DXVIEW 4.9.6

Prerequisites

To use DXView, you need
- a PC running Windows NT, Windows 2000, Windows XP, Windows 7, or Windows 8
- 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

Displaying Information About a Callsign

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 Override has been defined for the callsign, the Override's 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:

Textbox	Contents
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 the Display GeoMag panel option is enabled, the **GeoMag** panel will be present in the **Info** window and display the maximum geomagnetic latitude for the path between your QTH and the current position; the larger the geomagnetic latitude, the more absorption will be suffered by signals on the path due to interaction with the auroral zone.

If DXView is configured to use the DX Atlas World Map window, either short paths or long paths between your QTH and the callsign's location can be displayed. To display the short path, click the word **short** in the **Info** window's **Heading** panel; to display the long path, click the word **long** in the **Info** window's **Heading** panel; your current selection in the **Heading** panel will be highlighted in bold font.

If Commander and PropView are running and the Generate Propagation Forecast option is enabled,
- clicking the word **short** in the **Info** window's **Heading** panel will direct PropView to generate a short path forecast of propagation from the currently selected location using the transceiver's current band
- clicking the word **long** in the **Info** window's **Heading** panel will direct PropView to generate a long path forecast of propagation from the currently selected location using the transceiver's current band

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 Pathfinder isn't running, the **QRZ.com** button will be disabled.

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, DIGI, 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 DXKeeper is running, double-clicking one of these **Info** window labels will filter the Log Page Display:

Label	Log Page Display filter when double-clicked
callsign	all QSOs with the callsign specified in the **callsign** textbox
prefix	all QSOs with stations in the DXCC entity specified in the **code** textbox
entity	all QSOs with stations in the DXCC entity specified in the **code** textbox
code	all QSOs with stations in the DXCC entity specified in the **code** textbox
cont	all QSOs with stations in the continent specified in the **cont** textbox
grid	all QSOs with stations in the gridsquare specified by the first 4 characters in the **grid** textbox
CQ	all QSOs with stations in the CQ Zone specified in the **CQ** textbox
ITU	all QSOs with stations in the ITU Zone specified in the **ITU** textbox
IOTA	all QSOs with stations on the island group whose tag is specified in the **IOTA** textbox

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.

- 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; depressing the **Ctrl** key while clicking a table column or row heading filters DXLab's log to show only QSOs with the **Search** panel's callsign in the selected band **or** mode
- clicking a table cell filters DXLab's log to show only QSOs with the DXCC entity in the selected band **and** mode; depressing the **Ctrl** key while clicking a table cell filters DXLab's log to show only QSOs with the **Search** panel's callsign 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.

If Commander is running, the primary transceiver's band will be highlighted in green in the Progress panel. If WinWarbler is running, WinWarbler's current Operating Mode will be highlighted in green in the Progress panel.

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 populate the **Capture** window's **call** box with the contents of DXView's **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. The **DXCC** panel will also display the date at which the callsign last uploaded QSOs to eQSL.

You can obtain `eQSLAG.mdb` 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.

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

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 active 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.

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 can be configured to display a **GeoMag** panel on its **Info** window with a textbox in which you specify the current value of the geomagnetic 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, the **GeoMag** panel's **K** 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.

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; if no location is selected, the **Plot** button will be disabled. 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 Active DX Stations and QSOs, Logged QSOs, and DXCC Entity Award Progress
Using the built-in or DX Atlas **World Map** windows and Google Earth, DXView can display the locations of DX stations and DX QSOs captured by SpotCollector, QSOs logged in DXKeeper, and your progress against DXing awards tracked by DXKeeper.

Displaying DX Stations and DX QSOs on the built-in World Map window, and optionally on Google Earth
To display active DX stations 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 DX station 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 an active 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.

If you check the **My** box in the **DX** sub-panel in the built-in **World Map** window's **Plot** panel, the display of spots and QSOs on the world map will be limited to those whose most recent "spotting station" is
- the specified station callsign
- the specified station callsign followed by a hyphen followed by anything else

Note: the **My** box is unchecked at startup.
Active DX stations, logged QSOs, and DXCC Entities can in parallel be displayed on Google Earth:
- The location of each active DX station is marked with a red circle containing a black 5-pointed star, the location of its spotting station is depicted as a red circle, and the path between the DX station and spotting station is depicted with a red line
- The location of each station in a logged QSO is marked with a red circle containing a black 5-pointed star
- The location of each DXCC Entity is marked with a red circle containing a black 5-pointed star

You can control the size of the circles and lines used to depict DX stations, spotting stations, and paths on the built-in **World Map** window:
- 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 active 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 DX station; if the Include country in popup box is checked, the text banner will also include the associated country name.

Clicking the **Scan DX** button on the Main or World Map window will
- save the Xcvr band only and Band Filter settings
- display active DX stations on each of the bands selected in the Scan DX Bands panel for the number of seconds specified, subject to the Mode Filter, Continent Filter, and Origin Filter
- restore the Xcvr band only and Band Filter settings

While a Scan DX operation is in progress,

- the name of the band whose active DX is currently being displayed will appear to the right of the **Scan DX** button on the Main window, and above the **Scan DX** button on the World Map window
- if SpotCollector is running with audio announcements enabled and DXView's ann setting is enabled, the name of the band whose active DX is currently being displayed will be audibly announced
- clicking the **Scan DX** button on the Main or World Map window will immediately terminate the Scan DX operation

Selecting Active DX Stations on the Built-in World Map

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 DX station
- convey the DX station's information to WinWarbler (if running) if
  - the DX station's mode is PSK31, PSK63, or RTTY
  - the DX station's mode is CW and the CW Mode panel is set to CW via WinWarbler
  - the DX station's mode is SSB and the Phone modes via WinWarbler panel's SSB box is checked
  - the DX station's mode is FM and the Phone modes via WinWarbler panel's FM box is checked
  - the DX station's mode is AM and the Phone modes via WinWarbler panel's AM box is checked
- set your transceiver to the DX station's frequency and mode (if the spot is not conveyed to WinWarbler and if Commander is running)
  - if the DX station'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 DX station'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 DX station's callsign and grid square (if available)
- direct Pathfinder (if running) to perform a QSL route search
- display all previous QSOs with that DX station's callsign or DXCC entity, as directed by the Log Filter panel

If you depress the **Ctrl** key while double-clicking a plotted DX station, 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 DX station 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 DXCC entities whose award status is unworked on the selected band or in the selected mode
- *Unconfirmed* - displays a red circle at the location of DXCC entities whose award status is unconfirmed on the selected band or in the selected mode
- *Confirmed* - displays a red circle at the location of a logged QSO whose confirmation status is confirmed or submitted
- *Verified* - displays a red circle at the location of a logged QSO whose confirmation status is verified

Logged QSOs can in parallel be displayed on Google Earth; the location of each conveyed QSO will be marked with a yellow thumbtack labeled with the station's callsign.

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.

DXCC Entities can in parallel be displayed on Google Earth; the location of each Entity will be marked with a yellow thumbtack labeled with the Entity's DXCC Prefix.

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 Active DX Stations and DX QSOs on the DX Atlas World Map window
To display DX stations 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 DX station will be marked by a solid red circle that persists until its *lifetime* expires, or until you terminate DXView.

Active DX stations and QSOs can in parallel be displayed on Google Earth; plotted DX stations are marked with a yellow thumbtack, the location of the spotting station is depicted as a red circle, and the path between the DX and spotting station is depicted with a red line.

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.

Selecting Active DX Stations on the DX Atlas World Map
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 DX station
- convey the spot information to WinWarbler (if running) if
  - the DX station's mode is PSK31, PSK63, or RTTY
  - the DX station's mode is CW and the CW Mode panel is set to CW via WinWarbler
  - the DX station's mode is SSB and the Phone modes via WinWarbler panel's SSB box is checked
  - the DX station's mode is FM and the Phone modes via WinWarbler panel's FM box is checked
  - the DX station's mode is AM and the Phone modes via WinWarbler panel's AM box is checked
- set your transceiver to the DX station's frequency and mode (if the spot is not conveyed to WinWarbler and if Commander is running)
  - if the DX station'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 DX station'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 DX station's callsign and grid square (if available)
- direct Pathfinder (if running) to perform a QSL route search
- display all previous QSOs with that DX station'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 DX station'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.

Logged QSOs can in parallel be displayed on Google Earth; the location of each conveyed QSO will be marked with a yellow thumbtack labeled with the station's callsign.

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.

DXCC Entities can in parallel be displayed on Google Earth; the location of each Entity will be marked with a yellow thumbtack labeled with the Entity's DXCC Prefix.

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

Selecting a Location

There are four ways to select a location:

1. click on its location in the built-in **World Map** window or in the DX Atlas **World Map** window, if enabled
2. enter its latitude and longitude in the **Info** window's **Latitude** and **Longitude** textboxes, and strike the **Enter** key in either textbox
3. enter its grid square in the **Info** window's **Grid** textbox, and strike the **Enter** key
4. enter its IOTA tag in the **Info** window's **IOTA** textbox and strike the **Enter** key, or select an IOTA tag in the **Info** window's **IOTA** selector (if present)

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 location
long	the long-path heading from your QTH to the selected location
latitude	the selected location's latitude
longitude	the selected location's longitude
grid	the selected location's Maidenhead grid square
SP DX	the short-path distance in miles or kilometers from your QTH to the selected location, 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 location

If the GridDXCC database is installed, the first three ways of selecting a location will determine what DXCC entity or entities are contained within the selected location's 4-character grid square. If this grid square contains a single DXCC entity,

- the entity will be specified in the Main window's **DXCC** panel
- if the grid square contains one or more Australian States, Canadian Provinces, Japanese Prefectures, US States, or New Zealand call areas, the Main window's **Location** textbox will identify them

If the selected location's 4-character grid square contains more than one DXCC entity, the names or DXCC prefixes of these entities will be identified in the Main window's **Location** textbox.

When the GridDXCC database provides information about the selected location's 4-character grid square, that grid square is noted in the **Location** panel's upper-right corner.

If the IOTA database is installed, entering an IOTA tag in the **Info** window's **IOTA** textbox and striking the **Enter** key will display its parent DXCC entity in the Main window's **DXCC** panel.

If DXView is configured to use the DX Atlas World Map window, either short paths or long paths between your QTH and the selected location can be displayed. To display the short path, click the word **short** in the **Info** window's **Heading** panel; to display the long path, click the word **long** in the **Info** window's **Heading** panel; your current selection in the **Heading** panel will be highlighted in bold font.

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 specified in the format D M' S" Z, where

- D is the degrees component of the latitude
- M is the minutes component of the latitude
- S is the seconds component of the latitude
- Z is the letter N or S

Examples of latitudes you can enter include 123 9' 55" S, 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 D M' S" Z, where

- D is the degrees component of the longitude
- M is the minutes component of the longitude
- S is the seconds component of the longitude
- Z is the letter E or W

Examples of latitudes you can enter include 73 56' 2" E, 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 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. If the Main window's **DXCC** panel does not specify a DXCC entity, the **MapQuest** button will be disabled.

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. If the Main window's **DXCC** panel does not specify a DXCC entity, the Google button will be disabled.

Initiating a Google Search for the selected entity

To initiate a Google search for the currently-selected entity, depress the CTRL key while clicking the **Info** window's **Google** button. Search results 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.

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 or and strike the **Enter** key or when you select an IOTA tag in the **Info** window's **IOTA** selector (if present), DXView will

- display the name of the associated Island group in the **Info** window's **Region** textbox
- set the current location 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
  - o D - deleted
  - o P - provisional
  - o 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.

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 the **Auto update** box is checked, the **UTC Date** and sunrise/sunset times will automatically be updated at the beginning of each UTC day.

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 **DX** panel's 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.

Clicking a grid cell that contains a time will configure the World Map window to display the solar terminator at that time on the date associated with the clicked cell's row, and place this date and time in the **Selected Time** box. To return the World Map window's solar terminator display to the current date and time, click the **X** button to the right of the **Selected Time** box, or click the **Current** button in the Solar position panel on the Configuration window's **World Map** tab, or close the Sunrise/Sunset window.

Displaying Gray-Line Times

Sunrise Gray-Line openings begin approximately 30 minutes before sunrise and end approximately 30 after sunrise; sunset Gray-Line openings begin approximately 30 minutes before sunset and end approximately 30 minutes after sunset. To display next 100 days with Gray-Line openings between your QTH and the currently-selected position, click the Info window's **Sun** button to display DXView's **Sunrise/Sunset** window, and click the **Gray-Line** button. The scrollable grid in this window displays one row for each day on which a sunrise or sunset Gray-Line opening is present between your QTH and the selected currently-selected location -- referred to in this window as **DX**. The grid displays starting and ending times for each opening, starting with the date specified in the **UTC Date** textbox; by modifying this date and clicking the **Calculate** button, you can display Gray-Line times beginning at any specified date. Double-clicking the **UTC Date** sets its contents to the current UTC date.

If the **Auto update** box is checked, the **UTC Date** and Gray-Line times will automatically be updated at the beginning of each UTC day.

If you select a new location via the **Info** or **World Map** windows and the **Sunrise/Sunset** window is on-screen, Gray-Line times for the new location will be automatically recomputed. If you modify the **DX** panel's latitude or longitude, the location of your QTH, or the contents of the **UTC Date** textbox, the grid will be cleared, and the **Calculate** button will become active. When you click the **Calculate** button, Gray-Line times will be computed and displayed, and the **Calculate** button will be deactivated.

Clicking a grid cell that contains a time will configure the World Map window to display the solar terminator at that time on the date associated with the clicked cell's row, and place this date and time in the **Selected Time** box. To return the World Map window's solar terminator display to the current date and time, click the **X** button to the right of the **Selected Time** box, or click the **Current** button in the Solar position panel on the Configuration window's **World Map** tab, or close the Sunrise/Sunset window.

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.

Positioning an Antenna Rotator
The **Info** window's **Heading** panel provides controls that rotate your antenna(s). If the selected rotator model is a Green Heron, Hygain, M2 RCP2800P-A, M2-RCP2800PX, MDS, Rotor-EZ, or Yaesu, you can enable the Request rotator heading once per second option, which will display the position of your antenna(s) in the **Info** window's **Heading** panel. If Request rotator heading once per second is not enabled, then the **Heading** panel will display the **most recent heading** to which DXView rotated your antenna(s).

To activate a properly configured antenna rotator connected to your PC, click the **Heading** panel 's **SP** button to choose the current **short** path heading, or click its **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 model supports a programmable stop command.

Above the **SP** and **LP** buttons, DXView displays the **most recent heading** and path reported by or conveyed to the rotator. Clicking the **most recent heading** will set the **short** path heading to the most recent heading, but will not initiate antenna rotation.

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 short path 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.

If the height and width of DXView's Main window are sufficient, the **Antenna presets** panel will display 30 antenna preset buttons in two columns of 15, each associated with a heading; clicking one of these buttons will rotate the current antenna to the heading associated with that button.

- if DXView's Progress panel is not present, not all antenna preset buttons in each column will be displayed
- if the Query Special Callsign database option is not enabled, not all antenna preset buttons in each column will be displayed
- reducing the width of DXView's Main window will reduce the number of preset button columns from two to one
- further reducing the width of DXView's Main window will hide the **Antenna presets** panel

To specify or modify 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 all 30 Antenna preset buttons' captions and headings. Presets in the left-most column are numbered 1 through 15; presets in the right-most column are numbered 16 through 30. To make the **Antenna presets** panel visible on DXView's **Info** window, click the Show button on the Configuration window's **Rotator Control** tab; to hide the **Antenna presets** panel, click the Hide button on the Configuration window's **Rotator Control** tab.

If you have Installed and configured the freeware N1MM Rotor application, you can configure DXView to control up to 16 rotators by interoperating with this application. If Commander is running, DXView's N1MM Rotor Selection by Band panel lets you specify which rotator to use as a function of the current transceiver band. N1MM Rotor provides a realtime display of the current rotator's position. Step-by-step configuration instructions are available.

The Directive Acceptance by Band panel determines whether, with Commander running, rotation directives received from other applications are obeyed or ignored as a function of the transceiver's current frequency. If the most recent rotation directive was ignored, the **Heading** panel's antenna position and path are displayed in red font, indicating that an antenna position and path are not being provided to other applications; otherwise, the **Heading** panel's antenna position and path are displayed in blue font.

Databases

DXView employs eight databases

- DXCC
- IOTA
- USAP
- RDA
- GridDXCC
- 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
- optionally populate its IOTA selector with the tags of all groups contained in the currently-selected DXCC entity

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 RDA Database specifies callsigns and the Russian Districts from which they have operated. The RDA database is maintained in DXView's `Databases` folder in a file named `RDA.mdb`.

The GridDXCC Database identifies the DXCC entities present in each grid square that contains part of a DXCC entity. It also identifies Australian States, Canadian Provinces, Japanese Prefectures, US States, and New Zealand call areas contained in a grid square that contains their parent DXCC entity.

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 and three free-standing buttons:

- 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
Query IOTA database	when checked with the IOTA database installed, any action that selects a DXCC entity will query the IOTA database for IOTA groups in that entity • if the entity contains no IOTA groups, the Main window's IOTA textbox will be empty • if the entity contains one or more IOTA group, the Main window's IOTA textbox will be replaced by an IOTA selector populated with the IOTA tags for each group contained by the entity; you can select a particular IOTA tag by clicking its entry in the selector
Display GeoMag panel	when checked, DXView display a GeoMag panel on the **Info** window that displays the maximum geomagnetic latitude for the current path, and provides a **K** box in which you can specify the current geomagnetic K index used to calculate the location of the auroral zones; if SpotCollector is running, DXView's **K** textbox will be automatically updated as SpotCollector receives WWV data.
Generate propagation forecast	when checked with Commander and PropView running, • a callsign lookup via the **Info** window will direct PropView to generate a short path forecast of propagation from the selected location using the transceiver's current band • clicking the word **short** in the **Info** window's **Heading** panel will direct PropView to generate a short path forecast of propagation from the currently selected location using the transceiver's current band • clicking the word **long** in the **Info** window's **Heading** panel will direct PropView to generate a long path forecast of propagation from the currently selected location using the transceiver's current band
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 2015 position of 86 4' N)
Longitude	the North Magnetic Pole's longitude (defaults to the estimated 2015 position of 153 21' 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

Station Callsign	your callsign
Latitude	your QTH latitude, in the format D M' S" Z • D is the degrees component of your QTH latitude • M is the minutes component of your QTH latitude • S is the seconds component of your QTH latitude • Z is the letter N or S examples: • 77 13' 156" S • 38 15' N • 42S
Longitude	your QTH longitude, in the format D M' S" Z • D is the degrees component of your QTH longitude • M is the minutes component of your QTH longitude • S is the seconds component of your QTH longitude • Z is the letter N or S examples: • 113 10' 12" E • 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.

- **Display License** button - when clicked, displays DXView's License
- **Display Error Log** button - when clicked, displays the errorlog.txt file in DXView's folder
- **Help** button - when clicked, displays DXView's reference documentation

The **Plot Settings tab** contains five panels that govern what is displayed on the world map

- Selection Panel
  - DX sub-panel
    - the Spots, QSOs, and My controls 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

My	when checked, limits the display of spots and QSOs on the world map to those whose most recent "spotting station" is
	  ▪ the specified station callsign
	  ▪ the specified station callsign followed by a hyphen followed by anything else
	Note: this option is disabled at startup

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*

- Scan DX Bands

band checkboxes	determine which bands will be included in the Scan DX sequence
ann	if checked, directs SpotCollector (if running) to announce each band as its active DX stations are displayed during a Scan DX operation; if dwell is set to less than 3 seconds, each band's active DX stations will be displayed for 3 seconds
dwell	specifies how long in seconds each band's active DX stations are displayed during a Scan DX operation; a value less than 1 will be interpreted as 1 second, and a value greater than 30 will be interpreted as 30 seconds

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

band checkboxes	determine 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 several checkboxes and six panels
- **Enable**
  - determines whether rotator control is enabled
  - when set, attempts to open and configure the selected port
  - will be unchecked if no serial port is selected or if the selected serial port can't be opened
- **Enable at startup**: when checked, enables rotator control at startup. Check this box so that if rotator control is disabled by a powered-down USB port, it will be automatically enabled the next time DXView is started.
- **Request rotator heading once per second**: when checked and enabled (not "greyed out"), directs the antenna rotator to report its position once each second, and displays this position in the **Info** window's **Heading** panel. This setting is enabled when one of the following Rotator Models is selected: Green Heron, Hygain, M2 RC2800P-A, M2 RC2800X, MDS, Rotor-EZ, or Yaesu.
- **Report computed short path heading when disabled or on unsupported band**: when checked, provides DXLab applications with the computed short path heading if Rotator Control is disabled, of if Directive Acceptance by Band is not enabled for the transceiver's current band.

- **Model** Panel

AlfaSpid	specifies and AlfaSpid antenna rotator using the `ROT1PROG` protocol
ARCO Hygain	specifies an ARCO antenna rotator using the Hygain protocol
ARCO Yaesu	specifies an ARCO antenna rotator using the Yaesu protocol
ARSWIN	specifies a rotator controlled by ARSWIN
Heath	specifies a Heath HD1780 IntelliRotor
Green Heron Hygain MDS Rotor-EZ	specifies a rotator whose controller uses the Hygain DCU-1 protocol, which is also used by Green Heron, MDS, and Rotor-EZ 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 Current	specifies rotator control via the current version of N1MM Rotor
N1MM V12.11	specifies rotator control via N1MM Rotor (version 12.11 or earlier)
Prosistel	specifies a Prosistel antenna rotator
SARtek	specifies a SARtek antenna rotator
TIC	specifies a TIC antenna rotator
TrackBox	specifies a TAPR TrackBox antenna rotator
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

- **ARCO** Panel (ARCO Hygain and ARCO Yaesu rotators only)

Serial	when selected, DXView communicates with the ARCO antenna rotator via the serial port specified in the Serial Port Interface panel
TCP	when selected, DXView communicates with the ARCO antenna rotator via TCP using the specified **Host Address** and **Port**

- **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 rotation directives from other applications are obeyed or ignored: if the box associated with transceiver's current band is checked in this panel, then

- rotation directives are obeyed.
- the antenna heading is reported to other applications
- the antenna heading and path are rendered in blue font

If Commander is running and the box associated with transceiver's current band is not checked, then

- rotation directives are ignored.
- DXView indicates to other applications that the antenna heading is unknown
- the antenna heading and path are rendered in red font

If Commander is not running, then

- rotation directives are obeyed
- the antenna heading is reported to other applications
- the antenna heading and path are rendered in blue font

- **Serial Port Interface** Panel (not shown if the Model panel is set to ARSWIN or LP-Rotor antenna rotators, to an N1MM Rotor application, or to the ARCO Hygain or ARCO antenna rotators with the ARCO panel's TCP setting selected)

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 present if the Model panel is set to **N1MM Current** or **N1MM V12.11**)

Enable	check to enable rotator selection by current transceiver band if Commander is running ○ if the Model panel is set to **N1MM Current** when **Enable** is unchecked or **Commander** is not running, N1MM Rotor will send commands to the COM port specified by the **all bands** selector ○ if the Model panel is set to **N1MM V12.11** when **Enable** is unchecked or **Commander** is not running, N1MM Rotor will send commands to COM16 ○ if the Model panel is set to **N1MM Current** or **N1MM V12.11** when **Enable** is checked and **Commander** is running, N1MM Rotor will send commands to the COM port specified by the **band** selector associated with the primary transceiver's current frequency
all bands	serial port to which the current version of N1MM Rotor will send commands when **Enable** is unchecked or **Commander** is not running
160m	serial port to which N1MM Rotor will send commands when the primary transceiver frequency is in the 160m band
80m	serial port to which N1MM Rotor will send commands when the primary transceiver frequency is in the 80m band
60m	serial port to which N1MM Rotor will send commands when the primary transceiver frequency is in the 60m band
40m	serial port to which N1MM Rotor will send commands when the primary transceiver frequency is in the 40m band
30m	serial port to which N1MM Rotor will send commands when the primary transceiver frequency is in the 30m band
20m	serial port to which N1MM Rotor will send commands when the primary transceiver frequency is in the 20m band
17m	serial port to which N1MM Rotor will send commands when the primary transceiver frequency is in the 17m band
15m	serial port to which N1MM Rotor will send commands when the primary transceiver frequency is in the 15m band
12m	serial port to which N1MM Rotor will send commands when the primary transceiver frequency is in the 12m band
10m	serial port to which N1MM Rotor will send commands when the primary transceiver frequency is in the 10m band
6m	serial port to which N1MM Rotor will send commands when the primary transceiver frequency is in the 6m band
4m	serial port to which N1MM Rotor will send commands when the primary transceiver frequency is in the 4m band
70cm	serial port to which N1MM Rotor will send commands when the primary 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. Step-by-step configuration instructions are available.

- **N1MM Rotor IP** panel (only present if the Model panel is set to **N1MM Current** or **N1MM V12.11**)
  This panel specifies the IP address of the computer on which **N1MM** Rotor is running. The default value is `127.0.0.1`, which means "the computer on which DXView is running". Clicking the **Local** button sets **N1MM Rotor IP** to `127.0.0.1.`

The **World Map tab** contains five 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
Always On Top	when checked, the World Map window will always appear atop other windows

  - 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

  - 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
	  - double-clicking sets the date/time to the current date time
	  - 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
	  - 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

  - 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

This panel governs DXView's Interoperation with DX Atlas:

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,
	   ○ 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
	   ○ 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
	   ○ 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,
	   ○ allowing the mouse cursor to hover near a plotted spot displays text indicating the spot's callsign, frequency, mode, and time
	   ○ allowing the mouse cursor to hover near a plotted logged QSO displays text indicating the QSO's callsign, band, mode, and grid square
	   ○ 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

Label font	click to select the font, font size, font color, and font metrics used to display labels on DX Atlas

- Google Earth Panel
  This panel governs DXView's interoperation with Google Earth:

Enable	when checks DXView to display information on Google Earth in addition to the built-in world map or DX Atlas
QTH Label	specifies the text that should appear at the user's location, e.g. the user's callsign
Fly to Selected Location	when checked, selecting a position causes Google Earth to shift its viewpoint to the newly-selected position at the specified altitude; the speed of this shift is controlled by the **Fly-To Speed** setting on the **Navigation** panel of the **Google Earth Options** window.
Altitude	the height of Google Earth's viewpoint above a selected position or when the user double-clicks a *place* in the Google Earth *Sidebar*
Display Active DX	when enabled, DXView maintains a filterable list of active DX stations and their spotting stations for display on Google Earth when DXView is configured to display spots
Update	specifies the interval at which Google Earth will check for a new selected position, new active DX stations, new logged QSO, or new DXCC entities; choosing a low value will make Google Earth more responsive to DXView, but will also increase Google Earth's resource consumption
Icon Size	selects the size of the icons used to represent DX stations, spotting stations, logged stations, and entities on Google Earth

Icons	when clicked, DXView's "Google Earth Icons" window is displayed, enabling selection of the graphic icon used to represent locations on Google Earth:
	   o QTH - the location specified in the QTH panel on the Configuration window's General tab
	   o Selected Location - the location whose latitude and longitude are specified on DXView's Main window
	   o Active Station - with Display Active DX enabled, a station for which one or more Entries are present in SpotCollector's Spot Database
	   o Spotting Station - with Display Active DX enabled, a station that spotted one or more stations with Entries present in SpotCollector's Spot Database
	   o Logged Station - a logged station that has been plotted on DXView
	URLs for alternative icons can be obtained here.
	
	Each icon URL can be returned to its default value by clicking the **Default** button to its right.
	
	Clicking the **Sync** button directs Google Earth to update its display, showing the result of any icon changes.

Sync	when clicked, Google Earth is directed to update its display

- Google Map Panel

The selector in this panel specifies the type of map to be displayed when Google Maps are invoked to display the current position:

- Roads - road map
- Satellite - satellite view
- Hybrid - satellite view and major roads
- Terrain - terrain view

The slider in this panel specifies 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.

- MapQuest Panel

    The slider in this panel specifies 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.

The **Override List tab** allows you to

- specify the operating location of a station whose callsign prefix is ambiguous as to DXCC entity - like TM or TX
- specify the operating location of a station whose callsign does not conform to standard prefix assignments - like K5D
- provide specific information for a station operating in a needed Location (Subdivision or Region), CQ zone, ITU zone, continent, grid square, or IOTA tag

Each entry on the Override List specifies the following information:

Callsign	the station's Callsign
DXCC Entity	the DXCC entity from which the station is operating
Location	the name of the location from which the station is operating • include the <Pri:> tag to specify an ADIF Primary Administrative Subdivision code, e.g. <Pri:FL> or <Pri:LO> • Include the <Sec:> tag to specify an ADIF Secondary Administrative Subdivision cide, e.g. <Sec: FL,Seminole> or or <Pri:LO, LO-23> • include 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
Continent	the Continent from which the station is operating
Grid	the Maidenhead Grid Square from which the station is operating
Grid2	a second Maidenhead Grid Square, for use when the station is operating on the border between 2 grid squares
Grid3	a third Maidenhead Grid Square, for use when the station is operating on the border between 3 grid squares
Grid4	a fourth Maidenhead Grid Square, for use when the station is operating on the border between 4 grid squares
IOTA	the IOTA tag for the island from which the station is operating
TimeZone	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)

StartDate	the date on which the override becomes active, in YYYY-MM-DD format; the override becomes active at 0Z on the specified day.
EndDate	the date on which the override expires, in YYYY-MM-DD format; the override expires at 0Z on the specified day, so it's best to specify an expiration date several days after the override's callsign is expected to QRT
Notes	additional information about the callsign (ignored by DXLab applications)
Source	indicates whether the entry was manually created by the user, or created from a Club Log exceptions

DXView, DXKeeper and SpotCollector use these Overrides when determining a station's location. DXKeeper can optionally be configured to use these Overrides when importing QSOs.

You can configure the Override List:
- To adjust the width of the **Override List** tab, position the cursor over its right border. Click-drag to the right to increase the tab's width. Click-drag to the left to decrease the tab's width. Whether all columns in the Override List will be simultaneously visible depends on their width, as well as the width of the **Override List** tab. If all columns are not simultaneously visible, use the horizontal scrollbar displayed along the bottom of the Override List to display the columns you wish to see.
- To adjust the width of an Override List column, position the cursor over the vertical line to the left or right of the column's caption; when properly positioned, the cursor will change to the Windows border adjustment cursor, allowing you to click and drag the column border to either expand or contract the column width as desired.
- To change the order of columns in the Override List, click on the caption of a column you wish to relocate. Then click-and-drag the column until the two red positioning triangles indicate the desired new location./p>

Using functions on the Configuration window's **Override List** tab, you can create, update, and delete overrides, either manually, from Club Log, or from Big CTY exceptions:
- To manually create an override for a callsign for which no override is currently specified,
  1. click the **New** button
  2. in the empty list entry that appears, specify
     - the callsign
     - the DXCC entity from which the callsign is operating
     - any other location information available, e.g. CQ zone, ITU zone, continent, IOTA tag, grid square, TimeZone
     - the StartDate before which the override should be ignored; if the override is active now, leave the StartDate column empty
     - the EndDate after which the override should be ignored; if the override should remain permanently active, leave the EndDate column empty
  3. click the **Save** button
- To populate an Override List entry's CQ zone, ITU zone, continent, IOTA tag, grid square, and TimeZone columns if they can be unambiguously determined from the entry's DXCC Entity, tight-click the entry select the **Populate override contents from Entity** menu command

- To update the Override List with Club Log exceptions, click the **Club Log** button; in response, DXKeeper will
    1. prompt you to confirm that it should direct SpotCollector to terminate, and then proceed to replace existing Override List entries created from past Club Log exceptions with new entries created from current Club Log exceptions
    2. clear the Override Filter
    3. delete all Overrides whose source is *ClubLog*
    4. download exceptions from Club Log
    5. for each Club Log exception that specifies location information that differs from DXView's DXCC and USAP databases, create an Override whose Source column is set to *ClubLog*
        - if an override already exists, the existing override will be augmented (if the information it provides is consistent) or replaced (if the information it provides is inconsistent)
        - changes to existing overrides are displayed in the **Club Log Override Update Report** window
    6. update the date shown above the **Club Log** button to show the date associated with the Club Log exceptions just processed
- To update the Override List with Club Log exceptions and populate each created entry's CQ zone, ITU zone, continent, IOTA tag, grid square, and TimeZone columns if they can be unambiguously determined from the entry's DXCC Entity, depress the CTRL key while clicking the **Club Log** button
- To update the Override List with Big CTY exceptions, click the **BigCTY** button; in response, DXKeeper will
    1. prompt you to confirm that it should direct SpotCollector to terminate, and then proceed to replace existing Override List entries created from past Big CTY exceptions with new entries created from current Big CTY exceptions
    2. clear the Override Filter
    3. delete all Overrides whose source is *BigCTY*
    4. download exceptions from Big CTY
    5. for each Big CTY exception that specifies location information that differs from DXView's DXCC and USAP databases, create an Override whose Source column is set to *BigCTY*
        - if an override already exists, the existing override will be augmented (if the information it provides is consistent) or replaced (if the information it provides is inconsistent)
        - changes to existing overrides are displayed in the **Big CTY Override Update Report** window
    6. update the date shown above the **Big CTY** button to show the current date
- To update the Override List with Big CTY exceptions and populate each created entry's CQ zone, ITU zone, continent, IOTA tag, grid square, and TimeZone columns if they can be unambiguously determined from the entry's DXCC Entity, depress the CTRL key while clicking the **Big CTY** button
- To delete an entry in the Override List, click on the entry and then click the **Delete** button, or right-click the entry and select the **Delete override** menu command
- To delete all filtered overrides, depress the CTRL key while clicking the **Delete** button; DXKeeper will prompt you to confirm that it should direct SpotCollector to terminate, and then proceed to delete all filtered overrides
- To update each filtered override's CQ zone, ITU zone, continent, IOTA tag, grid square, and TimeZone columns if they can be unambiguously determined from the entry's DXCC Entity, click the **Update** button.
- Right-clicking an entry in the Override List and selecting the **Clear override contents** menu command will clear all of the entry's columns except Callsign and Source

The **Override Filter** panel provides the ability to filter the Override List by callsign, DXCC prefix, source, and expiration:

- typing a callsign into the **Override Filter textbox** and clicking the **Call** button (or striking the **Enter** key) will filter the Override List to only contain entries
  - whose callsigns match the specified callsign, which can include wildcard characters:

To match...	Callsign with Wildcards	Samples that match	Samples that don't match
one or more characters	VU4*W	VU4CW, VU4WWW, VU41W	VU2CW, VU4DY
one or more characters	*YV1DIG*	YV1DIG, YV0/YV1DIG, YV0/YV1DIG/QRP	YV0/YV1DX
one character	OX1VHF/?	OX1VHF/P, OX1VHF/5,OX1VHF/M	OX1VHF, OX1VHF/MM
one digit	A6#AJ	A61AJ, A64JA	A6JA, C61AJ
a range of characters	A[A-L]6DX	AA6DX, AF6DX	AM6DX, A6DX, AA6DY
outside a range of characters	K[!G-H]4DX	KC4DX, KK4DX, K$4DX	KG4DX, KC4DY
outside the range of digits	K5[!0-9]	K5K, K5%	K50
pattern composed of several sub-patterns	A[A-L]#[A-Z]*	AA6YQ, AL7X	AM4DX, KH6/AL7X, AA6

  - and whose Source columns match the **Source filter**
  - and whose StartDate and EndDate columns match the **Expiration filter**
- typing a DXCC entity prefix into the **Override Filter textbox** and clicking the Prefix button will filter the Override List to only contain entries
  - whose Entity columns exactly match the specified entity prefix
  - and whose Source columns match the **Source filter**
  - and whose StartDate and EndDate columns match the **Expiration filter**
- the **User**, **ClubLog**, and **BigCTY** checkboxes form the **Source filter**
  - unchecking the **User** box will filter the Override List to hide entries whose source is *User*
  - unchecking the **ClubLog** box will filter the Override List to hide entries whose source is *ClubLog*
  - unchecking the **BigCTY** box will filter the Override List to hide entries whose source is *BigCTY*
- the **Unexpired** and **Expired** checkboxes form the **Expiration filte**r
  - unchecking the **Unexpired** box will filter the **Override List** to display only entries whose EndDate columns specifies dates in the past
  - unchecking the **Expired** box will filter the **Override List** to display only entries whose EndDate columns are either empty, or specify dates in the future
- clicking the **X** button will remove all filtering from the **Override List**, clearing the **Override Filter textbox**, and checking the **User**, **ClubLog**, **BigCTY**, **Unexpired**, and **Expired** boxes

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
RDA	date-of-last-update for the installed RDA database	date-of-last-update for the currently available RDA database	**Install**	download and install currently available RDA database
			Upgrade	upgrade the currently available RDA database
GridDXCC	date-of-last-update for the installed GridDXCC database	date-of-last-update for the currently available GridDXCC database	**Install**	download and install currently available GridDXCC database
			Upgrade	upgrade the currently available GridDXCC 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/files/file/DXCC/2016_Current_Deleted.txt
Country Code	the Entity's Country Code, a unique, immutable number assigned by the ARRL DXCC desk; see http://adif.org.uk/adif#DXCC_Entity_Code_Enumeration
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 the CQ WAZ rules
ITU Zone	ITU zone for this Location, per the International Telecommunications Union
IOTA	IOTA tag for this Location, per the Islands on the Air list
Continent	Continent for this location - one of AF, AN, 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 19.

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.