HCA Technical Note: HTML displays with Client-Server

When using HCA in client-server mode and your design contains HTML displays there are some additional considerations when configuring clients. This technical note discusses these issues and uses the HCA Sample file as an example.

There are two major questions about HTML displays that this technical notes answers:
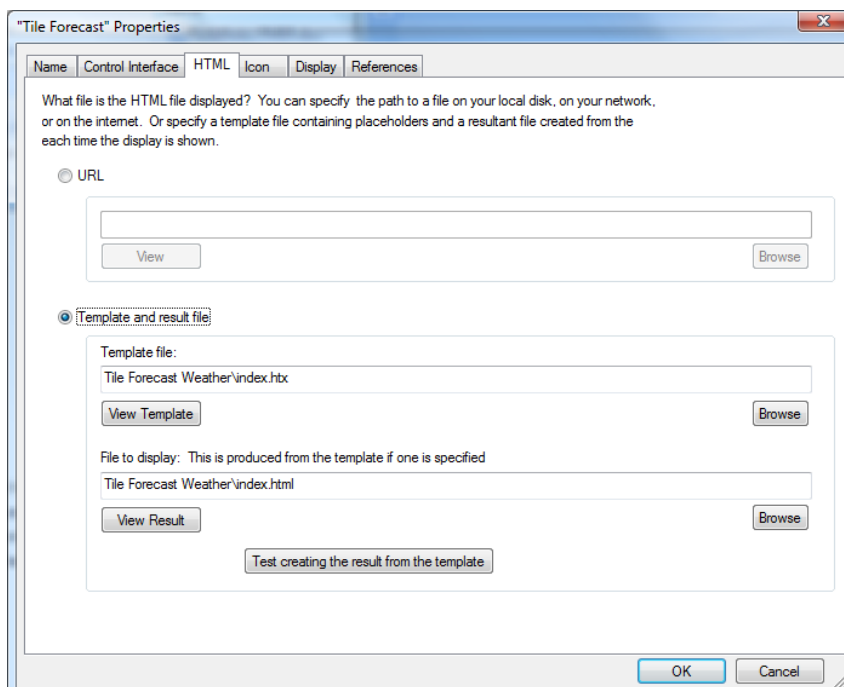
1. If an HTML display is produced from a template into a result file, how is the result file accessed by a client and, most importantly, where is that file stored?

2. If the HTML file references other files – style sheets and images – how do those files get to the client?

The HCA sample file contains a number of HTML displays in order to create a page structure when viewed in the Control User Interface. If you open in the sample file you can see that the Display named "Page Weather" contains three tiles. Each of these is an HTML display:

- Tile Sun Moon
- Tile Current Weather
- Tile Forecast

Relative and Absolute Paths

Opening the properties of the "Tile Forecast" display and choosing the HTML tab shows this:

Note that the paths used for the template file and the result files are not absolute paths – they don't start from something like "C:". They are given only as a portion of the path.

Before a client makes an HTML display the current display - it appears in the display pane - it examines the properties of that display. If the HTML is given simply as a URL then the client uses that URL and the display appears. But if the display uses a template and result file, then a message is sent to the server to produce the result file from the template and then the result file is sent from the server to the client for display.

Most Important point: The path to the template file and the result file as entered into the display properties must be valid for both the server and all the clients. If you supply an absolute path then that path must exist and be the accessible on all clients.
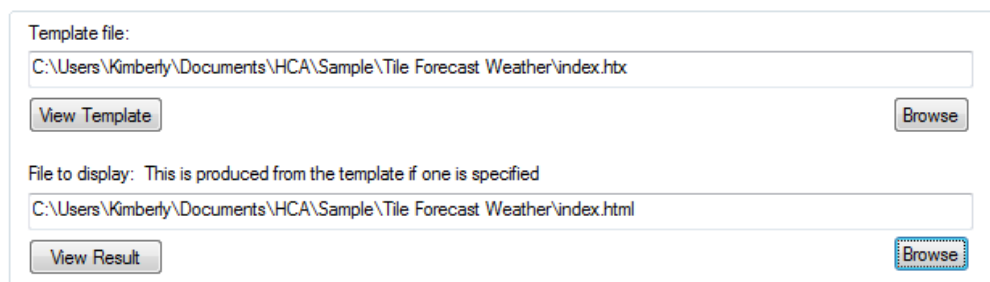
Here is an example that may help clarify this point. Suppose that on the server machine HCA was installed by a user called "Kimberly". That would put the HCA documents area as:

```
C:\Users\Kimberly\Documents\HCA
```

Now suppose the HCA was installed on a client machine by a user called "Bob". That would put the HCA documents area as:

```
C:\Users\Bob\Documents\HCA
```
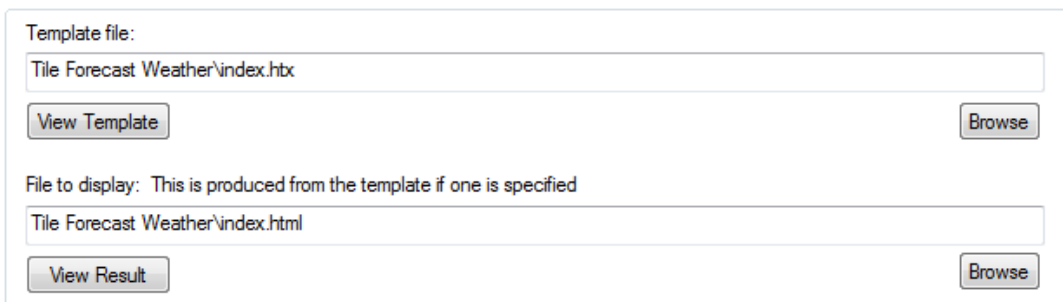
If when the design was created the properties of an HTML display were configured as:

Template file:

C:\Users\Kimberly\Documents\HCA\Sample\Tile Forecast Weather\index.htx

[View Template]   [Browse]

File to display: This is produced from the template if one is specified

C:\Users\Kimberly\Documents\HCA\Sample\Tile Forecast Weather\index.html

[View Result]   [Browse]

It wouldn't work. When the client tried to store the result file sent back from the server the path wouldn't exist since there is no "Users\Kimberly" on the client.

But if the paths were set as:

Template file:

Tile Forecast Weather\index.htx

[View Template]   [Browse]

File to display: This is produced from the template if one is specified

Tile Forecast Weather\index.html

[View Result]   [Browse]

Then the server stores the result file in:

`C:\Users\Kimberly\Documents\HCA\Tile Forecast Weather`

And the client, after getting it from the server, stores it in:

`C:\Users\Bob\Documents\HCA\Tile Forecast Weather`

By using a relative path in the display properties, the appropriate path to the file can be located on both the server and the client.

Client File Storage Area

However, sorry to say, now that you understand why it is important to use relative paths, we have to tell you that what we just said isn't entirely accurate.

When working with client-server, the client uses the "Temp" folder in the HCA documents area as the location to store files that come from the server. To be completely accurate the last section should be slightly different. The server stores the result file in:
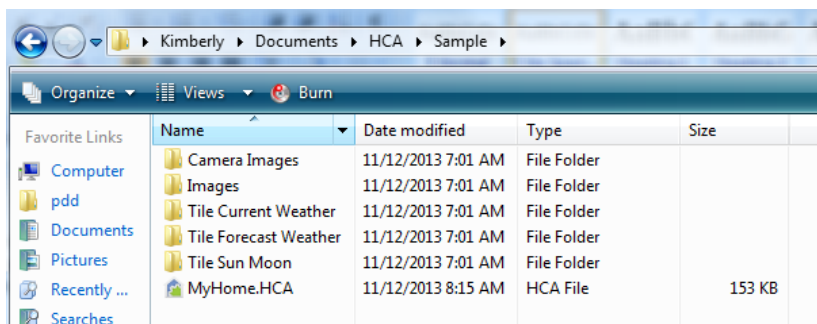
`C:\Users\Kimberly\Documents\HCA\Tile Forecast Weather`

And the client stores it in a sub-folder in the Temp folder:

`C:\Users\Bob\Documents\HCA\Temp\Tile Forecast Weather`
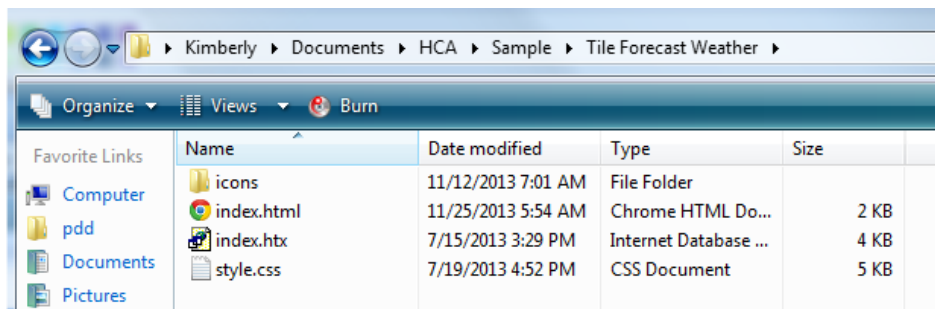
The reason you need to know this is answered in the next section

Style sheets and image files referenced by an HTML file

If the HTML file contains references to other files, for example images and style sheets, those files are **not** sent by the server to the client like the resultant HTML file is. It is your responsibility to place those files on each client in the place where they are expected to be found. For example, here is the folder in your documents area for the HCA sample file.
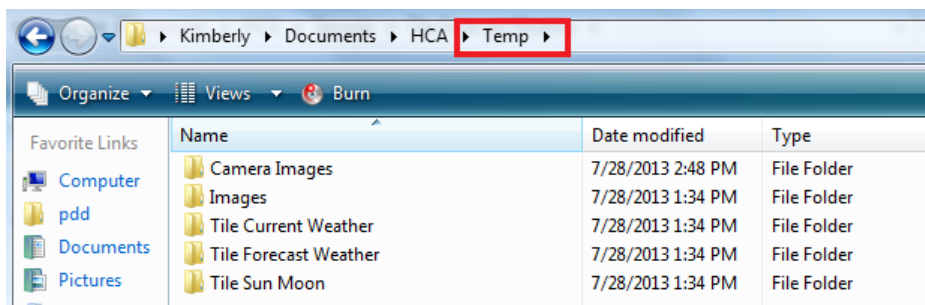

In the "The Forecast Weather" folder are these files:
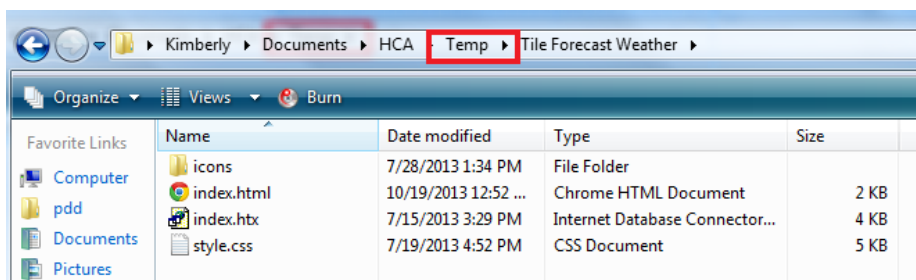
The HTML template file is index.htx and the resultant file is index.html. Also in this folder are the style sheet referenced and a folder containing images it uses.

If you are using client-server, it is **your responsibility** to create a similar structure and move these extra files on to the clients into the client *Temp* folder. For example:

And in the *Tile Forecast* folder, the style sheet and the icons folder must be set up as index.html expects them:

Best practices

The best way to ensure that HTML displays work with client-server is to:

1. Use relative paths to the template and resultant files.

2. Manually copy all the auxiliary files used by the HTML to each client.