

# ADS V4 User's Manual Part I Getting started with ADS

Rev A July 20, 2022



# Table of content

1.	TO INSTA	ALL ADS ON YOUR COMPUTER3	
2.	TO RUN	ADS3	
3.	ADS SESS	SION4	
	3.1. CRE	ATE A NEW SESSION	4
	3.2. LOA	ND AN ALREADY SAVED SESSION	4
	3.3. GET	TING ACCESS TO THE MODULES OF ADS	5
	3.3.1.	Getting access with an Activation Code	£
	3.3.2.	Getting access with a License File	8
	3.3.2.1	Send to OAD your personal data (Step 1)	8
	3.3.2.2	Retrieve the license file sent by OAD (Step 2)	g
	3.4. SAV	'E THE CURRENT SESSION	9
4.	ADS MAI	IN WINDOW10	
	4.1. TOP	MENU	10
	4.1.1.	File	10
	4.1.2.	Edit	10
	4.1.3.	View	11
	4.1.4.	Tools	11
	4.1.5.	Window	11
	4.2. TRE	eView	12
	4.2.1.	Airplanes	12
	4.2.2.	Engines	12
	4.2.3.	Airfoils	13
	4.2.4.	Materials	13
	4.2.5.	Batteries	13
	4.2.6.	Tires	13
	4.2.7.	Fuels	14
	4.2.8.	Regulations	14
	4.3. PRO	PERTY DISPLAY	14
	4.4. MEI	MO AREA	14
	4.5. PRO	DCESS AREA	14
	4.6. Out	TPUT AREA	15
		TUS BAR	



# 1. To install ADS on your computer

Before proceeding to the installation you must have downloaded, from <a href="www.oad.aero">www.oad.aero</a> / ADS / Client Area:

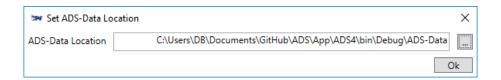
- 1. The Setup file (ADS\_Vxyz\_Setup.exe)
- 2. The ADS-Data folder (ADSV4-ADS-Data.zip)

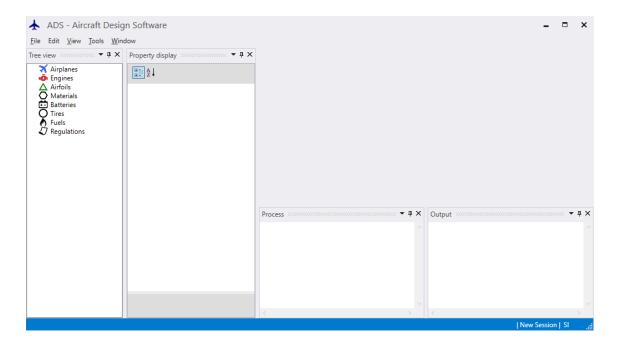
Then unzip ADSV4-ADS-Data.zip

To install the software, right click on ADS4\_Vxyz\_Setup.exe, select Run as Administrator, and follow the instructions. When you run ADS for the first time, You have to run it as Administrator too.

#### 2. To run ADS

When you run ADS for the first time, you are invited to locate the ADS-Data folder





Each time you run the software, you must either:

- Create a new session or,
- Load an already saved session.

As long as a session has not been created, all the menus will remain inaccessible.



#### 3. ADS Session

Each time you run the software, you must either:

- Create a new session or,
- Load an already saved session

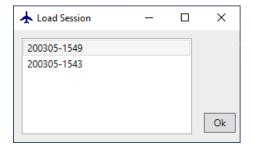
Contextual Menu :	
Left click on File:	
New Session	To create a new session
Load Session	To load an already saved session
License Manager	To open the License Manager
On-Line Activation	To Activate ADS On-Line
Save Session	To save the current session
Exit	To Exit from ADS

#### 3.1. Create a new session

A name is proposed by default which is the concatenation of Year/Month/Day-Hour/Minute The user has to choose the unit system (SI-km/h, SI-kts, FPSR-mph, FPSR-kts)



### 3.2. Load an already saved session





#### 3.3. Getting access to the modules of ADS

An activation code or license is mandatory to get access to the different modules of ADS.

The <u>activation code</u> is provided to the <u>user</u>. It is generated On-Line and must be requested every time you start ADS. It may be used by the user/client before getting his personal license file. It will be used also by the user who is not the owner (client) of the license and has to use the software for a limited time period, like a student for example.

The <u>license</u> is provided to the <u>client</u>. The license is under the form of a text file which is generated by OAD according to the modules you have purchased and according to the computer on which the software has been installed. It's requested once and will remain valid as long as the software remains on the same computer.

Both **Client Id** and **User Id** are communicated immediately after the purchase process. The **Client Id** is different than the **User Id**. **Client Id** is given to the "owner" of the license (Engineering department of the University of Chicago for example). It is formed by numbers ONLY (1234567890) and will be used to get the license. The **User Id** is given for a specific User (one student of the engineering department of the University of Chicago for example) and is formed by numbers and letters (Avdt6HH9Dx). For one **Client Id** there might have several **User Id**.



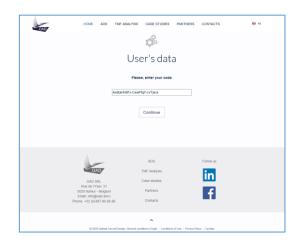
#### 3.3.1. Getting access with an Activation Code

In order to get the activation code, you have to communicate your personal User Id to OAD. According to the User Id, OAD will generate your personal Activation Code. Your internet connection must be active.

a) Open the On-Line Activation window: File/On-Line Activation

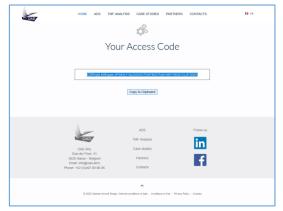


- a) Enter your User Id (for example: Avdt6HH9Dx).
- b) Click on Generate and Copy to Clipboard to generate and copy the code to the clipboard.
- c) Click on On-Line Activation to open the website

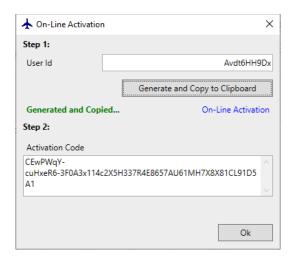


- d) Paste the content of the clipboard to the white field (Ctrl+V)
- e) Click on **Continue** to open the next page which displays the access code





- f) Click on Copy to Clipboard to copy this text to the clipboard
- g) Go back to ADS and paste (Ctrl+V) the content of the clipboard in the Activation Code white field



h) Click on ok to run ADS



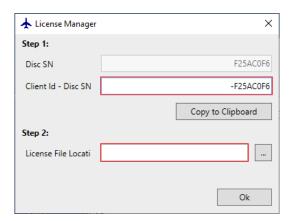
#### 3.3.2. Getting access with a License File

In order to generate the license, you have to send to OAD:

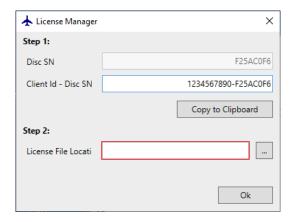
- Your Client Id and
- The Computer Disc Serial Number

#### 3.3.2.1. Send to OAD your personal data (Step 1)

i) Open the license Manager: File/License Manager



j) Enter your Client Id (for example: 1234567890) in front of the Disc SN



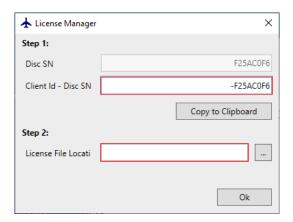
- k) Click on Copy to Clipboard to copy this text to the clipboard.
- I) Send it by Email to OAD (support@oad.aero)
- m) Click on to run ADS in "Input" mode (not possible to perform any calculations as long as the license is not registered in the right folder, cf. Step 2)

After receiving your email, OAD will send the license file and additional information by email to the email address used by the client for the license request. This operation may take a few hours.

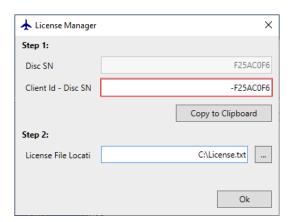


## 3.3.2.2. Retrieve the license file sent by OAD (Step 2)

n) Open the license Manager: File/License Manager



o) Click on to retrieve the license file sent by OAD



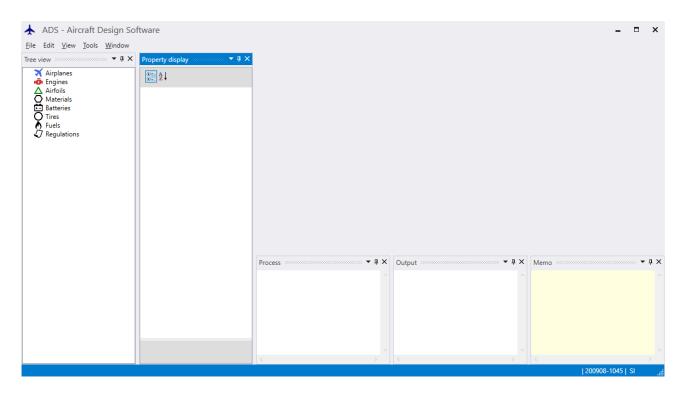
p) Click on ok to automatically copy the license file to the appropriated folder and run ADS

#### 3.4. Save the current session

All the dataset loaded in the current session will be saved before saving the session. You must run ADS as administrator to be allowed to save the session.



# 4. ADS Main Window



# 4.1. Top menu

#### 4.1.1. File

Contextual Menu :	
Left click :	
New Session	To create a new session
Load Session	To load an already saved session
Save Session	To save the current session
Exit	To Exit from ADS

#### 4.1.2. **Edit**

Contextual Menu :	
Left click :	
Undo	Not active
Redo	Not active



#### 4.1.3. **View**

Contextual Menu :	
Left click :	
Property display	To display the Properties :
Tree view	To display the TreeView
Output	To display the results during the computing process
Process	To display the tasks performed during the computing process
Memo	To add information about the current dataset
Reset view	To put the different windows at their default position

#### 4.1.4. Tools

# 4.1.5. **Window**



#### 4.2. TreeView

Height nodes are displayed in the TreeView. They give access to the different database.

- Airplanes
- Engines
- Airfoils
- Materials
- Batteries
- Tires
- Fuels
- Regulations

Sometimes color dots are displayed in front of one branch. The color means that a specific action can be performed from the contextual menu (right click):

Possibility to download one Technical Note
 Possibility to display one picture
 Possibility to open your favorite browser and go to one website or watch a video

Other colors are a combination of the three additive primary color (R, G, B) to indicate that several actions can be performed.

Possibility to download one Technical Note and watch a video

#### 4.2.1. Airplanes

Contextual Menu :		
Right click:		
New Airplane	To create a new dataset from scratch	
Open Airplane	To open an existing dataset	
Duplicate Airplane	To duplicate an existing dataset and create a new one	

#### 4.2.2. **Engines**

Contextual Menu :	
Right click :	
New Engine	To create a new dataset from scratch
Open Engine	To open an existing dataset
Duplicate Engine	To duplicate an existing dataset and create a new one



#### 4.2.3. Airfoils

Contextual Menu :	
Right click :	
New Airfoil	To create a new dataset from scratch
Open Airfoil	To open an existing dataset
Duplicate Airfoil	To duplicate an existing dataset and create a new one

#### 4.2.4. Materials

Contextual Menu :	
Right click :	
New Material	To create a new dataset from scratch
Open Material	To open an existing dataset
Duplicate Material	To duplicate an existing dataset and create a new one

#### 4.2.5. Batteries

Contextual Menu :	
Right click :	
New Battery	To create a new dataset from scratch
Open Battery	To open an existing dataset
Duplicate Battery	To duplicate an existing dataset and create a new one

#### 4.2.6. **Tires**

Contextual Menu :	
Right click :	
New Tire	To create a new dataset from scratch
Open Tire	To open an existing dataset
Duplicate Tire	To duplicate an existing dataset and create a new one



#### 4.2.7. Fuels

Contextual Menu :	
Right click :	
New Fuel	To create a new dataset from scratch
Open Fuel	To open an existing dataset
Duplicate Fuel	To duplicate an existing dataset and create a new one

#### 4.2.8. Regulations

Contextual Menu :	
Right click:	
New Regulation	To create a new dataset from scratch
Open Regulation	To open an existing dataset
Duplicate Regulation	To duplicate an existing dataset and create a new one

## 4.3. **Property Display**

The property display is the area to enter the data relative to a given dataset.

#### 4.4. Memo Area

The Memo Area is used to display specific information about to the current dataset. This text will be displayed in the Open Dialog Window.



#### 4.5. Process Area

The Process Area gathers the information related to the tasks performed during the computing process



# 4.6. Output Area

The Output Area contains the computed values and some messages (information or warning) related to the results. The Output area may also contain results computed directly from the Tree View.

#### 4.7. Status bar

The Status bar informs the user about the state of the software.