Actions Tech. Note 17

Draft 1.0

Using fwParametersCreated

Freeway 3.5 Pro introduced a new user function `fwParametersCreated` this is called whenever parameters are created for an instance of an action. It will be called at the following times:

- When an Action is first sketched
- When an item is pasted
- When a list of actions item is detached from a master

The `fwParametersCreated` user function as been added so that you can be guaranteed of initialising parameters that your Action depends on for every instance. Previously action writers have had to rely on doing this sort of initialisation in the `fwInterface` function or when an action is published.

Performing initialisation in the `fwInterface` function or when an action is first published is strongly discouraged. There are some serious problems with it

- You can not be guaranteed to run in `fwInterface`. This user function will only be called if the interface is visible. It is quite possible to add actions, detach them from their masters etc. Without the `fwInterface` being called.

- Setting parameters in an instance will detach it from the Master. This is something to be careful of. If you change a parameter within an instance of an Action programmatically then Freeway will detach all the Actions from the master. If you, during some initialisation or execution, detach instances from the master it leads to a poor user experience.

The `fwParametersCreated` function can be useful in cases where files are assigned to action-file parameters as a part of initialization. If, for example, your Action ships with files that the Action needs to upload during publishing (for example images, or JavaScript files) then you should set the files in this function.

The following Action will look for a file in the same folder is it is in. In this case, it will look for a file called "this.txt". If the file exists, it will insert a reference to that file in the parameter named "theFile". In the case of this Action being applied to a Master Page, this Action will retain this setting on any pages to which it has been applied, without the child pages becoming detached.

```
<page-action  name="Create  Parameter">
<action-file  name="theFile"  keepwithhtml>

<action-javascript>

function  fwParametersCreated()
{
//Create  the  file  reference
   var  file  =  new  FWFile;

//get  the  path  of  the  file
   var  curPath  =  this.fwPathName.toString();
   myPos  =  curPath.lastIndexOf(":");
```

```
   curPath  =  curPath.substring(0,myPos+1);

//Create  the  fill  path  of  the  file
   theFile  =  curPath+"this.txt"

//Check  to  see  if  the  file  exists
   file.fwOpenRead(theFile);

   if  (file.available!=0)
   {
//   If  the  file  exists,  specify  it  in  the  "theFile" parameter
      fwParameters["theFile"].fwSpecify(  file  );
      fwParameters["theFile"].toString();
   }
   else
   {
      alert("Could  not  find  the  file  \"this.txt\".");
   }

//Don't  forget  to  close  the  file  when  you've  finished!
   file.fwClose();
}

function  fwAfterEndBody()
{
//Make  sure  that  the  file  is  published  by  Freeway
   myFile  =  fwParameters["theFile"];
   var  file  =  new  FWFile;
   file.fwOpenRead(myFile);
   file.fwClose();
}

</action-javascript>
</page-action>
```

If you intend distributing Actions which rely on external files, it is best to distribute the Action and all support files within their own folder. By doing this you reduce the possibility of interrelated files becoming separated. It is always good practice for the Action to warn the user if such an event occurs.