

WxNow Weather Generator User's Guide

javAPRSSrvr 4.3

WXNowGen is Copyright © 2017 - Pete Loveall AE5PL pete@ae5pl.net

Use of the software is acceptance of the agreement to not hold the author or anyone associated with the software liable for any damages that might occur from its use.

APRS is a trademark of Bob Bruninga

Other trademarks included in the following text are recognized as belonging to the respective trademark holders.

Table of Contents

Section 1 - Introduction	1
Section 2 - Program Requirements and Description	2
Section 3 - Configuration Properties	3
javAPRSSrvr Properties	4
Clients=.....	4
WXNowGen Properties.....	5
ClassPath=	5
Class=.....	5
StationCall=	5
WxStationID=.....	5
WXNowFile=wxnow.txt	5
WXTime=5.....	5
Delay=30	5
(M)Upstream=false	5
(M)FullFeed=false	5
(M)ReadOnly=false	5
(M)LocalOnly=false	5
(M)History=false	5
(M)ServerAdjuncts=false	5
(M>LastHeardTime=-1	5
(M)MessageHoldTime=-1	5
WxNow Generator Properties.....	6
Symbol=/.....	6
(M)TimeStamp=.....	6
Section 4 - Installation Instructions	7
Section 5 – XML Status Page Description	8
General XML	8
Detail XML	9

Section 1 - Introduction

WXNowGen provides a simple APRS weather packet generator based on a wxnow.txt file. As a client on javAPRSSrvr, multiple may exist in a single instance. The generator checks the wxnow.txt file for changes at a fixed interval for transmission. If the wxnow.txt file has not been updated, the generator will not generate a packet.

This application operates as a client to javAPRSSrvr. It requires javAPRSSrvr 4.0 to provide the network interface and do the packet parsing.

Section 2 - Program Requirements and Description

WXNowGen is designed to run on any OS and Java VM capable of running javAPRSSrvr 4.0.

WXNowGen is comprised of a number of classes which Java looks at as objects. WXNowGen classes are in WXNow.jar which must be specified in the ClassPath property in the WXNowGen's properties file.

WXNowGen reads the specified wxnow.txt file at a fixed interval. If the file has been updated, a new weather packet will be sent to javAPRSSrvr. The packet will contain a timestamp in UTC time based on the local time stamp found in the wxnow.txt file.

Section 3 - Configuration Properties

The configuration properties reside in properties files for each client adjunct, server adjunct, and port. The main properties file is called javaprssrvr.properties by default. You can use any text file for the main properties file if you pass the name into javAPRSSrvr as a command line parameter.

The property names are not case sensitive but the values can be. Defaults are shown below.

NOTE: UNLESS YOU REQUIRE A SETTING OTHER THAN THE DEFAULT, DO NOT INCLUDE ANY PARAMETERS WITH DEFAULT SETTINGS.

List parameters (L) may be defined on the property line or may be defined in a text file with the suffix .lst. If defined on the line, each entry is separated by a semicolon. If defined in a file, each entry is put on a separate line in the .lst file and the file name is the property value. Do not put blank lines in the file. For instance, this could be a definition for ListProperty (example only):

```
ListProperty=first.aprs.net:1313;second.aprs.net:1313
```

Or you could have the following 2 lines in a file named hubs.lst:

```
first.aprs.net:1313
second.aprs.net:1313
```

with ListProperty=hubs.lst

Properties preceded by a (M) are unchangeable and should not be included in your properties files. They are included in the descriptions below to indicate what common properties are available vs. those that have been forcibly overridden.

javAPRSSrvr Properties

Clients=

This must include the file of this WXNowGen's properties file.

WXNowGen Properties

ClassPath=

(L) Must include WXNow.jar.

Class=

Must be set to net.ae5pl.wxnow.WXNowGen.

StationCall=

This is the callsign-SSID for the WXNowGen.

It must conform to AX.25 standards and it must be different from javAPRSSrvr's ServerCall (the server's callsign-SSID) and any other station's callsign-SSID visible to APRS-IS.

WxStationID=

The software will use the lower case J as its designator followed by the 2 to 4 letters you put here. Some predefined weather station ids are:

Dvs = Davis

HKT = Heathkit

PIC = PIC device

RSW = Radio Shack

U-II = Original Ultimeter U-II (auto mode)

U2R = Original Ultimeter U-II (remote mode)

U2k = Ultimeter 500/2000

U2kr = Remote Ultimeter logger

U5 = Ultimeter 500

Upkm = Remote Ultimeter packet mode

WXNowFile=wxnow.txt

This is set to point to the wxnow.txt file which must be updated by external software.

WXTime=5

Time in minutes to wait between transmissions.

Delay=30

Time (seconds) to wait before first transmission.

(M)Upstream=false

(M)FullFeed=false

(M)ReadOnly=false

(M)LocalOnly=false

(M)History=false

(M)ServerAdjuncts=false

(M)LastHeardTime=-1

(M)MessageHoldTime=-1

WxNow Generator Properties

Symbol=/_

This specifies the APRS symbol to use in the weather station.

(M)TimeStamp=

This will be set to a DMHz format based on the contents of the wxnow.txt file.

Section 4 - Installation Instructions

WXNow.jar must be placed in the wherever specified in the ClassPath property. Normally it will be in the same directory as javAPRSSrvr and ClassPath=WXNow.jar Add the properties file to Clients and start javAPRSSrvr.

The wxnow.txt file MUST follow the following format:

MMM dd yyyy HH:mm (local PC time)

Weather posit format following the lat/lon symbol.

Eg:

Jul 07 2012 14:00

292/004g011t098h36b10139jDvs

Section 5 – XML Status Page Description

General XML

```
<clientrcv>
<time>
<connect utc="1341672397349"/>
<lastlinein utc="1341685972369"/>
</time>
<upstream>
false
</upstream>
<readonly>
false
</readonly>
<login>
<callssid verified="true">
AE5PL
</callssid>
<software version="4.0.0">
WXNowGen
</software>
</login>
<rcvdfrom bytes="3828" lines="44" packets="44">
<udp bytes="0" lines="0" packets="0"/>
</rcvdfrom>
</clientrcv>
```

Detail XML

```
<clientrcv>
<time>
<connect utc="1341672397349"/>
<lastlinein utc="1341686272369"/>
</time>
<class name="WXNowGen">
<package name="net.ae5pl.wxnow" revision="b01" title="wxnow.txt Weather Generator" version="4.0.0"/>
</class>
<messages callssids="0" unacked="0"/>
<upstream>
false
</upstream>
<readonly>
false
</readonly>
<login>
<callssid verified="true">
AE5PL
</callssid>
<software version="4.0.0">
WXNowGen
</software>
</login>
<rcvdfrom bytes="3915" lines="45" packets="45">
<udp bytes="0" lines="0" packets="0"/>
</rcvdfrom>
<file>
<![CDATA[C:\Weather\wxnow.txt]]>
</file>
</clientrcv>
```