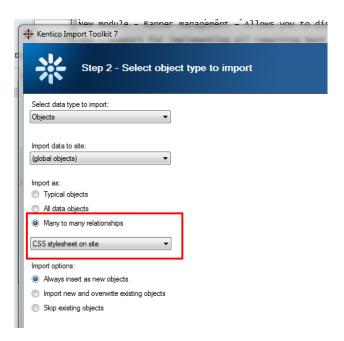


Improvements of Import toolkit

Import toolkit application also brings some interesting improvements:

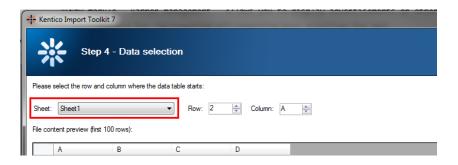
Support for import of many to many relationships

You can now import 'many to many' relationships such as site bindings or permissions:



Support for import from excel files with multiple sheets

It is now also possible to import data from excel files with multiple sheets:

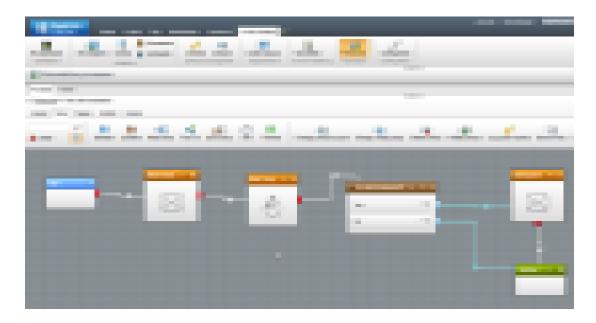




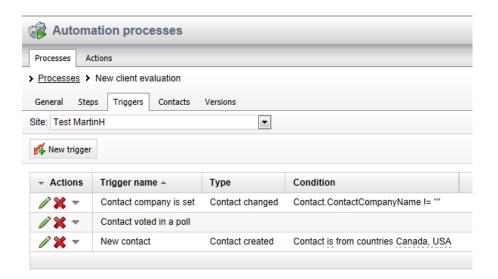
On-line marketing

Marketing automation

One of the greatest improvements that we provide in v7 final is the ability to define automated processes over On-line marketing contacts. You can define the processes with a visual designer in a similar way as the Advanced workflow:

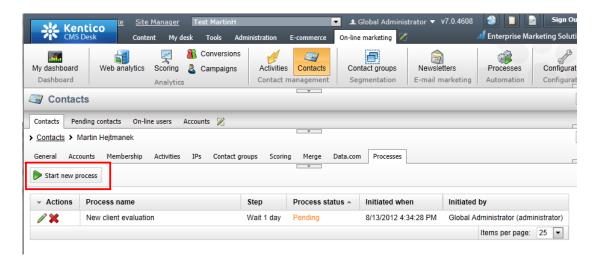


These processes will either start automatically based on triggers fired by particular actions (contact creation, update, activity), and filtered by macro conditions built with our new rule designer or written by administrator:

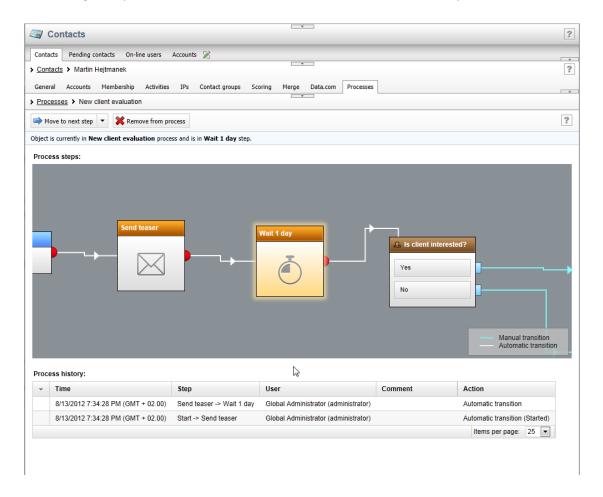




Or manually by the marketer:

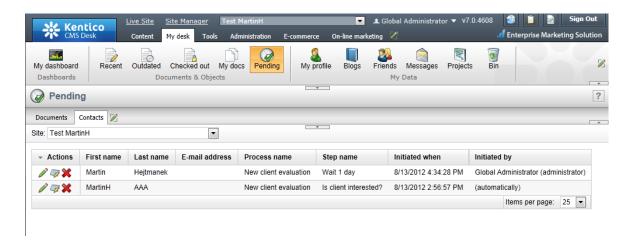


All currently processes currently running under specific contact are listed above, and you can manage the process similar to document workflow and see its history:

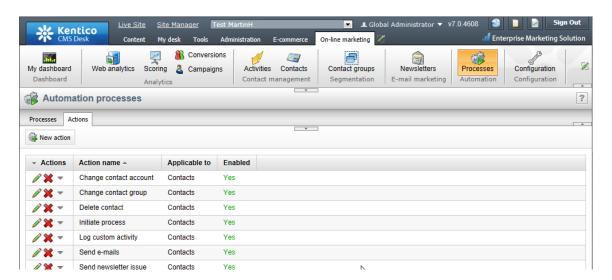




Processes of clients waiting for some manual intervention (e.g. decision upon branching) of the marketer are listed under pending Contacts (available also as widget for Dashboard):



Similar to advanced workflow, clients will be able to add their own custom actions in the process to further automate the process:

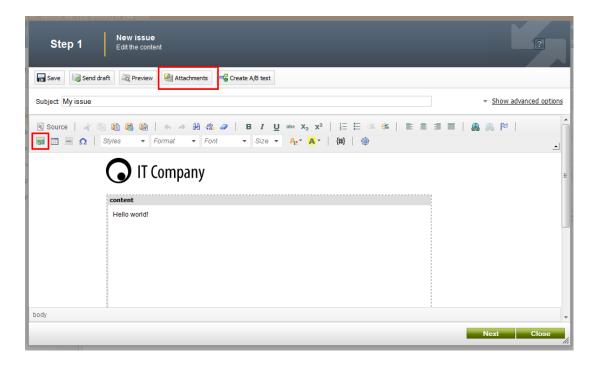


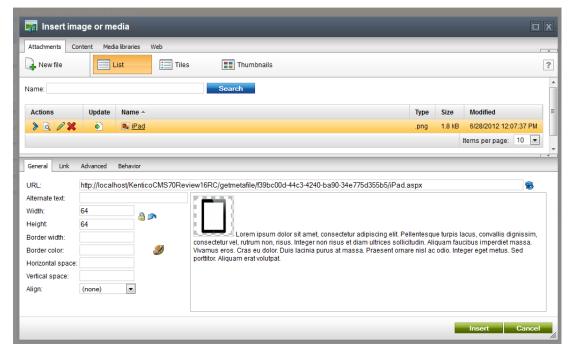
Marketing automation is closely integrated with the Newsletter module, so you can easily use it for e-mail marketing campaigns.



Newsletter UI redesign

We have reviewed the UI of Newsletters to provide improved user experience, including a better UI layout and better integration of newsletter attachments.





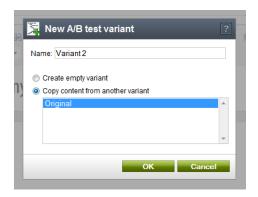


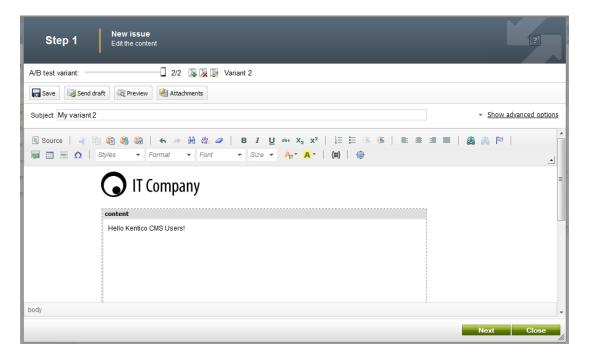
A/B testing support in the Newsletter module

It is now also possible to set up an A/B test on a newsletter issue to maximize its value. You can simply create an A/B test:



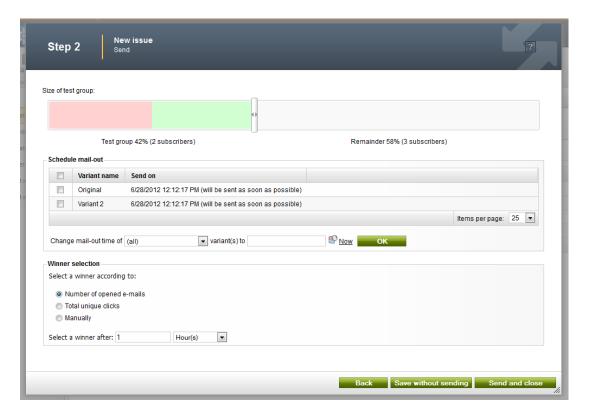
Define its variants:







Then select the size of the test group, and how the winning variant (which will be sent to all other subscribers) is determined.



You have the choice between manual selection or automatic selection based on the number of opened e-mails or clicked links to maximize the statistics you are most interested in.

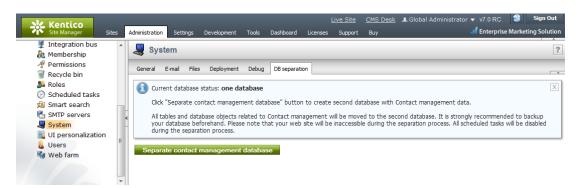
You can learn more about these two features here:

http://devnet.kentico.com/Blogs/Zdenek-Strach/March-2012/Kentico-CMS7-New-E-mail-Marketing-Enhancements.aspx



On-line marketing database separation

To improve performance of your On-line marketing platform and for better backup options, you can now split your database to the standard content database and on-line marketing database, using a new separation wizard:



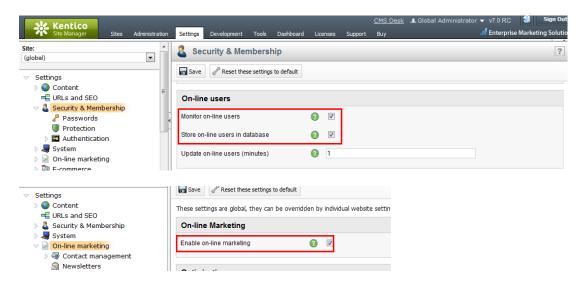




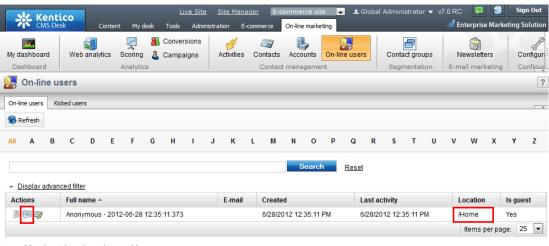
On-line contacts

We have improved the On-line users' module and integrated it with the Contact management module to facilitate work with On-line contacts.

In order to fully leverage this feature, you must enable monitoring of on-line users. In order to also track anonymous users, the option to store users in the database must be enabled. And of course you also need to enable On-line marketing itself:



Then, you can see each site visitor in the list, including their last location on the website. Online Contacts can be integrated with another new module in v7 – Support chat, which enables you to initiate chat with users. (I will cover this in more detail in the Chat chapter):

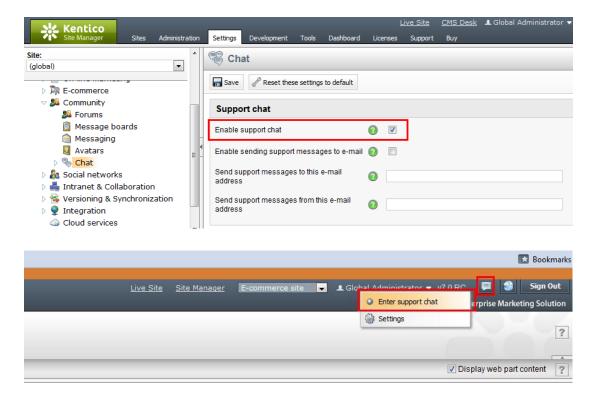


1 user(s) on-line: 0 logged in and 1 guest(s)



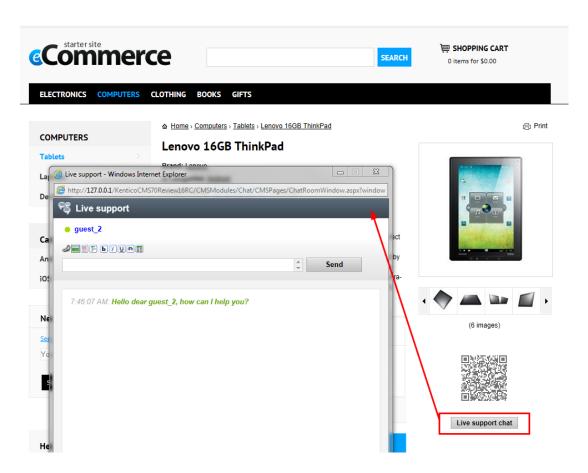
Support chat

One of the features that our new Chat module provides is support chat. We have released a preview of this module already for v6 in the MarketPlace as you can read about here: http://devnet.kentico.com/Blogs/Juraj-Hrinik/March-2012/Chat-module.aspx. This module is now integrated into version 7 and brings some important improvements. There are several ways to leverage this module. In all scenarios, there must be one or more support engineers logged in to the system in order to provide this functionality. If support chat is enabled in settings, the support engineer can log in to support chat via the top right-hand corner of the admin UI which is where chat notifications are located as well:

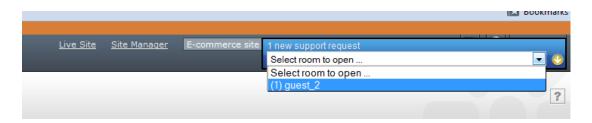




All examples are available on our new sample E-commerce website. The basic feature offers a button for the user to request a chat. The Chat support web part then displays a support chat window:



Support engineers are notified once the person asks a question (not before this as the welcome message from the system is automatic). They can then open the chat room and conduct a standard private conversation:

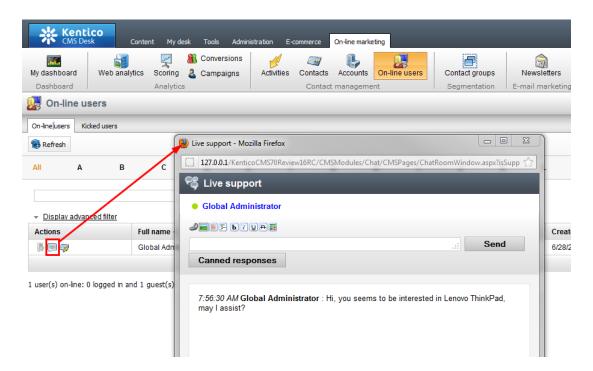




Another option is to automatically offer the site visitor a chat conversation if he or she is inactive for some time. The Reply button then starts the conversation similar to how the first question did in the previous case:



I also mentioned earlier that you are able to initiate chat with a site visitor from the On-line contacts listing. If support chat is enabled, you can use the Initiate chat action in that listing.

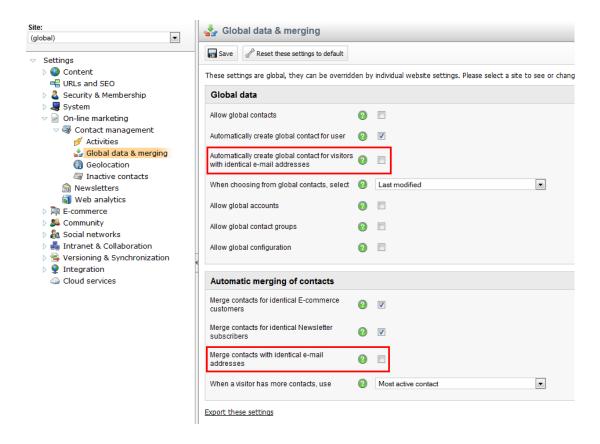


The notification will then appear on the visitor's side.



Automatic merging of contacts by e-mail

We have added one important automatic merging option to our Contact management, which is merging by contact e-mail:

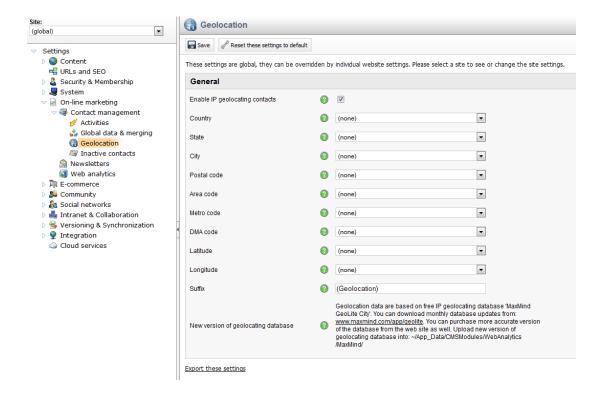


But not only that, you can now also simply register your own merging provider programmatically to provide automatic merging by custom fields or based on custom rules.



Better GeoIP services - Integration with MaxMind GeoIP database

Our implementation of IP2Country was slowly becoming obsolete. That is why we fully replaced it with a new GeoIP database from MaxMind. In addition to country, default installation also provides state, zip and area code, GPS position, etc. You also have the option of purchasing a premium database from MaxMind, which covers Company property, to maximize value. Its UI pretty much only covers settings which say how the GeoIP properties will map to Contact properties:

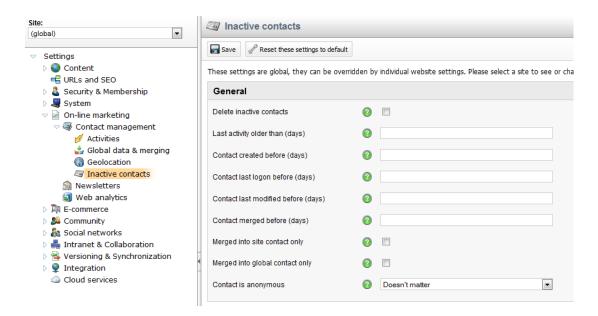






Scheduled task and settings for deletion of inactive contacts

To maintain the size of your database of contacts and their data, the system brings you the option to delete inactive contacts based on settings:

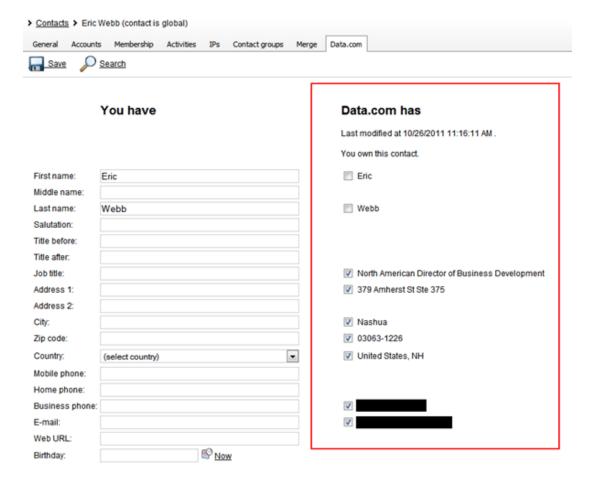


Contact management - Web crawlers are no longer logged automatically as contacts, but you have the option to enable that.



Data.com Connector

This allows you to keep your contacts and accounts up to date with data from the Data.com business directory (previously, Jigsaw). The retrieval of data is done by looking up already known data and finding the best match. After you select the relevant contact information, you can apply it to your existing contact.



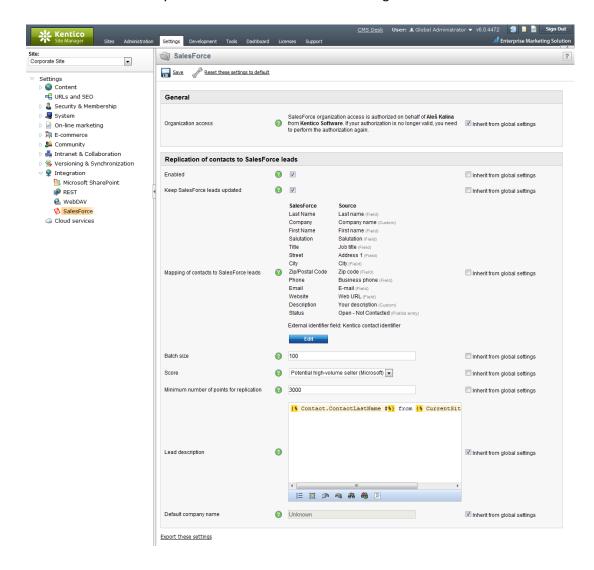
You can learn more about the Data.com connector here:

http://devnet.kentico.com/Blogs/Juraj-Hrinik/February-2012/Data-com-integration.aspx



Salesforce.com Connector

This allows you to replicate contacts that match certain criteria to your Sales Cloud (or another cloud application from Salesforce.com) as leads. Synchronization is handled by a scheduled task which synchronizes contacts based on settings:



You can learn more about the Salesforce.com connector here:

http://devnet.kentico.com/Blogs/Ales-Kalina/April-2012/SalesForce-Connector.aspx



Support for cookie levels and cookie consent

Because of new cookie legislation, we have provided a solution for cookie consent through our hotfixes for version 6: http://devnet.kentico.com/Blogs/Martin-Hejtmanek/May-2012/Cookie-law-support-in-Kentico-CMS-6.aspx

These new web parts and support for customization of the CookieHelper class are now also integrated into version 7, with the same options as described in the above-linked article:

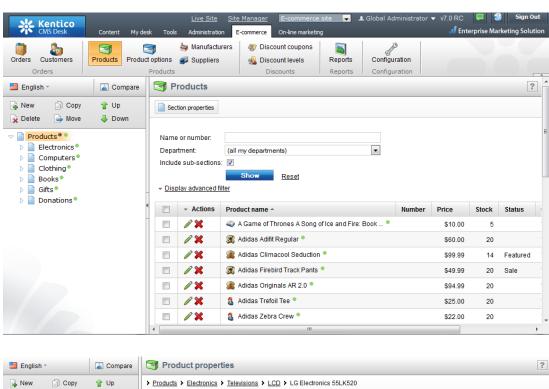


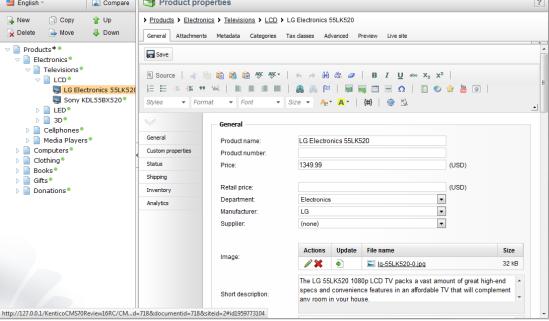


E-commerce

New products management UI

Based on feedback from clients, we have completely reviewed the E-commerce product management UI to provide more integration with content documents. It now provides a similar UI to the Content tab, but focused purely on managing products.



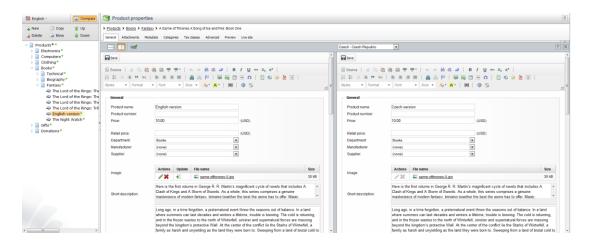


These changes allowed us to leverage the full potential of our document engine in our commerce module, bringing several important improvements to products.



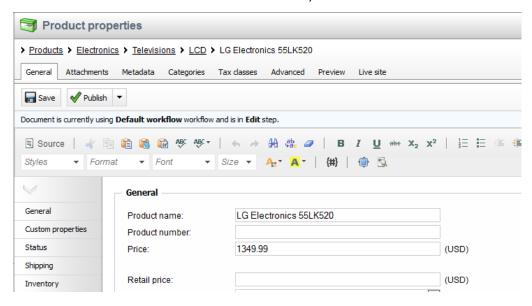
Support for multilingual products

You can now easily localize the text fields of products and use 'compare mode' for SKUs the same way as you are used to for standard ocuments:



Support for products under workflow

Document workflow now applies also to SKU data (main SKU properties, not bindings such as tax classes etc.) so you can now fully leverage workflow for your product data too. This also includes the new advanced workflow feature, of course.



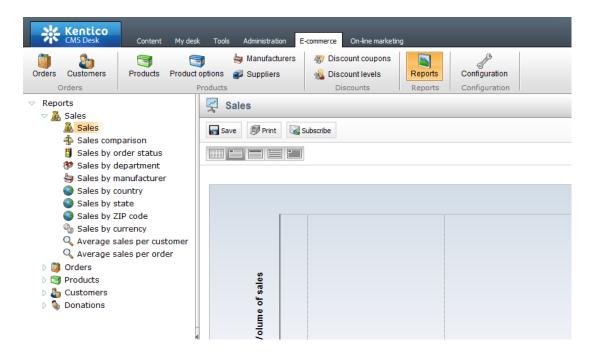
You can learn more about these improvements here:

http://devnet.kentico.com/Blogs/Petr-Vozak/June-2012/Kentico-CMS-7-New-Products-Management-UI,-Multilin.aspx



30+ E-commerce reports

We have also prepared a lot of new E-commerce reports:



You can learn more about which new reports are available here:

http://devnet.kentico.com/Blogs/Petr-Vozak/January-2012/Kentico-CMS-7-30-new-e-commerce-reports!.aspx

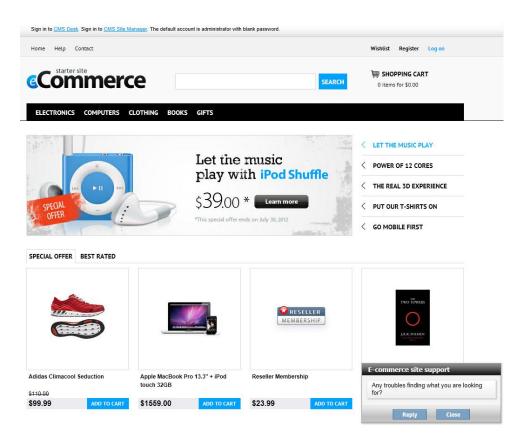
In v7 final, the user interface for reports offers also sample data generator so it is easier for everyone to demonstrate these to the end clients:





New E-commerce sample site

To be able to demonstrate all newly-introduced E-commerce functionality now and in future, as well as to provide a new fresh web template for your E-commerce website, we have prepared a brand new E-commerce sample site. This site is very easy to customize, and also includes lot of the new features available in version 7, including QR code and support chat integration.



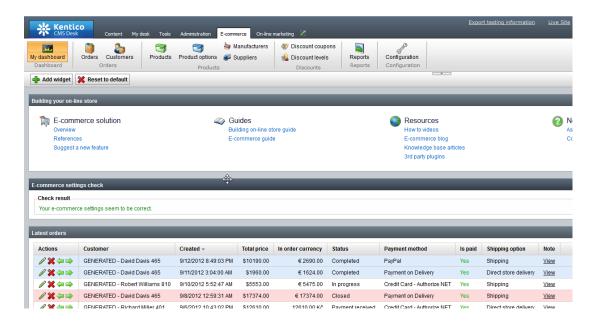
It also comes with its mobile version, to demonstrate how you can easily produce your content with jQuery mobile UI:





E-Commerce Dashboard

The E-Commerce module in v7 final now also provides its own Dashboard with some useful widgets:



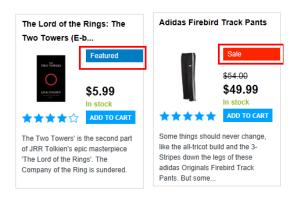


Other E-commerce improvements

There are also other improvements in our E-commerce module; here are the most important ones.

Better support for product flags (new, featured, etc.)

It is now much easier to tag products by publicly visible tags based on their status or to indicate new products in stock.



Invoice number generated based on macro expression

There is a new setting that allows you to use macro expressions to generate invoice numbers:



Improvements to shopping cart preview web part

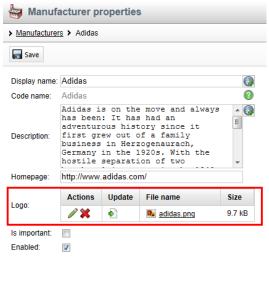
It is now easier to display total number of items and their total price in the shopping cart preview web part using macros.





Thumbnail images for shipping options, payment methods, suppliers and manufacturers

These objects now support their thumbnail images or logos. You can see how the feature is used on the Brands section of the E-commerce site home page:





New product fields

There are several new product fields which will help you to fully define your products' properties.

- Short description
- Retail price
- Minimum items per order
- Reorder at (number of items in stock below which you should reorder the product from its supplier)



Social networking

Chat

The chat module allows users to create, visit and chat in 'chat rooms'. We have already released a preview of this module for v6 in the MarketPlace as you can learn here: http://devnet.kentico.com/Blogs/Juraj-Hrinik/March-2012/Chat-module.aspx

Now fully integrated within the default installation, it provides more options than the MarketPlace version. An example of community chat with standard rooms is demonstrated on our sample Community web site:

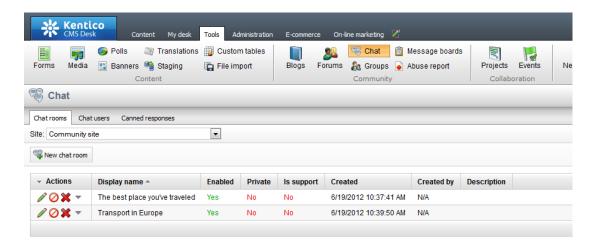




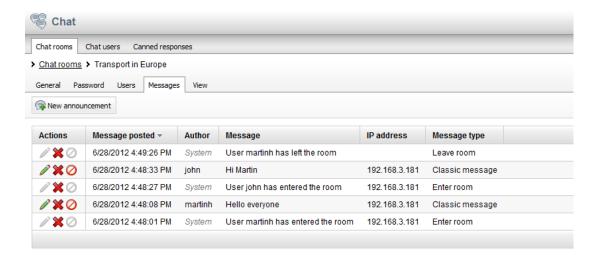
Kentled



In CMS Desk, you can manage all existing chat rooms:



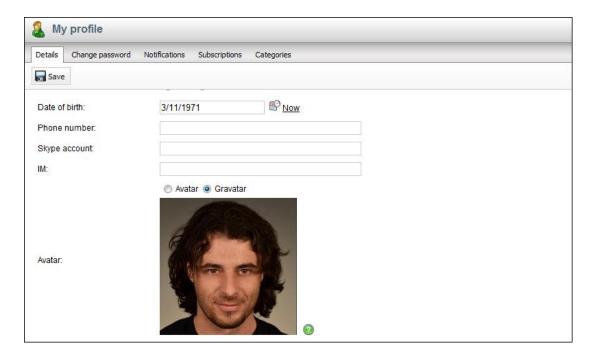
And their chat messages:





Gravatars support

In addition to system or user-defined Avatars, you can now also use Gravatars for users.

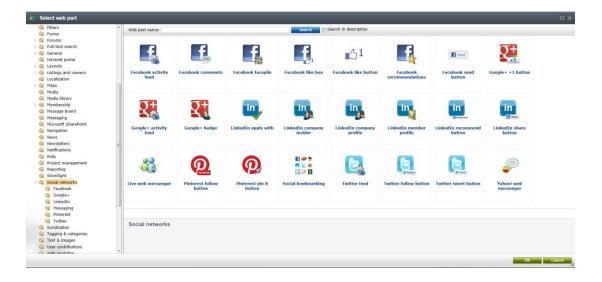


You can learn more about using Gravatars here:

http://devnet.kentico.com/Blogs/Jakub-Oczko/May-2012/Kentico-CMS-7-Gravatars.aspx

Set of new web parts for Social networks (Google+, LinkedIn, Pinterest, Twitter)

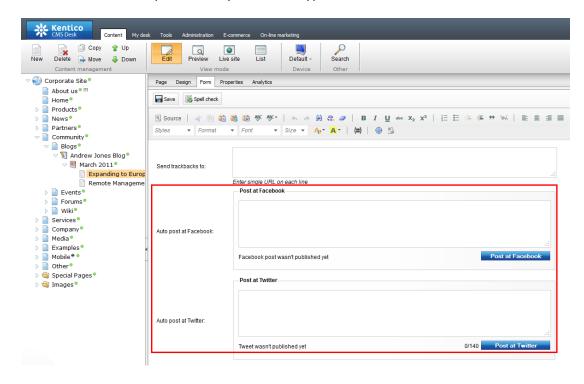
We have released a package of Social networking web parts in the MarketPlace for various social networks: http://devnet.kentico.com/Marketplace/Community/Social-networking-web-parts.aspx - Now integrated in default installation.





Automatic publishing to Facebook and Twitter

Kentico CMS 7 provides the possibility of automatically publishing a comment about a newly-created document to Twitter or Facebook. This integration is provided by two form controls which can be placed in any document type:





Security and membership improvements

We have always taken security precautions very seriously. That is why with each new version we present new features that make your life easier and your websites more secure.

Account lock after 'N' invalid user logon attempts.

It is now possible to define the number of allowed attempts a user has to enter their correct password, before the system automatically locks their account.



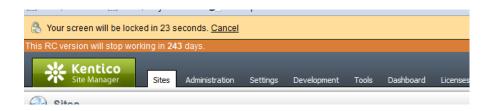


Screen lock

Another security precaution now easily applicable is the allowing of automatic UI screen locking after a specific period of inactivity. If the editor or administrator forgets to log out, this feature prevents others from accessing the system while they are away.



First, there comes notification:



The Screen lock dialog would display, requiring users to enter their password in order to continue:





Support for user password expiration

You may now configure password expiration rules to enforce regular changes to passwords.



Disabling Autocomplete for user name on login form

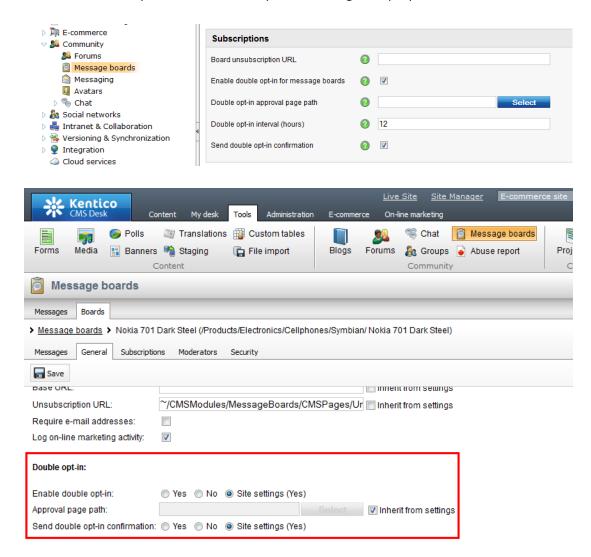
Until now, our logon forms didn't prevent a user's browser from remembering their user name, but now you can choose whether this is allowed or not. Protecting even user names can add to the security of highly secured projects and now this option is available.





Double opt-in for Blogs, Message boards and Forums

All these modules now have options for double opt-in subscription confirmation via e-mail and have all been updated with their respective settings and properties:



Configuration of other modules is very similar to the above.



Ability to enforce password policy

In addition to the password policy settings that were already available, you may now enforce password policy on existing users and their passwords, helping you be stricter and make sure that all user passwords follow it. If you enable it, the user is forced to change his password after login if the policy is not met.



Frames cannot be inserted into websites on different domains

This feature covers what is called "clickjacking". Some attacks leverage IFRAME elements to fake their website UI by overlapping it with your pages to gain user trust and to encourage them to click on something that is really attacker code. This feature prevents these types of attacks and is automatically enabled.

Smaller security improvements

There are also some smaller security improvements in the system worth mentioning:

- Support for user impersonation with windows authentication
- When using windows authentication values in users' GUID column corresponds with GUIDs in AD.
- AD Import Option to bind custom attributes from user's schema
- Better protection against session attacks

Should you need any more details about them, see our documentation or contact our support.

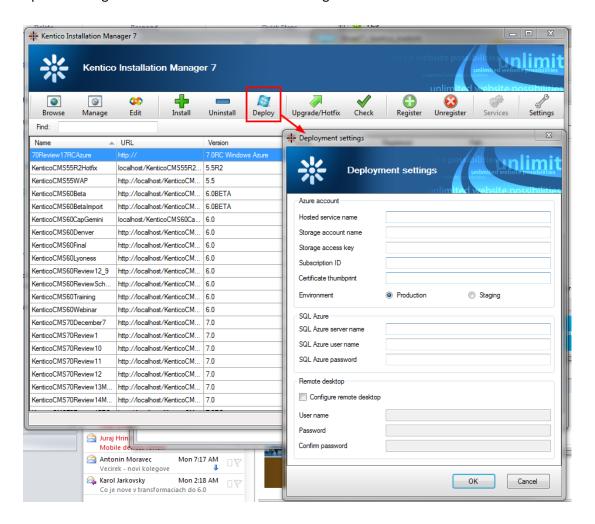
You can find more details about these security improvements here: http://devnet.kentico.com/Blogs/Dominik-Pinter/May-2012/Security-improvements-in-Kentico-CMS-7.aspx



Cloud Improvements

Deployment to Windows Azure through Kentico Installation manager

We have provided a PowerShell script which helps you deploy websites to Windows Azure, mentioned on our Blog: http://devnet.kentico.com/Blogs/Juraj-Komlosi/April-2012/Windows-Azure-deployment-script-on-Kentico-Marketp.aspx Now this deployment option is integrated into Kentico Installation manager:



Support for Kentico EMS Windows services (Scheduler, Health monitoring)

You can now also run the features supported by Windows Services, such as Scheduler or Health monitoring, as worker roles on Windows Azure.



Amazon S3 IO provider which allows you to store files in S3 inbs.

Another feature that we have provided in our MarketPlace in terms of the cloud was IO provider for Amazon S3 storage, you can learn more about it here:

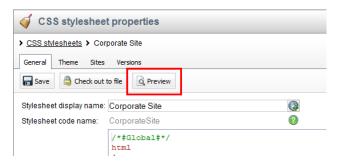
http://devnet.kentico.com/Blogs/Dominik-Pinter/February-2012/Amazon-S3-provider-for-the-CMS-IO-namespace.aspx

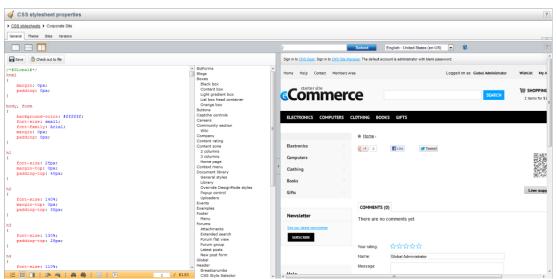


User Experience

Preview mode for design objects

In case you edit an object with layout or CSS (transformations, page layouts, page templates, CSS stylesheets, web part layouts), you can now use a split view mode to see the preview as you edit the code:





Similar to Compare language mode in CMS Desk -> Content, you can choose between a horizontal and vertical split according to your preference.

You can find more information about design preview here:

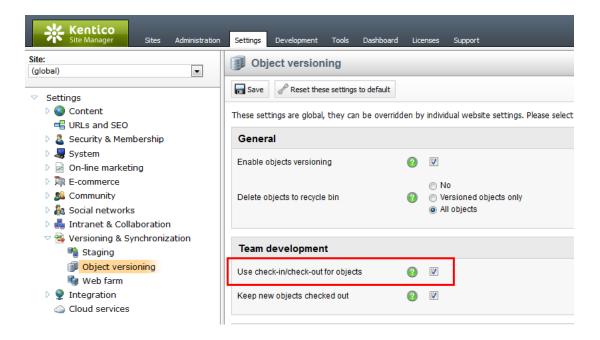
http://devnet.kentico.com/Blogs/Jakub-Oczko/May-2012/Kentico-CMS-7-Design-preview.aspx



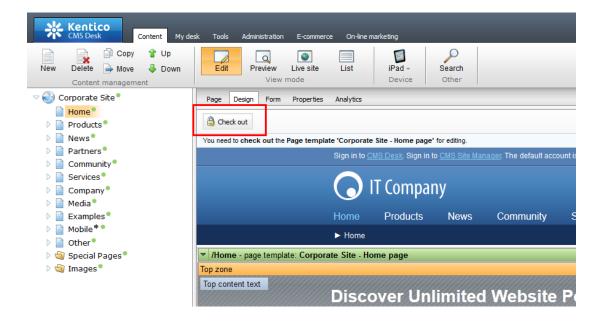
Object locking

In addition to the design preview, it is now also much easier to develop web site as a team with v7 final. Design mode objects now support locking (check-out, check-in).

First, you need to enable this:



Then the edit action of all items related to design mode require acquiring the lock for such object:



This functionality is very similar to the locking available for content documents.



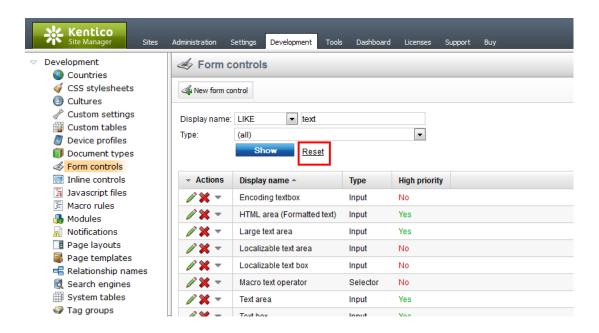
Content UI refactoring

We have spent a significant amount of time refactoring the CMS Desk -> Content interface. It now properly remembers the edited document culture even if you change it from another browser window.

It also provides improved performance by lowering the number of frames and optimizing the load process of particular pages.

Remembering filters in listing

All listings now remember the last state of filters, paging and sorting to provide better user experience when working with a filtered set of items. These items can be easily reverted back to default with the Reset action:

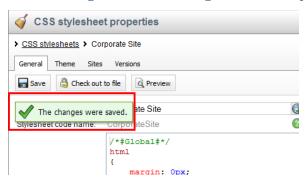




UI Review

We have also reviewed the entire UI to unify the user experience it covers:

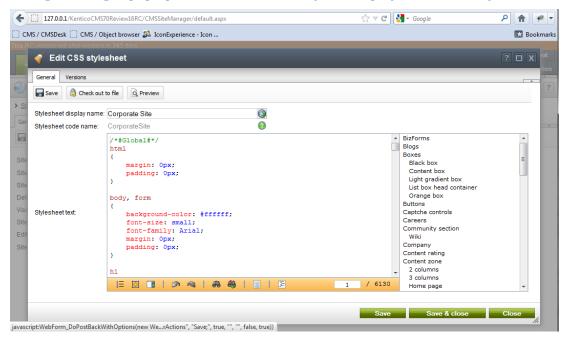
All UI messages have new design and more options



'Save' and 'OK' buttons have been unified to 'Save'



Dialogs no longer pop up as new windows. They are displayed in a new layer



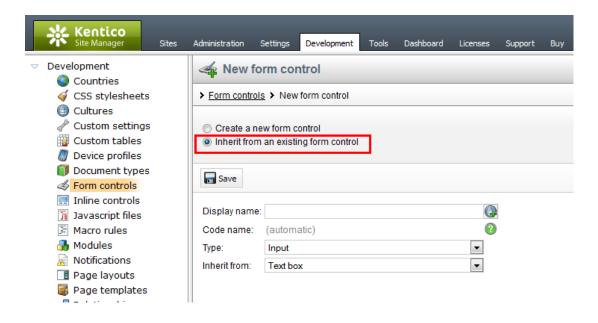


Form engine improvements

There are several important improvements to our form engine.

Inherited form controls

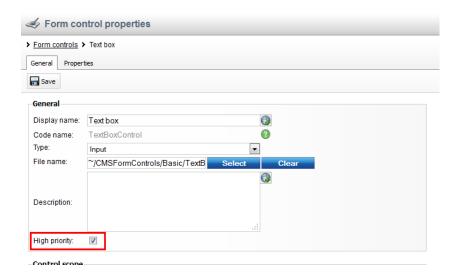
Similar to web parts, you can now create and re-use the form control, which is inherited from the existing one but with different default settings:

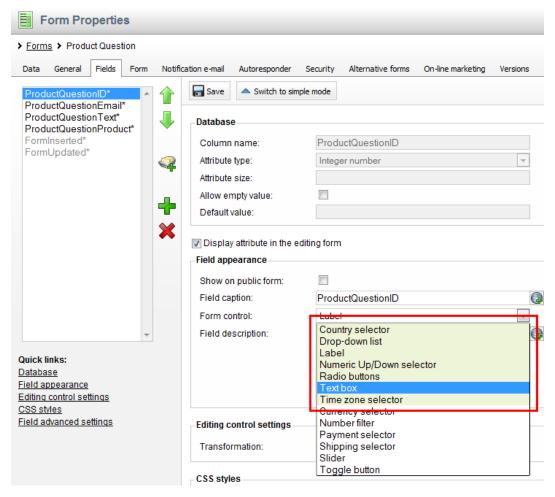




Prioritized and default form controls

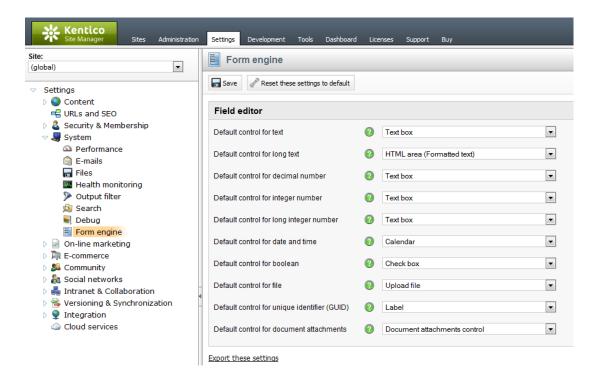
You can also define that a particular form control has higher priority in the selectors, which means that they will appear at the top of the selectors and in the simple mode of the form field designer in the on-line forms module.





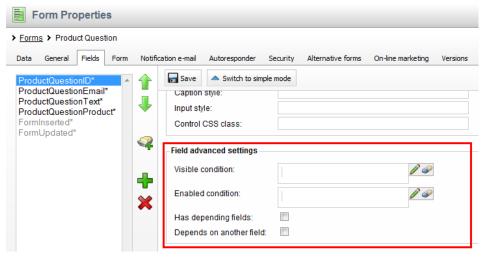


In addition to this, you may now specify in settings which form controls will be used as default for particular field types, so you can override them with your own preconfigured or preferred ones:



Support for dynamic forms

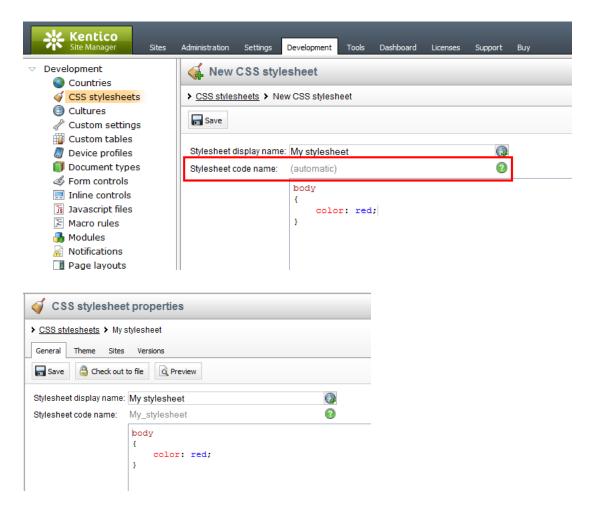
It often happens that a client needs to build a dynamic form containing fields only to be displayed under certain conditions, like perhaps when a specific field value is selected. This is now possible in Kentico CMS 7. We have integrated the form engine with macro conditions so you can specify under which circumstances particular fields will be visible or enabled:



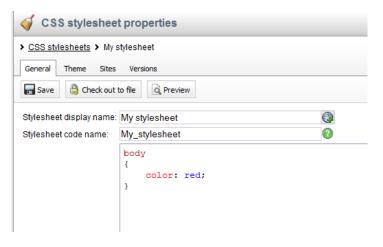


Support for automatic code names for all objects

A small step in terms of UI changes, but a giant leap in terms of user-friendliness and productivity. Whenever you are creating a new object anywhere in the CMS, the code name of the object is now automatically populated from its display name unless you explicitly enter it yourself:



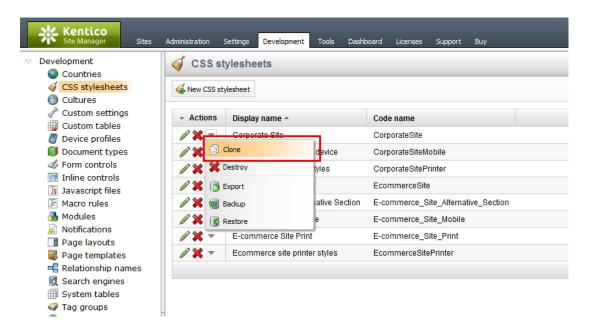
You may customize it at any time by clicking on it, which turns it into an editable item:



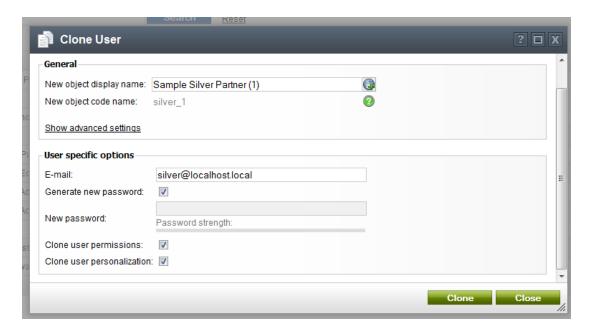


Object cloning

General cloning support for objects within the CMS, including their relations, makes your life easier when you want to replicate something. Cloning is available in all listings under object context menu:



You can clone almost any object within the system, including document types, custom tables, on-line forms, user roles with permissions etc. Each object type can have its own specific settings to allow you to narrow or extend the scope of cloning to your needs.

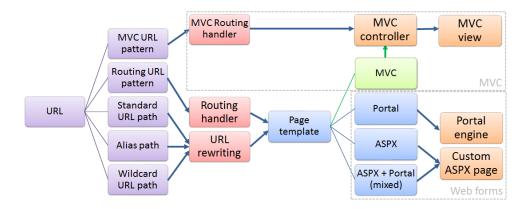




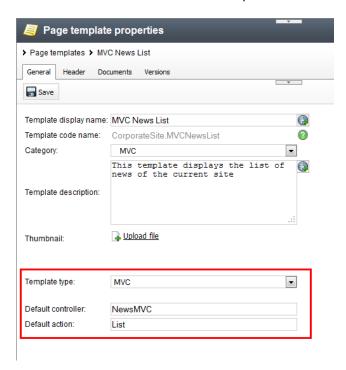
Core & Development

Support for MVC page template types and improved routing

You previously had the option of either using routing with new URL patterns as aliases, or using standard templates with standard document URLs based on hierarchy. We have managed to improve on this by implementing a new page template type: MVC. This allows the rewriting engine to use standard URLs together with the MVC view engine as shown in this diagram:



It also allows us to have the MVC components defined in the page template properties:



You can learn more about it here:

http://devnet.kentico.com/Blogs/Martin-Hejtmanek/June-2012/Improved-MVC-support-in-Kentico-CMS-v7.aspx



Also installation for .NET 4.0 in now compiled against MVC3, which should allow you to use the Razor view engine. We will focus on this more for v7 final to make sure it is properly available.

Support for connection to multiple databases from the same context

Our data engine and API was limited to single database access because, even if you used nested connection scopes, system objects that were cached in static dictionaries were provided from the cache of the database that first queried them. Now our engine provides a new class that works as an envelope for static objects to honor current connection scope, so you (and also our engine) can take advantage of static objects with support for multiple databases:

Static objects before:

```
private static ProviderStringDictionary siteInfos = null;

Static objects now:

private static CMSStatic<ProviderStringDictionary> mSiteInfos = new CMSStatic<ProviderStringDictionary>();
```

Then you can use the following code without any problems:

```
using (new CMSConnectionScope("ExternalConnectionString", false))
{
    ...
    using (new CMSConnectionScope("CMSConnectionString", false))
    {
        ...
        using (new CMSConnectionScope("ExternalConnectionString", false))
        {
            ...
        }
      }
}
```

This particular improvement will help us to provide more flexibility in future for features such as comparison of two CMS environments or better multitenant support.



Web farm synchronization mechanism based on database

Of the most important aspects of our solution are scalability and availability at hardware level. Not just cloud, but also custom environments with multiple servers need the mechanism to synchronize data between instances of the application. To be able to move forward with this, we have introduced a new method of web farm server synchronization to ensure web farms can operate properly in environments where particular servers are not able to contact each other through HTTP requests. That is why we now provide web farm synchronization based on a database, which will allow us to provide you with support for web garden models in future, as well as automated web farms for team development.

You can learn more details about how it works here:

http://devnet.kentico.com/Blogs/Dominik-Pinter/March-2012/New-web-farm-updatemechanism.aspx



Progressive caching option to lower contention in non-cached components

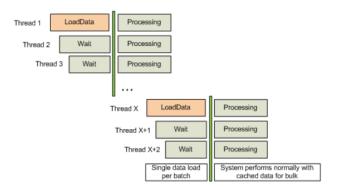
I will be explaining this in more detail on my Blog, so I will keep it brief. There is a new option for cache settings that we called Progressive caching.



It is used when caching is disabled (should you need fresh data at any time) and is able to reduce contention in those scenarios. If several threads meet at the same code block (defined by CachedSection as described here http://devnet.kentico.com/Blogs/Martin-Hejtmanek/June-2010/New-in-5-5--Caching-API.aspx), only the first one queries the data, sharing the result, which leads to lower load of the application and also of the data source (whether it is file system or database).

Progressive caching (CachedSection)

CacheMinutes = 0, Progressive caching = ON



This results in lower contention under heavy load if non-cached data is accessed, and basically behaves in a similar way to standard caching, with the one difference being that the data is only cached for the shortest period of time possible.



Access to zip file content through IO providers

File access through CMS.IO namespace is now capable of providing read-only content of a zip file as if it were a standard file system folder. Zip file content access is provided with paths such as:

~/App_Themes/Default/Images/[Images.zip]/Design/...

Zip file name enclosed in brackets provides access to its internal content as a folder.

This has allowed us to nearly half the number of installation files **from almost 20k to about 11k**, which means faster installation and deployment with smaller installation size.

Specifically, the following folders are now mapped (packed) to respective zip files:

- UI icons from folder ~/App_Themes/Default/Images are now zipped in file
 ~/App_Themes/Default/Images/Images.zip
- SQL installation scripts from folder ~/App_Data/Install/SQL are now zipped in file
 ~/App_Data/Install/SQL.zip
- All sample site web templates from folders ~/App_Data/Templates/<sitename>
 are now zipped in file ~/App_Data/Templates/<sitename>/Template.zip



Performance improvements

We have also implemented several improvements to speed up the application.

Indexed database views for documents

To provide better initial performance of the application, we have built two schema-bound views as a base for all other document views which provide much better performance for larger websites.

Generated default database queries

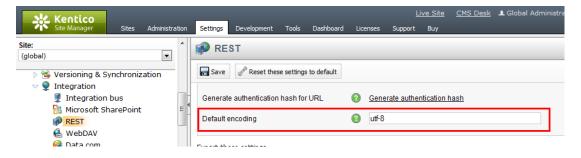
All default database queries are now generated automatically on-the-fly, which speeds up startup time. The original number of queries stored in the database has been lowered from about 3k to 800.

Support for weak references and caching in providers

Providers that didn't take advantage of caching objects in static dictionaries, especially UserInfoProvider and ContactInfoProvider, now support weak references in their caching dictionaries which allows the system to cache only items that were recently used and allow garbage collection of items that are not referenced any longer.

REST - Support for various types of response encoding

REST service now supports configuration of response encoding:





Summary

And that is it! Now is the time for you to say "WOW!" and to download Kentico CMS 7.

Please note that there are some other minor modifications not included here so as to keep this document "brief".

As always, we appreciate your feedback, and if you want to know more, contact us on sales@kentico.com or support@kentico.com.

