

Simple documentation of the imageMaker software package

Here is a listing of the files that are needed by the imageMaker software package as well as a description of how the system works.

```
IGC_Process
ImageMaker.csh
RequestManager
RequestTable.txt
imageServer
ipc.config      **
makeImage
ppmtogif [a standard system utility, probably found in /usr/bin]
```

I have starred (**) the ipc.config file since this file already exists in AWIPS, but one line needs to be added to this file if it doesn't already exist. This line is following:

```
"IMAGE_MAKER",          "localhost", "12018", \
```

Put all of these files, listed above, into a single directory on a machine that can talk to the AWIPS notification server.

Note: The package includes a Build 5.0 IGC_Process executable. On a pre-5.0 system, make sure not to install the package on a workstation in the ~fxa/bin directory, to avoid conflicting with the current-release IGC_Process executable.

The whole image maker package is table driven. Entries are read in from the "RequestTable.txt" file and processed by the makeImage executable. Here is a sample line from the RequestTable.txt file:

```
NS|1073752008|5|1083,1068|/awips/fxa/bin/ImageMaker.csh -f/var/tmp/kftg_2.4_BaseRefl.gif|
```

Each of the pipe (|) symbols is a delimiter separating individual columns in this table. If you look at the RequestTable.txt file you will see that every line that starts with a "#" symbol is a comment. Here is a description of the fields:

Column 1	NS	This stands for Notification Server and will not change.
Column 2	1073752008	This is the depict key for which you will make a GIF image. In this example, this is the depict key for the kftg (Denver) NEXRAD 0.5 elevation reflectivity image.
Column 3	5	This is the scale key. This is the "WFO" scale. See the documentation in RequestTable.txt.
Column 4	1083,1068	These are map background keys. You may have multiple map backgrounds displayed on the same image.
Column 5	/awips/fxa/bin/ImageMaker.csh - f/var/tmp/kftg_2.4_BaseRefl.gif	This is the executable name that will get executed when the depict key listed in the first column arrives. Give the fully qualified pathname to this file, which will be ImageMaker.csh. The -f option specifies the fully qualified pathname of the GIF image file that will be written to disk. In this example, I'm writing the GIF image to /var/tmp. You can write it anywhere (that you have permission to).
Column 6	-blank-	This column is currently left blank. In a future build of this software this column will be reserved for a hostname of a machine. This will allow us to run this software on some remote host.

Now you have to edit one more file, namely, the ImageMaker.csh file. At the top of this file there is an environment variable called "RUN_DIR". Set this variable to be the directory into which you have put the imageMaker software package.

Now you can run the imageMaker software. Make sure that "." is in your path. Then, simply type:

```
RequestManager <path name>/RequestTable.txt
```

where, <path name> is the fully qualified path name where the RequestTable.txt file is located. Once the RequestManager is started you should see a message saying that the ImageMaker.csh is EXECUTING. The first image that gets created after you start the RequestManager will take the longest to produce since there is some overhead involved with the imageMaker package at start-up. The bulk of this initial overhead is when the IGC_Process starts up. Once the first image is made the IGC_Process stays running, so any subsequent image request found in the RequestTable will be processed much more quickly. The RequestManager will remain running until it is killed, and whenever a new depict key arrives it will get processed.

Listed below are the files where you can look to get information on depict and map key numbers:

Depict Keys National: /awips/fxa/data/localization/nationalData/depictInfo.manual

Local Keys: /awips/fxa/data/localizationDataSets/<SITE-ID>:
radarDepictKeys.txt, etc...

Map Keys: /awips/fxa/data/localization/nationalData/depictInfo.manual

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