

# USAGE AGENT - ISP Monitoring Tools



Version 9.0.7.0

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## Introduction

The Usage Agent tool set is designed to help manage your ISP data usage without having to log into your ISP usage page. It can optionally monitor your network card throughput and produce reports on usage. Compatible with Windows 2000, Windows XP, Vista, Linux (and possibly Mac) via Mono. You will need Dot Net Framework V2.0 installed on win2k and XP, available [here](#) or the latest version of Mono for Linux and Mac.

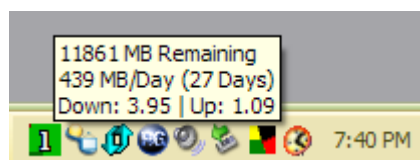
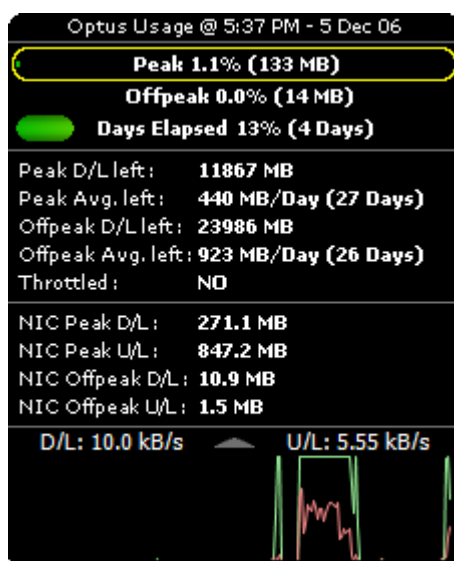
Usage Agent consists of a number of applications:

### Usage Agent Configuration (UAConfiguration.exe)

This application configures all the tools provided by Usage Agent.

### Usage Agent Tray Icon (UATrayIcon.exe)

This application displays ISP usage information and (optionally) live NIC stats on both a windows form and in the icon tray.



Note: NIC graph unsupported on Mono

### Usage Agent Image (UAIImage.exe)

This application creates an image of your ISP usage information and (optionally) NIC stats. It can be used in conjunction with a widget application like Windows Sidebar, Samurize or with UA Wallpaper.

### Usage Agent Wallpaper (UAWallpaper.exe)

This application displays ISP internet usage information, as well as any web image, and merges them into your desktop wallpaper. It uses UALmage to create the ISP form image.

Benfits over Usage Agent Tray Icon:

- ISP stats are displayed on the wallpaper itself.
- Does not take up valuable system resources by staying constantly open.
- Records the same log data as other versions of Usage Agent.
- Has the same reporting functionality as other versions of Usage Agent.
- Allows display of any web image.

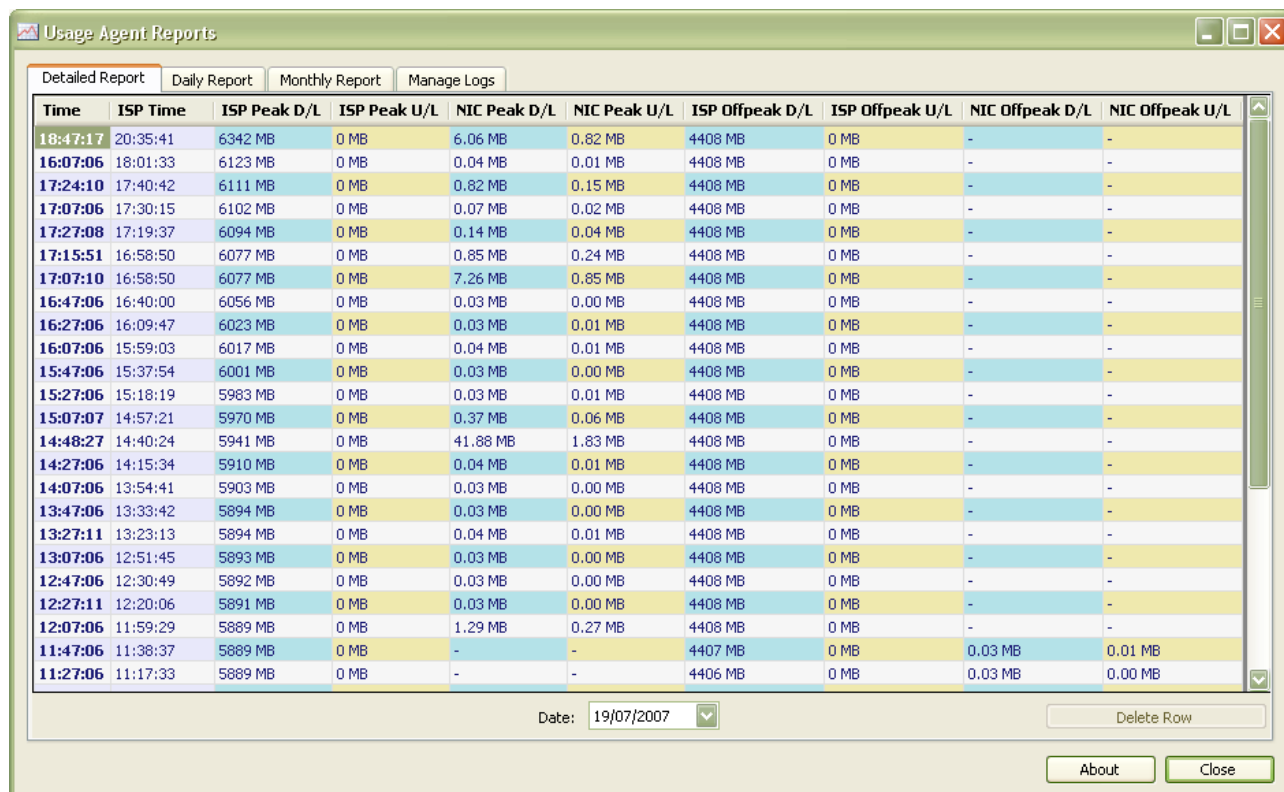
Drawbacks :

- Does not show live NIC upload / download usage.



## Usage Agent Reports (UAREports.exe)

This application is used to generate reports on the information recorded by Usage Agent Tray Icon and Usage Agent Wallpaper.



Time	ISP Time	ISP Peak D/L	ISP Peak U/L	NIC Peak D/L	NIC Peak U/L	ISP Offpeak D/L	ISP Offpeak U/L	NIC Offpeak D/L	NIC Offpeak U/L
18:47:17	20:35:41	6342 MB	0 MB	6.06 MB	0.82 MB	4408 MB	0 MB	-	-
16:07:06	18:01:33	6123 MB	0 MB	0.04 MB	0.01 MB	4408 MB	0 MB	-	-
17:24:10	17:40:42	6111 MB	0 MB	0.82 MB	0.15 MB	4408 MB	0 MB	-	-
17:07:06	17:30:15	6102 MB	0 MB	0.07 MB	0.02 MB	4408 MB	0 MB	-	-
17:27:08	17:19:37	6094 MB	0 MB	0.14 MB	0.04 MB	4408 MB	0 MB	-	-
17:15:51	16:58:50	6077 MB	0 MB	0.85 MB	0.24 MB	4408 MB	0 MB	-	-
17:07:10	16:58:50	6077 MB	0 MB	7.26 MB	0.85 MB	4408 MB	0 MB	-	-
16:47:06	16:40:00	6056 MB	0 MB	0.03 MB	0.00 MB	4408 MB	0 MB	-	-
16:27:06	16:09:47	6023 MB	0 MB	0.03 MB	0.01 MB	4408 MB	0 MB	-	-
16:07:06	15:59:03	6017 MB	0 MB	0.04 MB	0.01 MB	4408 MB	0 MB	-	-
15:47:06	15:37:54	6001 MB	0 MB	0.03 MB	0.00 MB	4408 MB	0 MB	-	-
15:27:06	15:18:19	5983 MB	0 MB	0.03 MB	0.01 MB	4408 MB	0 MB	-	-
15:07:07	14:57:21	5970 MB	0 MB	0.37 MB	0.06 MB	4408 MB	0 MB	-	-
14:48:27	14:40:24	5941 MB	0 MB	41.88 MB	1.83 MB	4408 MB	0 MB	-	-
14:27:06	14:15:34	5910 MB	0 MB	0.04 MB	0.01 MB	4408 MB	0 MB	-	-
14:07:06	13:54:41	5903 MB	0 MB	0.03 MB	0.00 MB	4408 MB	0 MB	-	-
13:47:06	13:33:42	5894 MB	0 MB	0.03 MB	0.00 MB	4408 MB	0 MB	-	-
13:27:11	13:23:13	5894 MB	0 MB	0.04 MB	0.01 MB	4408 MB	0 MB	-	-
13:07:06	12:51:45	5893 MB	0 MB	0.03 MB	0.00 MB	4408 MB	0 MB	-	-
12:47:06	12:30:49	5892 MB	0 MB	0.03 MB	0.00 MB	4408 MB	0 MB	-	-
12:27:11	12:20:06	5891 MB	0 MB	0.03 MB	0.00 MB	4408 MB	0 MB	-	-
12:07:06	11:59:29	5889 MB	0 MB	1.29 MB	0.27 MB	4408 MB	0 MB	-	-
11:47:06	11:38:37	5889 MB	0 MB	-	-	4407 MB	0 MB	0.03 MB	0.01 MB
11:27:06	11:17:33	5889 MB	0 MB	-	-	4406 MB	0 MB	0.03 MB	0.00 MB

Information can be grouped by 24 hours, Daily or Monthly.

## Usage Agent Update (UAUpdate.exe)

This application checks the Usage Agent website for updates and will optionally download the latest version. You must manually overwrite the previous version to upgrade.

## Usage Agent Shutdown Update (UAShutdownUpdate.exe)

This application writes an entry to the log file, recording NIC stats changes. If both NIC monitoring and logging are enabled it will automatically run on Windows shutdown. It will NOT update ISP stats via the internet as this may slow down the shutdown process.

*Note: Unsupported on Mono*

## UANotify.exe (UANotify.exe)

This application is executed by UATrayIcon and UALmage once per day. When run, it loads a page on the Usage Agent web site which is then used for tracking purposes by Google Analytics.

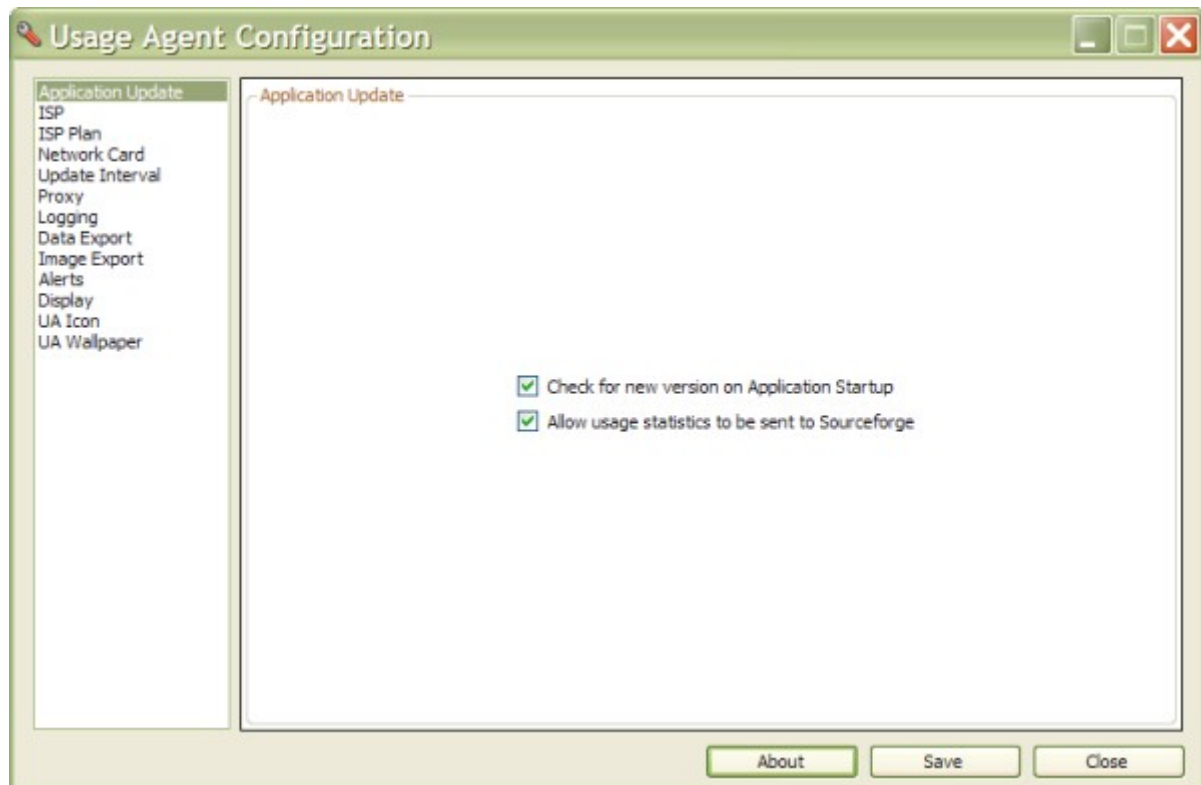
*Note: Unsupported on Mono*

## Setup Instructions

Prior to running any of the Usage Agent applications, you will need to run UAConfiguration. This sets your ISP details as well as the behaviour of the other Usage Agent applications. When first run, you start at the first entry and make your way to the last, changing the settings as you go. Note that under mono certain

options are hidden as they are not used. The configuration file is written to “C:\Documents and Settings\All Users\Application Data\UsageAgent\UsageAgent.cfg” under Windows and the current folder under Linux.

*Application Update:*



Tick if you want to check for a new version each time UA Icon is started.

Tick if you want to allow usage statistics to be sent to Sourceforge. No personally identifiable data is sent, and it only “pings” home once per day when enabled.

ISP:

The 'Usage Agent Configuration' window has a sidebar on the left with the following items: Application Update, ISP (selected), ISP Plan, Network Card, Update Interval, Proxy, Logging, Data Export, Image Export, Alerts, Display, UA Icon, and UA Wallpaper. The main area is titled 'ISP' and contains three fields: 'ISP:' with a dropdown menu showing 'Optus', 'Username:' with a text box containing 'myusername', and 'Password:' with a text box containing '\*\*\*\*\*'. At the bottom are three buttons: 'About', 'Save', and 'Close'.

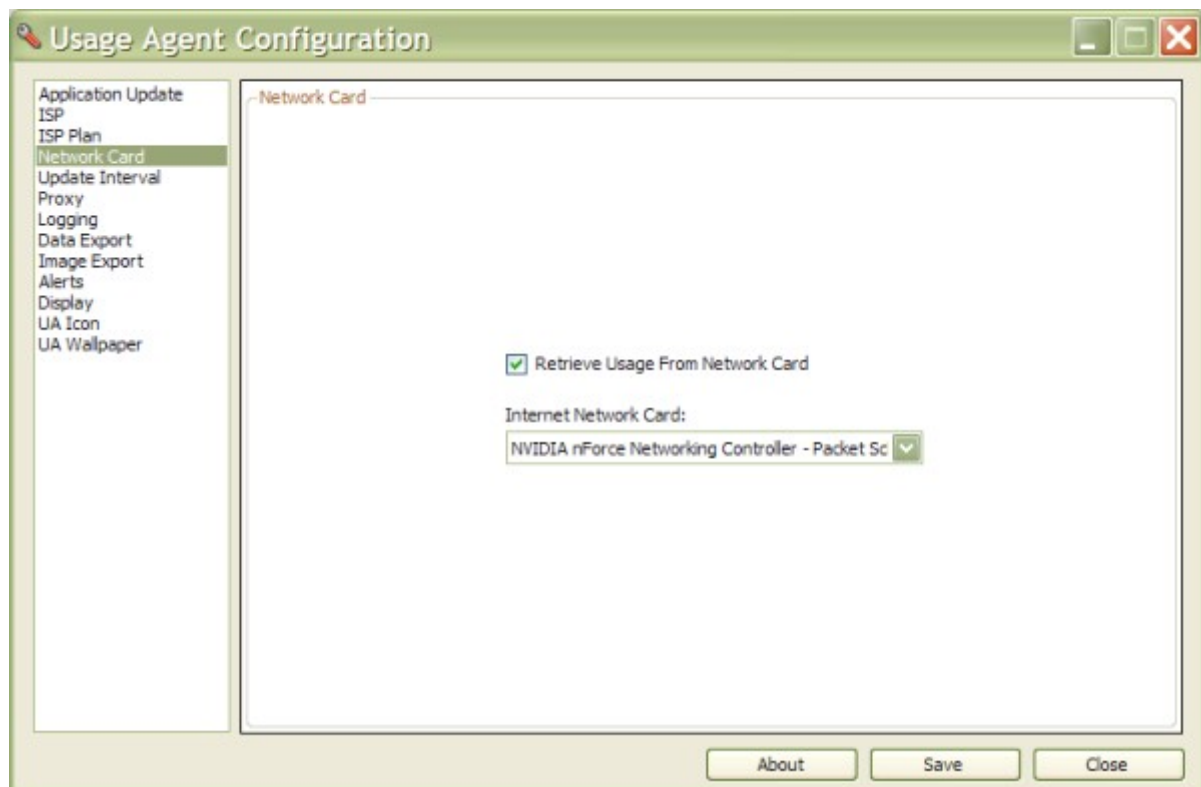
Choose your ISP from the dropdown list. Your password is obfuscated and stored in “account.dat”.

ISP Plan:

The 'Usage Agent Configuration' window is now on the 'ISP Plan' tab. The sidebar is the same, but 'ISP Plan' is selected. The main area is titled 'ISP Plan' and contains several sections: 'Peak Settings' with 'Peak Unlimited:' (No), 'Peak Limit: (MB)' (12000), and 'What happens when Peak limit reached:' (Shaped); 'Excess Charges Applicable:' (No); 'Cost Settings' with 'Excess Rate: (\$ Per MB)' and 'Max Excess Charge: (\$)'; 'Offpeak Available:' (Yes); 'Offpeak Settings' with 'Offpeak Time (24 Hr):' (0 to 12), 'Offpeak Time Zone:' (Sydney), 'Offpeak Unlimited:' (No), 'Offpeak Limit: (MB)' (24000), 'Weekends Unlimited:' (No), 'What happens when Offpeak limit reached:' (Usage taken from F), and 'Offpeak available when Peak limit reached:' (No); 'Rollover Settings' with 'Rollover Day:' (1), 'Uploads Counted:' (No), 'Upload Value Available:' (No), and 'WAIX Available:' (No). At the bottom are three buttons: 'About', 'Save', and 'Close'.

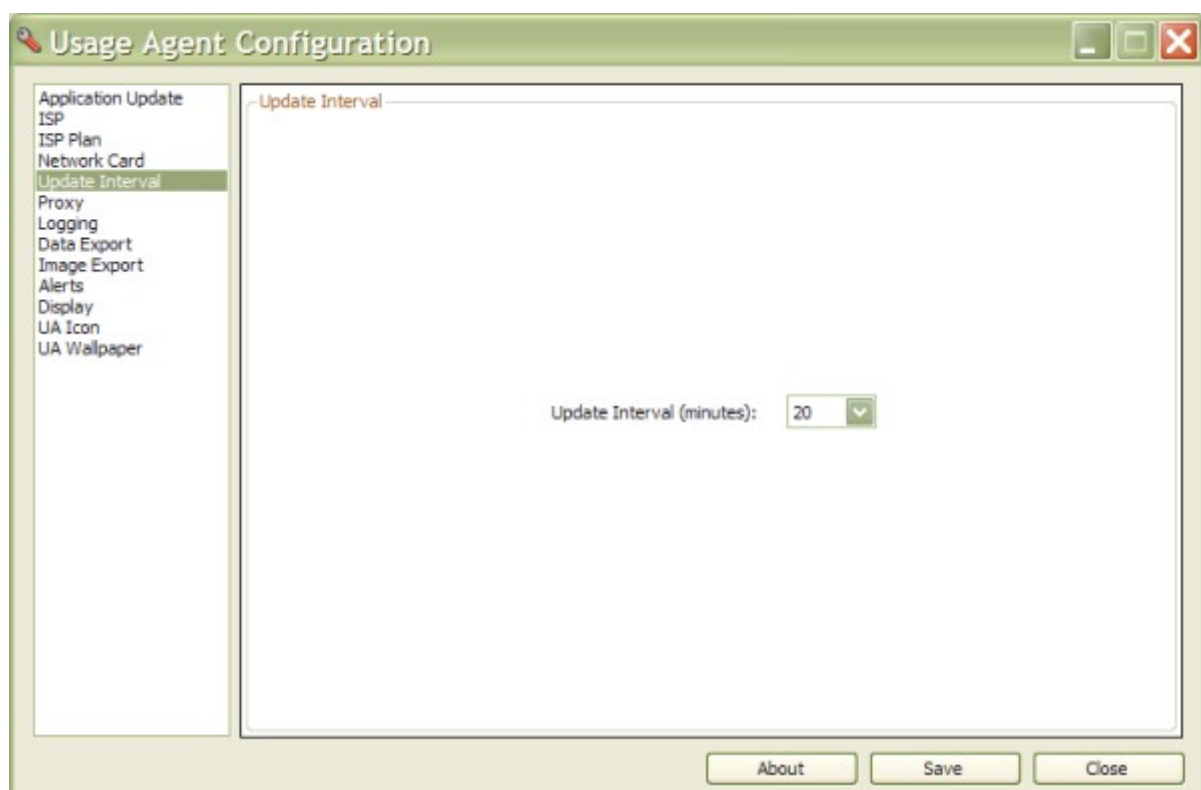
This page is used to define your ISP plan details. Enter the details for each field as relevant to you. Note: this information is no longer automatically extracted from your ISP.

Network Card:



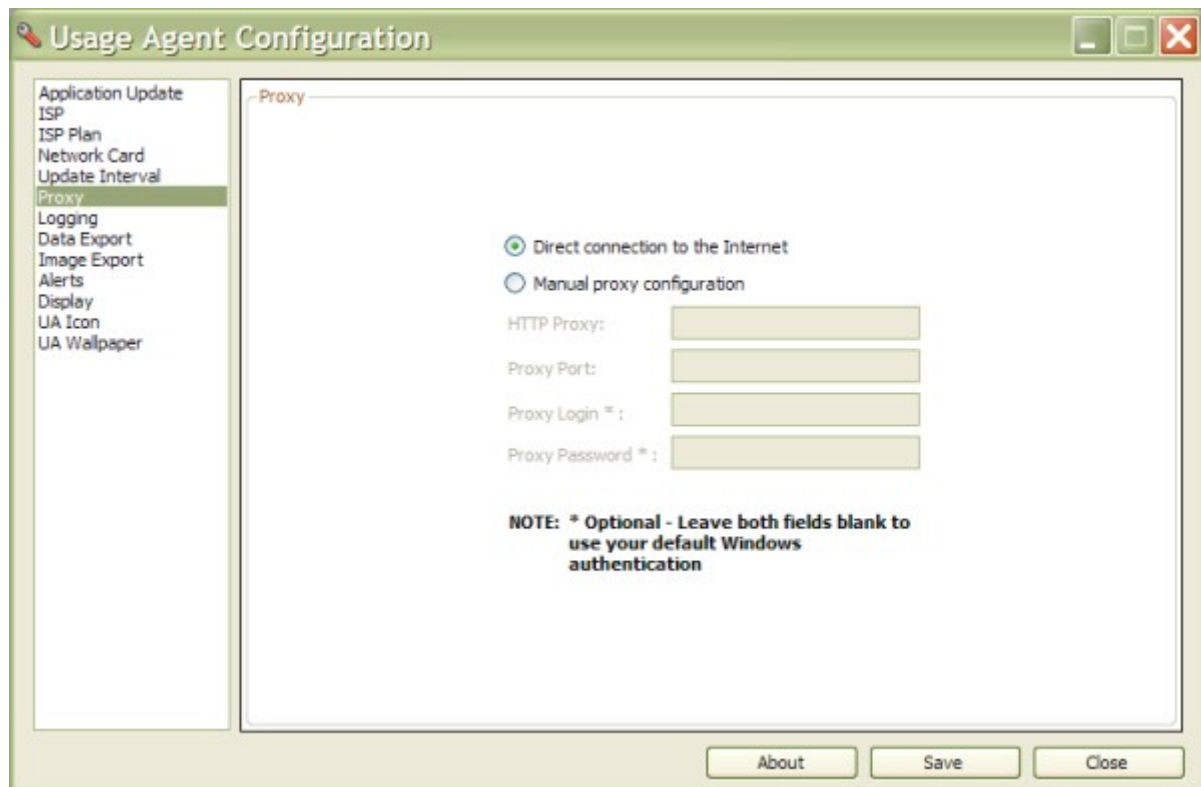
If you want to monitor your Network Card throughput, tick the relevant box, then choose your card from the dropdown list.

*Update Interval:*



This sets how often you want to retrieve usage stats from your ISP. Note that some ISP's only update once a day, so setting this to a lower value would only be of use to refresh your NIC stats or to update your wallpaper forms.

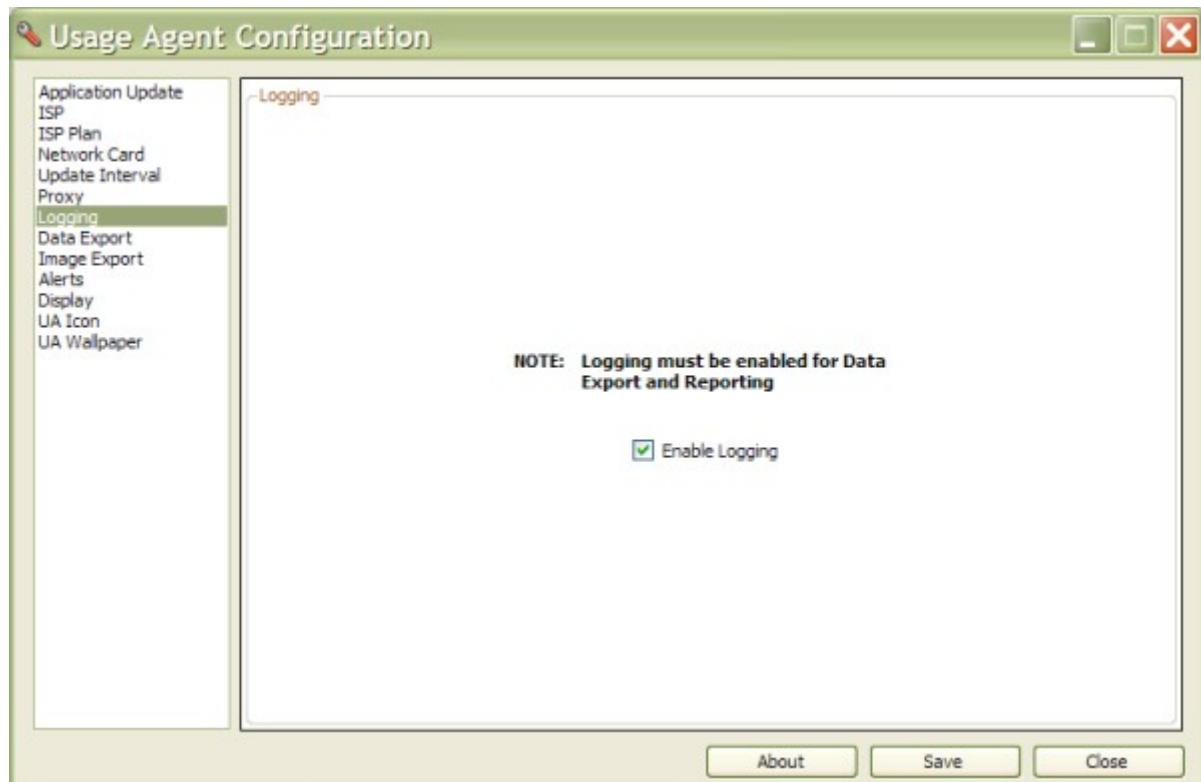
Proxy:



The image shows the 'Usage Agent Configuration' window with the 'Proxy' tab selected. The left sidebar lists various settings: Application Update, ISP, ISP Plan, Network Card, Update Interval, Proxy (selected), Logging, Data Export, Image Export, Alerts, Display, UA Icon, and UA Wallpaper. The main area of the window is titled 'Proxy' and contains two radio buttons: 'Direct connection to the Internet' (which is selected) and 'Manual proxy configuration'. Below these are four text input fields: 'HTTP Proxy:', 'Proxy Port:', 'Proxy Login \*:', and 'Proxy Password \*:'. A note at the bottom states: 'NOTE: \* Optional - Leave both fields blank to use your default Windows authentication'. At the bottom right of the window are three buttons: 'About', 'Save', and 'Close'.

If you need to connect to the Internet via a proxy server (i.e. corporate lan) then you can enter the relevant values here to enable proxy support. Your password is obfuscated and stored in "proxy.dat".

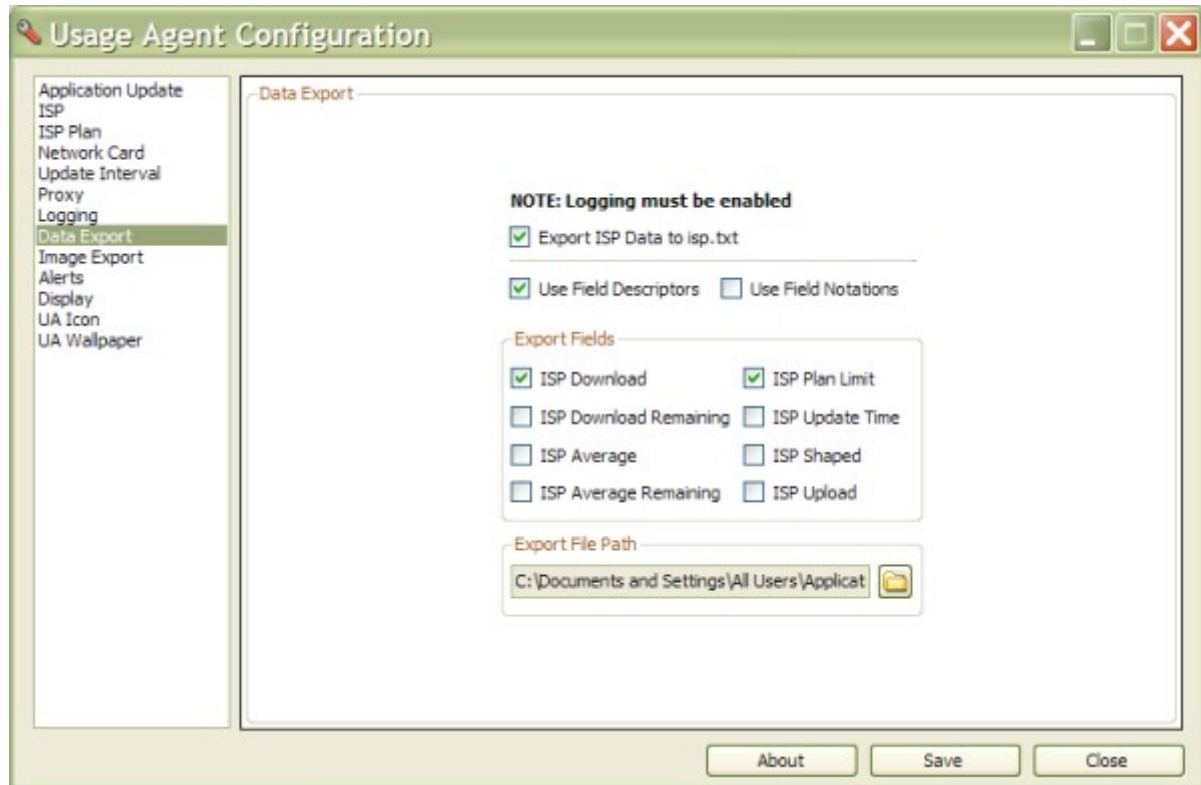
Logging:



The image shows the 'Usage Agent Configuration' window with the 'Logging' tab selected. The left sidebar is the same as in the previous image, with 'Logging' now selected. The main area of the window is titled 'Logging' and contains a note: 'NOTE: Logging must be enabled for Data Export and Reporting'. Below the note is a checkbox labeled 'Enable Logging', which is currently checked. At the bottom right of the window are three buttons: 'About', 'Save', and 'Close'.

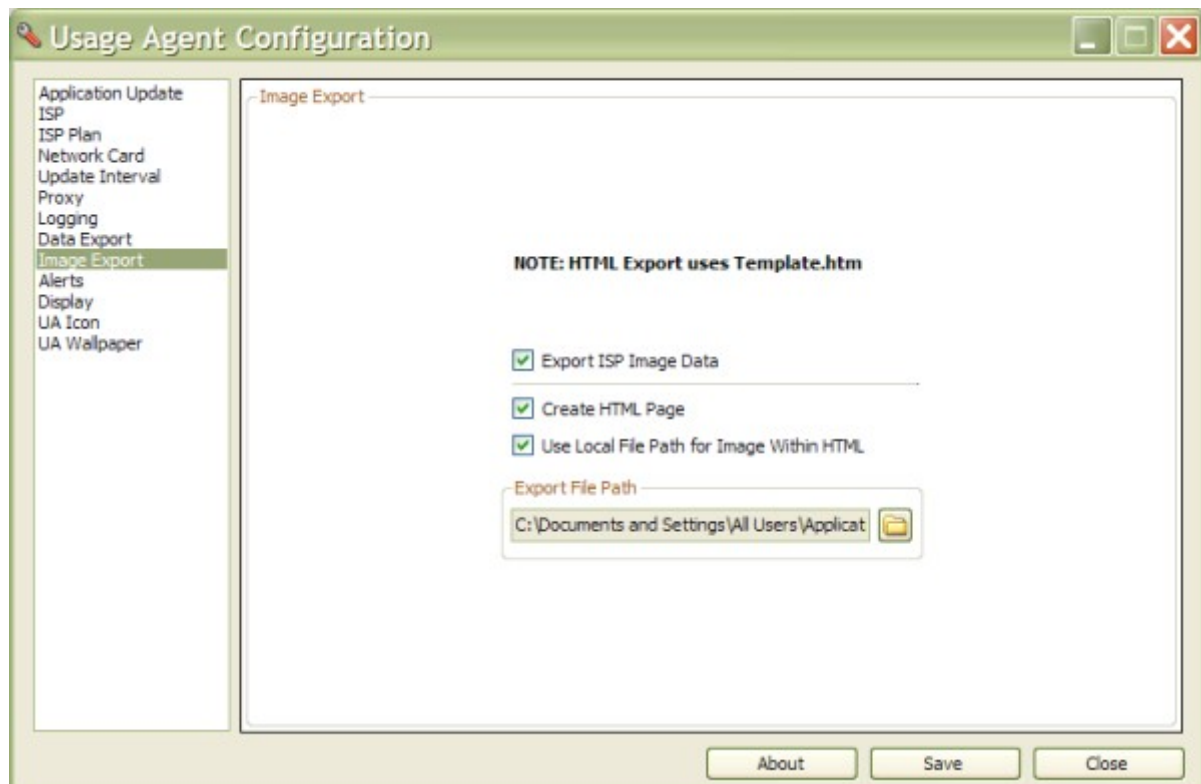
Tick this option to enable logging. Logging is required for data export and reporting.

### Data Export:



Use these options to dump values recorded by Usage Agent to the text file "isp.txt". Useful for importation into other applications like Samurize.

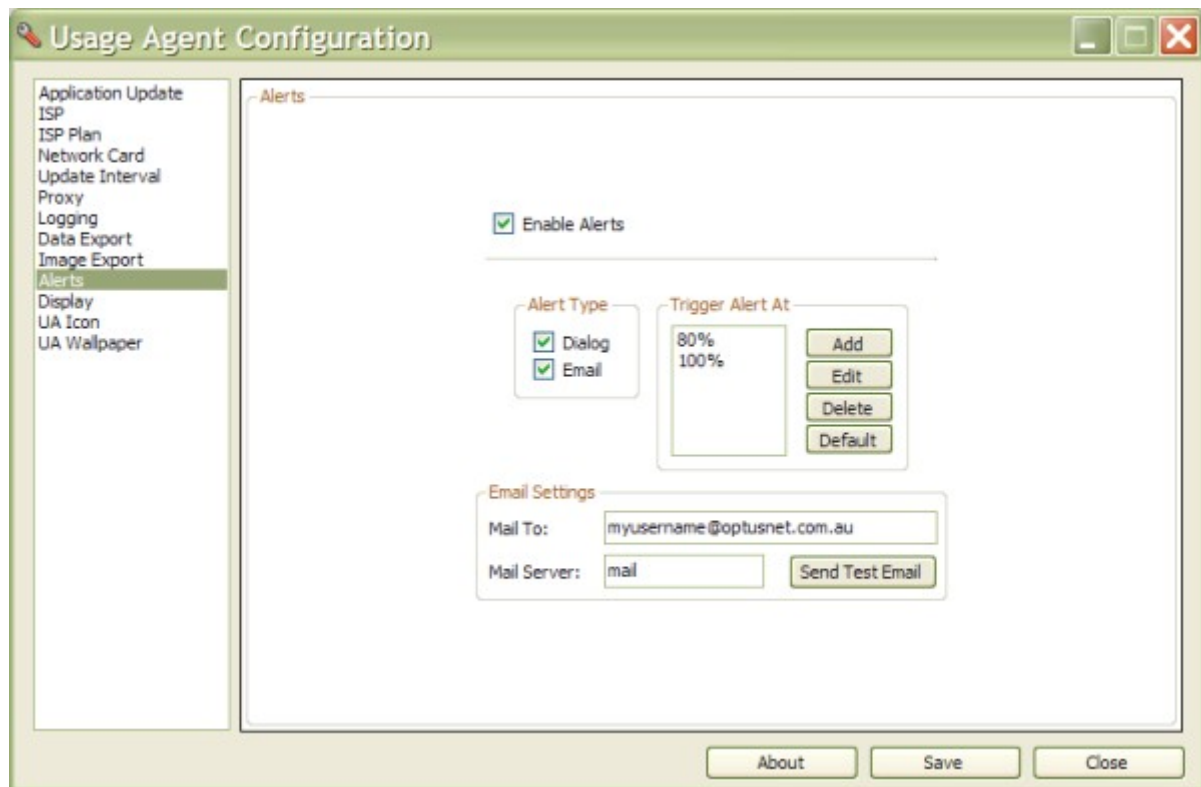
### Image Export:





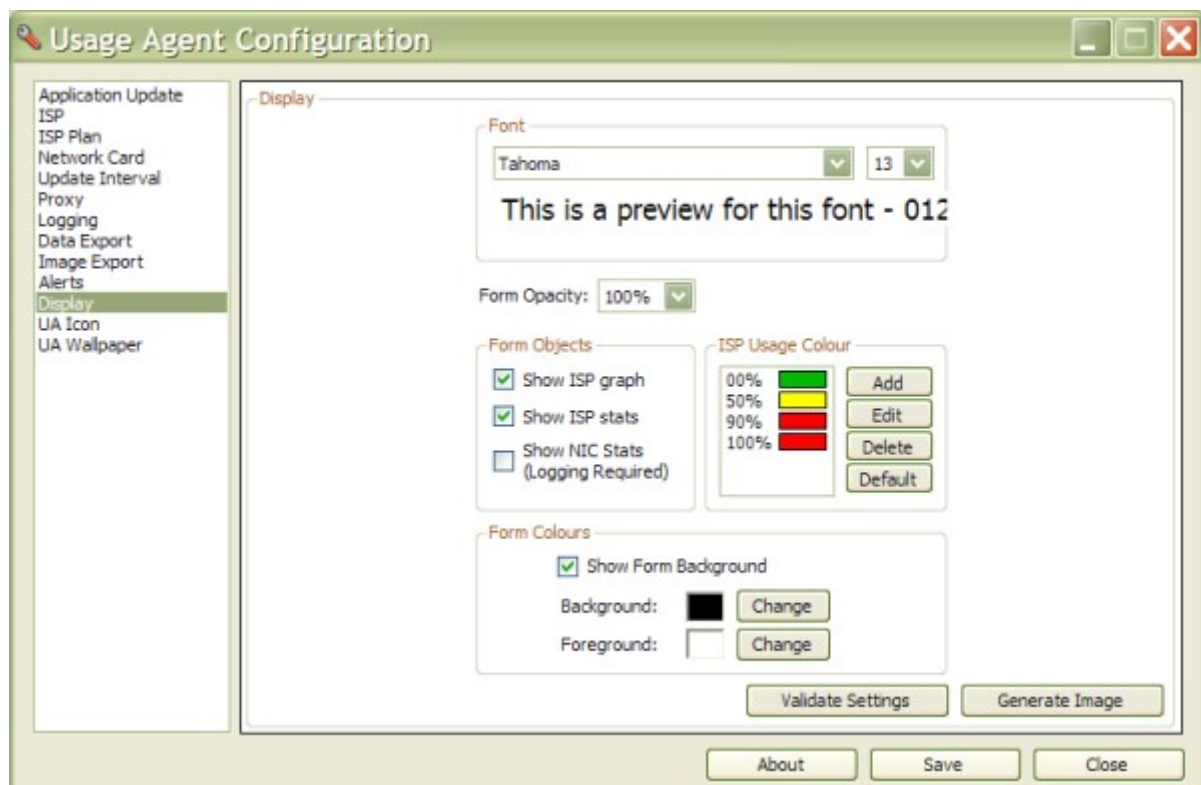
Export the generated image file and optionally create a HTML page for viewing through a web browser.

*Alerts:*



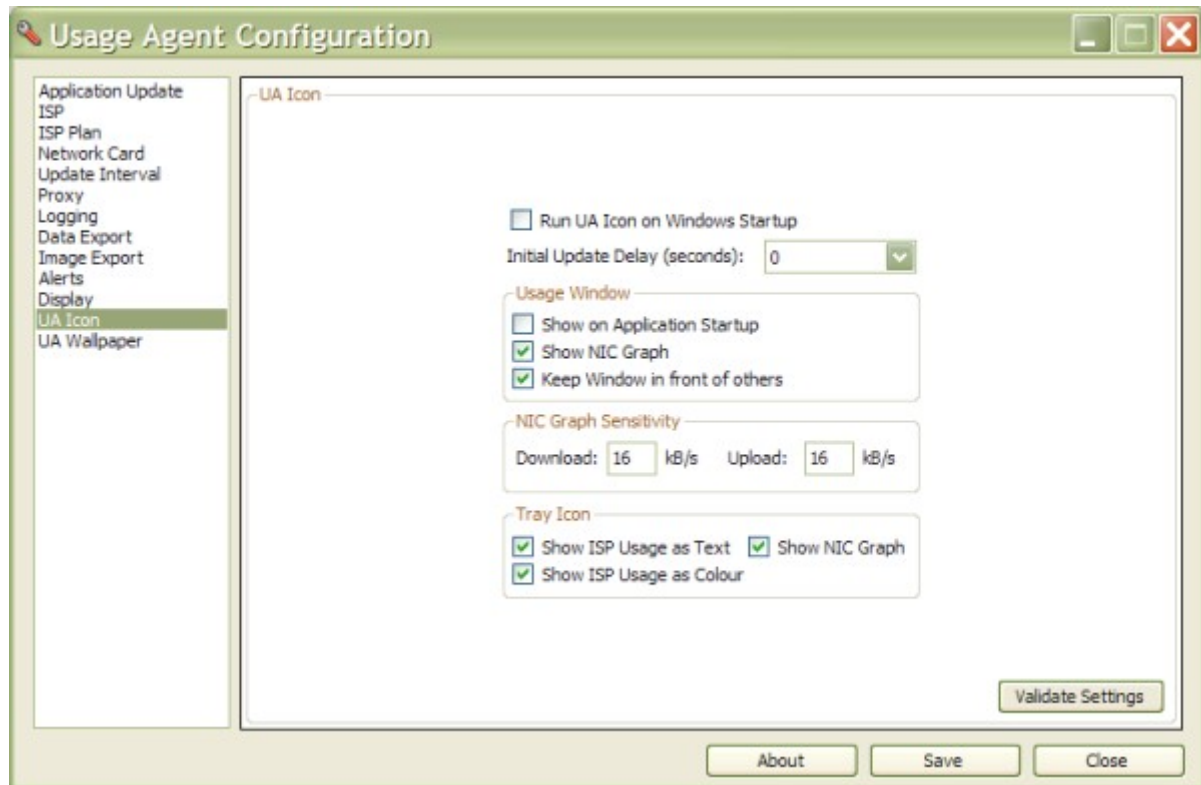
Generate a Dialog Box message and/or Email once usage limit(s) have been reached.

*Display:*



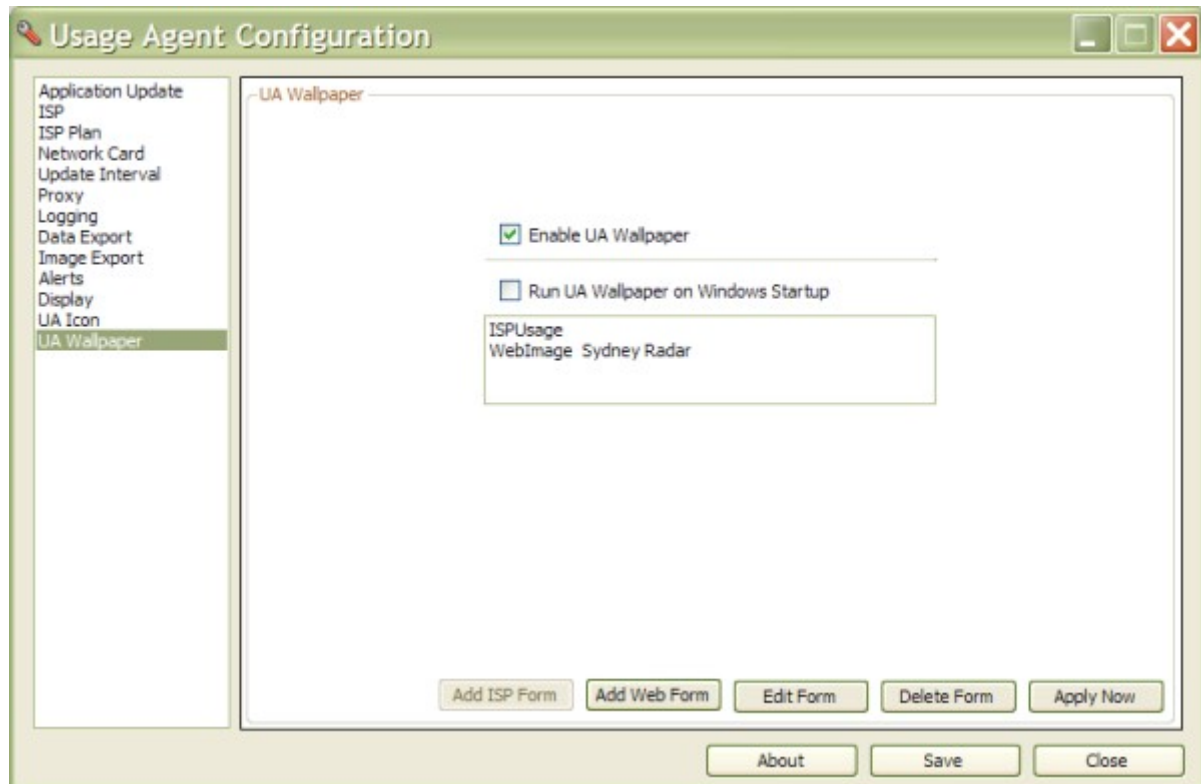
These options define the look of the ISP forms generated by Usage Agent. ISP Usage Colours defines the colour graduations used by the bar graphs as well as the colour of the icon tray background (if shown). The show form background option only affects the look of the ISP form generated by UA Image (and therefore UA Wallpaper).

*UA Icon:*



These options are specific to UA Tray Icon. Changing the initial update delay should not be necessary for most people, however it may be of assistance to some – allowing UA Tray Icon to correctly retrieve ISP data on first attempt. NIC Graph sensitivity sets the amount of change required for a value to reach the top of the graph. It does not affect your NIC throughput.

## UA Wallpaper:



Here you can define the Wallpaper forms to be embedded. The ISP Usage form is included by default. You can have only one ISP form at a time, however you can have as many web forms as you like. When you save your configuration, scheduled tasks entries are automatically created that run UA Wallpaper at the update interval previously defined.

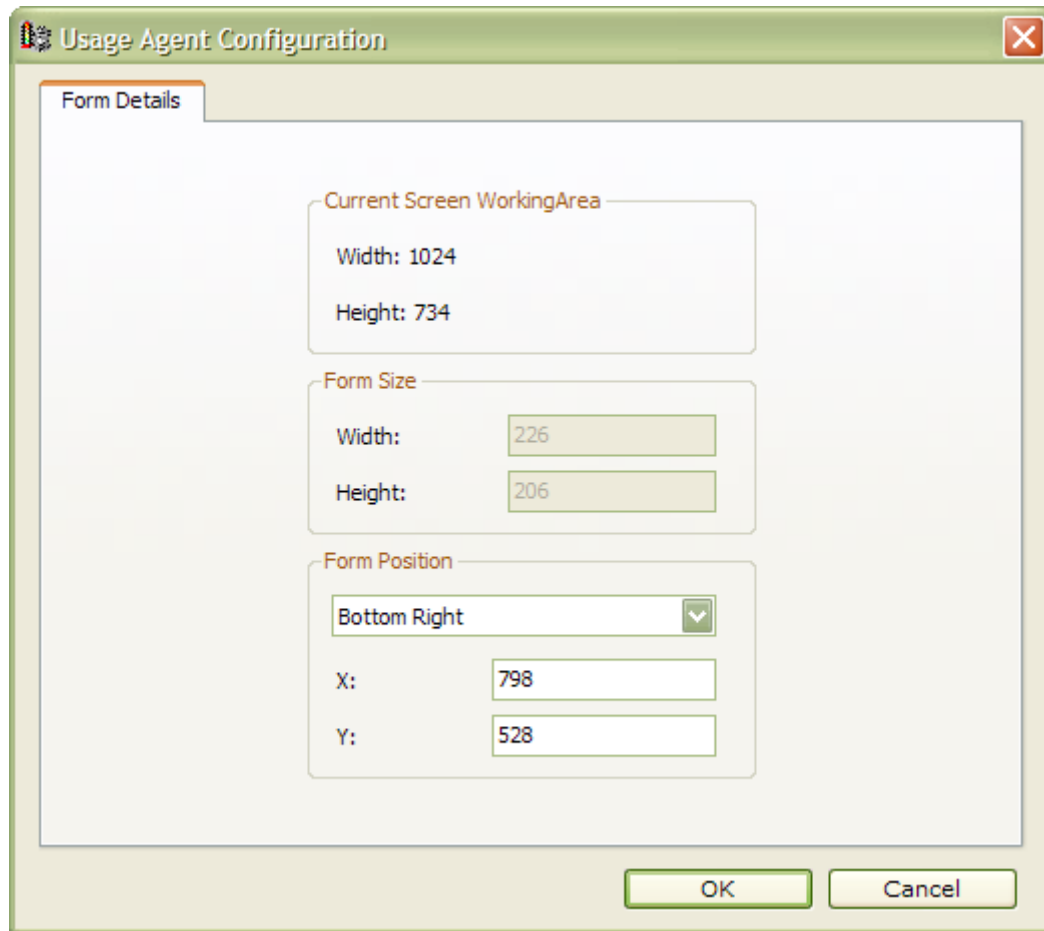
### Additional notes for Mono

Under Mono you will have an additional option to set the Unix 'Set Wallpaper' command. Choose an option from the WDM drop down and it will preset the command and arguments options. You can then further tweak these settings if required.

When UA Wallpaper is enabled and the 'Save' button is pressed, cron entries are automatically created.

You must place the background wallpaper in the same folder as UA, and rename it to "source.jpg" (or any other supported image extension, ie png, bmp, etc)

ISP Form:

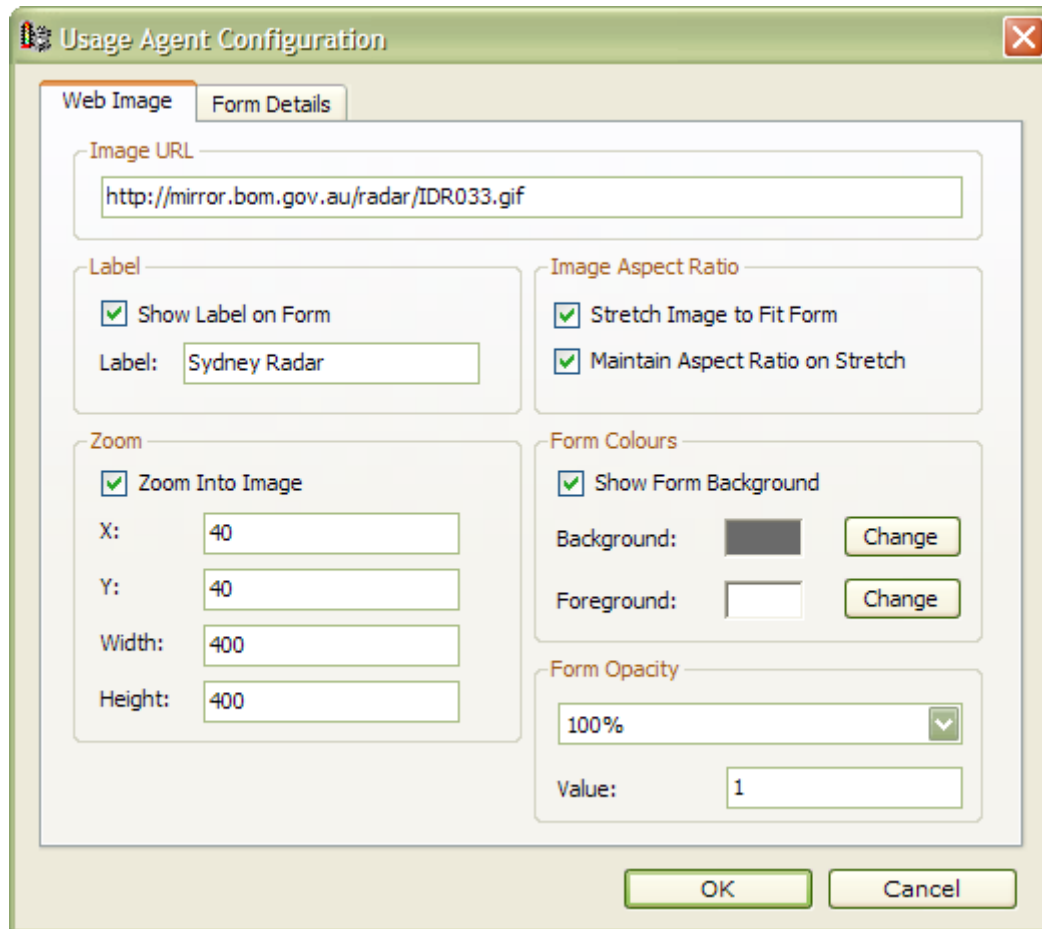


The image shows a 'Usage Agent Configuration' dialog box with a 'Form Details' tab. It contains three sections: 'Current Screen WorkingArea' with 'Width: 1024' and 'Height: 734'; 'Form Size' with 'Width: 226' and 'Height: 206' in input fields; and 'Form Position' with a dropdown menu set to 'Bottom Right' and 'X: 798' and 'Y: 528' in input fields. 'OK' and 'Cancel' buttons are at the bottom right.

Section	Property	Value
Current Screen WorkingArea	Width	1024
	Height	734
Form Size	Width	226
	Height	206
Form Position	Position	Bottom Right
	X	798
	Y	528

The form size is calculated from the information gathered from your ISP in addition to the settings you have defined in the display options. Choose a form position using the dropdown menu, or set the X and Y values manually.

## Web Forms:



The image shows a 'Usage Agent Configuration' dialog box with two tabs: 'Web Image' and 'Form Details'. The 'Web Image' tab is active. It contains several sections: 'Image URL' with a text box containing 'http://mirror.bom.gov.au/radar/IDR033.gif'; 'Label' with a checked box 'Show Label on Form' and a text box 'Sydney Radar'; 'Image Aspect Ratio' with checked boxes 'Stretch Image to Fit Form' and 'Maintain Aspect Ratio on Stretch'; 'Zoom' with a checked box 'Zoom Into Image' and input boxes for X (40), Y (40), Width (400), and Height (400); 'Form Colours' with a checked box 'Show Form Background' and color pickers for Background (dark grey) and Foreground (white), each with a 'Change' button; and 'Form Opacity' with a dropdown set to '100%' and a 'Value' input box set to '1'. At the bottom are 'OK' and 'Cancel' buttons.

When choosing a web form image, you must enter the URL of the actual image, not that of the HTML page. As an example, let's set it up for Australian Bureau of Meteorology radar images.

This is the main URL for choosing a radar image:

<http://mirror.bom.gov.au/weather/radar/>

Click on your area of interest. ie, For Darwin you will see the URL looking like this:

<http://mirror.bom.gov.au/products/IDR633.shtml>

This is the URL to a HTML page, not the actual image itself (which is what you need). However from the above URL you can derive what the actual image is by using the following:

<http://mirror.bom.gov.au/radar/IDR633.gif>

The underlined text is always the same, and the bold text is taken from the original URL.

ie.

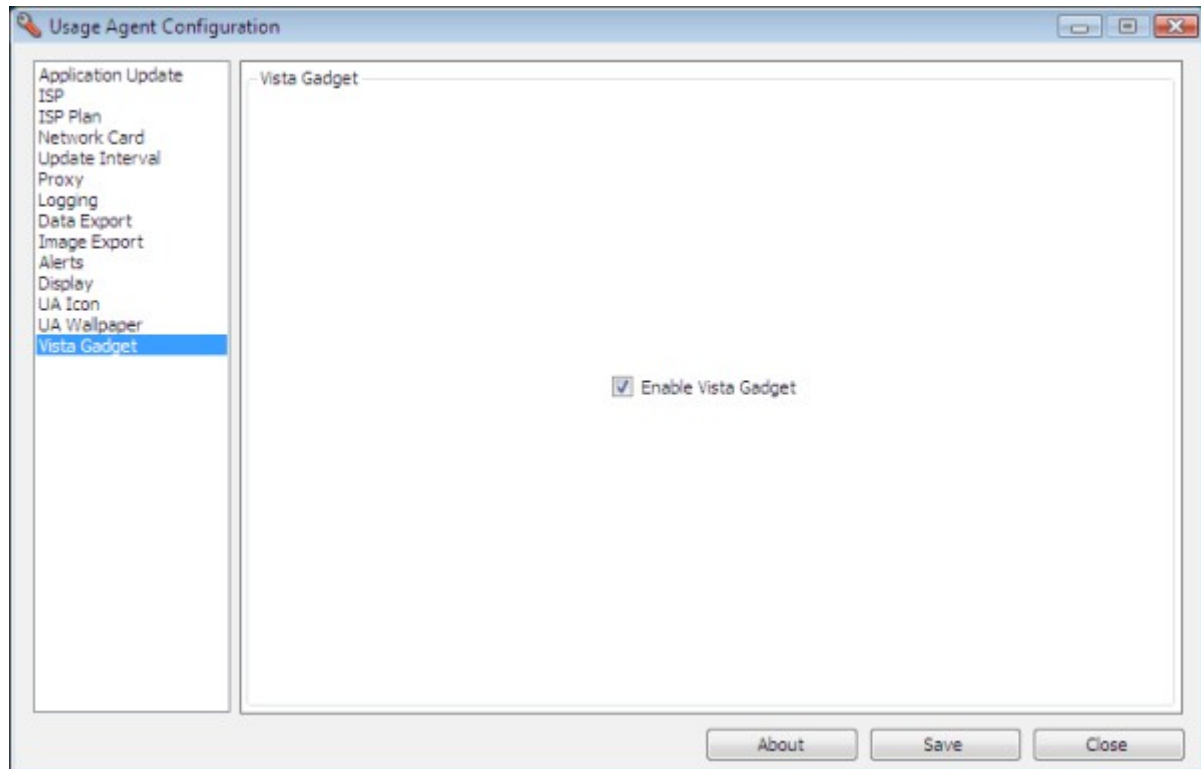
Sydney:

<http://mirror.bom.gov.au/radar/IDR033.gif>

Melbourne:

<http://mirror.bom.gov.au/radar/IDR023.gif>

## Vista Gadget:



If running Vista, the Vista Gadget option will become available. To install the gadget files, tick "Enable Vista Gadget" in UAConfiguration and click save. When you do this a number of things happen:

- Connects to your ISP and validates your connection.
- Creates an image used for the gadget.
- Overwrites any existing UsageAgent gadget files.
- Adds UAImage.exe to the scheduled tasks

Now use the Sidebar manager to add the "Usage Agent" gadget. Double click the gadget to show/hide the flyout menu.

Note that each time you run UAConfiguration and change something that effects the gadget size, you'll need to close / open the gadget to see the changes.

The gadget polls `c:\programdata\usageagent\uaimage.png` every 10 secs and looks for a change in the last modified date. When a change is detected it will refresh to suit. In effect, the gadget does nothing other than show the image generated by the UAImage.exe scheduled task.

## Notes on Registry Changes

If you choose to start UATrayIcon or UAWallpaper when windows starts, or have NIC monitoring and logging enabled, UA Configuration will make changes to the following areas of the Windows Registry:

Startup:

"HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Run"

Shutdown:

"HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Group  
Policy\State\Machine\Scripts"

"HKEY\_LOCAL\_MACHINE\SOFTWARE\Policies\Microsoft\Windows\System\Scripts"

Please note that changes made to the shutdown process are not reflected in gpedit.msc. This is unfortunate, however there is no documentation available that describes how to make this happen.