Web Pager

No front panel should be a hostage!

Version: 0.61.2

Wizard reference

COMPATIBLE WITH

NATIONAL INSTRUMENTS
LabVIEW

August 2014

Overview

This document will guide you through **WebPager Wizard** available from LabVIEW menu (*Tools >> WebPager >> Web Publishing Wizard…*). WebPager also provides API for programmatic control of its functionality. To know more about WebPager API please refer to '**WebPager API Reference**'.

WebPager is a LabVIEW add-on that allows accessing LabVIEW front panel from a browser without any modifications in the LabVIEW block diagram and without installing any plugins in user's browser. It doesn't require LabVIEW Run-Time Engine on client machines. The user interface created by WebPager uses only standard web-technologies – HTML5, CSS3, JavaScript.

WebPager maintains quasi real-time control over front panel via Internet from any browser-enabled device and operating system – Windows, Mac, Linux, Android, iPad, etc. Moreover, WebPager also provides API for programmatic access of its functionality.

WebPager is suitable for all types of developers. First, it can be used for putting LabVIEW application online in one click via Wizard - without any modifications in the LabVIEW source code. Second, it can be used in a more flexible ways by programmatically controlling WebPager (and not using Wizard). And third, WebPager can be used for merging LabVIEW front panel and external HTML code together for those with a good knowledge of web technologies, thus allowing having user interfaces and effects that are impossible to achieve on LabVIEW front panel alone.

1. Logging In.

After you registered your account at WebPager (https://vfpsoft.com/webpager/register), downloaded and installed the toolkit to your computer, you'll have to sign you in. From you LabVIEW development environment go to menu

Tools >> WebPager >> Web Publishing Wizard…. If you sign in for the first time you'll see a 'Sign In' window:
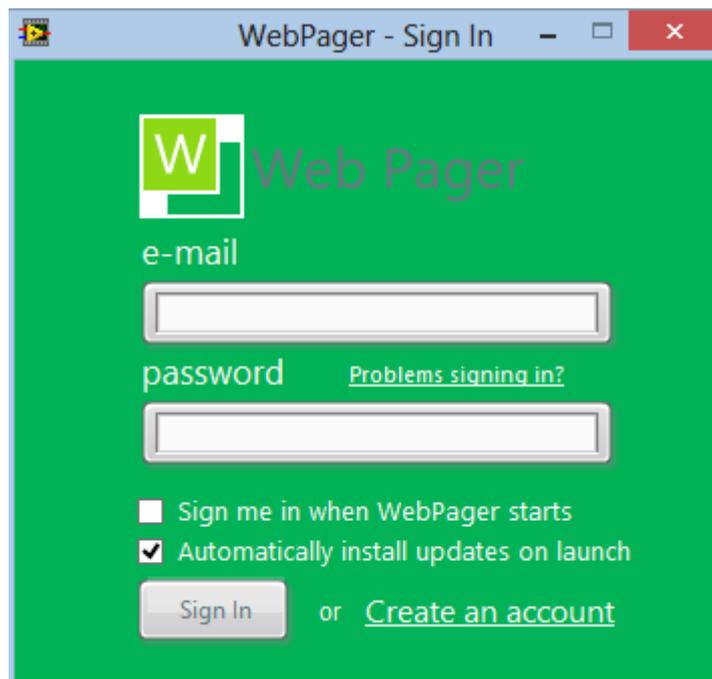

Figure 1.1 – WebPager 'Sign In' window.

Enter your email and password and press 'Sign In' button. If you want to sign in automatically next time (without providing authorization information each time) then check '*Sign me in when WebPager starts*' checkbox to a checked state. It's also recommended to leave '*Automatically install updates on launch*' checked to have the latest software with all updates and hotfixes. However, if you're logging in with a slow connection then uncheck this box. Average update rate through automatic update feature is 1 Mb per week. If you don't have a WebPager account yet, click on 'Create an account' link.

2. Working with Wizard.

Let's go quickly through the user interface of the Wizard (fig. 2). In the left side of the window you'll see the *current plan* (1) and its *duration* (2) (for example, '*deluxe*' and '*nano*'). Next – your WebPager credits (3). And then – time when current active period ends (4) and remaining time countdown (5) to avoid ambiguities with time zones, system time settings and other related issues. On the right you'll see current VI name that will be synchronized (6), 'Target URL' fields for both Internet and LAN (7), page size in bytes (8), other tabs (9) and buttons: 'Start' (10), 'Stop' (11), 'Exit' (12), 'Help' (13).
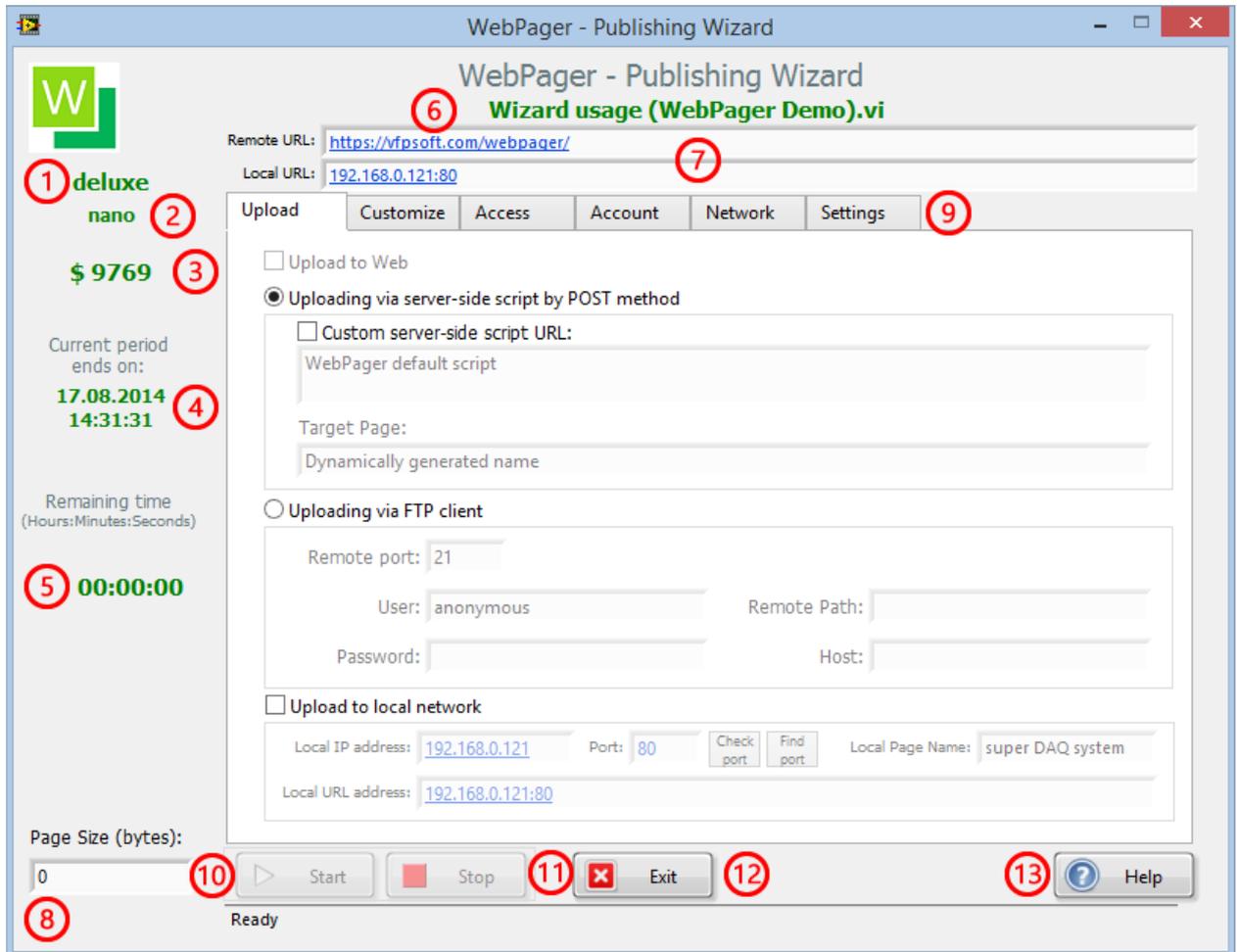

Figure 2 – Wizard main UI elements (1 – subscription plan, 2 – duration of the plan, 3 – balance, 4 – end of the current plan, 5 – remaining time countdown, 6 – VI name, 7 – target URLs, 8 – web page size in bytes, 9 – tabs, 10 – 'Start' button, 11 – 'Stop' button, 12 – 'Exit' button, 13 – 'Help' button).

2.1 'Account' tab - managing your account.

Probably the first thing to do is to decide how you'll be using this product. Namely, what functionality you need (plan subscription) and how often (plan period). Let's look at the 'Account' tab (fig. 2.1.1). Here one can see the email of the account ('Login'), its balance ('Credit') and plan expiration time. On the right side of the tab there is a panel which should be used for choosing and activating license. Both buttons ('Activate new license period' and 'Confirm changing plan') will be disabled until you carefully read terms and conditions and confirm it by checking 'I confirm…' checkbox.
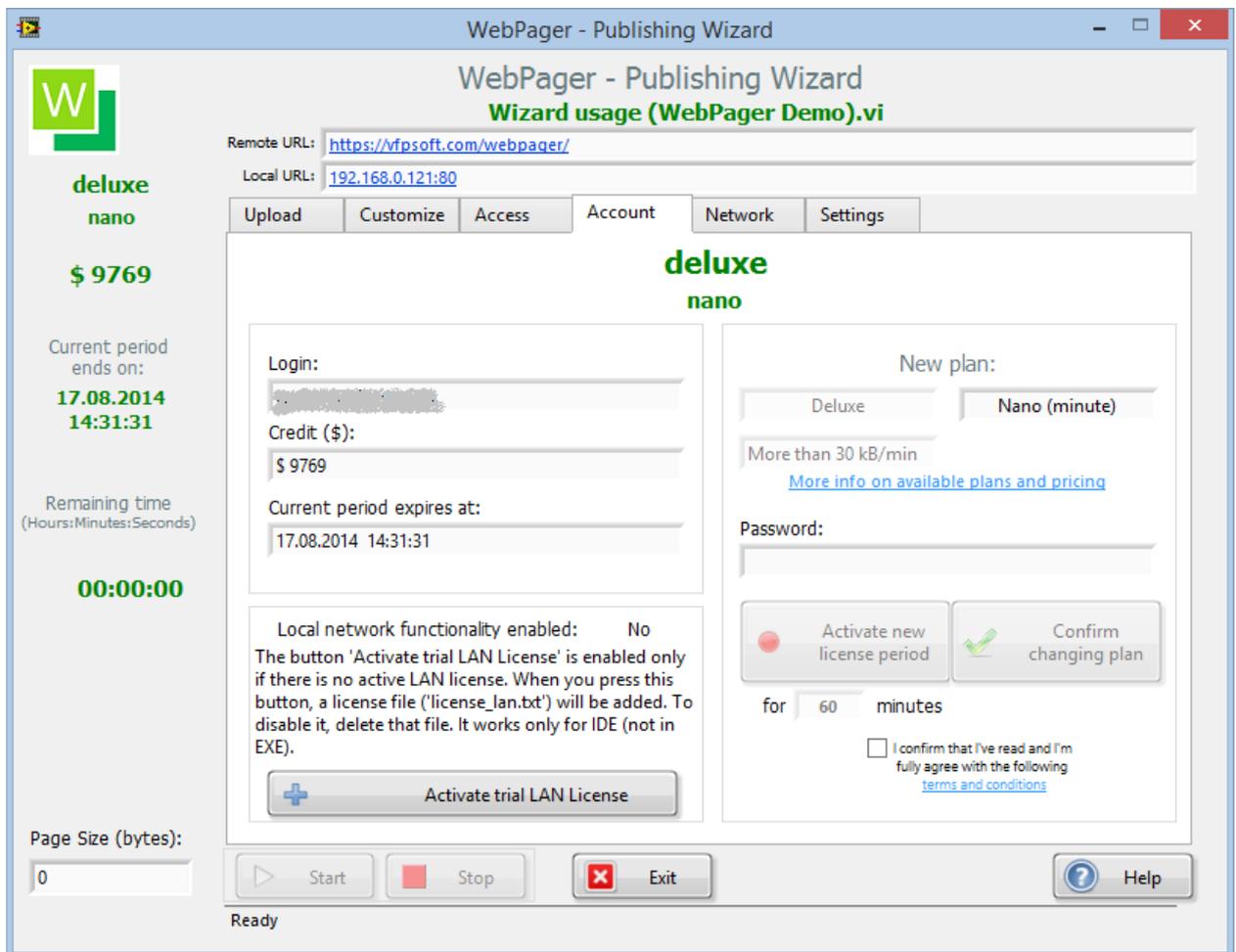

Figure 2.1.1 – WebPager Wizard 'Account' tab. Both buttons (Activate and Upgrade) are disabled until the user confirms that he agrees with terms and conditions.

If you're here for the first time, then you'll be able to enjoy trial mode functionality (evaluation mode). You can use evaluation mode only one time and on one computer. Other users shouldn't use evaluation mode on a computer where it's already expired.

For more information on different plans, durations and current prices please visit this page. Each subscription plan has differences in available functionality, pricing and timing. Plans are ranging from 'Basic' to 'Deluxe' and durations start from minutes for 'nano' and end on maximum license period of one century for 'giga'.

After you chose the plan, you can enable the button (by reading terms and conditions and checking 'I confirm') and a numeric field where you should enter number of time units you want to use (minutes, days, months, years). 'Nano' plans have limitations on lower limit, while others don't.

Now the last step before the countdown starts is to enter your password (fig. 2.1.2) and press 'Activate' button:

Figure 2.1.2 – Providing number of minutes to buy, entering password and clicking 'Activate' button.

Now in the left part of the Wizard window you'll observe some changes: your account was charged by a number of credits you chose and countdown started (fig. 2.1.3). While your account is active you'll be able to contemplate LabVIEW front panels in the web browser without installing

any programs, plugins or LabVIEW Run-Time Engine.

basic

nano

$ 632.92

Current period
ends on:

2/1/2014
11:19:39 PM

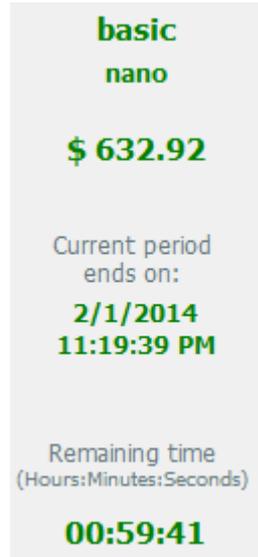Remaining time
(Hours:Minutes:Seconds)

00:59:41

Figure 2.1.3 – Account balance was charged by a few credits and countdown started.

Now let's imagine that you need more functionality before your current plan expired – for example you need to programmatically start and stop synchronization with a web page, and therefore you want to have access to WebPager API. To do this, you repeat essentially the same steps as for activating new license, but in the end you'll have to press button 'Confirm changing plan' instead of 'Activate new license period' (fig. 2.1.4):
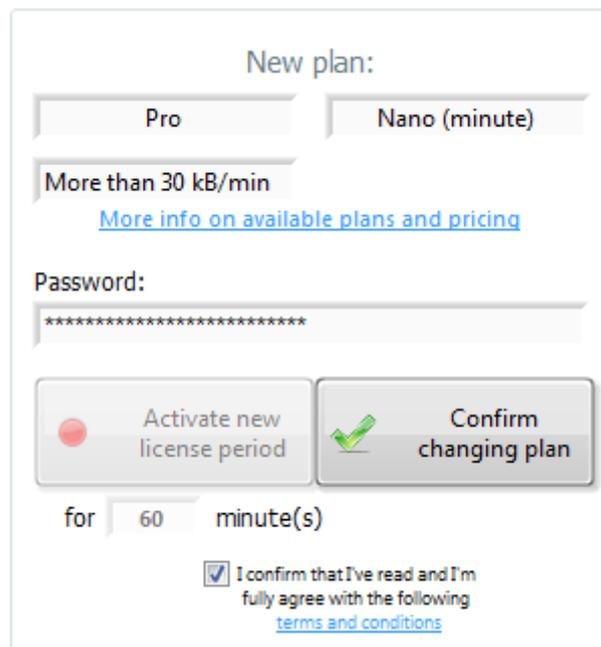
New plan:

| Pro | Nano (minute) |

More than 30 kB/min

More info on available plans and pricing

Password:

****

Activate new
license period

Confirm
changing plan

for 60 minute(s)

☑ I confirm that I've read and I'm
fully agree with the following
terms and conditions

Figure 2.1.4 – Upgrading currently active plan from 'Basic' to 'Pro'.

N.B.: **You can't downgrade your license or choose shorter license duration. It's only possible to upgrade it.**

The account will be charged with corresponding amount of money and plan duration will be applied for minimum number of time units for this plan. But we advise that you should be trying to decide what functionality and for what time you need in advance in order to avoid upgrading your plan before it expired.

Most likely you won't need all these steps because now you can buy unlimited license (since version 0.61.1).

2.2 Uploading your webpage.

Now we are ready to finally generate and upload the web page that will be synchronized with the front panel. First we'll discuss the simplest scenario when you need to press only one button to go. There are many other options discussed in other documents and in other sections of this reference. However, to get started we'll stick to hosting your webpage on vfpsoft.com and will not make any changes in the web page.

If your target VI (the VI with a front panel that you want to synchronize with a web page) is running all you have to do is to press 'Start' button. If everything went well, you'll see corresponding message in the status bar ('Web page was successfully uploaded') and a new target URL appearing in the 'Target URL' text field (fig. 2.2.1):

Figure 2.2.1 – Address of the web page available for you in the 'Target URL' indicator.

Such a page name (hash-like) is generated in order to avoid name collisions with other users. You can use other names you think appropriate by modifying corresponding fields on the 'Upload' tab (available in 'Pro' and 'Deluxe' plans). If you want to host the page yourself, you have a choice of uploading it in the HTTP POST variable to the server side script, or uploading it via FTP.

For another example of starting using Publishing Wizard from scratch, please go to '*LabVIEW WebPager – Reference Guide – Absolute Beginner*' document, chapter 4 'Launching Publishing Wizard for the first time'. There you'll find more details explanations on how to use WebPager Wizard with pictures;)

This document will be extended in future versions to explain how to use those and all other fields.