

**Videstra**

Get the Most From  
Your Micro Local Cameras



# Web Publishing

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WITH VIDESTRA

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## Web Publishing Your Videstra® Managed Content

Videstra VestraView has many tools designed to automatically publish compelling and relevant content to your digital properties including *fully branded* content that will engage your on-line visitors and create sponsorship opportunities. With VestraView, always-current still images, timelapse movies, and even live video from your Micro Local Cameras can become part of your on-line presence. Web Publishing is available for every Micro Local camera managed by your Videstra system. Simply click on the Gear Icon for a camera and select the **Publishing** option!



*Before we dive into how to publish, let's explain the kinds of things you can publish from a camera using Videstra.*

### Images

The most basic thing you can publish to the web is a current still image. The Videstra system can automatically capture images from any camera and upload it to your website via FTP (File Transfer Protocol). Videstra can automatically update that image as often as every 60 seconds so your web site visitors will only see current images.

However, instead of posting simple, unadorned images, you will likely want to add branding and possibly some information about the image. Videstra's **Graphics Template Factory™** lets you design how your images will look when presented on your web page(s). With the Graphics Template Factory, you can add any of the following items:

- Logo (Branding)
- Sponsor banner
- Image Information (AKA Boilerplate)
- Current Weather Information for the camera's specific geo-location

By adding elements of branding, image information and current weather data the images become a real point of interest for your web site visitors. Having the images automatically update every minute means it is not only interesting, but it is *relevant*.



**Note:** *The videstra system lets you publish the same image with different branding or sponsorship to two locations.*

## Timelapse Movies

A more advanced approach is to publish automatically created timelapse movies from cameras to your web site. With timelapse movies your web site can show the cameras view for the previous 30 minutes to 3 hours (Selected Time Period). With a suggested update cycle of 5 minutes, the timelapse movie will represent everything the camera has recorded for the past Selected Time Period (i.e. 30 minutes to 3 hours) right up to the present. Like images, all the following can be included as part of the timelapse movie:

- Logo (Branding)
- Sponsor banner
- Image Information (AKA Boilerplate)
- Current Weather Information for the camera's specific location

Timelapse movies are an easy, yet powerful way to add interesting and relevant content for your web site visitors.

## Live to Web (VestraShare™)

With Videstra VestraShare your cameras can be presented live on your web site. This gives your web site visitors direct access to see live, real-time video from your Micro-Local cameras.

Videstra offers a special feed for your cameras and a custom player for these live feeds that is easy to integrate into your site.

While images and timelapse movies do not incur additional cost to publish to your web site – VestraShare does require a monthly subscription to our VestraShare service and protected player. The VestraShare player is designed to reduce unnecessary bandwidth usage by automatically stopping after two minutes of live play. Users may start the stream again if they wish to continue watching, however most users only view static shots from live cameras for around 30 seconds. The two-minute timeout is in place to eliminate bandwidth usage when a user forgets and buries a window under other applications. It also discourages “squatters” from accessing a live feed continuously.

Branding, image information and current weather are not available with Videstra LiveShare. Instead, these elements should be part of the presentation page on which the live streams are viewed.

To qualify for VestraShare, cameras must either be on a public IP Address, or incoming ports on the private address for accessing the cameras rtsp stream must be made available. Typically this will be port 554, but any port higher than 1024 can be configured.

**Note:** *VestraShare has the added benefit of allowing other stations in your group (by permission only) to use your cameras as easily as they use their own (except PTZ functionality is reserved only for you).*

Please contact Videstra for more information about VestraShare!

## Summary

Current still images, timelapse movies and live video are all highly engaging content, easy to set up, fully customizable and typically attract sponsorship dollars.

## The Nuts and Bolts of Web Publishing with Videstra

The following is a guide to help you publish Videstra managed content to your web site. This document handles the specifics of publishing images and timelapse movies with branding, weather info, etc. If you have questions after reviewing this document please reach out to Videstra – we will be happy to walk you through the process. Contact us at [support@videstra.com](mailto:support@videstra.com).

### Setting Up the FTP with VxFTP<sup>2</sup>

Before you start creating images or timelapse movies for your web site we need to setup the method for *moving* the content to your website – which is usually done through various forms of FTP (File Transfer Protocol). To set this up you will use the Videstra VxFTP<sup>2</sup> program that is on your V-Manager desktop. The icon looks like this:

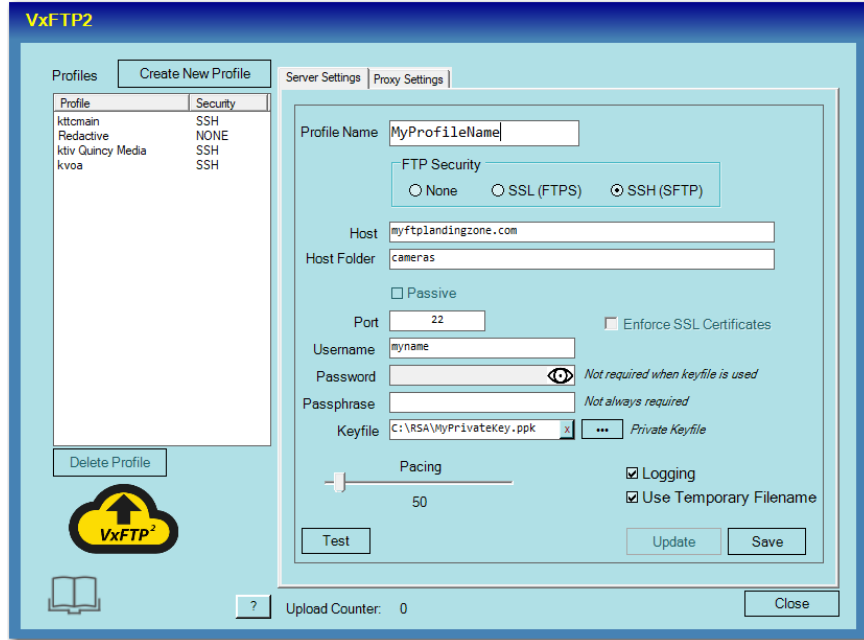


With VxFTP<sup>2</sup> you will create one or more *FTP Profiles* that will be used to move images and timelapse movies to your web site. VxFTP<sup>2</sup> supports FTP (non-secure), SFTP (Using SSH Security) and FTPS (Basic encryption). SFTP is the most secure, although for most purposes FTPS is sufficient.

<b>FTP</b>	<i>Easy but insecure. Usernames and Passwords can be accessed by clever hackers</i>
<b>FTPS</b>	<i>Easy and mostly secure. Usernames and Passwords are encrypted. Content is not.</i>
<b>SFTP</b>	<i>Requires a public/private key pair. Usernames, Passwords and Content are encrypted.</i>

SFTP requires the people who manage your web server to provide you with a private key file (these files end with .ppk) for you to transfer files. From your perspective, however, the process of setting up an FTP Profile with VxFTP<sup>2</sup> is pretty much the same regardless of which FTP protocol you are using.

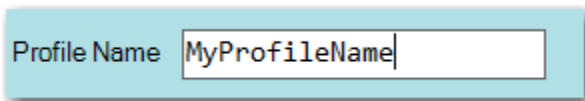
When you click on the VxFTP<sup>2</sup> icon it will start the profile editor. Here you can make one or more profiles. You may need more than one profile if you are publishing to more than one site or location on the Internet.



The person(s) who manage your web site will be able to give you all the details you need to create and test a VxFTP<sup>2</sup> profile. They will provide the following:

- Protocol (FTP, SFTP or FTPS)
- Hostname
- Host Folder
- FTP Port            Although VxFTP<sup>2</sup> will automatically set up the default ports for each protocol – your web site manager *may* have configured different ports. They will tell you when you ask for the FTP details.
- Username           Always required
- Password           Not required with SFTP (SSH)
- Passphrase         *Sometimes* required when using SFTP (SSH)
- Keyfile              Required when using SFTP (SSH)

When creating a VxFTP<sup>2</sup> profile give each profile a meaningful name.



Fill in the rest of the details from the information provided to you from your web site manager(s).

Pacing | Logging | Use Temporary Filename

There are three options that are important for you to understand.

Logging:            Unless there is a specific reason (and we can't think of any) please leave this checked.



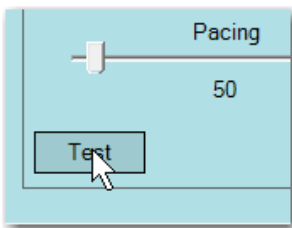
**Pacing:** Set this to a minimum of 50 or 100. This “slows” down the upload communications for servers that may be handling many simultaneous uploads. It’s just a safety precaution that add no significant time to the overall upload process.

**Use Temporary**

**Filenames:** We recommend you check this. Uploading files using a temporary filename will help improve your website caching mechanism and prevent visitors from occasionally accessing an image that has only been partially uploaded. Some servers may not accept a “rename” command and therefore may not allow this feature – but that is rare.

**Test the FTP Setup**

Click on the test button to see if everything works as expected.



You will get either a success or failure notice with an offer to see the log file.

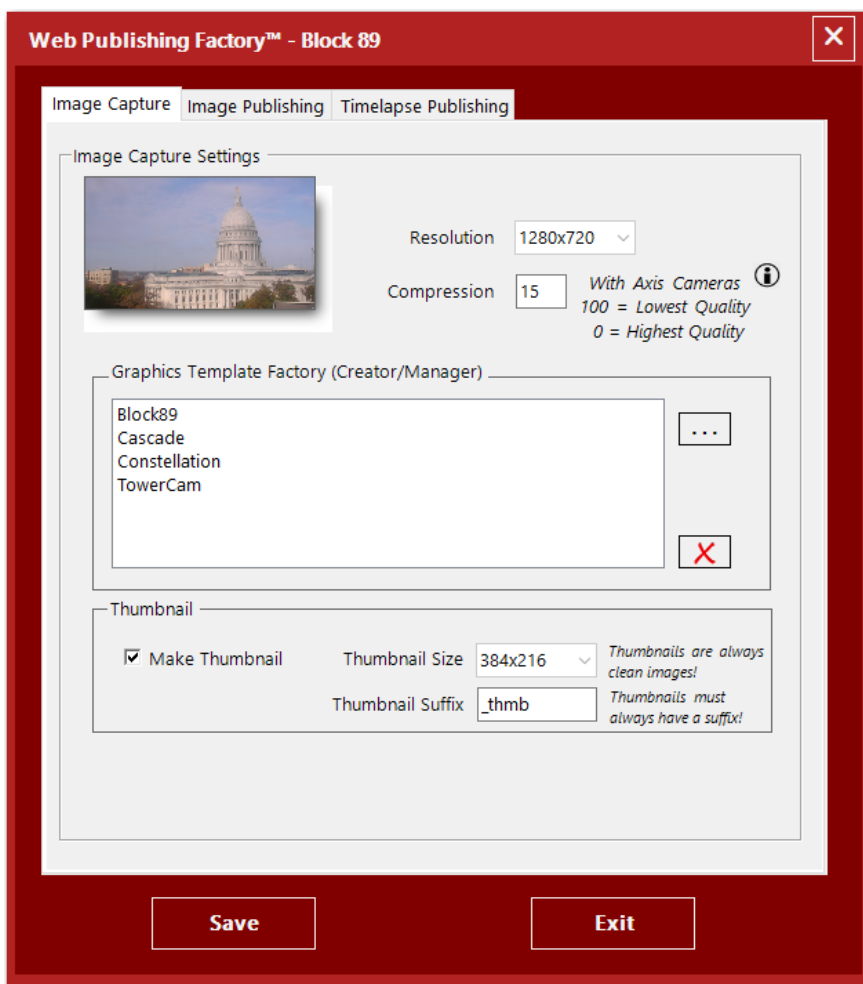
Once you have created any necessary profile(s) they are stored on the V-Manager and can then be used when you set up any camera for web publishing in the Web Publishing Factory.

## The Web Publishing Factory™

To enter the Videstra Web Publishing Factory: On the Videstra Camera Panel for which you want to begin web publishing click the gear icon.

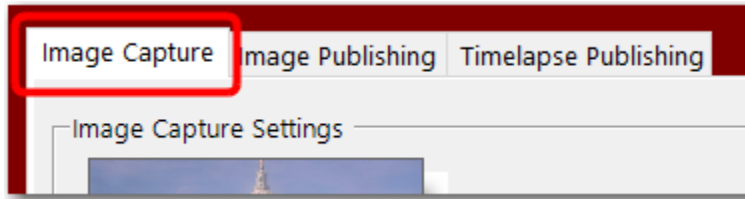


The Web Publishing Factory will now give you many options.



There are three tabs in the Web Publishing Factory: **Image Capture**, **Image Publishing**, and **Timelapse Publishing**. The following discusses each option in these tabs.

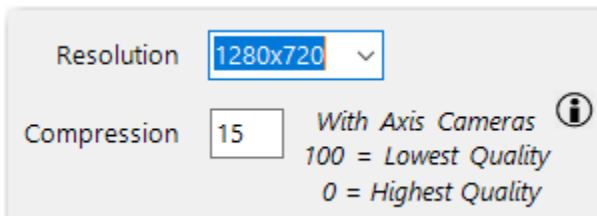
## Image Capture Tab



This is the *first* tab on the Publishing Factory dialog.

## Resolution/Compression

This tells the Videstra system what size to make all images captured for this camera panel for use in timelapse (either on-air or web published timelapses). This does NOT define the size of the image when



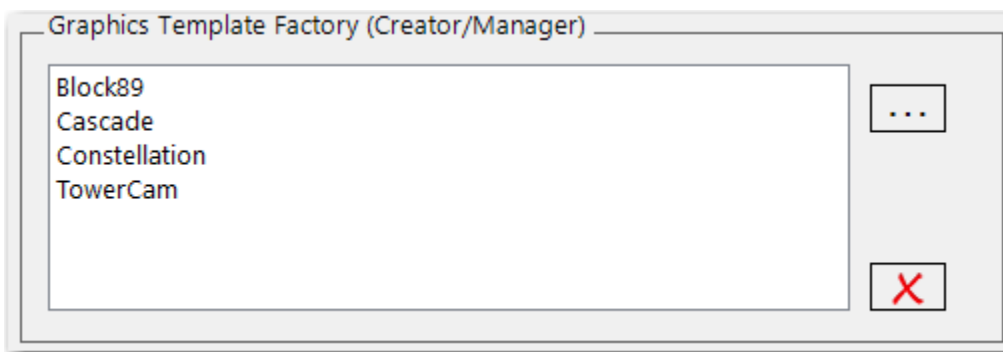
they are *published* (that you can do later) but has to do with originating quality. Different cameras will often offer different maximum resolution. It is best to set this to exactly what the camera is set for. For example, this should be set to 1280x720 for a camera set to operate at a resolution of

1280x720. This preserves the quality of what the camera is set to deliver.

Compression affects the quality of all images used for on-air or web publishing. Images from cameras are almost always jpg images and are subject to *lossy* compression. The number here represents how much (or little) you want to compress the images. Less compression means larger images (which can aggravate bandwidth issues). When possible, keep compression low.

## Graphics Template Factory™

This is a Global tool where you may create and edit Graphics Templates that are used with *all* Videstra Camera Panels. Access to the Graphics Template Factory is placed here for convenience. All templates created or edited here are available to all cameras.



With the Graphics Template Factory, you can create the overall branding, display of the images and timelapse movies you publish from a Videstra camera panel.

To edit an existing template, click and highlight the template you want to edit and then click the ellipses button. To create a new template just click the ellipses button without selecting a template.

If you want to delete a template highlight the one you want to remove and click the X button.

Once you are inside the Graphics Template Factory you can begin to design (or edit) the way your images (or timelapse movies) will appear on your web site.

We will discuss the Graphics Template Factory a little later in this document.

### Thumbnail

Thumbnails are small images used on web pages to provide visitors a clickable link to a larger image (or movie).

Thumbnail

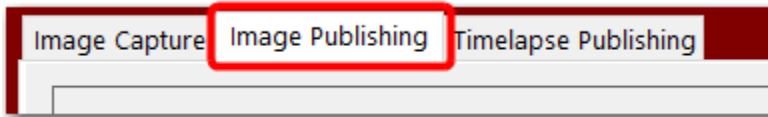
Make Thumbnail      Thumbnail Size 384x216      *Thumbnails are always clean images!*

Thumbnail Suffix \_thmb      *Thumbnails must always have a suffix!*

The Videstra system can create thumbnails for any panel and manages the sizing, naming and upload process for thumbnails. In this part of the Image Capture tab, you can tell the system to include thumbnails, what size they should be (always a 16x9 ratio) and what extension to put on the filename to indicate it is, indeed, a thumbnail.

**Note:** *Although full images can be branded with overlays, text, and weather information – thumbnails are always “clean” images.*

### Image Publishing Tab



The Image Publishing Tab is where you specify how the Videstra System will publish still images to one or two locations. Within this tab are two sections, one for Primary Publish and one for Secondary Publish. You can set up none, one or both.

**Note:** *To enable any web publishing the panel must have Timelapse enabled. This is done on the Videstra Camera Panel Setup. Contact Videstra Support if you are unsure about this.*

The first option on this tab is to enable image publishing. This option lets you permanently, or temporarily turn off Image Publishing if desired.

**Enable Image Publishing** ... *Make sure Timelapse is enabled on Panel Settings*

There are several options in each publish section – both sections have identical options but can be set up differently.

## Image Options

Both sections have the same options

Primary Publish Secondary Publish

Rename to  Do not include file extension

Image Text (Boilerplate) ⓘ

*(year) inserts current year*  
*(c) inserts copyright symbol*  
*(date) inserts the full culture specific date mm/dd/yyyy or dd/mm/yyyy*  
*(time) inserts the current time hh:mm AM/PM*

Graphics Template  ...

VxFTP Profile

Publish Size  Preview Template

Interval  minutes

Timeout  Max seconds to allow script to run

### Rename to

This lets you set the exact name the published image will have when sent (via VxFTP<sup>2</sup>) to your web site. *Do not put the file extension here* (e.g. .jpg) – just the name. Don't worry about the path – that is managed by Videstra. This name will also be used for the thumbnail, but the thumbnail suffix will automatically be appended when uploaded.

### Image Text (Boilerplate)

This is the text that will appear at the top or bottom of the image (see Graphics Template Factory later in this document). This text *can* be specified in the Graphics Template Factory, and in fact the text specified in the Graphics Template Factory will be the *default* text. If you specify text here then this will override any text specified in the template. This makes it possible to reuse a template and have *different* text for each use.

### Graphics Template

This is the actual Graphics Template (one you build in the Graphics Template Factory) you want to use when this image is published to your web site.

### VxFTP<sup>2</sup> Profile

This is the FTP profile that will be used to put this image onto your web site. VxFTP<sup>2</sup> is covered earlier in this document.

### Publish Size

This is the size of the image you wish to put on your web site. Typically, you will want them a bit smaller than original size, but this can be any of the provided 16x9 sizes provided in the drop-down control.

### Interval

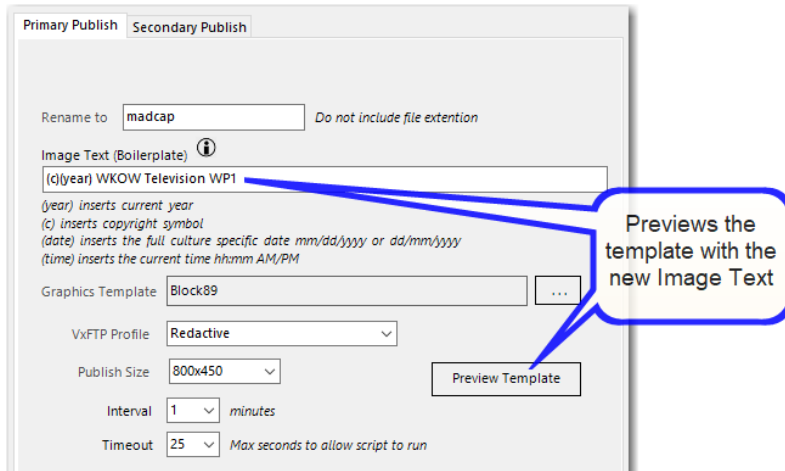
This is how often you want this image updated on your web site. You should coordinate this interval with the person or team that directly manages your web site. Once per minute is *normally* ok, however some web site publishers may prefer this to be less often to accommodate their internal image caching mechanisms. Without coordination it's possible to update the image more often than they can be presented to site visitors.

### Timeout

This is an internal management setting that lets Videstra know how long to wait before giving up on getting a fresh image from the camera. Sometimes the internet does not cooperate with us and it takes too long to get a new image. In this case Videstra will give up and try again on the next interval.

### Preview Template Button

The preview template button lets you preview this template over a sample image using either the default text or the Image Text (Boilerplate) you place here.

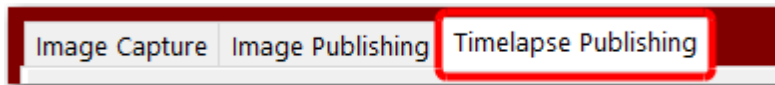


This may be useful if you have changed the Image Text (Boilerplate) text in this publishing section. All attributes of the text are managed by the template (font, color, size, justification) but the text defined in the template can be overridden in each publishing section.

### Enabling the second publish section

The second Publish section has the same options, however there is an “Enable” checkbox to turn it on or off. This allows you to keep the Primary Publish going while temporarily (or permanently) disabling the secondary one.

## Timelapse Publishing Tab



The Timelapse Publishing tab lets you set up timelapse movies from a Videstra Camera Panel that will automatically be published to your web site.

Timelapse movies can be created as animated **GIF** files (compatible with even very old browsers, but unnecessarily large and uses a limited color range) or **WEBM Movies**. WEBM Movies are compatible with nearly all currently release browsers including Chrome, Firefox, Edge, Opera, Safari and Android. Timelapse movies have many options. One option is the time-period covered but be aware that no matter the period covered, timelapse movies always cover the time-period *up to the time the movie is created*. To be clear, if a timelapse movie is configured for a 2-hour period and the movie is made at exactly 4:30, then the timelapse movie will cover from 2:30 to 4:30.

There are many options here – let’s review each:

A screenshot of the 'Timelapse Publishing' configuration panel. At the top, 'Animation Format' has radio buttons for 'WEBM' and 'GIF', with 'GIF' selected. Below are fields for 'Publish Interval' (1 Minutes), 'Depth' (10 Frames), and 'Run Length' (15 Seconds). There is an 'Image Size' dropdown set to '800x450' and a checked 'Allow GIF Interpolation' checkbox. A status line shows '~15 Second Movie Spans 10 Minutes' and 'Frame Rate 0.7 fps'. The 'Rename to' field contains 'MadCap\_Timelapse' with a note 'Do not include file extension'. The 'Graphics Template' is 'Block89'. The 'Timelapse Timestamp Text' field contains '(c)(year) Videstra LLC - Madison Capitol'. Below this are instructions for placeholders: '(year) inserts current year', '(c) inserts copyright symbol', '(date) inserts the full culture specific date mm/dd/yyyy or dd/mm/yyyy', and '(time) inserts the current time hh:mm AM/PM'. There is a 'Preview Template' button. The 'VxFTP Profile' dropdown is set to '[none]'. The 'Timeout' is set to '18' with the note 'Max seconds to allow this method to run'. A 'Debug' checkbox is unchecked, with a note: 'In debug mode a Command Window will open for animation creation. Caution: leaving this option on will open a new window each time!'.

## Timelapse Options

### Animation Format

Choose GIF or WEBM (see notes on these above)

### Publish Interval

How often you want a *new* timelapse to be created. One minute is good for images but may be much too aggressive for timelapse movies. We recommend a 5-minute interval.

### *Depth*

This is the number of *minutes* or frames from the timelapse cache to use. Essentially this defines the period covered by the timelapse. Think of this number as *minutes*.

### *Run Length*

This is the *target* time you want the movie to run. Regardless of the period covered you may want the movie to only run 15 seconds. This is an approximation, and the final movie may be a few seconds off.

### *Image Size*

This will set the dimensions in width and height of the movie that is created.

### *Allow GIF Interpolation*

This only shows when GIF files are being created. If you select this your GIF files will be much smoother, but also much larger and that may affect your visitors experience – especially when they have limited bandwidth.

### *Rename to*

This will be the final name of the movie or GIF posted to your web site. Do not put a file extension here.

### *Graphics Template*

Just like images, you may specify a Graphics Template that you built in the Graphics Template Factory here to set branding, a boilerplate, or any overlays you want.

### *VxFTP<sup>2</sup> Profile*

This is the FTP Profile created in VxFTP<sup>2</sup> for uploading the movie or GIF to your web site. VxFTP<sup>2</sup> is covered earlier in this document

### *Timeout*

Tells Videstra that it can give up after X seconds if there is an issue with capturing a new image for the timelapse.

### *Debug*

Used by Videstra support only. It will make the background process that creates the timelapse movie visible but... IT WILL LEAVE THAT WINDOW OPEN. After a while there will be so many windows open your system will likely hang.

### *Preview Template Button*

The preview template button lets you preview this template over a sample image using either the default text or the Image Text (Boilerplate) you place here.



## The Graphics Template Factory™

The Graphics Template Factory is where you can design exactly how your images and timelapse movies will look to your web site visitors. You may define as many templates as you require.



Initially the Graphics Template Factory will show the most current image from the camera from the panel on which you started the Web Publishing Factory. It is a static image and doesn't update – but understand it is only here for reference – the background image itself is never part of the template. The template only defines the following elements that will be used to publish images and/or timelapse movies:

- Overlay Image
  - This is for branding images such as station logo and/or sponsor banners.
  - Only ONE overlay image is supported so if a station logo *and* a sponsor banner is required they will have to be part of the single overlay image.
- Image Information (Boilerplate).
  - Specialized text, image name, copyright and other information can be placed at the top or bottom of the image.
  - Image Information (Boilerplate) *backplate* that will appear behind the text
  - Text font, font size and font color
  - Backplate size, color, and transparency
  - Boilerplate position (Top or Bottom)

- Weather Information
  - Icon/Icon Size
  - Weather Text (current conditions, temp, precipitation, etc)
  - Weather *backplate* (the banner that appears behind the icon and weather text)
  - Font, font size and font color
  - Backplate color and transparency
  - Weather Information Justification (Left, Center, Right)

The Interface lets you set and select these elements of each template, then save and name it.

### The Overlay Image

When you want to brand or add a sponsor to your camera image you will build an overlay image.

Overlay images should be PNG files with transparency. They must be either 1280x720 or 1920x1080 (your “canvas” size). You may have semi-transparent elements of your overlay – that is supported in Videstra. Overlay files can be built in programs like Adobe Photoshop™ or GIMP.

Position your logo or sponsorship banner onto the canvas where you want it to appear. When you are done place the file onto the V-Manager into the following folder:

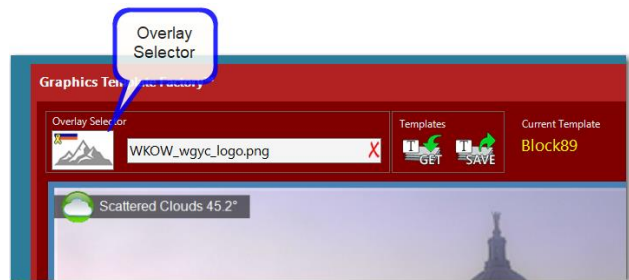
#### **C:\Videstra\VestraView\WebOverlays**

You may place as many as you need into this folder

Remember you can select only one overlay in the Graphics Template Factory so if you need a station logo *and* a sponsor banner you will need to create a single overlay with both on the canvas.

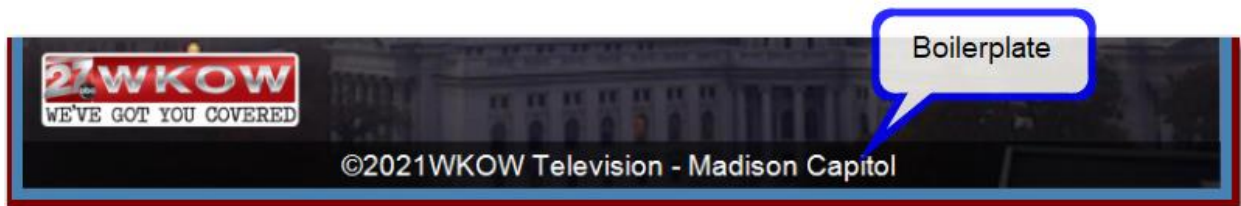
In the Graphics Template Factory select the overlay by clicking on the Overlay Image button in the upper left-hand corner (it doesn’t look like a button, but it is). You will be presented with a list of all available overlays from the WebOverlays folder.

Image Information (Boilerplate)



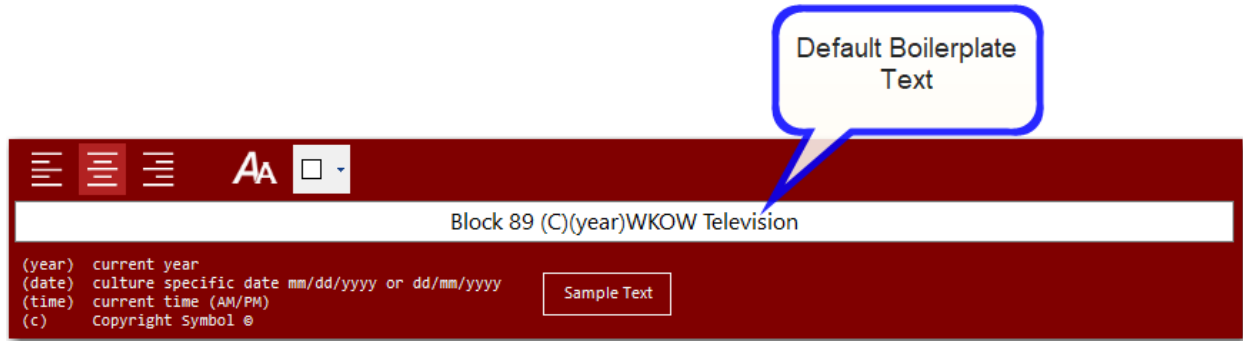
### Image Text (Boilerplate)

Information about the image can be placed in a banner along the top or bottom of the image. This can contain the location of the image, a copyright or even a date and timestamp.



The boilerplate shown above is placed at the bottom of the image with a semi-transparent black background.

The text that appears on the boilerplate can come from one of two places. You may specify *default* text in the Graphics Template Factory when you create/edit the template.



You may *also* specify the text where you set up individual image Publishing options on the Image and Timelapse Publishing tabs (see the earlier part of this document discussing the Imaging and Timelapse publishing options).

You can select text justification, font, font color or font size using the controls just above the text box. Below is a key to special text you may use that will be translated into current information.

(year) will become the current year

(date) will become the current culture-specific date

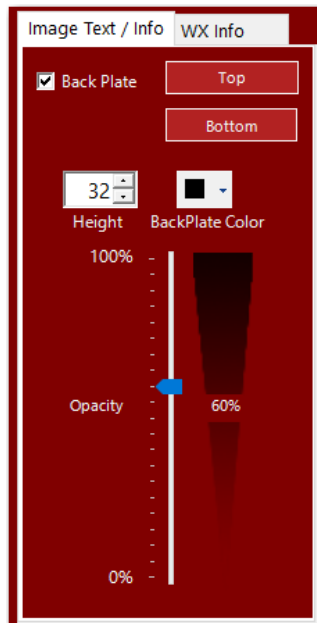
(time) will become the current time (showing AM/PM)

(c) will become the circle-c copyright symbol

Clicking on the Sample Text button will just put some sample text into the text box and display it on the image. You may edit this as necessary. After editing text you will want to click on Refresh All.

### BackPlate

The Image Text (Boilerplate) is just text. No matter what size or color you make it, the image may make it very difficult to read. A backplate can be generated to make your Image text readable in all circumstances.

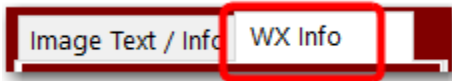
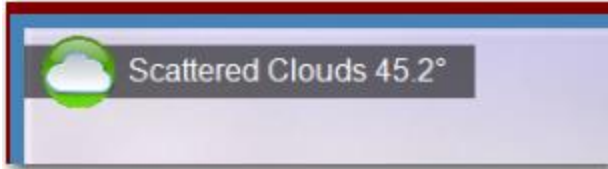


Using the tools in the Image Text/Info section you can position the boilerplate text at either the top or bottom of the image. Here you may also design the color, size, and transparency of the backplate.

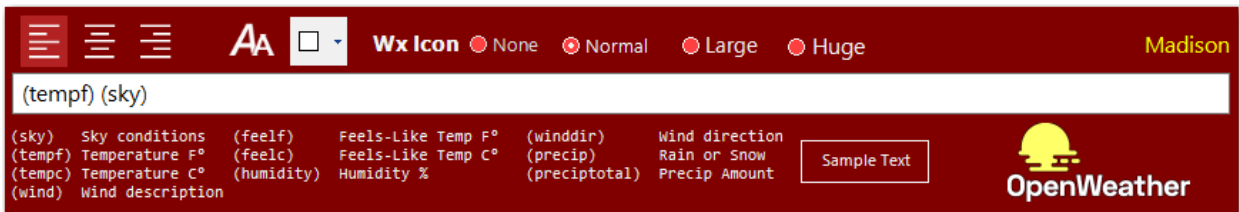
**Note:** *The backplate for the Image Text is always full width.*

## Adding Weather Information to your Images/Timelapse Movies

The Graphics Template Factory lets you design a simple weather presentation into your images and movies. Using the services of OpenWeather.org™ current weather data for the specific *latitude and longitude* of the camera can be embedded into the image.



When you click on the WX Info section the textbox at the bottom of the interface lets you design the look of how you want weather information displayed on the image.

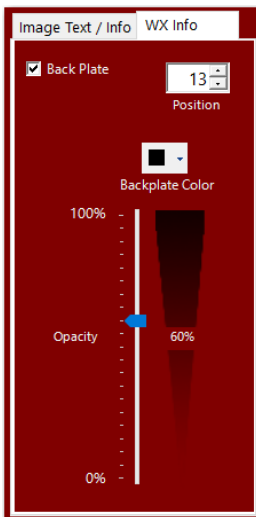


Just like the Image Text (Boilerplate) there are elements that will automatically be translated to current weather data provided by OpenWeather.

**Note:** You will need to set the lat/lon for the cameras in your system and get a free OpenWeather API key to use this feature. Contact Videstra support for how this is done.

## WX Info Backplate

You can design a backplate for the weather information much like the backplate for the Image Text.



Backplates for the weather info are automatically sized to aesthetically fit the text and icon.

You do not have to specify any text if you don't want to.

## Weather Icons

Icon size options are **None** (for no icon at all), **Small**, **Medium**, **Large** and **Huge**. Icons will *always* appear to the left of any text. You can use the provided icons, or you may use an alternate set (Provided). You may also design your own. See Weather Icons in Videstra at the end of this document if you want to design and use your own.

## Getting/Saving Graphics Templates

There are two buttons at the top, Get and Save.

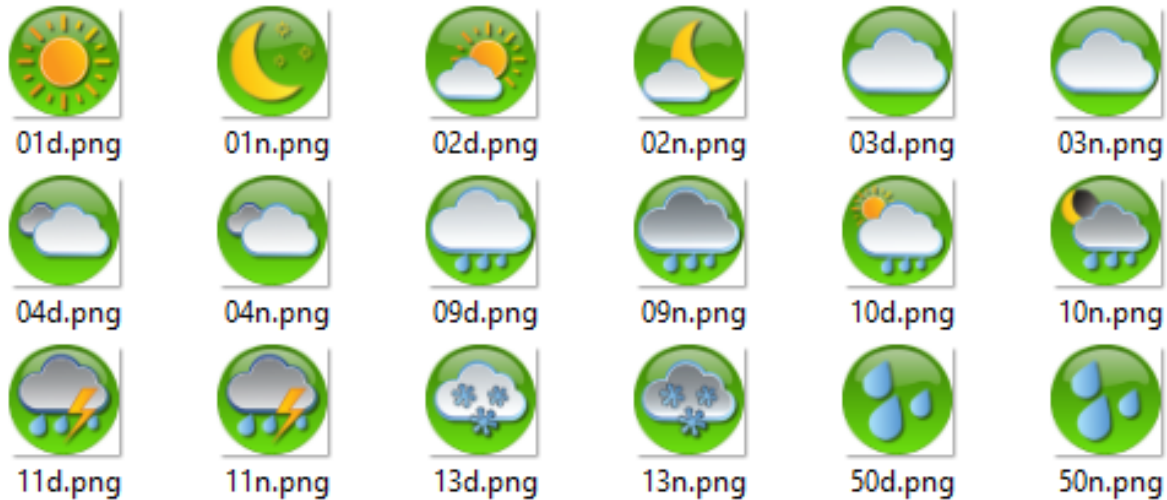


Save is really a “Save As” – which means you can create new versions of the same template easily and conveniently.

## Managing Weather Icons in Videstra

The default Videstra Web Publishing icons may not suit your needs or stations graphic standards. There are a few options for the icons provided by Videstra, but only with different color orbs behind each (or no orb).

Here are the default Icons:



Each icon is designed for a specific weather condition based on the OpenWeather™ API. The names of the icons (e.g., 09d.png) correlate to the OpenWeather API and cannot be changed. Icons names ending in a “d” are for daytime, those ending in “n” are nighttime.

Here is the official chart from OpenWeather for the icon names they specify when a current conditions call is made to their API.

Day Icon	Night Icon	Description
01d	01n	Clear Sky
02d	02n	Few Clouds
03d	03n	Scattered Clouds
04d	04n	Broken Clouds
09d	09n	Shower Rain
10d	10n	Rain
11d	11n	Thunderstorm
13d	13n	Snow
50d	50n	Mist

OpenWeather will only send the above icon names (e.g. 04d or 04n) when providing current conditions via the API.

More information on the OpenWeather iconography can be found here:

<https://openweathermap.org/weather-conditions>