

I.2-UNIX-XSETS PROGRAM EXECUTION INFORMATION FOR THE SHEF ENCODED TIME SERIES PROGRAM (XSETS) ON UNIX SYSTEMS

Script

The script xsets can be used to execute program XSETS.

The command format is:

```
xsets [-p progname] [-i infile] [-f xsets_&_ofs_filesets]
      [-a alt_xsets_fileset] [-n alt_informix_db] [-d date]
      [-b bin_dir]
```

All the parameters are optional and will be provided values if not supplied on the command line. Available options are:

<u>Option</u>	<u>Description</u>	<u>Default Value</u>
-p	Program name	xsets
-i	Input file	Use file specified by token xsets_config_file
-f	xsets and OFS file sets	Use file sets specified by tokens xsets_level and ofs_level
-a	Use alternate for token xsets_level (different than token ofs_level)	Token xsets_level set to token ofs_level
-n	Alternate xxrfc name or 'oper' (different than token ofs_level) to select Informix database name	Use token ofs_level to select Informix database (xxrfc or oper)
-d	Use other date: 'OFSFILES' = get date from OFS time series mm/dd/yyyy = explicit date at 12Z	Use date specified by the token xsets_date_used Current date is indicated by 'SYSTEM'
-b	Use executable bin directory indicated by: a = token xsets_dir/bin/ARCHIVEbin/RELEASE d = token my_dir/bin (devl) m = token mgr_dir/bin/RELEASE ma = token mgr_dir/bin/ARCHIVE name = directory name	Use directory specified by the token xsets_dir/

Examples:

```
xsets (use all defaults)
xsets -p xsets_d (use program xsets_d)
xsets -f oper_test -n oper (ofs_level and xsets_level set)
```

```

xsets -a oper_test
xsets -f oper_test -a oper -n oper

xsets -b a

xsets -i config.dat
xsets -f sju
both

xsets -f ofstest -d 04/03/1993
xsets -f ofstest -d OFSFILES -b d

```

to oper_test,
reset Informix database to
operational name-token
db_name)
(xsets_level set to oper_test)
(ofs_level set to oper_test,
xsets_level reset to oper,
Informix reset to oper)
(execute xsets program from
../bin/ARCHIVE directory)
(another input file name)
(xsets_level and ofs_level
set to sju)
(date 04/03/1993)
(Date from OFS time series and
executable program from
../devl/bin directory)

Apps_defaults Tokens

The script xsets and the program XSETS use apps_defaults tokens to set execution options and path names. See Chapter I.2-UNIX for a description of the Apps_defaults System.

Tokens are case-sensitive with the exception of YES/NO and SHEF/COMMENT/NO which can be upper or lower case.

[] indicates the default value.

The following is an example and description of each variable. The variables (tokens) to the left of the colon are defined by the expressions on the right using substitutions as needed.

```

#.....
#   Date Control
#.....
xsets_date_used      : SYSTEM                # Date from:
                                                # [SYSTEM] = computer system clock
                                                # OFSFILES = first forecast time
                                                #           series selected
                                                # mm/dd/yyyy = explicit date at 12Z

#.....
#   Directories and Files
#.....
#db_name             : hd1_2rxxx             # Informix database

#public_bin         : /awips/hydroapps/public/bin
xsets_dir           : $(apps_dir)/xsets
xsets_rls           : $(xsets_dir)/bin/RELEASE
xsets_arc           : $(xsets_dir)/bin/ARCHIVE
xsets_level         : oper
xsets_files         : $(xsets_dir)/files
xsets_xsfiles       : $(xsets_files)/$(xsets_level)
xsets_param_dir     : $(xsets_xsfiles)/param
xsets_config_file   : xsetsconfig
xsets_output_dir    : $(xsets_xsfiles)/output

```

```

#.....
#  Commands
#.....
xsets_editor      : nedit          # Command to edit product file
xsets_help_cmd    : $(xsets_dir)/doc/html/index.html 1/
xsets_hydrographs_cmd : $(xsets_dir)/bin/RELEASE/new_hydroplot 1/
xsets_print_cmd   : lp            # Command to use to print product
xsets_xmit_cmd    : cat

#.....
#  Parameters for creation of hydrographs
#.....
xsets_hydro_button : NO          # Create Make Hydro button, [NO]
xsets_make_hydro   : NO          # Create .gif hydrographs, [NO] 1/

#.....
#  New_Hydroplots parameters
#.....
xsets_html_daily_dir : /pub/FcstGraphs
                                     # Location of gif images on web server
                                     1/
xsets_html_flood_dir : /pub/FloodGraphs # Location of gif images on web server
1/
xsets_hydrographs_html : 1          # 1 = create basic html 1/
                                     # 0 = no html created
xsets_hydrographs_output : $(xsets_output_dir)/gifs 1/
xsets_hydrographs_param : $(xsets_xsfiles)/hydrographs/param 1/

#.....
#  File Print Options and Settings
#.....
xsets_add_remarks   : NO          # Add Remark after each site, [NO]
xsets_brackets      : NO          # Put brackets around latest stage,
                                     # forecasts and dates, [NO]
xsets_cmt_line      : NO          # YES = separate line for site specific
                                     # comment
                                     # NO = append to segment description and
                                     # river name line
xsets_expanded_dates : YES        # Insert MMDD before values, [NO]
xsets_fgroup_preamble : 'FORECAST GROUP IS'
                                     # Preamble string placed before
                                     # forecast group name
xsets_H_precision   : 1          # 0, [1] or 2 decimal precision of
stages
xsets_output_style   : E          # E = Expanded (each day has line),
                                     # C = Compact
xsets_print_crests   : COMMENT    # Print crests:
                                     # SHEF = encode in SHEF,
                                     # COMMENT = display as comment,
                                     # [NO] = do not include
xsets_print_disclaimer : YES      # Print disclaimer, [NO]
xsets_print_fs       : YES        # Display flood stage as comment, [NO]
xsets_print_fs_cross : COMMENT    # Time the level passes flood stage:
                                     # SHEF = encode in SHEF
                                     # COMMENT = display as comment
                                     # [NO] = do not include
xsets_print_ls       : SHEF       # Latest stage:
                                     # SHEF = encode in SHEF
                                     # COMMENT = display as comment
                                     # [NO] = do not include
xsets_print_MAP      : NO          # Print MAP values, [NO]
xsets_print_preamble : YES        # YES = print forecast group preamble
                                     # NO = do not print
xsets_print_qpf      : SHEF       # Print qpf values:
                                     # SHEF = encode in SHEF
                                     # COMMENT = display as comment
                                     # [NO] = do not include

```

```

xsets_print_ws      : YES          # Display warning/caution stage, [NO]
xsets_afos_node     : PIT          # 3-character AFOS node identifier
xsets_Q_precision   : 1           # 0, [1], or 2 decimal precision of
                                # flows
xsets_signature     : $(LOGNAME)   # User signature string
xsets_wmo_id        : 'FGUS5i KCCC ddhmm' # Insert values for i and CCC
xsets_ws_label      : WARNING      # Label for WARNING/[CAUTION] stage
xsets_zczc          : NO           # Include ZCZC and NNNN, [NO], non-AWIPS

#.....
#   Run Options
#.....
xsets_age_check     : 6            # Number of hours old of forecast before
                                # error generated, [6]
xsets_edit_lock     : NO          # Lock main display when editing SETS
                                # file, [NO]
xsets_gen_summary   : NO          # Include summary of flooded locations,
                                # [NO] (currently unused)
xsets_msg_obs_warn  : YES         # Print warning when observed values are
                                # missing, [NO]
xsets_num_MAP_values : 4          # Number [4] of MAP values to place in
                                # product when outputting MAP
xsets_num_qpf_values : 4          # Number [4] of QPF values to place in
                                # product when outputting QPF
xsets_numdays_hydro : 3          # Number of days previous to today to
                                # include on FCST PROG hydrograph
xsets_numhrs_curob  : 12          # number of hours back from current time
                                # to use Informix obs as 'current ob'
xsets_ofs_select    : OFS         # OFS or IFP for time series files
xsets_stdout        : NO          # Send wprint messages to stdout, [NO]
xsets_time          : Z           # Time zone code used in product
                                # ([Z], E, C, M, P, A, H or N)

#.....
#   System Tokens Accessed
#.....
#db_name            :hdl_2rxxx
#public_bin         : /awips/hydroapps/public/bin
#server_name        : ONLINE
#shef_data_dir
#ofs_fs5files
#ifp_fs5files
#rfs_sys_dir
#db_convention

#.....
#   Compile and link tokens
#.....
# xsets_ctl         : $(xsets_dir)/ctl # control file dir
# xsets_inc         : $(xsets_dir)/inc # include files dir
# xsets_mak         : $(xsets_dir)/mak # make file dir
# xsets_lib         : $(xsets_dir)/lib # lib files dir
# xsets_log         : $(xsets_dir)/log # output files from make
# xsets_src         : $(xsets_dir)/src # source files dir

```

Notes:

1/ Not used by program XSETS. May be used by local implementation of application programs.

Directory Structure

The XSETS program and files are organized in the following directory structure:

```

.../xsets
  /bin
    /ARCHIVE      previous executables
    /RELEASE      current executable
  /doc            documentation
  /files
    /oper         all files for the user
      /hydrographs
        /gifs     gif files 1/
        /param    parameters to make gif files 1/
  /output        product files, status, warnings,
                errors
    /param        config file, include files
  /scripts       script files

```

Directory .../xsets/files/oper/param must contain these files:

```

.datemask
colors.dat
xsetsconfig (other names such as config)
ctrl_tokens (not at RFC - optional for HRL support)
xsets_disclaimer

```

Additional directories for source code and compiling are:

```

.../xsets
  /ctl
  /inc
  /lib
  /log
  /mak
  /src

```

Notes:

1/ Not used by program XSETS. My be used by local application programs.