DXView 3.6.1

Overview

DXView enables you to
- determine a callsign's DXCC entity and location information, including latitude, longitude, gridsquare, IOTA tag, CQ zone, ITU zone, beam heading, distance, and country map
- select a location on its built in world map, or optionally on DX Atlas (version 2.1 or later), by
    o entering a callsign
    o entering a latitude and longitude
    o entering a grid square
    o entering an IOTA tag
    o clicking on that location (built-in world map only)
- display sunrise and sunset times for any selected location
- plot information on its built-in world map, or optionally on DX Atlas (version 2.1 or later)
    o beam headings and great circle signal paths
    o solar position
    o solar terminator
    o spotted DX stations and QSOs captured by SpotCollector (QSOs can only plotted on the built-in world map)
    o award progress from the currently-open DXKeeper log
- prepare to work a DX station plotted on the built-in world map by automatically
    o setting your transceiver to the appropriate frequency and mode via Commander
    o creating and initializing a new DXKeeper log entry
- control and align PC-connected antenna rotators

Prerequisites

To use DXView, you need
- a PC running Windows 95 (v4.00.950 B or v4.00.950 C), Windows 98, Windows NT, Windows 2000, or Windows XP, ideally
  - 75 mHz Pentium or better
  - 32 MB RAM or better
- an SVGA display or better

Operation

DXView's major functions can be invoked by clicking buttons in its **Info** window, or by striking keyboard shortcuts.

DXView draws information from six databases for which it provides management facilities; it can optionally query a seventh database, SpotCollector's Special Callsign Database

DXView employs four windows:
1. the **Info** window, which displays textual information like DXCC entity, latitude and longitude, grid square, IOTA tag, etc.
2. the World Map window graphically displays beam headings, the solar terminator, and DX spots; this information can be optionally displayed on the DX Atlas **World Map** window (requires DX Atlas version 2.1 or later).
3. the Sunrise/Sunset window displays sunrise and sunset times over a 30-day interval for both your QTH and the currently selected location
4. the Translations window optionally displays translations of amateur radio phrases for languages used in the currently-selected DXCC entity

Using the World Map Window
You can configure DXView to use its own built-in World Map window , or to use the DX Atlas World Map window. Clicking the **World** button in the **Info** window's **Map** panel will display the **World Map** window you've chosen.
If you have selected the built-in word map, use the **World Map** window's **Map** panel to specify which set of boundaries to display:
- continental boundaries (with or without Antarctica)
- Maidenhead Field boundaries
- CQ zone boundaries
- ITU zone boundaries
- ITU region boundaries

Both the built-in **World Map** window and the DX Atlas **World Map** window display
- your QTH, as a solid black circle
- the currently selected position, as a solid blue circle
- the great circle route between your QTH and the currently selected position, as a blue line
- the sun's current position or its position at a specified date and time, as a solid yellow circle
- the position of the solar terminator, via shading of the nighttime area
- the positions of stations you have spotted or worked as solid circles
- the paths between spotted DX stations and the stations that spotted them (if enabled)

The built-in **World Map** window also displays the borders of the auroral zones, in magenta.

If you've chosen the built-in **World Map** window and Solar Position panel's **Current** button is selected, the solar position and terminator are updated every two minutes; the built-in **World Map** window's title bar displays the time of the most recent update. To view the solar position and terminator at a specific date and time, click the **At this UTC date/time** button and specify a UTC date and time using the format dd-mmm-yyyy hh:mm; if this date and time are valid, the solar position and terminator will be displayed, and the built-in **World Map** window's title bar will display this date and time until you specify another, or until you select the Solar Position panel's **Current** button. The DX Atlas **World Map** window continuously updates its display of the solar position and terminator, and provides controls for displaying the positions of solar position and terminator at any time in the past or future.

To set your QTH, click the **Config** button and specify your latitude and longitude in the **General** tab's QTH panel. Alternatively, select your QTH position as described in the next section, click the **Config** button, and then click the **Position** button in the **General** tab's QTH panel.

Selecting a position
There are four ways to select a position:

- click on its location in the built-in **World Map** window or in the DX Atlas **World Map** window, if enabled
- enter its latitude and longitude in the **Info** window's **Latitude** and **Longitude** textboxes, and strike the **Enter** key in either textbox
- enter its grid square in the **Info** window's **Grid** textbox, and strike the **Enter** key
- enter its IOTA tag in the **Info** window's **IOTA** textbox, and strike the **Enter** key

Selecting a position plots its position in the **World Map** window as a solid blue circle, plots the great circle route connecting it and your QTH as a blue line, and updates the following **Info** window textboxes:

short	the short-path heading from your QTH to the selected position
long	the long-path heading from your QTH to the selected position
latitude	the selected position's latitude
longitude	the selected position's longitude
grid	the selected position's Maidenhead grid square
SP DX	the short-path distance in miles or kilometers from your QTH to the selected position, depending upon the setting selected in the Distance Units panel ;click the ~ button to display the long-path distance in miles or kilometers.
max	the maximum magnetic latitude encountered by a signal traversing the short or long path from your QTH to the selected position

If you depress the **Ctrl** key while selecting a location by clicking on a map location, DXView will rotate your antenna to the location's short path heading; if you depress the **Alt** key, DXView will rotate your antenna to the location's long path heading.
If you depress the **Shift** key while selecting a location by clicking on a map location, DXView will direct PropView to compute and display a propagation forecast to the designated location.
Latitudes should be entered in the format X Y' Z, where

- X is the degrees component of your QTH latitude
- Y is the minutes component of your QTH latitude
- Z is the letter N or S

Examples of latitudes include 38 15' N and 42S . If you enter an illegal latitude, the value 0 0' S will be used.

Longitudes should entered in the format X Y' Z, where

- X is the degrees component of your QTH longitude
- Y is the minutes component of your QTH longitude
- Z is the letter E or W

Examples of latitudes include 122 10' W and 10E . If you enter an illegal longitude, the value 0 0' E will be used.

The accuracy of DXView's computation of the maximum magnetic latitude encountered by a signal depends in part on knowing the geographic location of the Magnetic Poles; as the magnetic poles drift significantly from year to year, these settings should be updated annually.

Displaying Auroral Zones
If you check the **Aurora** box in the built-in **World Map** window's **Plot** panel, the predicted boundaries of the northern and southern aurora zones will be displayed on the built-in World Map, enabling you to visually determine the extent to which a signal path may be influenced by auroral transit. As described in http://sprg.ssl.berkeley.edu/forecast/currentshelp.html , the auroral boundaries expand as the earth's magnetosphere increases in strength due to solar activity. This field strength is measured and widely reported using a parameter referred to as the K index, which takes on values from 0 (low field strength) to 9 (extremely high field strength). DXView provides a textbox on its **Info** window's **GeoMag** panel for you to specify the current

value of the K index, which is available from WWV broadcasts and propagation web sites. SpotCollector automatically captures the most recent K index from WWV spots; if SpotCollector is running, DXView's **K index** textbox will be automatically updated as SpotCollector receives WWV data. The accuracy of DXView's prediction of auroral zone boundaries depends in part on knowing the geographic location of the Magnetic Poles; as the magnetic poles drift significantly from year to year, these settings should be updated annually.

Displaying a callsign's location
Type or paste a callsign (or callsign fragment or prefix) into the **Info** window's **Callsign** textbox; characters will be displayed in red font until you initiate the search by striking the **Enter** key, or by clicking the **Go** button. If an Entity Override is specified for the callsign, the specified DXCC entity will be used; otherwise, the DXCC Database will be searched to determine the callsign's DXCC entity. If the callsign's DXCC entity is not in the United States or its possessions -- Alaska, Puerto Rico, US Virgin Islands, Baker Howland Island, Guam, Johnston Island, Midway Island, Palmyra Island, Kingman Reef, Hawaii, Kure Island, American Samoa, Wake Island, or the Marianas Islands -- then the DXCC database search results are used to determine the callsign's approximate location. If the callsign's DXCC entity is the United States or one of its possessions, and if the USAP Database is installed, then this database will be searched to determine the callsign's location based on the zipcode on file for that callsign with the US Federal Communications Commission; if the USAP Database is not installed or if the callsign is not found in this database, then the callsign's approximate location is determined from the DXCC Database search results -- which can be quite inaccurate for callsigns in these DXCC entities. The name of the database used to determine a callsign's location is displayed at the top-right of the **Info** window's **Location** panel.

If Commander and PropView are running, and if the Generate propagation forecast option is enabled, then after providing a callsign and striking the **Enter** key or clicking the **Go** button PropView will be directed to generate a propagation forecast for the transceiver's current band.

If the callsign's location is successfully determined, the current position is set to that location. DXView plots the current position in the **World Map** window as a solid blue circle, plots the great circle route connecting it and your QTH as a blue line, and updates the following **Info** window textboxes:

prefix	the standard prefix associated with the DXCC entity
entity	the name of the DXCC entity
code	the DXCC entity's country code as assigned by the ARRL's DXCC desk
short	the short-path heading from your QTH to the selected position
long	the long-path heading from your QTH to the selected position
location	the name of the location containing the selected position, possibly including • a tag conveying a Region Code that identifies a DXKeeper Award Region, e.g. <Reg:IT9> for Sicily in CQ DX and Marathon awards • a tag conveying a ADIF Primary Administrative Subdivision, e.g. <Pri:SC> for South Carolina in the United States, or <Pri:SU> for Sumska Oblast in Ukraine
latitude	the selected position's latitude
longitude	the selected position's longitude
grid	the selected position's Maidenhead grid square
SP DX	the short-path distance in miles or kilometers from your QTH to the selected position, depending upon the setting selected in the Distance Units panel; click the ~ button to display the long-path distance in miles or kilometers.
cont	the selected position's continent
CQ	the selected position's CQ zone
ITU	the selected position's ITU zone
time zone	the selected position's time offset relative to UTC

If Pathfinder is running, clicking the **QRZ.com** button will query the online callbook at www.QRZ.com and update the **Entity**, **Code**, **Grid**, **Latitude**, **Longitude**, **CQ**, **ITU**, and **Time** textboxes with the information found there. Depressing the **Shift** key while striking the **Enter** key in the **Callsign** textbox or while clicking the **Go** button will also query www.QRZ.com.

If DXKeeper is running, DXView displays a **Progress** panel showing award progress for the selected DXCC entity in the currently open log; the DXCC entity's prefix and the name of the currently open log both appear in the **Progress** panel's caption. A table within the **Progress** panel shows the status of four modes (SSB, CW, RTTY, and PSK) and 11 bands (160m through 2m), using the following progress codes:

Code	Meaning
W	worked, no QSL requested
R	worked, QSL requested
C	QSL received
V	QSL's Entity, Band, and Mode verified by DXCC desk
E	QSL's Entity verified by DXCC desk
B	QSL's Entity and Band verified by DXCC desk
M	QSL's Entity and Mode verified by DXCC desk

If the DXCC Award objectives specified in DXKeeper indicate that a mode is sought, but there are no confirmed QSOs with the selected DXCC entity in that mode, then the background of that mode's cells will be white rather than the window's background color. Similarly, if the DXCC Award objectives specified in DXKeeper indicate that a band is sought, but there are no confirmed QSOs with the selected DXCC entity on that band, then the background of that band's cells will be white rather than the window's background color.

- double-clicking a table column or row heading filters DXLab's log to show only QSOs with the DXCC entity in the selected band **or** mode
- double-clicking a table cell filters DXLab's log to show only QSOs with the DXCC entity in the selected band **and** mode

If DXKeeper is installed but not running and the Open Most Recent Log option is enabled, DXView will display the **Progress** panel and populate with information from the most recently-opened log.

SpotCollector can be configured to automatically direct DXView to display information about each incoming spot by checking its **Automatic DXView Update** box.. To ensure that these automatic updates will not displace information you directly requested from DXView, such automatic updates are ignored for 5 seconds after any direct request. To preserve the currently-displayed information for a longer time, click the **SC Lock** button; when the current information is no longer needed, click the **SC Unlock** button.

If DXKeeper is running, you can log the contents of the **Prefix** textbox, presumably a callsign, by

- depressing the **Ctrl** key while striking the **Enter** key in the Prefix text box

or

- depressing the **Ctrl** key while clicking the **Go** button

Highlighting callsigns known to QSL via Logbook of the World
If the LotW Database is installed, then DXView will indicate that a callsign is known to QSL via Logbook of the World by coloring the backgrounds of textboxes in the **Search** and **DXCC** panels when you strike the **Enter** key in the **Callsign** textbox or when you click the **Go** button. The colors used differentiate callsigns based on known LotW participation can be specified in the Search & DXCC Background Colors panel. The **DXCC** panel will also display the date at which the callsign last uploaded QSOs to LotW.

You can obtain LotW.mdb by clicking the LotW Database's **Upgrade** button on the Database Versions panel.

Highlighting callsigns that are Authenticity Guaranteed members of eQSL.cc
If the eQSL AG Database is installed, then DXView will indicate that a callsign is an Authenticity Guaranteed member of eQSL.cc by coloring the backgrounds of textboxes in the **Search** and **DXCC** panels when you strike the **Enter** key in the **Callsign** textbox or when you click the **Go** button. The colors used differentiate callsigns based on an eQSL.cc Authenticity Guarantee can be specified in the Search & DXCC Background Colors panel.

You can obtain eQSLAG.mdb by by clicking the eQSL AG Database's **Upgrade** button on the Database Versions panel.

Querying SpotCollector's Special Callsign Database
SpotCollector's Special Callsign Database lets you associate Tags with callsigns you consider special -- friends, members of your local club, or members of a larger organization like the European PSK Club, Ten-Ten, or FOC. You can create your own Special Callsign Database entries, or you can load SpotCollector's Special Callsign Database with membership lists available online. SpotCollector uses its Special Callsign Database to highlight and announce spots of these callsigns. If SpotCollector is installed, you can configure DXView to query SpotCollector's Special Callsign Database, display the resulting Tags on a panel in the **Info** window, and make these Tags accessible to other applications.

Selecting a DXCC entity
You can select a DXCC entity by
- selecting the entity's prefix in the **DXCC** panel's **Prefix** selector
- selecting the entity's name in the **DXCC** panel's **Entity** selector
- enter the entity's country code in the **DXCC** panel's **Code** textbox and then striking the **Enter** key
DXView responds as it does when you identify a callsign's DXCC entity.

Locating an Island from its IOTA tag
If the IOTA Database is installed, then when you enter an IOTA tag in the **Info** window's **IOTA** textbox and strike the **Enter** key, DXView will
- display the name of the associated Island group in the **Info** window's **Region** textbox
- set the current position to the center of the associated Island group
- update the **Latitude**, **Longitude**, **Grid**, and **SP DX** textboxes
- update the short-path and long-path headings
- display a status code in parenthesis following the word IOTA in the **Info** window's **Location** panel
    - D - deleted
    - P - provisional
    - H - on hold pending additional information
- display the word IOTA in a magenta font if additional notes are available; to see these notes, let the mouse cursor hover over the word IOTA, and a popup window displaying the IOTA Database version and notes will appear

If the entire Island group falls within a single DXCC entity, the **Info** window's **Prefix**, and **Country** textboxes will be updated; the **Cont**, **CQ**, **ITU**, and **Time** textboxes may also be updated if they can be unambiguously determined.

Positioning an antenna rotator
The **Info** window's **Heading** panel provides controls that rotate your antenna(s), and displays the **most recent heading** to which your antenna(s) were rotated. To activate a properly configured antenna rotator connected to your PC, click the **Info** window's **SP** button to choose the current short path heading, or click the **LP** button to choose the current long path heading. Depressing the **CTRL** key while clicking the **SP** or **LP** buttons will stop any in-progress rotation if the selected rotator supports a programmable stop command.

Above the **SP** and **LP** buttons, DXView displays the **most recent heading** and path conveyed to the rotator.

Typing a callsign (or callsign fragment or prefix) into the **Info** window's **callsign** box and then depressing the **CTRL** key while striking the **Enter** key will display the callsign's position and rotate the antenna to the displayed shortpath heading.

If you are rotating two antennas whose rotator offsets are not the same, the **Heading** panel caption will indicate which antenna is currently active. To switch antennas, double-click the **Heading** panel caption; the **most recent heading** will be updated to display the newly-activated antenna's heading.

The **Antenna presets** panel contains 12 labeled buttons, each associated with a heading; if DXView's Progress panel is not present, only 8 preset buttons are available. Clicking a preset button rotates the current antenna to the button's heading. To edit the captions and headings associated with buttons in the **Antenna presets** panel, depress the CTRL key while clicking one of these buttons; this will display DXView's **Antenna Presets** window, whose settings specify each Antenna preset button's caption and heading. To make the **Antenna presets** panel visible on DXView's Info window click the Show button on the Config window's **Rotator Control** tab; to hide the Antenna presets panels, click the Hide button on the Config window's **Rotator Control** tab. Alternatively the **Antenna presets** panel can be revealed or hidden by expanding or contracting the width of DXView's **Info** window, respectively.

Viewing a country map
If DXView's Map subfolder contains a map for the currently-specified DXCC entity, the **Info** window's **Country Map** button will be enabled. Clicking this button displays the country map in a separate window.

Plotting the selected location
To capture information associated with the selected location and plot this location on the currently-selected **World** Map window, click the **Info** window's **Plot** button. Subject to Band Filtering, Mode Filtering, Continent Filtering, and Origin Filtering, this location will be marked on the World Map by a solid red circle that persists until its *lifetime* expires, or until you terminate DXView. Allowing the mouse cursor to rest on a plotted red circle will produce a popup that displays the captured information, which can include callsign, DXCC prefix, DXCC entity (if enabled), Maidenhead gridsquare, frequency, mode, UTC time, and shortpath heading.

For plots created by the Plot button to be visible on the **World** Map window, the Origin Filter must include the region specified by the Location setting in the **General** tab's **QTH** panel .

If Commander is running, the active transceiver's frequency and mode are captured when the **Plot** button is clicked. If Commander is not running, you must set the Band Filter and Mode Filter to display plots of unknown band and mode respective for such plots to be visible on the **World Map** window.

If you depress the **CTRL** key while clicking the **Info** window's **Plot** button, a small **DXView Plot** window will appear that lets you specify a frequency (in Kilohertz), and select a mode. Clicking the **DXView Plot** window's **Plot** button lets you create a plot with frequency and mode information without Commander running. If you depress **CTRL** key while clicking the **DXView Plot** window's **Plot** button, the plot will be generated, and the **DXView Plot** window will remain on-screen rather than close; this is convenient if you'll be frequently creating plots whose frequencies and modes you manually specify.

Displaying sunrise and sunset times
To display sunrise and sunset times for the currently-selected position, click the Info window's **Sun** button to display DXView's **Sunrise/Sunset** window. The scrollable grid in this window displays sunrise and sunset times for your QTH, and for the currently-selected position -- referred to in this window as **DX**. The grid displays sunrise and sunset times for the next 30 days, starting with the date specified in the **UTC Date** textbox; by modifying this date and clicking the **Calculate** button, you can display sunrise and sunset times for any 30-day interval. Double-clicking the **UTC Date** sets its contents to the current UTC date.

If you select a new location via the **Info** or **World Map** windows and the **Sunrise/Sunset** window is on-screen, sunrise and sunset times for the new location will be automatically recomputed. If you modify the latitude or longitude, the location of your QTH, or the contents of the **UTC Date** textbox, the invalid portion of the grid will be cleared, and the **Calculate** button will become active. When you click the **Calculate** button, the missing sunrise and sunset times will be recomputed, and the **Calculate** button will be deactivated.

If a location is in 24-hour sunlight or 24-hour darkness, the corresponding grid cell will indicate *day* or *night* respectively.

Displaying translations of amateur radio phrases
If DXView's Translations database is installed and Translation is enabled, then whenever a DXCC entity is selected as the result of a callsign, prefix, entity, or country code lookup, DXView's Translations window will display a table whose columns are amateur radio phrases and whose rows are the languages used in that DXCC entity. Double-clicking a phrase places that phrase in the Windows Clipboard, allowing you to quickly "paste" it into another application.

Column headings are displayed in your choice of native language. A column's position can be changed by clicking on the heading of a column you wish to relocate and then click-dragging the column until the two red positioning triangles indicate the desired new location; this allows the most frequently used phrases to be positioned on the left of the window, with less frequently used phrases accessible by horizontally scrolling the table to the right. The table's column widths can be automatically set so that all translated phrases will be fully visible.

Audio and video pronunciation guides are available.

Displaying the selected location in MapQuest
To invoke MapQuest with the coordinates of the DXView's currently selected location, click the **Info** window's **MapQuest** button. MapQuest will be displayed in the web browser whose pathname is specified in the **Guidance** panel on the **Config** window's **General** tab; if no browser pathname is specified, your default web browser will be used. You can specify the initial zoom level via the slider in the MapQuest Zoom panel.

Displaying the selected location in Google Maps
To display a Google Map with the coordinates of the DXView's currently selected location, click the **Info** window's **Google** button. Google Maps will be displayed in the web browser whose pathname is specified in the **Guidance** panel on the **Config** window's **General** tab; if no browser pathname is specified, your default web browser will be used. You can specify the initial zoom level via the slider in the Google Map panel.

Displaying DX Spots, DX QSOs, Logged QSOs, and DXCC Entity Award Progress
Using the built-in or DX Atlas **World Map** windows , DXView can display the locations of DX spots and DX QSOs captured by SpotCollector, QSOs logged in DXKeeper, and your progress against DXing awards tracked by DXKeeper.

Displaying DX Spots and DX QSOs on the built-in World Map window
To display spots captured by SpotCollector on DXView's built-in **World Map** window, select **Spots** in the **DX** sub-panel in the built-in **World Map** window's **Plot** panel. Subject to Band Filtering, Mode Filtering, Continent Filtering, and Origin Filtering, the plotted spot will be marked by a solid red circle that persists until its *lifetime* expires, or until you terminate DXView.

If you check the **QSOs** box in the **DX** sub-panel in the built-in **World Map** window's **Plot** panel, DXView will plot the location of both a spotted DX station and the station that spotted it if SpotCollector was able to obtain a grid square for both locations. The location of the spotting station is depicted as a black circle, the path between the spotted and spotting station is depicted as a black line.

You can control the size of the circles and lines used to depict DX stations, spotting stations, and paths:
- The diameter of the circles that depict your QTH, the currently-selected position, and the position of stations spotted or worked is specified by the DX spot diameter setting.
- The width of lines that depict the paths between spotted DX stations and the spotting stations is specified by the QSO line width setting.
- The diameter of the circles that depict spotting stations is specified by the QSO origin spot diameter setting.

Allowing the mouse cursor to linger on the built-in **World Map** window within 500 miles (800 kilometers) of a plotted spot will pop up a text banner containing the associated callsign, frequency, mode, grid square (if available), time, and beam heading for the closest plotted spot; if the Include country in popup box is checked, the text banner will also include the associated country name.

With **Spots** selected in the build-in **World Map** window's **Plot** panel, double-clicking in the World Map will
- set DXView's current location to the closest plotted spot
- convey the spot information to WinWarbler (if running) if
  - the spot's mode is PSK31, PSK63, or RTTY
  - the spot's mode is CW and the CW Mode panel is set to CW via WinWarbler
  - the spot's mode is SSB and the Phone modes via WinWarbler panel's SSB box is checked
  - the spot's mode is FM and the Phone modes via WinWarbler panel's FM box is checked
  - the spot's mode is AM and the Phone modes via WinWarbler panel's AM box is checked
- set your transceiver to the spot's frequency and mode (if the spot is not conveyed to WinWarbler and if Commander is running)
  - if the spot's mode is RTTY, the RTTY mode if WinWarbler not running panel specifies whether the transceiver is set to RTTY, RTTY-R, LSB or USB
  - if the spot's mode is CW, the CW Mode panel specifies whether the transceiver is set to CW or CW-R
- initialize a log entry (if DXKeeper is running) for that spot's callsign and grid square (if available)
- direct Pathfinder (if running) to perform a QSL route search
- display all previous QSOs with that spot's callsign or DXCC entity, as directed by the Log Filter panel

If you depress the **Ctrl** key while double-clicking a plotted spot, DXView will rotate your antenna to the short path heading; if you depress the **Alt** key, DXView will rotate your antenna to the long path heading.

If you depress the **Shift** key while double-clicking a plotted spot and PropView is running, DXView will direct PropView to generate a propagation forecast for the spot's location.

Displaying Logged QSOs on the built-in World Map window
When you invoke the **Plot** function on the **Log QSOs** tab of DXKeeper's **Main** window, all QSOs in the Log Page Display will be conveyed to DXView, the **QSOs** button in the **Log** sub-panel in the **Plot** panel of DXView's built-in **World Map** window will be both enabled and selected, and the each conveyed QSO will be plotted as a red circle on the world map. These plotted QSOs are subject to confirmation status filtering, as specified by checkboxes in the Log sub-panel:
- *Unworked* - displays a red circle at the location of a logged QSO whose confirmation status is invalid or expired
- *Unconfirmed* - displays a red circle at the location of a logged QSO whose confirmation status is unconfirmed
- *Confirmed* - displays a red circle at the location of a logged QSO whose confirmation status confirmed or submitted
- *Verified* - displays a red circle at the location of a logged QSO whose confirmation status is verified

If DXKeeper's Log Page Display was filtered when the **Plot** function was invoked, the caption of the **QSOs** button in the Plot panel of DXView's built-in **World Map** window will change to *Filtered QSOs*; allowing the mouse cursor to hover over the **Filtered QSOs** button will display a popup window showing the expression used to filter the Log Page Display.

You can control the diameter of the circles used to depict logged QSOs via the Logged QSO diameter setting.

With *QSOs* or *Filtered QSOs* selected in the **Log** sub-panel of the built-in **World Map** window's **Plot** panel, allowing the mouse cursor to linger on the built-in **World Map** window within 500 miles (800 kilometers) of a plotted QSO will display a text banner showing the QSO's callsign, DXCC entity name, band, mode, and grid square (if available). If multiple QSOs specify the same location, the text banner will designate one with the most advance confirmation status for that location.

Displaying DXCC Entity Award Progress on the built-in World Map window
When DXKeeper is running or with the Open most recent log option enabled, the caption of the **Log** sub-panel in the built-in **World Map** window's **Plot** panel indicates the name of the currently open log file; you can visually plot DXing award progress for this log file by selecting **DXCC Entities** in the **Plot** panel's **Log** sub-panel. These plots are subject to Band Filtering, Mode Filtering, and progress filtering, as specified by checkboxes in the **Log** sub-panel:

- *Unworked* - displays a red circle in each DXCC entity that has not been worked on each active band and active mode
- *Unconfirmed* - displays a red circle in each DXCC entity that has been worked, but has not been confirmed on each active band and active mode
- *Confirmed* - displays a red circle in each DXCC entity that has been confirmed but not verified on each active band and active mode
- *Verified* - displays a red circle in each DXCC entity that has been verified on each active band and active mode

You can control the diameter of the circles used to depict DXCC entities via the DX entity diameter setting.

With **DXCC Entities** selected in the built-in **World Map** window's **Plot** panel, allowing the mouse cursor to linger on the built-in **World Map** window within 500 miles (800 kilometers) of a plotted DXCC entity will display a text banner showing the prefix for the closest plotted country and the associated DXCC entity name.

Displaying DX Spots and DX QSOs on the DX Atlas World Map window
To display spots on the DX Atlas world map rather than on DXView's built-in World Map window,
1. click the enable button in the **DX Atlas** panel on the **Configuration** window's **World Map** tab
2. check the Spots box in the **DX** sub-panel in the **Selection** panel on the **Config** window's **Plot Settings** tab

Subject to Band Filtering, Mode Filtering, Continent Filtering, and Origin Filtering, the plotted spot will be marked by a solid red circle that persists until its *lifetime* expires, or until you terminate DXView.

In the **DX Atlas** panel on the **Configuration** window's **World Map** tab,
- If the Display labels box is checked, the red circle will be accompanied by a text description.
  - If the Display label details box is unchecked, the description will be the spot's callsign.
  - If the Display label details box is checked, the description will be the spot's callsign, frequency, mode, grid square (if available), time, and beam heading
- If the Display labels box is not checked, plotted spots will not be accompanied by text, but if you allow the mouse cursor to rest over a plotted spot, text containing the spot's callsign, frequency, mode, grid square (if available), and time will appear, and remain until you move the mouse cursor.

Note that a spot's text description will be suppressed if it would obscure another spot or its description; increasing the zoom will provide additional room for descriptions to appear.

With Spots selected in the **DX** sub-panel on the **Config** window's **Selection** panel, depressing the **Shift** key while clicking on the DX Atlas World Map window with panning mode disabled will
- set DXView's current location to the closest plotted spot
- convey the spot information to WinWarbler (if running) if
    - the spot's mode is PSK31, PSK63, or RTTY
    - the spot's mode is CW and the CW Mode panel is set to CW via WinWarbler
    - the spot's mode is SSB and the Phone modes via WinWarbler panel's SSB box is checked
    - the spot's mode is FM and the Phone modes via WinWarbler panel's FM box is checked
    - the spot's mode is AM and the Phone modes via WinWarbler panel's AM box is checked
- set your transceiver to the spot's frequency and mode (if the spot is not conveyed to WinWarbler and if Commander is running)
    - if the spot's mode is RTTY, the RTTY mode if WinWarbler not running panel specifies whether the transceiver is set to RTTY, RTTY-R, LSB or USB
    - if the spot's mode is CW, the CW Mode panel specifies whether the transceiver is set to CW or CW-R
- initialize a log entry (if DXKeeper is running) for that spot's callsign and grid square (if available)
- direct Pathfinder (if running) to perform a QSL route search
- display all previous QSOs with that spot's callsign or DXCC entity, as directed by the Log Filter panel

If you depress the **Ctrl** key while clicking a plotted spot, DXView will also rotate your antenna to the short path heading; if you depress the **Alt** key, DXView will rotate your antenna to the long path heading.

Displaying Logged QSOs on DX Atlas on the DX Atlas World Map window
To display logged QSOs on the DX Atlas World Map window rather than on DXView's built-in **World Map** window, click the enable button in the **DX Atlas** panel on **Configuration** window's **World Map** tab. When you invoke the **Plot** function on the **Log QSOs** tab of DXKeeper's Main window,
- all QSOs in the Log Page Display will be conveyed to DXView
- the **QSOs** button in the **Log** sub-panel in the **Selection** panel on the **Configuration** window's **Plot Settings** tab will be both enabled and selected
- each conveyed QSO will be plotted as a red circle on the DX Atlas **World Map** window.

In the **DX Atlas** panel on the **Configuration** window's **World Map** tab,
- If the Display labels box is checked, the red circle will be accompanied by a text description.
    - If the Display label details box is unchecked, the description will be the QSO's callsign
    - If the Display label details box is checked, the description will be the QSO's callsign, DXCC entity, band, mode, and grid square (if available).
- If the Display labels box is not checked, plotted QSOs will not be accompanied by text, but if you allow the mouse cursor to rest over a plotted QSO, text containing the QSO's callsign, DXCC entity, band, mode, and grid square (if available) will appear, and remain until you move the mouse cursor.

Note that a spot's text description will be suppressed if it would obscure another spot or its description; increasing the zoom will provide additional room for descriptions to appear.

Plotted QSOs are subject to confirmation status filtering, as specified by checkboxes in the in the **Log** sub-panel on the **Selection** panel on the **Configuration** window's **Plot Settings** panel:
- Unworked - displays a red circle at the location of a logged QSO whose confirmation status is invalid or expired
- Unconfirmed - displays a red circle at the location of a logged QSO whose confirmation status is unconfirmed
- Confirmed - displays a red circle at the location of a logged QSO whose confirmation status confirmed or submitted
- Verified - displays a red circle at the location of a logged QSO whose confirmation status is verified

If DXKeeper's Log Page Display was filtered when the **Plot** function was invoked, the caption of the **QSOs** button in the **Log** sub-panel on the **Selection** panel on the **Configuration** window's **Plot Settings** panel will change to Filtered QSOs; allowing the mouse cursor to hover over the **Filtered QSOs** button will display a popup window showing the expression used to filter the Log Page Display.

To update the DX Atlas **World Map** window to show worked and confirmed Fields and Grids (if DX Atlas is configured to display field and grid status), check the Update Grid Status box before invoking DXKeeper's **Plot** function.

Displaying DXCC Entity Award Progress on DX Atlas on the DX Atlas World Map window
To display DXCC entities on the DX Atlas **World Map** window rather than on DXView's built-in **World Map** window, click the enable button in the **DX Atlas** panel on the **Configuration** window's **World Map** tab. When DXKeeper is running or with the Open most recent log option enabled, the caption of the **Log** sub-panel on the **Selection** panel on the **Configuration** window's **Plot Settings** panel indicates the name of the currently open log file; you can visually plot DXing award progress for this log file by selecting DXCC Entities in the **Selection** panel's **Log** sub-panel:
- If the Display labels box is checked, DXCC entities will be plotted on the DX Atlas World Map window as red circles accompanied by a text description.
  - If the Display label details box is unchecked, the description will be the entity's DXCC prefix;
  - if the Display label details box is checked, the description will be the entity's DXCC prefix and name.
- If the Display labels box is not checked, plotted DXCC entities will not be accompanied by text, but if you allow the mouse cursor to rest over a plotted entity, text containing its DXCC prefix and name will appear, and remain until you move the mouse cursor.

Note that a DXCC entity's text description will be suppressed if it would obscure another spot or its description; increasing the zoom will provide additional room for descriptions to appear.

Plotted DXCC entities are subject to Band Filtering, Mode Filtering, and progress filtering, as specified by checkboxes in the **Log** sub-panel on the **Selection** panel on the **Configuration** window's **Plot Settings** panel:
- Unworked - displays a red circle in each DXCC entity that has not been worked on each active band and active mode
- Unconfirmed - displays a red circle in each DXCC entity that has been worked, but has not been confirmed on each active band and active mode
- Confirmed - displays a red circle in each DXCC entity that has been confirmed but not verified on each active band and active mode
- Verified - displays a red circle in each DXCC entity that has been verified on each active band and active mode

Databases
DXView employs six databases
- DXCC
- IOTA
- USAP
- LotW
- eQSL.cc
- Translations

The DXCC Database cross references callsigns to DXCC entities and where possible to regions within DXCC entities; it also provides information about these entities and regions, such as local time offsets, CQ zones, ITU zones, and IOTA tags. The DXCC database is maintained in DXView's Databases folder in a file named DXCC.mdb and must be present for DXView to run. While the DXCC database is centrally maintained and distributed, DXView includes facilities for managing it yourself; to display or modify entries in the DXCC Database, click the **Info** window's **DXCC** button.

The IOTA Database cross references IOTA tags to descriptions, locations, and parent DXCC entities. The IOTA database is maintained in DXView's Databases folder in a file named IOTA.mdb.If the IOTA database is not present, DXView will be unable to locate and describe an island via its IOTA tab.

The USAP Database contains callsigns and locations for stations in the United States, Hawaii, Alaska, Puerto Rico, US Virgin Islands, Guam, Marianas Islands, or American Samoa; a station's location is determined from the zipcode on file for that callsign with the US Federal Communications Commission. The USAP database is maintained in DXView's Databases folder in a file named USAP.mdb. If the USAP database is not installed, the approximate location of callsigns from the above DXCC entities will be determined from DXCC database search results alone -- which can be inaccurate for callsigns in these DXCC entities.

The LotW Database contains callsigns known to participate in the ARRL's Logbook of the World (LotW). The LotW database is maintained in DXView's Databases folder in a file named LotW.mdb.If the LotW database is not present, DXView will be unable to highlight the callsigns of stations known to participate in LotW.

The eQSL AG Database contains callsigns that are Authenticity Guaranteed members of eQSL.cc. The eQSL AG database is maintained in DXView's Databases folder in a file named eQSLAG.mdb.If the eQSL AG database is not present, DXView will be unable highlight the callsigns of Authenticity Guaranteed members of eQSL.cc.

The Translations Database provides translations of more than 50 phrases used in amateur radio in more than 50 languages.

These databases are updated a varying frequencies. To determine the installed version of the above databases, to determine the currently available version of the above databases, or to direct DXView to install or upgrade one of the above databases, use functions available on the Configuration window's Databases tab. DXView can be configured to automatically check for the availability of database upgrades on startup. When one or more database upgrades are available, it displays the message **new DB!** on its Main window; clicking this message displays the Configuration window's Databases tab, from which database upgrades can be initiated.

Keyboard Shortcuts

Info window shortcuts

Alt Key Shortcut	Effect
Alt-C	moves the mouse cursor to the callsign textbox
Alt-D	opens the DXCC Database window
Alt-G	moves the mouse cursor to the grid textbox
Alt-K	moves the mouse cursor to the K textbox
Alt-L	moves the mouse cursor to the longpath textbox
Alt-M	displays the MapQuest map for the selected location
Alt-N	moves the mouse cursor to the longitude textbox
Alt-P	directs the antenna rotator to the longpath heading
Alt-R	directs the antenna rotator to the shortpath heading
Alt-S	moves the mouse cursor to the shortpath textbox
Alt-T	moves the mouse cursor to the latitude textbox
Alt-U	displays sunrise and sunset times for the selected location
Alt-W	displays the world map window
Alt-Y	displays a country map for the selected location
Alt-Z	updates all Info window fields based on the callsign (equivalent to clicking the Go button)

Database window shortcuts

Alt Key Shortcut	Effect
Alt-A	moves the mouse cursor to the DXCC Name field
Alt-B	moves the mouse cursor to the Start Date field
Alt-C	moves the mouse cursor to the Country Code field
Alt-D	requests confirmation to delete the selected DXCC Database Entry
Alt-E	moves the mouse cursor to the End Date field
Alt-F	moves the mouse cursor to the Continent field
Alt-G	moves cursor focus to the DXCC Database Grid, which can then be navigated via the left and right arrow keys
Alt-H	moves the mouse cursor to the Time Zone field
Alt-I	moves the mouse cursor to the IOTA field
Alt-J	moves the mouse cursor to the DXCC Search field
Alt-K	moves the mouse cursor to the DXCC Sort field
Alt-L	moves the mouse cursor to the Prefix List field
Alt-M	moves the mouse cursor to the DXCC Map field
Alt-N	moves the mouse cursor to the Longitude field
Alt-O	moves the mouse cursor to the Location field

Alt-P	moves the mouse cursor to the DXCC Prefix field
Alt-Q	moves the mouse cursor to the CQ Zone field
Alt-R	activates the reTable function
Alt-S	saves changes to the selected DXCC Database entry
Alt-T	moves the mouse cursor to the Latitude field
Alt-U	moves the mouse cursor to the ITU Zone field
Alt-Z	abandons changes to the selected DXCC Database entry

Configuration

DXView's Configuration screen contains 6 tabs, each containing a related group of settings and controls that you can inspect and/or modify:

- General
- Plot Settings
- Rotator Control
- World Map
- Overrides
- Databases

The **General tab** contains seven panels:

- Options Panel

Display progress data in bold font	when checked, data in the info window's Progress table is rendered with a bold font
Open most recent log	when checked with DXKeeper not running, DXView opens the most recent log opened when DXView and DXKeeper were both last running (if DXKeeper is terminated with this box checked, DXView will continue to display progress from the currently open log)
Query Special Callsign database	when checked and SpotCollector is installed, queries SpotCollector's Special Callsign Database, reports any resulting Tags in a panel on DXView's **Info** window, and makes these Tags accessible to other applications
Generate propagation forecast	when checked with Commander and PropView running, directs PropView to generate a propagation forecast for the current transceiver band after performing a callsign lookup via the Info window
Display information in title bars	when checked, window title bars display the current UTC time (disable if running Vista!)
Use multiple monitors	when checked, windows that resided on a secondary monitor during the previous session will be restored to the same secondary monitor on startup; when not checked, all windows are restored to the primary monitor on startup
Log debugging information	when checked, DXView records diagnostic information in a file named Errorlog.txt residing in DXView's folder.

- Magnetic Pole Position Panel

Latitude	the North Magnetic Pole's latitude (defaults to the estimated 2004 position of 82 18'N)
Longitude	the North Magnetic Pole's longitude (defaults to the estimated 2004 position of 113 24'W)

- DX Units Panel

Miles button	sets the **DX** textbox's unit of distance measurement to miles
Kilometers button	sets the **DX** textbox's unit of distance measurement to kilometers

- Search & DXCC Background Colors

Normal	click on the rectangle to set the color used to display the backgrounds of textboxes in the Search and DXCC panels when the callsign is not known to participate in the ARRL's Logbook of the World
LotW	click on the rectangle to set the color used to display the backgrounds of textboxes in the Search and DXCC panels when the callsign is known to participate in the ARRL's Logbook of the World

eQSL	click on the rectangle to set the color used to display the backgrounds of textboxes in the Search and DXCC panels when the callsign is an Authenticity Guaranteed member of eQSL.cc
LotW & eQSL	click on the rectangle to set the color used to display the backgrounds of textboxes in the Search and DXCC panels when the callsign is known to participate in the ARRL's Logbook of the World and an Authenticity Guaranteed member of eQSL.cc

- QTH Panel

Latitude	your QTH latitude, in the format X Y' Z - X is the degrees component of your QTH latitude - Y is the minutes component of your QTH latitude - Z is the letter N or S examples: 38 15' N 42S
Longitude	your QTH longitude, in the format X Y' Z - X is the degrees component of your QTH longitude - Y is the minutes component of your QTH longitude - Z is the letter N or S examples: 128 37' W 71E
Position button	click to set your QTH latitude and longitude to the currently selected position on DXView's world map
Save button	click to save your QTH latitude and longitude for use by subsequent DXView sessions
Restore button	click to set your QTH latitude and longitude to the previously saved QTH position
Location buttons	choose your QTH location: - NAE for the eastern part of North America - NAM for the midwestern part of North America - NAW for the western part of North America - AS for South America - EU for Europe - AF for Africa - AS for Asia - OC for Oceania This location is used to establish an origin for plots created when you click the **Plot** button. The Origin Filter considers a plot's origin in determining whether or not that plot should be displayed on DXView's earth map.

- Translations Panel

  This panel governs DXView's ability to display translations of amateur radio phrases for languages used in the currently-selected DXCC entity. This panel is disabled unless the Translations database is installed.

Enable	when checked, enables the lookup and display of translated amateur radio phrases in DXView's Translations window
native language	select the language used to display column headings in the Translations window
Auto Size	when clicked, column widths in the Translations window are adjusted so that each phrase will be completely visible

- Guidance Panel

show control explanations	when checked, enables the display of explanatory information when the mouse cursor lingers over a textbox, button, checkbox, display pane, or setting.
Browser pathname	if this setting is blank, DXView displays online help using your PC's default HTML browser; if this setting contains the pathname of an HTML browser, DXView displays online help using that browser. MapQuest and Google maps are displayed using the same browser.

The **Plot Settings tab** contains four panels:
- Selection Panel
  - DX sub-panel
    - the Spots and QSOs items in this sub-panel are linked to their counterparts on the built-in World Map window's Plot panel; changing one will automatically update the other

Spots	when selected with SpotCollector running, DX spots are displayed on the world map
QSOs	when checked with SpotCollector running, both the location of a spotted DX station and that of the station that spotted it are displayed on the world map if gridsquares for each location were specified in the spot
Lifetime	specifies how long, in hours, a spot should be displayed on the world map, as measured from the time the spot first appears; fractional durations like .25 can be specified.

  - Log sub-panel
    - if DXKeeper is installed, the caption of this sub-panel includes the name of the log file from which QSOs and DXCC entities will be displayed
    - items in this sub-panel are linked to their counterparts on the built-in World Map window's Plot panel; changing one will automatically update the other

QSOs	when selected with DXKeeper running, logged QSOs are displayed on the world map • this item is disabled -- "grayed-out" -- until you direct DXKeeper to designate a set of QSOs to be plotted by clicking the **Plot** button on the *Log QSOs* tab of its Main window • if DXKeeper's Log Page Display is filtered when you click the **Plot** button on the *Log QSOs* tab of its Main window, then this item's caption will change to *Filtered QSOs*; allowing the mouse cursor to hover over the caption will produce a popup display containing the filter expression
DXCC Entities	when selected with DXKeeper running, DXCC entities are displayed on the world map
Unworked	when checked, the world map displays logged QSOs whose DXCC award status is *expired* or *invalid*, and DXCC entities whose award status is unworked
Unconfirmed	when checked, the world map displays logged QSOs whose DXCC award status is *worked* or *requested*, and DXCC entities whose award status is worked, queued, or requested
Confirmed	when checked, the world map displays logged QSOs whose DXCC award status is *confirmed* or *submitted*, and DXCC entities whose award status is confirmed
Verified	when checked, the world map displays logged QSOs whose DXCC award status is *verified*, and DXCC entities whose award status is *verified*

- Band Filter Panel (this panel is disabled -- "grayed out" when Logged QSOs are being displayed)

band checkboxes	determines whether DX spots, DX QSOs, or DXCC entity award progress on the specified band appear on the world map
? checkbox	determines whether DX spots, DX QSOs, or DXCC entity award progress whose band is unknown appear on the world map
Xcvr band only	if Commander is running, DX spots, DX QSOs, or DXCC entity award progress on the transceiver's current band appear on the world map
None checkbox	resets all band checkboxes
Top checkbox	sets the 160m checkbox
Low checkbox	sets the 80m and 40m checkboxes
Tri checkbox	sets the 20m, 15m, and 10m checkboxes
Warc checkbox	sets the 30m, 17m, and 12m checkboxes
VHF checkbox	sets the 6m and 2m checkboxes
All checkbox	sets all band checkboxes

- Mode Filter Panel (this panel is disabled -- "grayed out" when Logged QSOs are being displayed)

mode checkboxes	determines whether DX spots, DX QSOs, or DXCC entity award progress in the specified mode appear on the world map
? checkbox	determines whether DX spots, DX QSOs, or DXCC entity award progress whose mode is unknown appear on the world map
None checkbox	resets all mode checkboxes
All checkbox	sets all mode checkboxes

- Continent Filter Panel (this panel is disabled -- "grayed out" when Logged QSOs or Logged DXCC Entities are being displayed)

NA checkbox	determines whether DX spots or DX QSOs in North America appear on the world map
SA checkbox	determines whether DX spots or DX QSOs in South America appear on the world map
EU checkbox	determines whether DX spots or DX QSOs in Europe appear on the world map
AF checkbox	determines whether DX spots or DX QSOs in Africa appear on the world map
AS checkbox	determines whether DX spots or DX QSOs in Asia appear on the world map
OC checkbox	determines whether DX spots or DX QSOs in Oceania appear on the world map
AN checkbox	determines whether DX spots or DX QSOs in Antarctica appear on the world map
? checkbox	determines whether DX spots or DX QSOs whose continent is unknown appear on the world map
None checkbox	resets all continent checkboxes
All checkbox	sets all continent checkboxes

- Origin Filter Panel (this panel is disabled -- "grayed out" when Logged QSOs or Logged DXCC Entities are being displayed)

NAE checkbox	determines whether DX spots or DX QSOs originating from eastern North America appear on the world map

NAM checkbox	determines whether DX spots or DX QSOs originating from midwestern North America appear on the world map
NAW checkbox	determines whether DX spots or DX QSOs originating from western North America appear on the world map
SA checkbox	determines whether DX spots or DX QSOs originating from South America appear on the world map
EU checkbox	determines whether DX spots or DX QSOs originating from Europe appear on the world map
AF checkbox	determines whether DX spots or DX QSOs originating from Africa appear on the world map
AS checkbox	determines whether DX spots or DX QSOs originating from Asia appear on the world map
OC checkbox	determines whether DX spots or DX QSOs originating from Oceania appear on the world map
? checkbox	determines whether DX spots or DX QSOs whose origin is unknown appear on the world map
None checkbox	resets all origin checkboxes
All checkbox	sets all origin checkboxes

The **Rotor Control tab** contains the Enable checkbox and six panels
- **Enable**
  - determines whether rotator control is enabled
  - when set, attempts to open and configure the selected port
- Model Panel

AlfaSpid	specifies and AlfaSpid antenna rotator
ARSWIN	specifies a rotator controlled by ARSWIN
Heath	specifies a Heath HD1780 IntelliRotor
Green Heron Hygain Idiom Press	specifies a rotator whose controller uses the Hygain DCU-1 protocol, which is also used by Green Heron and Idiom Press controllers
LP-Rotor	specifies a rotator controlled by LP-Rotor
M2 RC2800P-A	specifies an M2 RC2800P-A antenna rotator
M2 RC2800X	specifies an M2 RC2800PX antenna rotator
N1MM	specifies the rotator controlled by N1MM Rotor
Prosistel	specifies a Prosistel antenna rotator
SARtek	specifies a SARtek rotor controller
TIC	specifies a TIC rotor controller
TrackBox	specifies a TAPR TrackBox rotor controller
Yaesu	specifies a Yaesu antenna rotator

- Speed Panel (M2 and Yaesu rotators only)

Slow	selects the rotators slowest speed of rotation
Medium	selects the rotators mid-range speed of rotation
Fast	selects the rotators fastest speed of rotation

- Options Panel (Hygain-compatible rotators only)

Endpoint	enables the Rotor-EZ "endpoint" option (disabling jumper on PCB must be removed for this to work)
Overshoot	enables the Rotor-EZ "overshoot" option (disabling jumper on PCB must be removed for this to work)
Unstick	enables the Rotor-EZ "Unstick" option (disabling jumper on PCB must be removed for this to work)

- Alignment Panel

Solar-QTH	- continuously displays the difference, in degrees, between the Sun's present longitude and your QTH's longitude - if your QTH longitude and PC's clock are set accurately, the Sun is due south or due north of your antenna when this value is 0
Ant1 rotator offset	- use this setting to compensate for a rotator positioning error associated with the primary antenna, and/or for rotator controllers requiring a fixed offset (e.g. Yaesu rotator controllers in North America require an offset of -180) - enter a value between -359 and +359 - changing this setting clears the most recent heading display
Ant2 rotator offset	- use this setting to compensate for a secondary antenna on the mast whose rotator offset is different than that of the primary antenna , and/or for rotator controllers requiring a fixed offset (e.g. Yaesu rotator controllers in North America require an offset of -180) - enter a value between -359 and +359 - a non-blank value causes the Heading panel caption to indicate which antenna is currently active - changing this setting clears the most recent heading display

- Antenna Presets panel

Clicking this panel's **Show** button displays the Antenna presets panel on DXView's **Info** window; clicking this panel's **Hide** button hides the Antenna presets panel on DXView's **Info** window.

- Directive Acceptance by Band panel

If Commander is running, the checkboxes in this panel determine whether rotator control directives from other applications are obeyed or ignored: if the active transceiver band's box is checked in this panel, then rotator control directives are obeyed. If the active transceiver band's box is not checked, then rotator control directives are ignored. If Commander is not running, rotator control directives from other applications are obeyed.

- Serial Port Interface Panel (not shown if the Model panel is set to ARSWIN or LP-Rotor controllers, or the N1MM Rotor application)

Port	choose the serial port by which your PC is connected to your rotator controller
Speed	select the serial port's baud rate
Word Length	select the serial port's word length, in bits
Stop Bits	select the number of stop bits following each transmitted word
Parity	select the serial port's parity

- N1MM Rotator Selection by Band panel (only shown if the Model panel is set to the N1MM Rotor application, and only effective if Commander is running)

Enable	check to enable rotator selection by current transceiver band
160m	serial port to which N1MM Rotor will send commands when the transceiver frequency is in the 160m band
80m	serial port to which N1MM Rotor will send commands when the transceiver frequency is in the 80m band
60m	serial port to which N1MM Rotor will send commands when the transceiver frequency is in the 60m band
40m	serial port to which N1MM Rotor will send commands when the transceiver frequency is in the 40m band
30m	serial port to which N1MM Rotor will send commands when the transceiver frequency is in the 30m band
20m	serial port to which N1MM Rotor will send commands when the transceiver frequency is in the 20m band
17m	serial port to which N1MM Rotor will send commands when the transceiver frequency is in the 17m band
15m	serial port to which N1MM Rotor will send commands when the transceiver frequency is in the 15m band
12m	serial port to which N1MM Rotor will send commands when the transceiver frequency is in the 12m band
10m	serial port to which N1MM Rotor will send commands when the transceiver frequency is in the 10m band
6m	serial port to which N1MM Rotor will send commands when the transceiver frequency is in the 6m band
4m	serial port to which N1MM Rotor will send commands when the transceiver frequency is in the 4m band
70cm	serial port to which N1MM Rotor will send commands when the transceiver frequency is in the 70m band

If Commander is not running or if this panel's Enable box is not checked, then N1MM Rotor will send commands to the currently-selected rotator. If Commander and this panel's Enable box is checked but the serial port selector for the current transceiver band does not specify a serial port, then no commands will be sent to any rotator.

The **World Map tab** contains four panels:
- Built-in Cylindrical Equidistant Panel

Enable	when checked, directs DXView to display information on its built-in world map, a cylindrical equidistant projection in a rectangular window, instead of on the DX Atlas world map
Include Antarctica on Continent overlay	when checked, the built-in world map's continent boundaries include Antarctica

  o Graphics sub-panel

DX spot diameter	specifies the diameter of the filled circle that depicts a DX spot on the world map
QSO line width	specifies the width of the line that connects both participants of a DX QSO on the world map

QSO origin diameter	specifies the diameter of the filled circle that depicts a spotted DX QSO's origin on the world map
Logged QSO diameter	specifies the diameter of the filled circle that depicts a Logged QSO on the world map
DXCC entity diameter	specifies the diameter of the filled circle that depicts a DXCC entity on the world map
Plot color	click to set the color of the solid circles that represent DX spots, logged QSOs, and DXCC entities on the world map

- o Solar position sub-panel

Current	when selected, the sun's current position is displayed on the built-in world map

At this UTC date/time	when selected, the sun's position at the specified date and time is displayed on the built-in world map
	    o double-clicking sets the date/time to the current date time
	    o the m, w, d, h, and n buttons above the word *previous* reduce the date/time by one month, week, day, hour, or minute, respectively
	    o the n, h, d, w, and m buttons above the word *next* increase the date/time by one minute, hour, day, week, or month respectively

- o DX Spots sub-panel

Set Xcvr split		when checked, double-clicking on a plotted spot in the built-in world map for a DX station operating split directs Commander (if running) to place the transceiver in split mode
Include Country in popup		when checked, country names are included in popups that appear when the mouse cursor hovers over a DX spot on the built-in world map
Log Filter	call	double-clicking on a plotted spot in the built-in world map directs DXKeeper (if running) to show all previous QSOs with the spot's base callsign
	entity	double-clicking on a plotted spot in the built-in world map window directs DXKeeper (if running) to show all previous QSOs with the spot's DXCC entity
RTTY mode if WinWarbler not running	RTTY	double-clicking on a plotted RTTY spot in the built-in world map sets the transceiver to normal RTTY mode (if Commander is running)
	RTTY-R	double-clicking on a plotted RTTY spot in the built-in world map sets the transceiver to reversed RTTY mode (if Commander is running)
	USB	double-clicking on a plotted RTTY spot in the built-in world map sets the transceiver to USB mode (if Commander is running)
	LSB	double-clicking on a plotted RTTY spot in the built-in world map sets the transceiver to LSB mode (if Commander is running)
	PKT	double-clicking on a plotted RTTY spot in the built-in world map sets the transceiver to PKT mode (if Commander is running and the current transceiver doesn't support Data mode)

		PKT-R	double-clicking on a plotted RTTY spot in the built-in world map sets the transceiver to PKT-R mode (if Commander is running and the current transceiver doesn't support Data mode)
		Data-L	double-clicking on a plotted RTTY spot in the built-in world map sets the transceiver to Data-L mode (if Commander is running and the current transceiver supports Data mode)
		Data-U	double-clicking on a plotted RTTY spot in the built-in world map sets the transceiver to Data-U mode (if Commander is running and the current transceiver supports Data mode)
CW mode		CW	double-clicking on a plotted CW spot in the built-in world map sets the transceiver to normal CW mode (if Commander is running)
		CW-R	double-clicking on a plotted CW spot in the built-in world map sets the transceiver to reversed CW mode (if Commander is running)
		CW via WW	double-clicking on a plotted CW spot in the built-in world map with both WinWarbler and Commander running, conveys the spot information to WinWarbler; if WinWarbler isn't running but Commander is running, the transceiver is set to normal CW mode
Phone modes via WinWarbler		SSB via WW	when checked, double-clicking on a plotted SSB spot in the built-in world map with both WinWarbler and Commander running conveys the spot information to WinWarbler; if WinWarbler isn't running but Commander is running, the transceiver is set to USB or LSB mode as a function of frequency
		AM via WW	when checked, double-clicking on a plotted AM spot in the built-in world map with both WinWarbler and Commander running conveys the spot information to WinWarbler; if WinWarbler isn't running but Commander is running, the transceiver is set to AM mode
		FM via WW	when checked, double-clicking on a plotted FM spot in the built-in world map with both WinWarbler and Commander running conveys the spot information to WinWarbler; if WinWarbler isn't running but Commander is running, the transceiver is set to FM mode

- DX Atlas Panel

Enable	when checked, directs DXView to display information on the DX Atlas world map instead of the built-in world map (requires DX Atlas version 2.1 or later)

Display labels	when checked,
	  o DX spots plotted on DX Atlas are accompanied by text indicating the spot's callsign and, if Display label details is enabled, the spot's frequency, mode, and time
	  o Logged QSOs plotted on DX Atlas are accompanied by text indicating the QSOs callsign, and if Display label details is enabled, the QSO's band, mode, and grid square
	  o DXCC entities plotted on DX Atlas are accompanied by text indicating the entity's DXCC prefix and if Display label details is enabled, the entity's name
	when non checked,
	  o allowing the mouse cursor to hover near a plotted spot displays text indicating the spot's callsign, frequency, mode, and time
	  o allowing the mouse cursor to hover near a plotted logged QSO displays text indicating the QSO's callsign, band, mode, and grid square
	  o allowing the mouse cursor to hover near a plotted DXCC entity displays text indicating the entity's DXCC prefix and name

Display label details	if Display labels is enabled, determines whether additional text is displayed for plotted DX spots, logged QSOs, and DXCC entities
Update grid status	when checked, initiating the Plot function on the Log QSOs tab of DXKeeper Main window clears any Maidenhead Fields and Grids currently shown as worked or confirmed on the DX Atlas map, and after all logged QSOs have been received from DXKeeper, updates the DX Atlas map to show worked and confirmed Fields and Grids (if DX Atlas is configured to display field and grid status)
Plot color	click to set the color of the solid circles that represent DX spots, logged QSOs, and DXCC entities on DX Atlas

- MapQuest Zoom Panel
  The slider in this panel specified the initial zoom level when MapQuest is invoked to display the current position. Zoom level 0 uses the least magnification for the widest possible view, while zoom level 9 uses the most magnification for the most detailed view. High magnification maps are not available for some parts of the world.
- Google Maps Zoom Panel

  The slider in this panel specified the initial zoom level when Google Maps are invoked to display the current position. Zoom level 15 uses the least magnification for the widest possible view, while zoom level 0 uses the most magnification for the most detailed view. High magnification maps are not available for some parts of the world.

The **Overrides tab** allows you to specify the callsigns of up to 16 stations and the details of their operating location in a set of 9 components:

DXCC Entity	the DXCC entity from which the station is operating; left-clicking a DXCC entity or striking the Enter key performs a DXCC database lookup that initializes the other components of the override -- Location, CQ, ITU, Cont, Grid, IOTA, and Time -- if they are unspecified
Location	the name of the location from which the station is operating • use the <Pri:> tag to specify an ADIF Primary Administrative Subdivision code, e.g. <Pri:SC> • use the <Reg:> tag to specify a DXKeeper Award Region code, e.g. <Reg:IT9>
CQ	the CQ zone from which the station is operating
ITU	the ITU zone from which the station is operating
Cont	the Continent from which the station is operating
Grid	the Maidenhead Grid Square from which the station is operating
IOTA	the IOTA tag for the island from which the station is operating
Time	the UTC offset for location from which the station is operating, in hours (positive for west of Greenwich England, negative for east of Greenwich England)
Expiration	the last date on which this override should not be cleared by the Clear Expired Overrides function

You can use this mechanism to handle DX callsigns that do not conform to standard prefix allocations, or to provide specific location information for a station operating in a needed CQ zone, continent, grid square, or IOTA tag. DXView and SpotCollector both use these Entity Overrides when determining a station's location. You can also specify or modify Overrides via the Overrides tab on SpotCollector's Configuration window; any such changes will be reflected on DXView's Overrides tab.

An Override's **X** button will when clicked clear all of the Override's components; to bypass its request for confirmation, depress the **Ctrl** key while clicking the X button.

Clicking the **Clear Expired** Overrides button will clear the components of all Overrides whose Expiration date is in the past.

The **Databases tab** shows you which versions of the databases used by DXLab applications are currently installed and which versions are currently available. It also provides controls that let you install or upgrade these databases.

Check for new versions on startup	when checked, DXView will during startup download a file whose contents specify the currently available versions of each database and update the Available versions display; if a new database version is available, **New DB!** will appear in the **Info** window's title bar, and a **new DB!** message will appear in red font above the Main window's **Config** button; clicking this message displays the Configuration window's Databases tab, from which database upgrades can be initiated.
New?	when clicked, DXView downloads a file whose contents specify the currently available versions of each database and update the Available versions display

Database	Installed	Available	Action	
DXCC	version number of the installed DXCC database	version number of the currently available DXCC database	**Install**	download and install currently available DXCC database
			Upgrade	upgrade the currently available DXCC database
			View Notes	displays Change Notes for the currently available DXCC database
IOTA	version number of the installed IOTA database	version number of the currently available IOTA database	**Install**	download and install currently available IOTA database
			Upgrade	upgrade the currently available IOTA database
USAP	date-of-last-update for the installed USAP database	date-of-last-update for the currently available USAP database	**Install**	download and install currently available USAP database
			Upgrade	upgrade the currently available USAP database
LotW	date-of-last-update for the installed LotW database	date-of-last-update for the currently available LotW database	**Install**	download and install currently available

				LotW database
			Upgrade	upgrade the currently available LotW database
eQSL AG	date-of-last-update for the installed eQSL AG database	date-of-last-update for the currently available eQSL AG database	**Install**	download and install currently available eQSL AG database
			Upgrade	upgrade the currently available eQSL AG database
Translations	version number of the installed Translation database	version number of the currently available Translation database	**Install**	download and install currently available Translation database
			Upgrade	upgrade the currently available Translation database

Managing the DXCC Database

DXCC Database Structure

DXView's DXCC Database contains *Entries* that *associate* callsigns with *DXCC Entities* and *Locations* within those Entities. A Location is a geographic region within an Entity that can be determined from a callsign. The callsign RA4FM, for example, is associated with the Penza region of the DXCC Entity European Russia. The governments of some DXCC Entities don't allocate callsigns in a way that allows a region to be unambiguously determined from a callsign; for such Entities, a single Location is defined with a name identical to that of the Entity. The current version of the DXCC Database is available at http://www.dxlabsuite.com/dxview/DXCC.exe

Each DXCC Entity has the following properties:

Property	Content
Entity Name	the Entity's full name, as defined in http://www.arrl.org/awards/dxcc/dxcclist.txt
Country Code	the Entity's Country Code, a unique, immutable number assigned by the ARRL DXCC desk; see http://www.dxlabsuite.com/dxkeeper/CountryCodes.htm
Entity Prefix	the prefix used to represent this entity within DXKeeper, e.g. K for the United States, G for the United Kingdom
Callbook Prefix	the prefix used by Pathfinder to select a country-specific callbook when seeking a QSL route for a callsign associated with this Entity
Map Prefix	the prefix used to select a country map to be displayed when the user clicks the **Country Map** button on DXView's Info window (if the Map Prefix is foo, then DXView displays the contents of the file foo.gif its Maps folder, if this file exists)
Start Date	the first date on which contacts with this Entity are deemed valid by the ARRL DXCC desk; if no date is specified, the Entity has been valid since the beginning of the ARRL DXCC program
End Date	the last date on which contacts with this Entity are deemed valid by the ARRL DXCC desk; if no date is specified, all contacts after the Start Date are valid.

Areas within a DXCC Entity that can be determine from a callsign's prefix, e.g. a region or administrative subdivision, have the following properties:

Property	Content
Location	The name of the area, e.g. the Pskov, or Sicily - use the <Pri:> tag to specify an ADIF Primary Administrative Subdivision code, e.g. <Pri:PS> - use the <Reg:> tag to specify a DXKeeper Award Region code, e.g. <Reg:IT9> Note that a DXCC entity must specify a Location that is different than the Locations specified by every other DXCC entity.

Prefix List	a comma-separated list of prefixes from this Location to be mapped to this Entity Name and Country Code
• the character ~ preceding a prefix means that the prefix is for documentation purposes only and should not be associated with the Entry's DXCC Entity; this is used as a way of recording the prefixes once associated with deleted DXCC Entities.
• a prefix may contain **one** of the following wildcard characters or range specifiers in order to generate multiple prefix-to-Entity associations:
o # - expands to the numbers 0 through 9, generating 10 prefix-to-Entity associations
o ? - expands to the letters A through Z, generating 26 prefix-to-Entity associations
o $ - expands to the letters A through G, I through K, and M through Z, generating 24 prefix-to-Entity associations (used in defining US prefixes for the 0, 6, 7, 8, and 9 call areas)
o % - expands to the letters A through G, I through K, M through N, and Q through Z, generating 23 prefix-to-Entity associations (used in defining US prefixes for the 1, 2, 3, 4, and 5 call areas)
o & - expands to the letters A through G and I though K, generating 10 prefix-to-Entity associations (used in defining US AA prefixes)
o ! - expands to the letters A through I, generating 9 prefix-to-Entity associations (used in defining the U prefixes assigned to European Russia)
o [a-b] - expands to the letters in the range a through b; for example, [B-E] expands to the letters B, D, and E
▪ a ! character following the initial [inverts the generated letters; for example, [!B-X] generates the letters A, Y, and Z
▪ multiple range specifiers can be separated by semicolons; for example, [B-E;G-J;T-W] expands to the letters B, D, E, G, H, I, J, T, U, V, and W
• DXView's callsign-to-Entity association algorithm operates by finding the *longest* defined prefix that matches the callsign. Thus the callsign 3C0DX is associated with Annobon Island because it matches the 3C0 prefix defined for Annobon, pre-empting the shorter 3C prefix defined for Equatorial Guinea. The callsign 3C1DX, however, would be associated with Equatorial Guinea since it doesn't match Annobon's 3C0 prefix. One can if necessary specify a full callsign as a prefix; the prefix DP1POL, for example, is associated with the Neumayer research base in Antarctica.
Note that the same prefix cannot be associated with more than one Entity; the reTable operation will report and ignore such attempts.
Time Zone	UTC offset for this Location, in hours (positive for west of Greenwich England, negative for east of Greenwich England)
CQ Zone	CQ Zone for this Location, per http://www.cq-amateur-radio.com/wazrules.html
ITU Zone	ITU zone for this Location, per http://www4.plala.or.jp/nomrax/ITU/
IOTA	IOTA tag for this Location, per http://www.rsgbiota.org/shortlist.php4
Continent	Continent for this location - one of AF,AS, EU, NA, OC, SA
Latitude	Latitude of this Location (degrees, positive for north latitude, negative for south latitude)
Longitude	Longitude of this Location (degrees, positive for east longitude, negative for west longitude)

An Entry in the DXCC Database comprises
- a set of prefixes associated with a Location of a DXCC Entity
- the properties of that DXCC Entity
- the properties of that Location
- a Sort property specifies the position in DXView's Database Display of this Entry among the other Entries for this Entity; the first Entry's Sort property is 1; an Entity's Entries are displayed in ascending of their Sort property.

A DXCC Database's Master table contains a set of Entries that cover all DXCC Entities -- current, and deleted. Prior to 2004, DXCC databases were not assigned versions. All DXCC databases released after 1-Jan-2004 contain a version designator, which is displayed in the caption of the Info window's DXCC panel, and in the Config window's Database Versions panel. If you are using a DXCC databases released prior to 1-Jan-2004, the displayed version number will be **1.?.?**.

A DXCC Database contains three tables -- DXCC, Location, and Prefix -- whose entries are derived from the Master table when you initiate the reTable operation; this arrangement is purely a performance optimization. A table named Settings is used to retain information specific to a DXCC Database: its version number, and a flag indicating whether or not the Master Table has been modified without changing the version number.

Viewing and Changing Entries in the DXCC Database
To view the DXCC Database's Master Table, click the Info window's **DXCC** button; when DXView displays its DXCC Database window, select the Master Table tab. The lower half of this tab contains the **DXCC Database Display** -- a scrollable grid with which you can select any DXCC Database Entry; you can adjust the widths of this grid's columns by left-dragging the lines separating the column captions. The upper half of this tab contains textboxes that are populated with data from the currently-selected DXCC Database Entry. These textboxes correspond to the components of a DXCC Database Entry described above. When you select a DXCC Database Entry by clicking on it in the Database Display, these textboxes display that Entry's components.

You can modify a component by editing its textbox; when you do so, the **Save** button becomes enabled, reminding you that the Entry has been modified. When you have completed all changes to an Entry, click the **Save** button to record them, or click the **Undo** button to back them out. When all additions, modifications, and deletions are complete, update the **Database Version** panel and then click the **reTable** button as described below.

To delete a record from the DXCC Database's Master table, select its entry in the **DXCC Database Display**, and click the **Delete** button. When all additions, modifications, and deletions are complete, update the **Database Version** panel and then click the **reTable** button as described below.

To add a record to the DXCC Database's Master table, scroll the grid control to the last DXCC Database Entry, which is designated by an asterisk in its first column. Click in first cell of this Entry to select it; click a second time, and DXView creates an empty Entry that you can populate via the textboxes in the tab's upper section. Click the **Save** button when all of the Entry's components have been specified. When all additions, modifications, and deletions are complete, update the **Database Version** panel and then click the **reTable** button as described below.

When you've completed all necessary changes, decide whether the new DXCC Database should be considered a new version, or just a modification of the existing version. If the former, enter the new version number in the **Database Version** panel's **New** textbox, and uncheck the **Flag new as modified** box. If the latter, leave the **New** textbox showing the current version, and check the **Flag new as modified** box. When using a DXCC Database created with *Flag new as modified* checked, DXView appends a plus (+) to the version number. If you are distributing the DXCC database to other users, then check the **Flag new as modifying entities** box to flag the DXCC database as adding, deleting or modifying one or more DXCC entities; when DXView upgrades to a DXCC database so flagged, it prompts the user to direct DXKeeper and SpotCollector to Recompute when upgrade operation is complete.

Keyboard shortcuts for the above functions are available on page 16.

As described above, the DXCC Database contains four tables. The contents of three of these tables -- DXCC, Location, and Prefix -- are computed from the Master table. Thus after adding, deleting, or modifying one or more Entries to the DXCC Database's Master table, you must regenerate these three tables; this is accomplished by clicking the **reTable** button. If you fail to regenerate these tables, none of the changes you made to the Master table will be available to the applications that rely on it until you perform a reTable operation. The reTable operation requires exclusive access to the DXCC Database. If SpotCollector and/or DXKeeper are running when you initiate a reTable operation, you will be notified that the operation cannot be completed; simply terminate SpotCollector and/or DXKeeper, and then click the **reTable** button again. Opening the DXCC Database with an application like Microsoft Access or Microsoft Excel will also prevent the reTable operation from completing.

The DXCC, Location, and Prefix tables are not made visible by DXView, though you can view them by opening the DXCC Database with Microsoft Access or Microsoft Excel. DXView does display the number of Entries in each of the DXCC Databases five tables on its Database window's Statistics tab.