

## **The World Wide Web's Next Step Ahead: Web Window Manager WinLIKE – Empowering Websites and Web Applications**

### **Abstract**

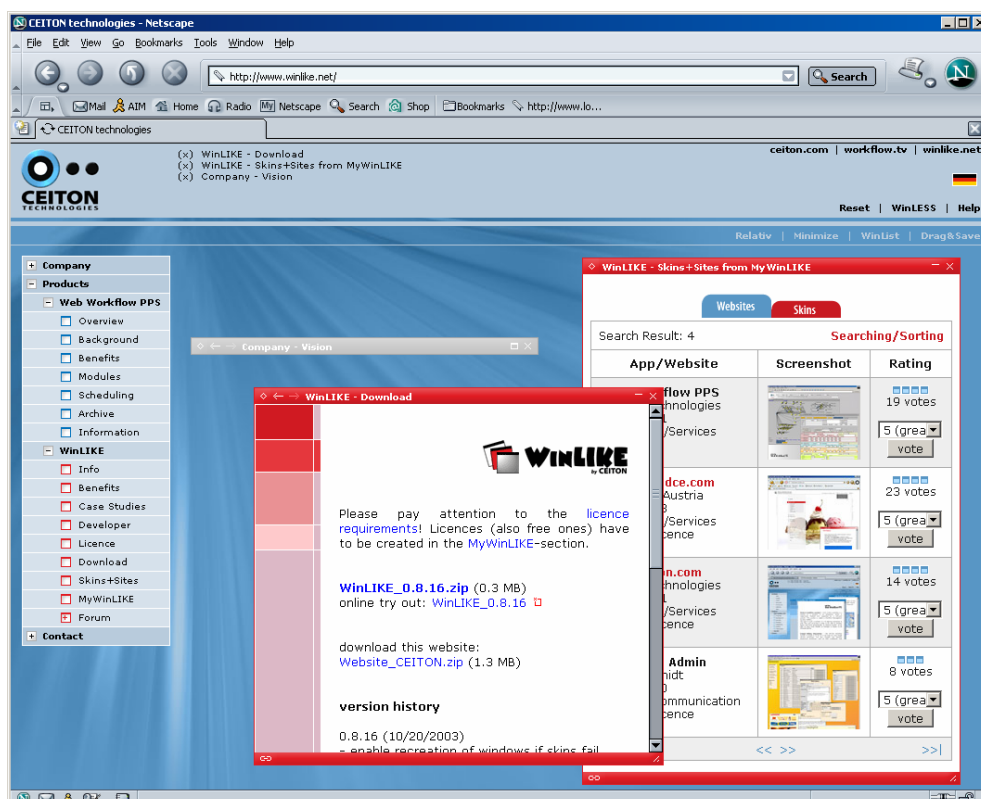
WinLIKE is the world's first professional Window-Manager for web browsers. With WinLIKE, web applications, websites and portals can contain real windows – just like a normal desktop application.

As one of the first major customer of WinLIKE, the Sony DVD Center Europe in Salzburg, Austria, completely rebuilt its website with the WinLIKE technology ([www.sonydce.com](http://www.sonydce.com)).

A Window-Manager is a program which displays and administers different overlapping windows (visual containers for contents) on the screen. For this purpose the Window-Manager offers functions like creating, closing, moving and minimizing windows and provides all the important foreground and background functions for overlapping windows. Every operating system, like Microsoft Windows, Unix-X/Windows or Apple OSX, has a Window-Manager. Now, with WinLIKE there is a Window-Manager available for the internet as well.

WinLIKE is based on various unique DHTML technologies and is only 27 kB in size. It works without any plug-ins in Microsoft Internet Explorer 5.5, Netscape Navigator 6.1 or other higher and related browsers (Mozilla 0.9, Firebird 0.7, Camino, Avant etc.) in addition to Lynx or search engines.

No specific web servers, databases nor script languages like ASP, ASP.NET, JSP, PHP, etc. are required, but are supported. WinLIKE sites are standard HTML-sites and even work from a hard disk.



## Who should be interested in WinLIKE?

### 1. Software Developers and Website Builders

Most new software is web-based, and every web developer needs a Window-Manager to build applications, portals or websites that have the same comfort as client-based software.

### 2. IT Business Managers

CEOs, CTOs and CIOs have to decide on long-term IT-projects. They need to know about the potentials of new technology.

### 3. Internet Users and Tech-savvy Individuals

WinLIKE is free for private usage. WinLIKE is a new breath-taking technology that is easy to use. Private users love to play around with the technology and to build WinLIKE web sites.

## Benefits of WinLIKE

**Improved Overview** - With the help of WinLIKE windows, information can be clearly arranged in the web browser, just like on a desktop of MS Windows or Linux/X. Insignificant content can easily be closed and important information can be highlighted.

**Usability** - The orientation in, and usage of, web applications and web sites becomes much easier, since clicking on a link will not necessarily change the entire HTML page, but most probably only the content of a window.

**Performance** - WinLIKE web sites usually load much faster, because less information needs to be transferred over the net (i.e. only the little content of the window instead of the whole new HTML page).

**Personalization** - Different personalization functions ensure that every individual user or user group can arrange or save important content in exactly the way it is best suited. Without WinLIKE, the development of personalization features is complex and expensive.

**Development** - WinLIKE makes life easier, especially for developers, because the navigation of content and the content itself is separated into different modules. Developers do not need to consider all possible user scenarios, because users will open windows by themselves. They could, for example, in an online shop, compare different products next to each other by opening individual windows. Furthermore, the status of the parts of the webpage not directly involved in any particular action (e.g. the state of the menus) does not have to be stored in a session variable as the web pages are not reloaded completely fresh. Without any prior programming knowledge, various pre-defined or individual views of the same content can be presented with the help of the personalization functions.

The layout is much simpler (background + windows + content) and differences between IE and NN are a thing of the past.

## Case Studies

During a workshop with AIESEC students without an IT background, CEITON asked the participants to pick websites which they use regularly but could possibly be improved upon. The participants were subsequently asked to sketch ways how these websites could become more user-friendly with the help of WinLIKE windows. The CEITON instructors were surprised how quickly the students plotted down their improvements. The following examples had been implemented only two days later:

Please note: These are fictional examples demonstrating the possible usage of WinLIKE. All trademarks and copyrights are reserved for their respective owners!

### **1. Operating System (Windows XP)**

With the help of WinLIKE windows, even operating systems like Windows XP, OSX or Linux/KDE/Gnome can be built in a web browser. Even documents can be edited online.

### **2. Search Engine (Google)**

It can be very useful to be able to display different search results parallel to the each other without the need of opening a new browser or browser window for each new result.

### **3. Website Builder (Tripod Trellix)**

This website or application consists of three different HTML pages: 1<sup>st</sup> – the selection in the background, 2<sup>nd</sup> - the website to be edited and 3<sup>rd</sup> – the properties dialogue for the text. With WinLIKE, this editor can be used like a integrated development environment (IDE) in only one page.

### **4. Web Mailer (MSN Hotmail)**

While using web mailers, usually enormous HTML pages (with menus, advertisements etc.) have to be loaded in order to use single functions like looking at contacts or writing or reading mails. Using WinLIKE, a user can open exactly the functions that he or she needs without unnecessary overhead. Additionally, more than one window may be opened at the same time (i.e. it is possible to write and read mails concurrently).

### **5. News Site (International Herald Tribune)**

It is common on larger news sites that the web pages look differently after each click. With WinLIKE, the desired information is opened in a small new window; the rest stays the same – that's it.

### **6. Shop (Yahoo)**

While using an online shop, WinLIKE is perfect for comparing the products of interest – they can be shown parallel to each other, possibly even next to the shopping cart. The user is unrestricted in his or her possibilities, and the programmer need not develop special product comparison features or functions.

Feel free to download these samples from the Company/Press section on [www.winlike.net](http://www.winlike.net). But please note that these are only samples – non-WinLIKE related links will not work.

## The History of the Graphical User Interface (GUI)

At the beginning of the development of desktop GUIs, there were mostly unstructured text surfaces, which gradually evolved to ever more standardized surfaces with widgets like windows, combo boxes, and buttons. Some were even skin-based.



## Development

**Window-Manager + Window-Editor** - WinLIKE has two components: the actual Window-Manager, which the user applies (without necessarily having to know about it); and the WinLIKE-Editor (with the help of a graphical user interface) to create and define windows and their characteristics such as size, content or skin. The editor delivers small segments of JavaScript code that can be integrated with HTML pages which subsequently contain windows.

**Functionality** - WinLIKE windows basically work like HTML frames, but with many additional functions and without their problems. For instance, the content of a link with the target 'abc' can be loaded into a window with the name 'abc' - just as if the window was a common frame. The window can be predefined with the editor or API and will be displayed or made visible as soon as the content is loaded. That is the whole concept.

As WinLIKE is based purely on HTML, not even a web server is needed. It is possible to call up WinLIKE HTML pages from a hard disk, just like any other normal HTML page.

**Usability** - WinLIKE windows do not make sense just anywhere - too many windows can be an irritation. A balance must be found between the usage of conventional HTML content on the root site and WinLIKE windows on top of that.

## Common Mistakes during WinLIKE development

WinLIKE development is easy for programmers and designers because every website or web application is segmented into logical content units. An application usually consists of three parts: the background HTML, the WinLIKE windows and the content. This concept makes it extremely easy to build professional looking and modular sites or apps.



Although WinLIKE is so easy to use, there are two typical problems that novices to WinLIKE development usually encounter. Instead of thinking in a traditional HTML-context, they must get used to working like a desktop developer.

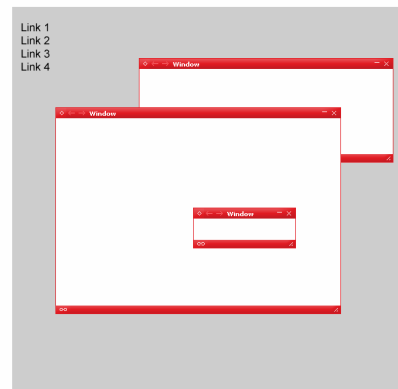
### Remaining in a classical HTML mindset

This attitude leads to the anticipation that every click has to change 90% of the page. As a consequence, the WinLIKE windows are frequently designed to be too big, even overlapping one another. The programmer or designer expects the window with the desired content to come to the foreground by using links.

Instead, it is preferable to split the content into one or two main working windows, a window containing the menu, a properties window, a help window and different dialogues.



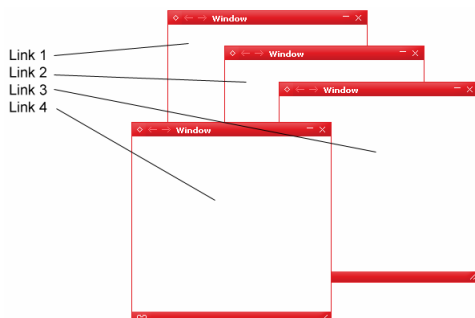
wrong



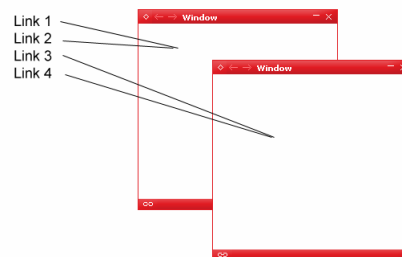
better

### Too Many Windows

Using too many windows usually leads to the opposite of the desired outcome, i.e. clarity of structure. It is helpful to have different links open up in the same window rather than letting every link open up its own window.



wrong



right

## Personalization

Personalization amounts to delivering content specifically customized to the needs of individual users or groups of users. See the following three examples:

### Views

It is very simple to target specific users by offering personalized views of the same content through opening the content in different windows at the initial opening stage. This principle is followed with the domains [www.winlike.net](http://www.winlike.net), [www.ceiton.com](http://www.ceiton.com) and [www.workflow.tv](http://www.workflow.tv), which all refer to the same website.

### Login / Cookies

If it is required for each user to arrange his or her own start configuration, it is possible to save the current window setup to the server through a WinLIKE-API function. With the next visit, the server automatically generates the identical window setup, offering the user his or her personalized website, portal or application.

### Drag-and-Save

While having a customer on the phone, a consultant, for instance, can search the corporate website and open the information of concern to the customer in different WinLIKE windows. The consultant can then save this particular window setup in a link and subsequently send that link to the customer. If the customer opens the link, all relevant data is right there for the customer to examine (e.g. comparisons of different insurances), without him or her having to repeat the same search the consultant did.

## Licenses

### Free License

- Private usage
- Education
- Free software
- Software development

### Standard License

- Price: 80 U.S. Dollars per installed server application

WinLIKE has no limitations like shareware and no security functions with a registration key. The free version of WinLIKE is not different from the standard version.

Even so, every WinLIKE implementation is required to have a valid license (even free ones) and a link to the WinLIKE license verification web site. This enables the visitors of websites or apps to verify the registered use of WinLIKE.

## MyWinLIKE

In the MyWinLIKE section of [www.winlike.net](http://www.winlike.net), users can create and pay for licenses online, register their web sites and skins, and upload screenshots of their designs to share with other users.

## Forum

At [forum.winlike.net](http://forum.winlike.net), users can discuss all issues regarding WinLIKE and get help for their particular implementations.

## Market Overview of Window Managers

In the last couple of years various companies, large and small, have tried to build Web Window-Managers. These can generally be grouped into two categories. There are plug-in based solutions (e.g. Flash, JavaBeans, and ActiveX) and JavaScript-based ones.

The plug-in based solutions, for example from Oracle, have never really had a chance because of heavy downloads, incompatibilities, performance problems and missing universality.

The JavaScript-based solutions have been implemented in two different ways, frame-based and layer-based.

1. The layer-based scripts (DIV) are very simple. To make a DIV moveable is quite straightforward, but it is impossible to load new content without having to refresh the entire web page. The only way to change content of a window with preloaded information is to use something like `window.innerHTML=xyz`. With a few more drawbacks besides, these scripts are nice to have but without any real value to developers.

These types of scripts can be identified by creating a combo-box in IE and then moving a window over to that box. If the box stays in the foreground, the window is only a simple moving DIV.

2. The frame-based scripts use IFRAMES in order to load arbitrary, encapsulated code. This process is very complex and hardly anybody controls it: Overlapping issues, shifting around, browser incompatibility and performance bottlenecks all cause problems. Additionally, a JavaScript instruction has to be executed to load content into a window, making the handling for developers very tricky, not to mention complete incompatibility with search engines.

These types of scripts can be identified by creating a combo-box in IE and moving a window over to that box. If the box remains visible only in the skin area of the foreground, the script is a better frame moving script.

In comparison, a real and professional Window-Manager should run in IE and NN with no errors and should satisfy the following requirements, which, of course, WinLIKE with its many unique features does:

- FRAMES for the content of windows
- normal links with TARGETs can load content into a window
- FORM-submits into windows
- window history
- customizable WinList (list of windows)
- overlapping combo-boxes anytime
- different skins for windows on one HTML page
- relative and absolute window behavior
- visual editor for easy window definitions
- Deeplinks for direct links to window content
- Drag-and-save links for saving a whole site in a simple link
- Sound effects for audio warnings
- transparent windows and skins and much more...

Currently, there is no real working Window-Manager for web applications in the sense that CEITON uses the term.

### **Editorial Suggestions**

WinLIKE is surprisingly easy to use but is still an absolute novelty. To give developers and private users the knowledge and skills needed to build window driven web applications, here are some suggestions for workshops that can be published in newspapers or magazines:

- How to build a website, web application or portal with WinLIKE
- How to build a WinLIKE skin
- How to use the WinLIKE API
- How to build personalized web sites/apps
- How to migrate a development to WinLIKE (with the possibility to go back)
- How to integrate WinLIKE in an IDE (Integrated Development Environment)

Please contact CEITON if you need help.

## Quotes from the Managing Director, Tobias Soppa

"We believe in the future of web browsers being used as front ends for many kinds of applications."

"In our opinion, WinLIKE is the next step of the Internet towards a desktop-like look-and-feel, with all its useful functionality."

"With WinLIKE, websites, and in particular web applications become much simpler, faster and more comfortable to use because the individual user can configure his or her own information setup."

"We redeveloped WinLIKE three times from scratch and are now extremely satisfied that we can finally deliver a superb and stable product."

"Over the years, the development of WinLIKE was extremely time consuming. We had enormous problems guaranteeing the stability of our product under the various circumstances, particularly slow computers, very slow internet connections or websites with hundreds of windows, when browsers tend to cut off instructions for no apparent reasons whatsoever."

"With IE 5.5 and the NN 6.1, we cover more than 90% of all browsers currently in use. We hope and plan, however, to be able to cooperate with manufacturers like Opera in the near future."

## Downloads

You will find this file and more information on [www.winlike.net](http://www.winlike.net) in the press section (Company/Press)

If you would like to put the WinLIKE distribution on a Magazine CD or DVD, consider this our approval.

## About

CEITON develops Internet technologies and integrates these systematically into unique and valuable management solutions for innovative business clients.

The company facilitates the chance for its customers to build significant competitive advantages and therefore secure long-term customer relationships. CEITON technologies achieves this by delivering effective process-based information privileges and distribution solutions.

The organization is at the cutting edge of Internet development and offers both industry specific and cross industry solutions and services worldwide.

Along with WinLIKE, the private software development and consulting company also developed a large web-based 3D Workflow-System suitable for Production Planning and Controlling of the next generation.

## Headquarters

CEITON technologies GmbH  
Käthe-Kollwitz-Str. 9  
04109 Leipzig  
GERMANY

[www.winlike.net](http://www.winlike.net)  
[contact@ceiton.com](mailto:contact@ceiton.com)  
+49 (341) 913 58 30

Ask for Mr. Tobias Soppa

Please feel free to use this content for press articles of any kind. If you are interested in more background information, screenshots, samples or support, please do not hesitate to contact us!

We would be very grateful to receive copies of any article or report that you publish about our products or company in general. Thank you.