

Australian National Wildlife Collection

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Source-data description

Data are managed in the primary ANWC collection management system, a SQL Server database.

The records that are included in the snapshot are controlled by a flag in the ANWC source database (*select ... where tblSpecimenRecords.PublishID = 1*).

The frequency of record updates is low and the exporter is to be scheduled fortnightly at this stage. The exporter itself can reside on any node within the CSIRO network – it must be run logged in to a domain account with permission to access the [ANWC_MSSQL_DB](#) database on a server managed by CSIRO IM&T.

If an update to the logical mapping between the source data and the Darwincore terms is required, then the exporter query file must be modified and copied to the above-mentioned node; a full export can then be performed and all existing data in the Atlas must be replaced.

Exporter components description

The first export component is a bash shell script, [anwc_dwc.bat](#), which is the entry point for running an export. This batch script encourages *powershell.exe* to connect to the sqlserver database and obtain the result of the query (see [anwc_dwc.sql](#)) into darwincore-csv format; it then compresses the data using *7zip.exe* and uploads the file to the upload.ala.org.au sftp server using *psftp.exe*.

The second export component is the sqlsvr query, [anwc_dwc.sql](#), which is called by the batch file and *powershell.exe*. This must reside in the same directory as the batch file. It will extract data, joining source tables and introducing constants where necessary. Output is to [anwc_dwc.csv](#) in the same directory as the batch file.

People (in order of preference)

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Prerequisites and notes

sql server 2008 powershell - sqlps.exe -

<http://jasonq.com/index.php/2012/03/3-things-to-do-if-invoke-sqlcmd-is-not-recognized-in-windows-powershell/>

7zip command line - 7z.exe - <http://sourceforge.net/projects/sevenzips/files/7-Zip/9.22/7z922.exe/download>

psftp.exe - <http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html>

Note: *text in italics* indicates command-line input or output while [CAPITAL_BLUE](#) words act as place-holders for user accounts and passwords.

ANWC

Running an export

- 1 – log on to the csiro network with an account with access to the [ANWC_MSSQL_DB](#) database
- 2 – if this is the first time you've used *psftp.exe* or the upload server on this machine, open a command-prompt and cd into the new directory; you must now log in manually to the upload server for first time, by running this command: *psftp -4 -pw ANWC_SFTPPWD ANWC_SFTP@upload.ala.org.au* ; you will then be asked to cache the 'fingerprint' (or similar) - typing 'y' will store the public key in the local registry (once you've finished logging in, ctrl-c to exit)
- 3 – trigger an export (*anwc_dwc.bat*); alternatively, double-click the batch file from within explorer
- 4 – look for *Press any key to continue . . .* in the output, indicating the script has finished
- 5 – check a file, named *anwc-dwc.%yy%%mm%%dd%-%hh%%min%.zip* (with a recent timestamp in place of the % variables) is also in the same directory
- 6 – list contents of sftp directory (*echo ls * | psftp -4 -pw ANWC_SFTPPWD ANWC_SFTP@upload.ala.org.au*) and look for the same file identified in the previous step; this will indicate that the file was uploaded successfully

Recommended modifications procedure

- 1 – update the files in the [ANWC_SFTP@upload.ala.org.au/_exporter/](#) directory (*pwd: ANWC_SFTPPWD*)
- 2 – log on to the csiro network with an account with access to the [ANWC_MSSQL_DB](#) database
- 3 – instal sql server 2008 management studio; place additional executable dependencies listed in prerequisites, along with the latest copies of *anwc_dwc.bat* and *anwc_dwc.sql* into a directory on the local c:\
- 4 – if this is the first time you've used *psftp.exe* or the upload server on this machine, open a command-prompt and cd into the new directory; you must now log in manually to the upload server for first time, by running this command: *psftp -4 -pw ANWC_SFTPPWD ANWC_SFTP@upload.ala.org.au* ; you will then be asked to cache the 'fingerprint' (or similar) - typing 'y' will store the public key in the local registry (once you've finished logging in, ctrl-c to exit)
- 5 – trigger an export (*anwc_dwc.bat*); alternatively, double-click the batch file from within explorer
- 6 – look for *Press any key to continue . . .* in the output, indicating the script has finished
- 7 – check a file, named *anwc-dwc.%yy%%mm%%dd%-%hh%%min%.zip* (with a recent timestamp in place of the % variables) is also in the same directory
- 8 – list contents of sftp directory (*echo ls * | psftp -4 -pw ANWC_SFTPPWD ANWC_SFTP@upload.ala.org.au*) and look for the same file identified in the previous step; this will indicate that the file was uploaded successfully

You should not change the batch or query without updating the corresponding file on the sftp server. This will ensure an earlier version is not inadvertently 'rolled back'.

Finally, if the logical mapping changes then the completeness model should also be updated to reflect this:
<http://goo.gl/hBkqmq>

Recommended installation procedure

- 1 – create the *c:\anwcexport* directory (*mkdir c:\anwcexport*)
- 2 – if this is the first time you've used *psftp.exe* or the upload server on this machine, open a command-prompt and cd into the new directory; you must now log in manually to the upload server for first time, by running this command: *psftp -4 -pw ANWC_SFTPPWD ANWC_SFTP@upload.ala.org.au* ; you will then be asked to cache the 'fingerprint' (or similar) - typing 'y' will store the public key in the local registry (once you've finished logging in, ctrl-c to exit)
- 3 – download the contents of the sftp directory (*echo "get _exporter/*" | psftp -4 -pw ANWC_SFTPPWD ANWC_SFTP@upload.ala.org.au*)
- 4 – check all component files are present, with appropriate permissions (*dir c:\anwcexport*)