

ESOV NG Version 2.4.1 - Release Notes

1. NEW RELEASE DESCRIPTION

1.1 Software and Hardware Requirements

The ESOV NG v2.4.1 software is available for the following computer platforms:

- Windows XP / Vista / 7 (32-bit)
- Mac OS X Intel 10.5 or above (64-bit)
- Linux (64-bit)

The ESOV NG software requires:

- Version 1.7 or higher of the Java Runtime Environment (JRE). It is already included in the ESOV NG packages for Windows and Mac OS X.
- 350+ Mb of hard disk space
- 512+ Mb RAM
- It is advised to have at least 1024 x 786 resolution display

1.2 Installation Executables

An ESOV NG distribution consists of one installer file for each supported computer platform:

	32-bit	64-bit
Mac OS X Intel	-	EsovNG_macintel64_2_4_1.dmg
Linux	-	EsovNG_linux64_2_4_1.sh
Windows	EsovNG_windows_2_4_1.exe	-

1.3 Installation Hints

The installation of the ESOV NG will be guided through an *Install4j* installation wizard.

- Windows 32-bit:

Run the executable installer *EsovNG_windows_2_4_1.exe*. Follow the instructions displayed by the installation wizard.

- Mac OS X Intel 64-bit:

Unpack the disk image *EsovNG_macintel64_2_4_1.dmg* by double-clicking it in a Finder window. A new Finder window will be opened, showing the package 'ESOV NG Installer'. Double-click the installer package and follow the instructions displayed by the installation wizard.

- Linux 64-bit:

Simply run the shell script *EsovNG_linux64_2_4_1.sh* and follow the instructions displayed by the installation wizard. Note that you may have to set execution permission with the command:

```
sudo chmod a+x EsovNG_linux64_2_4_1.sh
```

Note that the ESOV NG installer will overwrite installation folders of previous versions if the application is installed in the same directory. Please remember to backup your own data files in case they are stored in the installation directory.

Please check Sections 2 and 3 of the ESOVNG user manual for further information about the installation and application start-up.

The Section 4.3 of these Release Notes (“Hints and Tips”) provides useful information regarding issues than may occur after starting Esov NG.

2. NEW FUNCTIONALITIES

This new release provides the following new functionalities with respect to v2.4:

- Mission support
 - Default orbit parameters and Orbit Scenario Files have been updated to latest know values for ESA missions already launched (Sentinel-1A/B, Sentinel-2B and SMOS)
 - Applied Workaround for ESOVNG-AN-415, by setting the default date in affected IDFs (already launched missions, Sentinel2A, Sentinel3A) to one day later, to be sure resulting default orbit is correct
 - Added Orbit Scenario File examples for Sentinel-6 and MetOp-SG-A/B
 - Change swath definition file for AEOLUS ALADIN instrument (attitude definition as per Aeolus model, scan angle in attitude instead of in FOV definition)
 - Update azimuth and elevation mask for Sentinel1A/1B and Sentinel2A/2B to calculate optical link visibility times (DRS)
 - Update TLE settings for Sentinel2B

3. CLOSED SPRS

The following SPRs have been closed:

- ESOVNG-AN-416: The update mechanism always gives the message window as if there is no internet connection available
- ESOVNG-AN-417: Issue with vmoptions on Esov 2.4 Windows distribution

4. ADDITIONAL COMMENTS AND KNOWN PROBLEMS

4.1 Mission Support

Latest versions of Orbit Scenario Files (OSF) or Predicted Orbit Files (POF) for the supported missions can be found in the EOP System Support web server under the link (request username/password):

<https://eop-cfi.esa.int/index.php/applications/esov/esov-ng-download>

The orbit files are available in the sub-folder AUX_DATA/.

4.2 Known Problems

The current ESOV NG release has de following open anomalies:

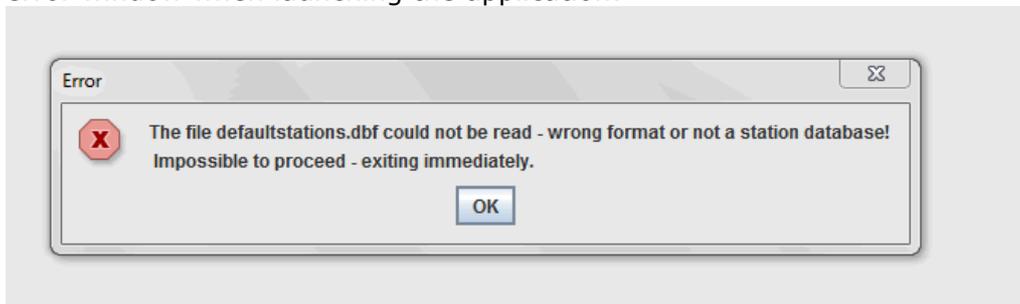
- ESOVNG-AN-383: It is not possible to switch on/off the display of individual zone

/stations ('Eye' icon in first column of Zone/Station tool window)

- [ESOVNG-AN-379](#): Java exception when clicking on year in Date Widget (Start/Stop Time). Workaround: date textbox can be edited
- [ESOVNG-AN-385](#): List of zone intersection segments is not complete when using TLE file.
- [ESOVNG-AN-400](#): Artefacts appear if zone is filled and zoom is applied (e.g. EURASIA, AFRICA)
- [ESOVNG-AN-401](#): Distortion over the Poles in Rectangular projection for very-wide swaths (e.g. TROPOMI)
- [ESOVNG-AN-415](#): Default orbit parameter: Under certain circumstances, the calculation of the start date of the time interval is set to one day earlier than given in the Date textbox
- [ESOVNG-AN-418](#): Lon/lat values in one-point zones imported from shapefiles are swapped in converted zone database file (issue in geotools shapefile parser)
- [ESOVNG-AN-419](#): The export CSV removes leading zeros from time fields.
- [ESOVNG-AN-420](#): When the OSF file is selected, setting the UTC start/stop times to other than ANX times results in an error "Cannot perform image rendering due to an unexpected problem" or in incomplete time segments.

4.3 Hints and Tips

- If your system has a previous installation of ESOV NG, you may see the following error window when launching the application:



This problem is due to an incompatibility with the previous version of the defaultstations.dbf file. The way to solve the problem is to delete the existing file defaultstations.dbf. This file can be found in the user application folder. See Section 2.5.2 in the User Manual for further instructions about how to locate the user application directory (location is platform dependent)

- If your system has a previous installation of ESOV NG you may not see the latest default layout. In order to see it, just go to the user application directory (see Section 2.5.2 in the User Manual), rename (or remove) the existing file myLayout.layout and launch again ESOV NG.
- If for any reason the tool windows do not appear in the main window frame, you can restore the default layout by selecting "Window → Reset Layout"
- If the style of the segments is changed, a window pops up to warn the user that the style of the individual segments is lost after recomputation. To block the warning window please select the option 'Do not show this message again'
- In order to import a LLF or UTF file export type .csv using a spreadsheet application, load it as external data and select 'semicolon' as delimiter. To correctly import the

decimal seconds in the UTC time, you just need to customize the cell format to hh:mm:ss.000

- Missions defined by the user with versions of Esov NG older than v2.3 may not work with the current version. A new field that has been added to the IDF (satellite identification file):

```
<Absolute_Reference_Orbit>1</Absolute_Reference_Orbit>
```

This new field has to be added to IDF file of the user-defined mission, for example:

```
<Default_Settings>  
  <Repeat_Cycle unit="day">12</Repeat_Cycle>  
  <Cycle_Length unit="orbit">175</Cycle_Length>  
  <ANX_Longitude unit="deg">0.000000</ANX_Longitude>  
  <MLST unit="h">18.0</MLST>  
  <MLST_Drift unit="s/day">0.0</MLST_Drift>  
  <Date>2000-01-01T00:00:00</Date>  
  <Absolute_Reference_Orbit>1</Absolute_Reference_Orbit>  
</Default_Settings>
```

- Please check the ESOV NG user manual for further information.

5. REPORTING PROBLEMS

For any problems or questions and to receive the username/password to download the software, please send an e-mail to the ESOV NG helpdesk: esov@eopp.esa.int