Creating OAW - type EAW Missions - *Page 1 - ver.2 republished 4/2007*

Tutorial for anyone wishing to compose a complete **OAW - type** mission for **EAW**.

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*(This type is the easiest to make, and can be used offline and online, even without any other **OAW** files. However; for online use the **OAW**rp's Flight Model would still needed to enable the U.S. Planes -especially Bombers- to take off from mainland European bases instead of the UK.)*

For reference, documents from my site are useful including:

RAFRoysEAWEditingOverview.pdf *(RAF_Roys brief summary of Mission editing files - ver. 2)*

RAFRoysFrontlineHowTo *(RAF_Roys Frontlines and X,Y editing notes - republished)*

Also although I don't cover griddata.dat placement in this tutorial you would also need to understand how to code a griddata with Tcodes to get objects to appear in the EAW world correctly.I have a document roughly illustrating grid coverage:

RAFRoysEAWgridexplained.pdf *(RAF_Roys EAW Griddata Grid Explained - v1.0)*

The other relevent notes about that and more coding are found in Dom's Notes,Charles Gunst notes,P.O.Prunes notes as well as Moggy's notes.

~ Understanding the needed Files ~

As shown in **Table 1** there are only 5 files needed for such missions:

Data File Name	Edited for use in OAWMission1?	EAW Data Use Function
Frntline.dat	Yes	Sets the Allied/Axis frontlines
Targets.dat	Yes	Actives the Targets or deactivates them; Sets entire Target locations; Assigns address pointers to Tardata for EAW to find the individual object records
Tardata.dat	Yes	Encodes specific target data and Target codes
Airfield.dat	Yes	Codes airfields as active or not; also some location info & cross checks
Griddata.dat	Yes	Codes special location information; sets appearance of Targets on Map

Getting the Tools :

The **EAW World** coordinates **X, Y** can be grasped somewhat by **RAFRoysFrontlineHowTo** and I will show you the practical issues needed anyway as we go.Don't worry if "what it all means" is confusing at first.

You will also need the **EAWK3wdb.html** document.

Editing the Frontline is almost next, so download:
DOM's EAW WORLD MAP NOTES N UTILITIES.ZIP
This is also needed because the essential tools called **Vertcon** and **Convert** for locating the proper Griddata coordinates come with it.And Dom's **HillGmap.jpg** - *a picture of the EAW World,* in conjunction with **ABTGList.rtf** - *a list of EAW bases,* comes in handy for finding the EAW base locations in the **640** x **320 grid**.

You will need a hex editor, any will do, but I use and recommend **XVI32** and also since I have a page about using it you can take quick look at **XVI32notes.html**.

Additionally for tutorial purpose I will show how to locate the EAW World coordinates from scratch, and be using my **EAW World Browser**

Getting Started

First starting with a briefing of the EAW World grid:

If you look at the **RAFRoysFrontlineHowTo** and the **HillGmap.jpg** or **EAW World Browser** you'll get an idea of this.The grid is broken up into **640** x **320**.What might not be obvious is as far as the data files of EAW is concerned it is all coded as hexidecimal coordinates and in the form; **xx,xx,xx,xx** and **yy,yy,yy,yy**.

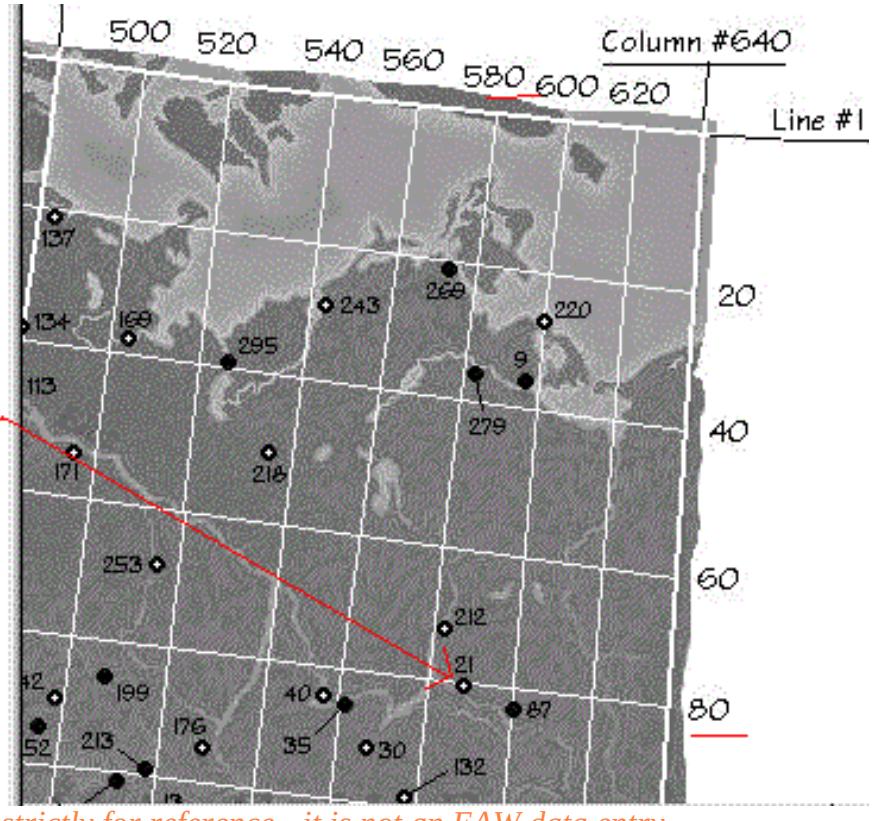
Open the **EAWK3wdb.html** and look at a base.The data for **x** , **y** is listed.For example, **Berlin** :

Berlin	4D	CD	B6	06	C9	50	BD	E5	9280-9311	51149	80	589

The **Berlin** data shown starting at the **x** , **y** address.The data is in the hexidecimal coordinate format used by EAW. This is what you will also see if you look in the targets.dat.Shown on the far right is the location reference using a conventional **640** **x** **320** decimal grid.That is; **Column 589** , **Line 80**.

Shown below is **Berlin** data seen with the **ABTGList.rtf** and **HillGmap.jpg** opened.

10		Anvers	122	302
11		Arnhem	99	349
12		Arras	151	248
13		Aschersleben	104	526
14	base	Audembert	133	218
15		Augsbourg	213	509
16	base	Bassingbourn	94	158
17		Beachy Head	135	167
18	base	Beaumont-Le-Roger	188	185
19	base	Beauvais	176	227
20		Belfort	236	379
21	base	Berlin	80	589
22		Bernburg	104	537
23		Béthune	141	245
24		Bielefeld	96	432
25	base	Biggin Hill	118	161
26	base	Bissel	67	404
27	base	Bodney	77	185
28		Böhlen	123	555
29	base	Bonn	137	387
30	base	Borkheide	90	567
31		Bottrop	111	381
32		Boulogne	138	211



Note; **Berlin** *is listed as #21 strictly for reference - it is not an EAW data entry.*

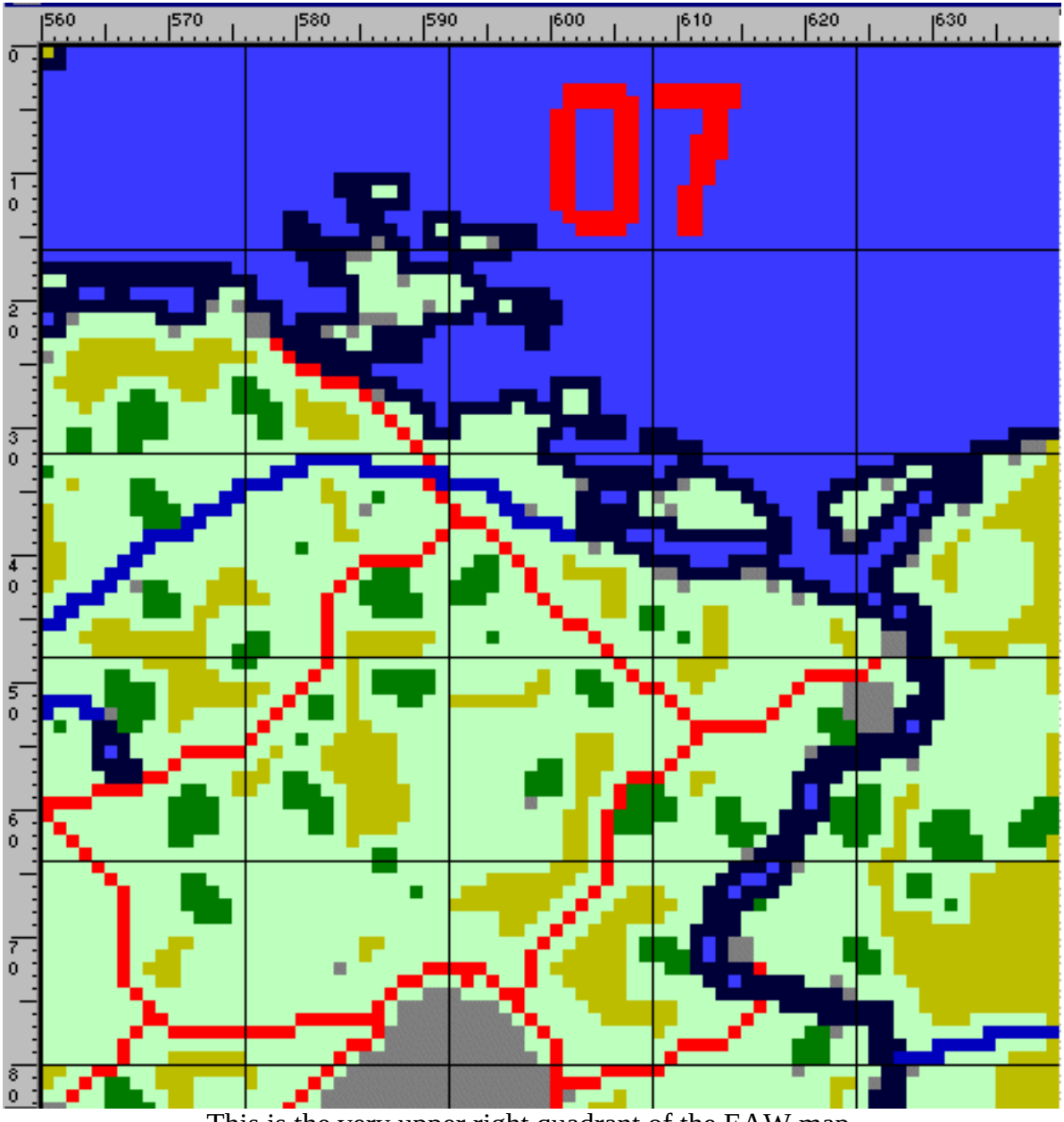
Now look to the Targets.dat with **XVI32** hex editor at **Berlin**'s data;

(jump 9280 after the 4 header bytes)

2440	02	02	00	00	4D	CD	B6	06	C9	50	BD	E5	93	13	00	00
2450	B6	AB	30	00	0A	00	D1	2B	5F	00	00	00	73	00	00	00

As you see highlighted in red is the coded EAW address - **Berlin**'s data starts there at the cursor.

An examination with the **EAW World Browser** is seen below:



This is the very upper right quadrant of the EAW map.

Berlin is the large gray area beginning at the specified coordinates and covering a very large area.Note the large **07** which appears at **Column 608**.

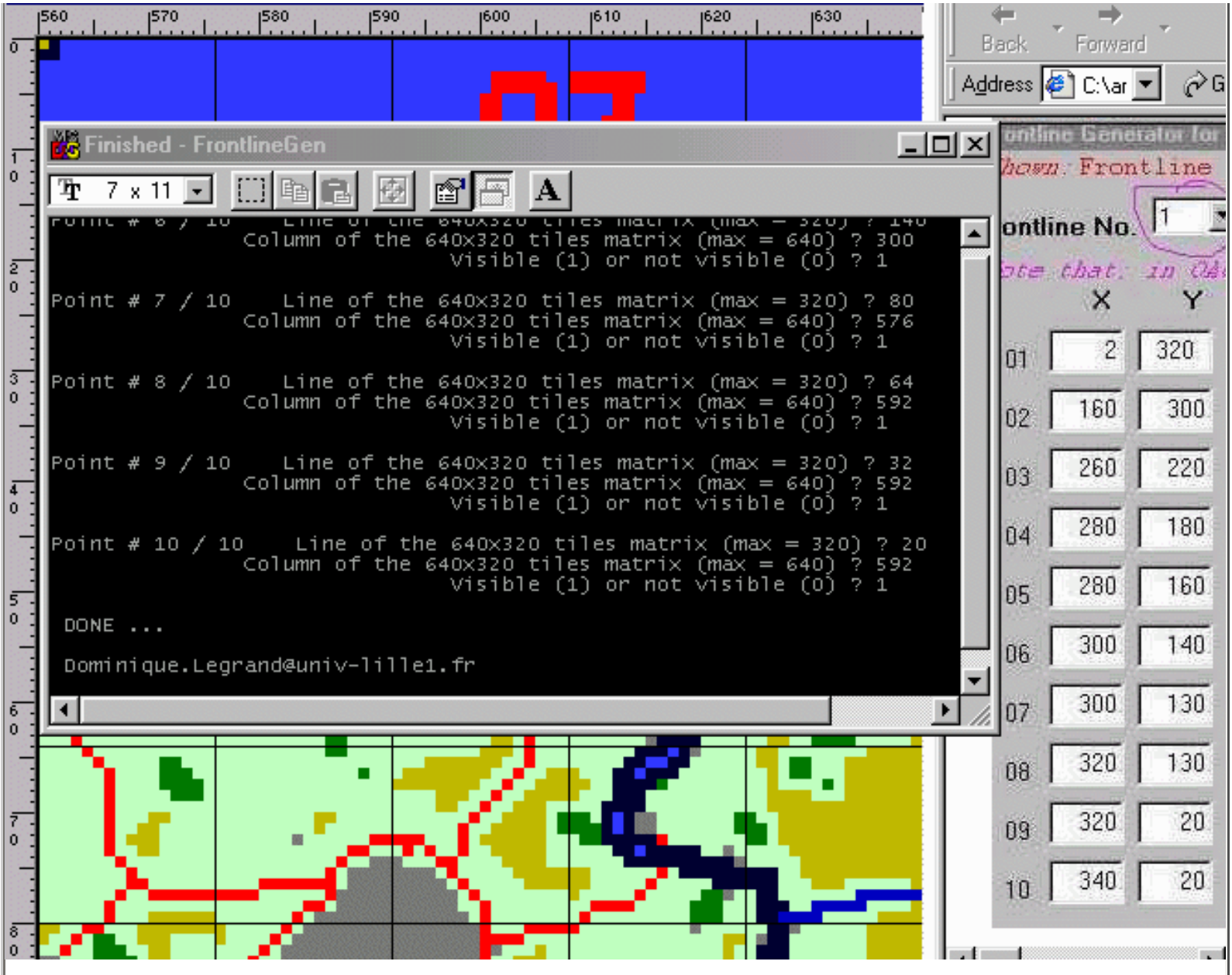
At this point if you are asking yourself; how does one convert the Decimal reference for **X** , **Y** to the Hexidecimal form used by EAW data files? - You are thinking well! ;)
This is mostly easily achieved using **Dominique LeGrand**'s **Vertcon** program.

*An example of the reverse, that is; converting hexidecimal to decimal using **Convert** is illuminated well in my **RAFRoysFrontlineHowTo** document.*

But in this case the opposite is called for - I'll show this, and at the same time, using the **EAW World Browser** - you will easily understand how to pick a location where no base was formerly present and gather the needed data for coding the EAW files, as follows:

~ But first, a quick digression to creating a Frontline is in order ~
Taking the **OAWM1** frntline.dat and making a slight adjustment will suffice, as follows:

Shown below; Altering **OAWM1** frntline.dat with **Dom's Frontline Generator**

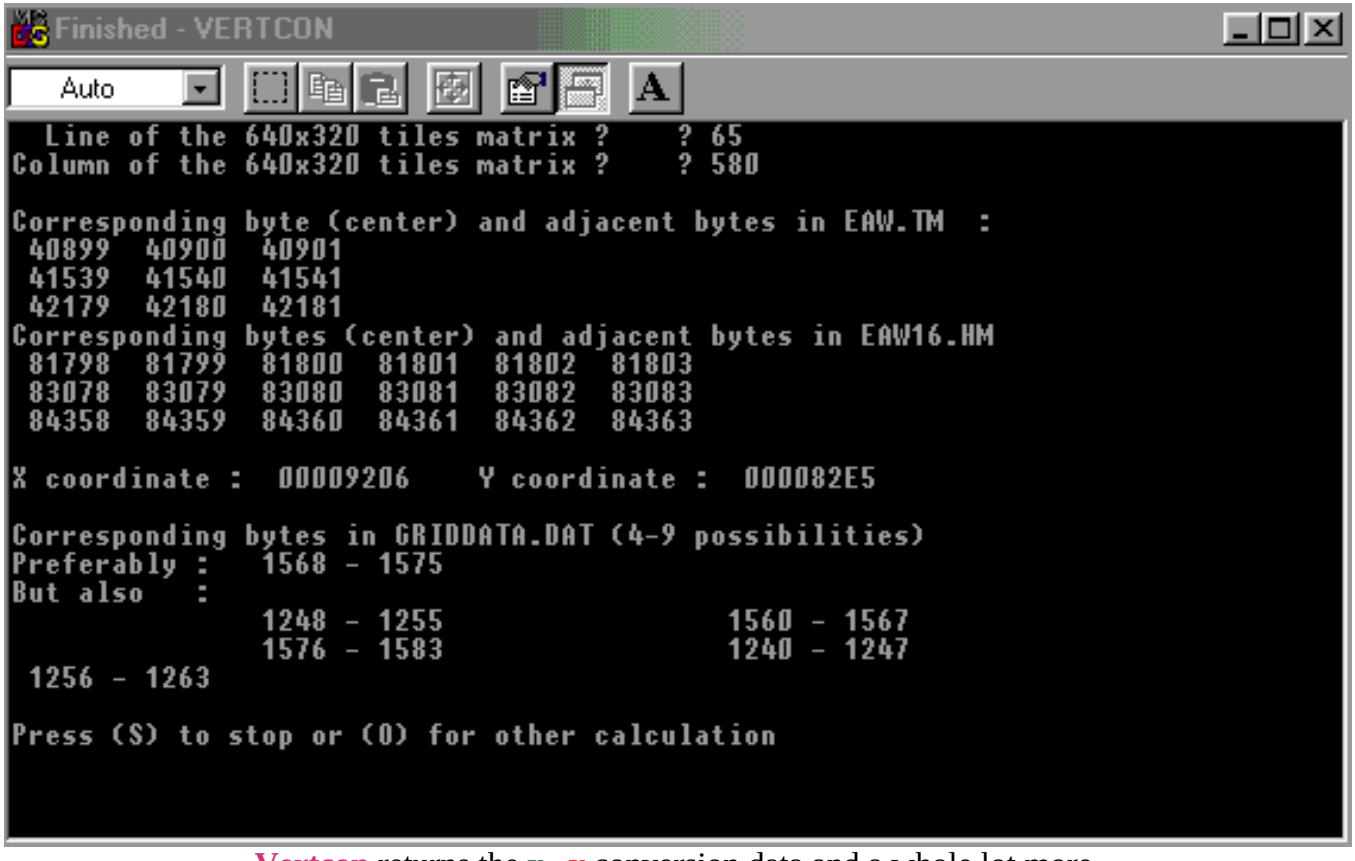


Here you can see I've altered the frntline.dat at point 7 to reach **Column 576** and **Line 80** then at point 8 to **Column 592** and **Line 64** after which it proceeds along **Column 592** to **Line 32** and then **Line 20** - which is close enough to

the edge of the map to complete the frontline.This will give room for the Allied side close to **Berlin** for the placement of an entirely new base which I will show you next.
*At right you can see data from **Alatriste's** program as seen in the **RAFRoysFrontlineHowTo** document.*

~ Now back to the Coordinate issue ~

Open **Vertcon** and enter for the **Line : 65** then press enter and for **Column: 580** and enter.



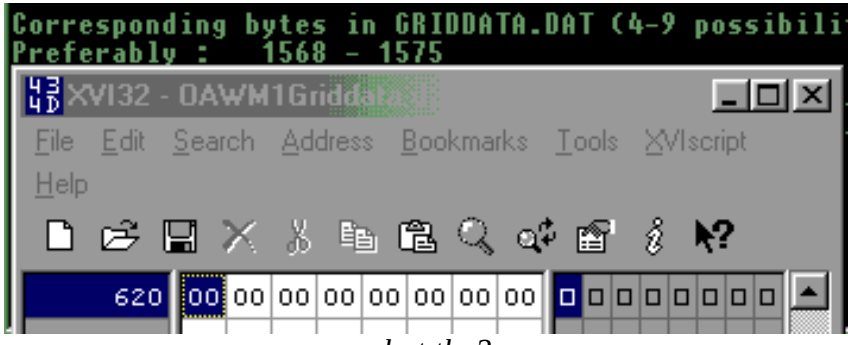
Vertcon returns the **x** , **y** conversion data and a whole lot more.

Most important is to record the **Griddata.dat** information.**Griddata** placement is one area that can get very sticky, as often a needed data address is already occupied.Having the provided alternatives is usually necessary.Fortunately, **Dom** is a brilliant man who thought of this when he created the program ;)

~ Finding a Base to move, Targets.dat and the relation to Griddata ~

There are a few important issues to consider in this.One of which is not apparent until your know a key issue; that being the sequencing of base coding in the **Griddata**.

First we open **OAWM1 Griddata.dat** and..

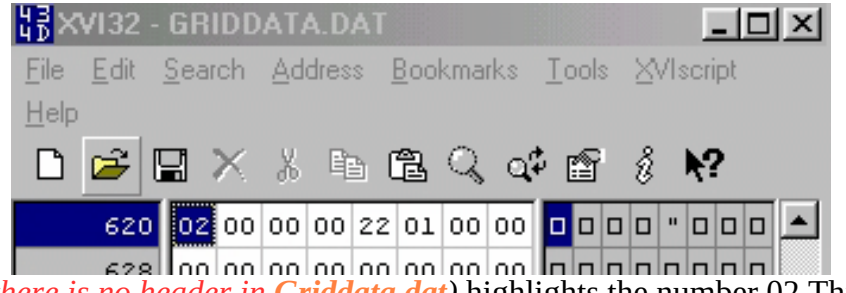


..what the?..

This is the **OAWM1 Griddata.dat** at the primary address *jump 1568*.

Yes, it s supposed to be *"zeroed"* as for the Mission I removed all default EAW bases from appearing except the @ 50 + found in the scenario.I just wanted to show you this, so you would be aware of it.

Now opening a *default* **Griddata.dat** we see the data.

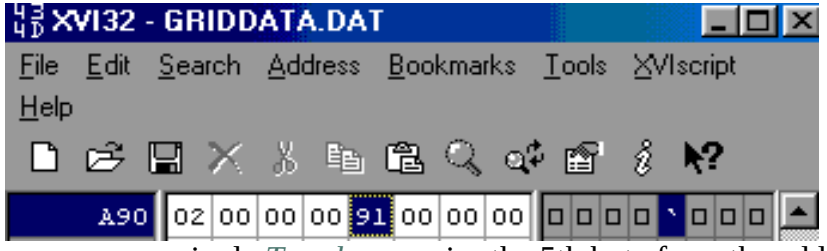


The cursor at 1568 *(note; there is no header in Griddata.dat)* highlights the number 02.This means there are 2 bases present.In the bytes to the right we see **22 01**.

Looking in **Dom's** *(converted)* **EAWK3wdb.html** you will find that this is the "Target code" *(T-code)* for **Berlin**. What this data means is there are 2 bases coded; beginning with *T-code* **22 01**.So the other base that would show up in the **EAW World** is?.. .. **2301** the *T-code* for **Orianenburg**.

The number sceme is clarified when you convert to hexidecimal.
22 01 is really "spelling" **0122** which is **290** in decimal.Since there are 302 bases in EAW you will find the higher numbered *T-codes* in this format. - *The majority of EAW bases have T-codes of only one set of numbers between 0 and 256.* -

Shown: **Brussels** in **Griddata**



As you can see, a single *T-code* occupies the 5th byte from the address.

Now back to the matter at hand:
If you wanted to add a base at the **EAW World** location you basically have one of 3 options:

1 - You could move the base(s) data already present there to another **Griddata** location.

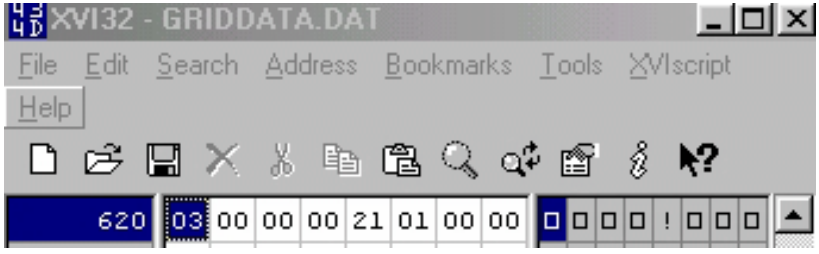
2 - You choose one the alternative *(and hopefully empty)* data locations as provided by **Vertcon**.

3 - You could add a base at the *1568* address in **Griddata.dat** - ***But only if it is numerically sequenced to the present base(s)*** *T-code(s)*.

What does that mean?

For example; you could add **Juterborg** whch has a *T-code* of **2401** since it follows in sequence.Or **Tutow** which has a *T-code* of **2101**.Then you would change the number at the beginning of the address to **03** to indicate that here are 3 bases now to be sought at the **EAW World** location.
In the case of **Tutow** since the *T-code* of **2101** is previous in numerical sequence to **2201** you would replace **2201** with **2101**.
EAW expects to count the *T-codes* occuring at **Griddata** address locations in numerically increasing order.

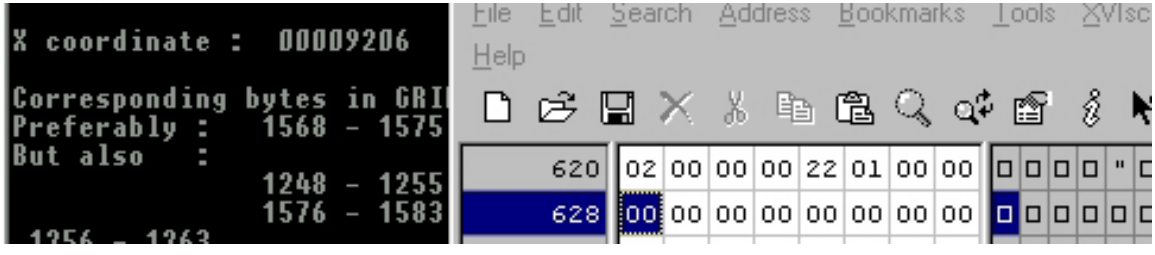
Here's an example of "type 3" **Griddata** alteration



I've altered the number of bases to 03 and at the right you can see it starts with **Tutow's** *T-code* of **2101**.
So the bases now coded here would be **Tutow**; *T-code* of **2101**, **Berlin**; *T-code* of **2201**, **Orianenburg**; *T-code* of **2301**.

I'm not satisfied, as I am looking to code an allied base.I'll change it back and show another method.

This is very convenient - the address *1576* just after is available



First I have to pick a suitable base.

Hmm.. in light of the length of this tutorial, it will be continued on Page 2..
Dec. 13, 2003

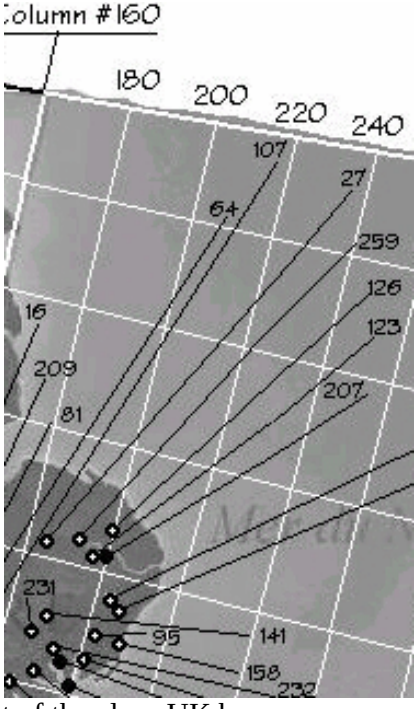
more

(Continued..) Finding a Base to move, Targets.dat and the relation to Griddata

We left off at the point of.. finding a suitable allied base for moving, so we will do that now:

Be aware that if expecting to code more than one base in the general area it will be necessary to use an available **Griddata** address.Often there is not many available uncoded data locations.So if another base is to be in the area it is wise to make a base selection based on *T-codes* that will allow numerical sequencing for the **Griddata.dat**.
Also, the formerly coded *default* **Griddata** address for the bases will have to be removed.It is easier to do so if the bases already occur at a single **Griddata**, it pays to do a little investigation.
Using the **HillGmap.jpg** is convenient also.Often bases that are located closely together will be coded at a single **Griddata** address.

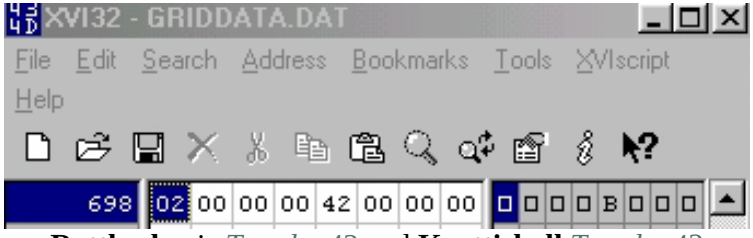
Here is the **HillGmap.jpg** showing an area of the UK.



A lot of the close UK bases are sequential.

Here I checked the above and the **ABTGList.rtf** then compared with the **EAWK3wdb.html** and found that **Rattlesden** - *(231)* and **Knettishall** - *(141)* are both sequential and coded at address*1688* in **Griddata**.

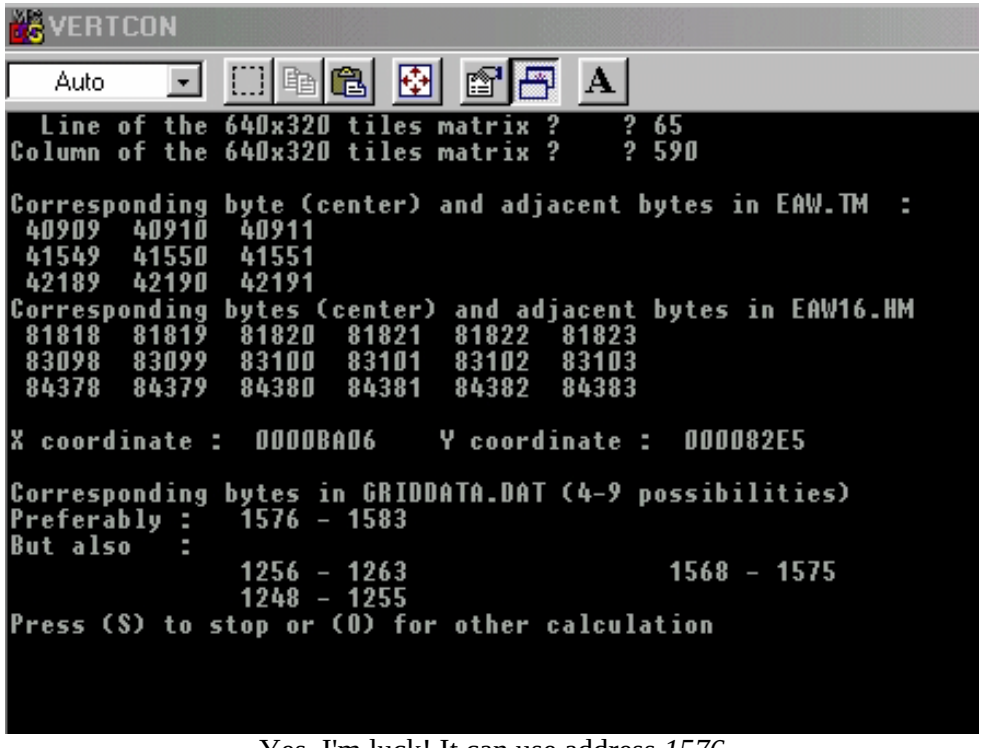
Griddata address *1688*



Rattlesden is *T-code;* 42 and **Knettishall** *T-code;* 43
All I have to do is "zero" the default data here

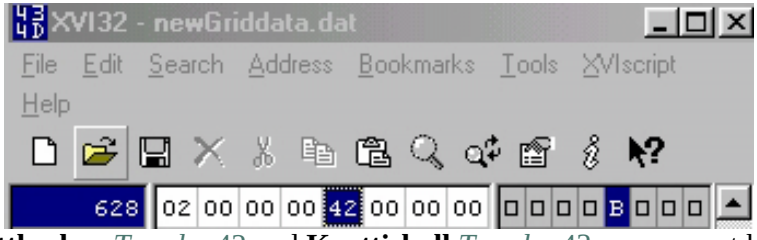
Now to place them in **Griddata**: In Page 1 of the tutorial I already checked the **x** , **y** in the **EAW World** location for placement of one base at **Column 580** , **Line 65** with the **Vertcon** program.
The question is where to place the second base?Also; I need to check the data for that location to be sure it can be coded by the same **Griddata** address.
I'm going to set the second base very close to the first, so hopefully it will fit.

Checking **Column 590** , **Line 65** with **Vertcon**



Yes, I'm luck! It can use address *1576*

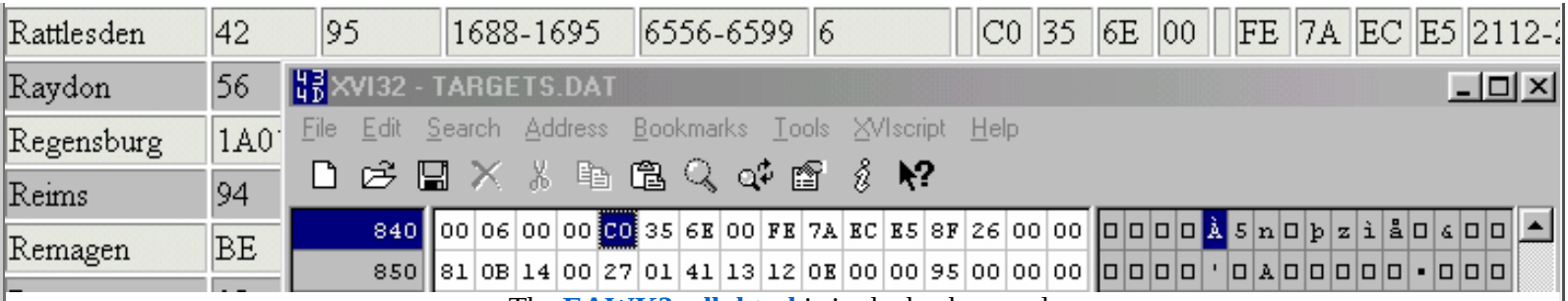
The newly coded **Griddata**



Rattlesden, *T-code;* 42 and **Knettishall** *T-code;* 43 are now set here
(Refer to Page 1 for coding reference)

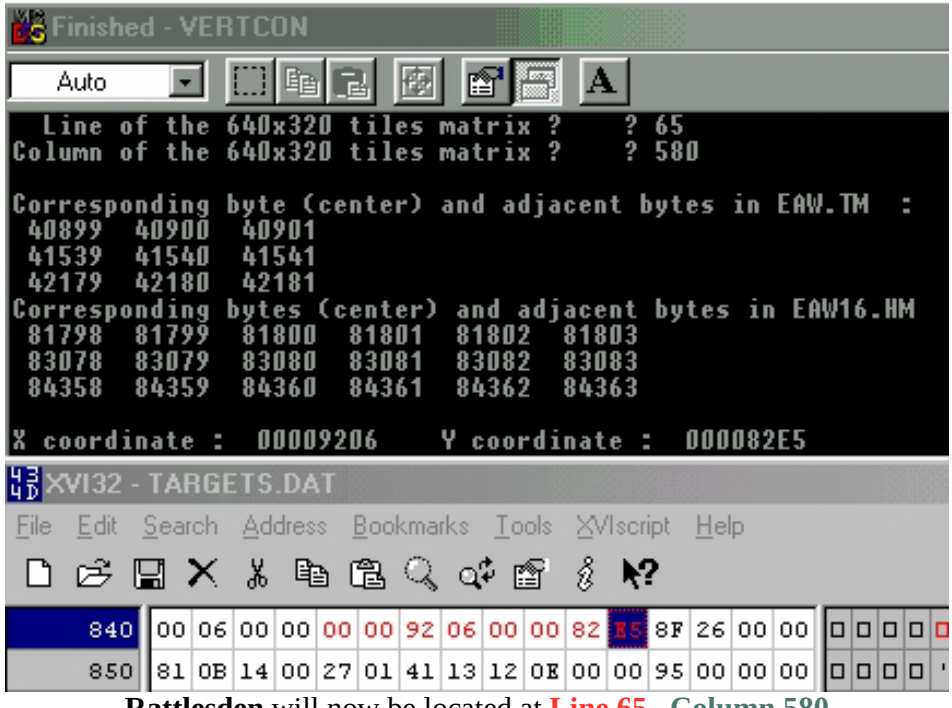
Now to the **Targets.dat** to change the **x** , **y EAW World** location data:

Shown here: **Rattlesden**'s *default* **Targets.dat** data at *jump 2112*



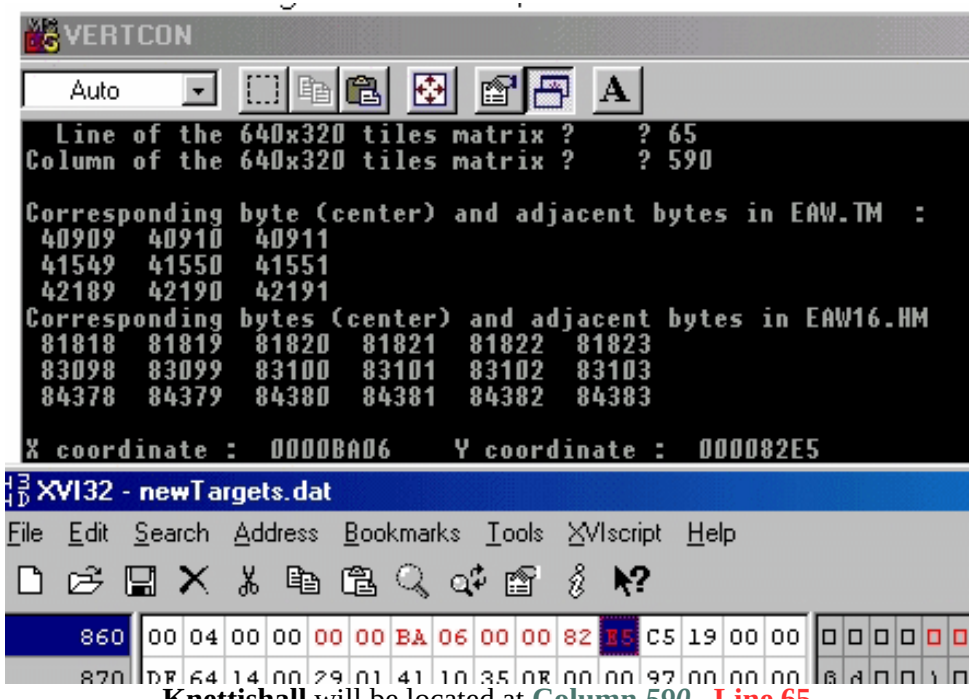
The **EAWK3wdb.html** is in the background.

Now I set the new **EAW World** location data for **Rattlesden** taken from **Vertcon**



Rattlesden will now be located at **Line 65** , **Column 580**

After doing the same process for **Knettishall**



Knettishall will be located at **Column** ***590*** , **Line 65**

Now to test this out:

Place the newly made **Targets.dat** , **Griddata.dat** , and **Frntline.dat** in EAW.
Also to be on the safe side; first, delete all Default*xx*.msn files in your EAW *savedata* folder.
(This will prevent any mixups and CTD's)

This is the new "Tutorial Mission" - I selected **Rattlesden** to take off from on a sweep to **Berlin**

You can see the Frontline - Hey I think I like this Scenario!

Well its about time to continue this on Page 3..

more

~ Setting Active Airbases and the **Airfield.dat ~**

If you haven't done so yet take a quick look at **Moggy**'s techairfields.htm on **Airfield.dat**

There is little you need to do as far as editing the file for basic mission purposes.The main point is understanding the part about Bytes 20 to 27 *(at bytes 21 to 28 if counting from 1 - 32 bytes)* is ***They govern the occurance of the airbase in each of the 4 EAW "years" or periods.***

As **Moggy** states, " **'FF FF'** means the base doesn't appear on the map in that year."
This means it is easy to remove any unwanted bases - just code **FF FF FF FF FF FF FF FF** in those bytes.

~ Scorpian's ***EAW Mission Editor*** **~**
This program is available from my site in the **Missedit.zip**

You can do the editing by hand , but it is easier to use **Scorpian**'s *(Neil Vennard)* creation.I never saw him since post coming to **EAW** ; I guess he moved on, but he left us a great legacy with this tool!
(On side note; I found he also created an EAW Rip - Ladder tool for ECAO and some FM files)

The only *caveat* about this is the ***Mission Editor*** only codes 2 bases for each side as active and deactivates all others.This is O.K. but presents a problem if you need more than that.Never-the-less it can be a big time saver if you need only a few more.I can show how.*But first to the use of the tool:*

Hmm.. I just found some errors with the Airbase.txt!
The supplied *Airbase.txt* is an editable file that the program uses, at least for listing.While looking for

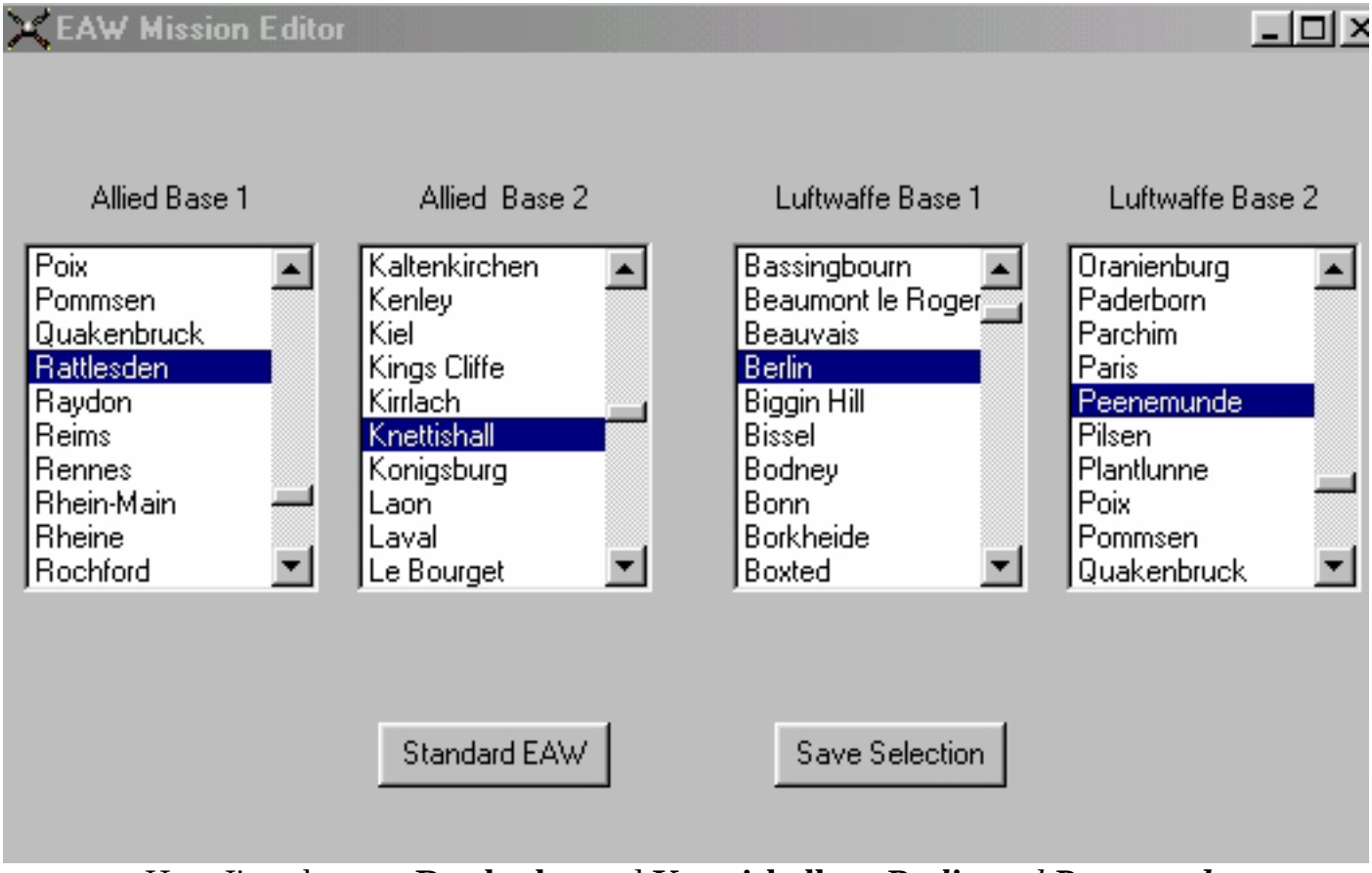
Peenemunde, I found it was not present.Also that Leipheim was listed twice, using it's *Airbase code* which is **62** and also *Airbase code* **5F** which is the proper code for Peenemunde.The solution is to edit the file.I added in a line for Peenemunde using **5F**.Apparently there was not any problem as far as the program code itself.But also I found the other errors as follows:

Corrections to the airbase.txt file:
Lechfeld: was 60 should be: 61
Leipheim: was listed twice, as 5F and 62 no removed the 5F copy
Neuberg: was 61 should be: 60
Peenemunde: was not listed, added it and, should be: 5F

..Ah, that seems to have solved the problem :)
Save a copy of this text FYI - or anyway I'll include it in a new Missedit.zip
Interesting in doing this is that I just realized the *Airbase codes* are arrived at by a similar method to the *T-codes*.The formula is:

Example ; **Caen** - *Airbase code* **7B** - address 5412:
5412 / by 44 *the length of individual records*
= 123
Converting 123 to hexidecimal = **7B**
Just goes to show that you learn something new every day in **EAW** :)

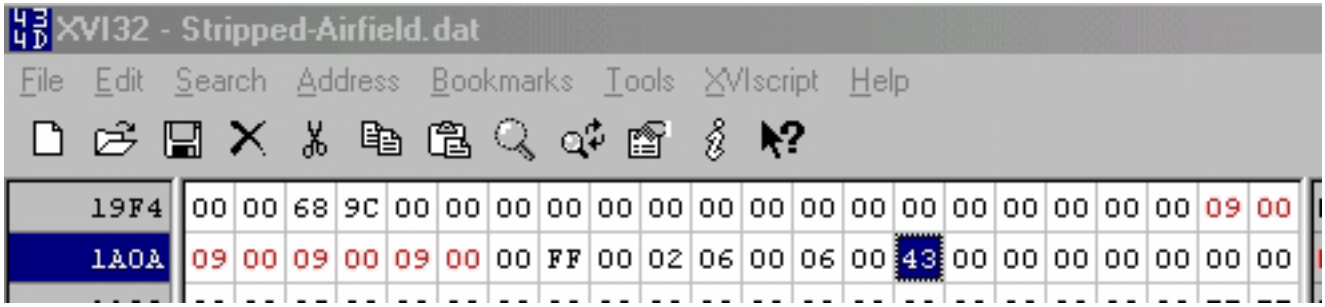
Here's a look at **Scorpian**'s ***EAW Mission Editor***



Here I've choosen **Rattlesden** and **Knettishall** vs. ***Berlin*** *and* ***Peeemunde***
(push "Save Selection" to execute, use the x to close)

Now to check the file with a hex editor:

Here's the **Airfield.dat** at the *6644* address for **Knettishall**
The addresses are listed in the **EAWK3wdb.html**
For this example I've "stripped off" the 4 byte header of the file and have set **XVI32** to show 22 Columns.



The bytes shown in red and coded as **09 00 09 00 09 00 09 00** are the 8 bytes that set the airbase to appear in each of the 4 periods.And these are the bytes to **FF FF** for each period you do not want the base to be active.To assure active bases you need to check here, as some bases are not always coded by *default* for all years.
FYI; highlighted at the cursor is **43** *- the T-code* ***Not*** the *Airbase code which does not appear in the file.*

After checking the rest and finding it O.K. its time for a test
(But first replacing the ***A2 00 00 00*** *header)*

Here it is.I selected takeoff from **Peenemude** to sweep **Knettishall**.All the other airbases not chosen have been successfully deactivated by the program.

The hardest part of editing is not spending all the time flying the missions when I need to be working!

~ Now about reactivating more bases ~

Use a *default* copy of the file open in one instance of **XVI32** while editing the new file with another, if you wish to duplicate the original coding.You can copy and paste *'as hex string'* from the *edit, clipboard* menu, hold *shift and use keyboard arrows* to move the cursor to hightlight, *or use block* 'n' *characters*
(Or just code by hand ;) The numbers of the Airbase 3d's are shown on **Moggy**'s techairfields.htm.

~ In Conclusion ~

I can't think of any other matters involving **Airfield.dat** except to say I gather from reading **Dominique LeGrand's** *"To campaign makers.txt "* that it is possible there are campaigns out there with **Airfield.dats** that contain customized *Airbase codes*.In that case, you would have to check the files closely and I'm unsure whether you could use **Scorpian's** ***EAW Mission Editor*** with these by altering the *Airbase.txt* file or not.

Also, *IMHO* there really doesn't seem to be a need to alter airbase locations via changing *Airbase codes* since moving them is easily done with **Targets.dat**.I think the former method probaly was used prior to the revealing of the coordinates system.

Next.. on to more fun in Page 4..
more

~ Adjustments to the Tutorial Mission ~

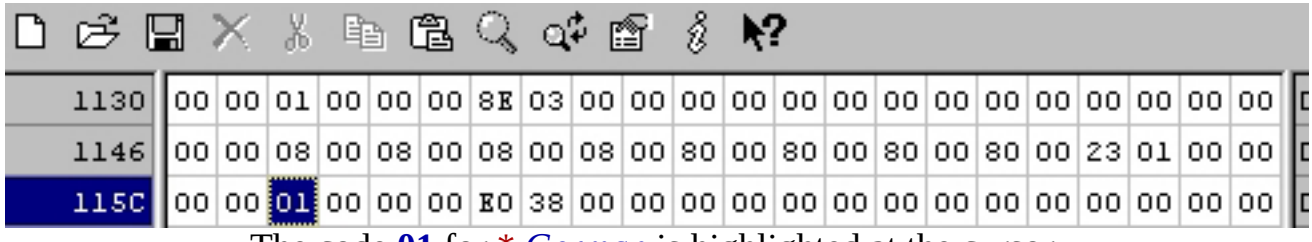
In Page 3 of the Tutorial I showed you the **Airfield.dat** editing.We coded 4 active airbases and deactivated all others.Now since this is shaping up to be a nice little scenario we might as well go all the way through coding it.I think we'll use a few more airbases.So at this point its time to pick some more airbases.

One extra one is **Orianenburg**.Its conveniently located between the moved airbases and **Berlin** and according to our Frontline is now on the Allied side.
But there's a slight problem.It is coded as a *French* base.This means we have to change another byte.

~ *Back to* Airfield.dat *for what I forgot!* ~

Actually to be truthful, I didn't forget it.Its just I never recoded an airbase this way.The base showed before on the Allied side, but couldn't be selected for use.So I had to look into it.
I knew it was probaly all there in **Moggy**'s pages.While it doesn't spell it out exactly in regards to this I took a guess and change the nationality code at byte 42 from **01** to **00**.It works.

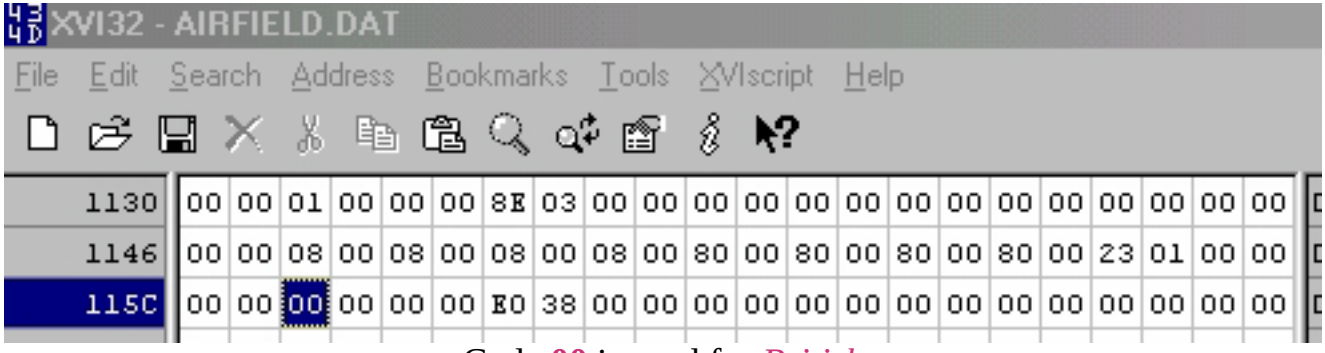
Here's the original **Airfield.dat** byte coding:



1130	00	00	01	00	00	00	8E	03	00	00	00	00	00	00	00	00	00	00	00	00	00
1146	00	00	08	00	08	00	08	00	08	00	80	00	80	00	80	00	80	00	23	01	00	00
115C	00	00	01	00	00	00	E0	38	00	00	00	00	00	00	00	00	00	00	00	00	00	00

The code **01** for * *German* is highlighted at the cursor.
(* update: Corrected this from original Page 4 that incorrectly listed 01 as "French")

And here's the new edited version:



Code **00** is used for *British*

Next its on to activating some more airbases.. **Briest** for ***Allied*** looks good.**Borkheide** and **Magdeburg** for the ***Axis***.All 3 of these need to be *Un*-**FF FF***'d* and for **Briest** the same changing of the nationality code is necessary.

New **German** airbase **Magdeburg** is at the *Iron Cross* and **Borkheide** at cursor.

The now ***Allied*** airbase **Briest** is at the red x

This scenario is really shaping up!Now that there are 4 active airbases for each side I think its time to move on to setting the regular bases ;)

~ Base appearance, *Or Not* , *Activation* and *"The Bomber Fix"* ~

If you remember, on Page 1 under "**Finding a Base to move, Targets.dat and the relation to Griddata**" , in the pic example of the **OAWM1 Griddata.dat** it showed the base address was "zeroed". **Griddata.dat** addresses for unwanted bases / cities / targets are simply "zeroed" out.Then they do not show up in the **EAW World**.*At least not when you are flying - Ufortunately they will still show in the preflight target selection screen from the hangar menu, and inflight map as dots.*
Of course, if the base is set in a **Griddata** address that also codes other bases you still want to appear, then you would not zero the address, but just remove the unwanted ones from the code.
Take for example where you coded **Rattlesden** and **Knettishall** - if you had set 3 bases there and the

first had been **Bodney** with a *T-code; 41* then later wished to remove it, you would recode as done starting with **Rattlesden** *T-code; 42*.
If you have an address that codes many bases and removing them would mean skipping some and it would not be sequential, i.e. if you wanted to keep *T-code 41 and 43* but remove *42* then you would have to move *43* to another **Griddata** address.

On Page 3 you also learned how to deactivate *Airbases*.But this doesn't solve the problem of bases of all types being fully removed from the scenario.They will still be selected automatically for targeting by **EAW** during *Online Missions*.
The solution is to apply what I call ***"The Bomber Fix"*** .

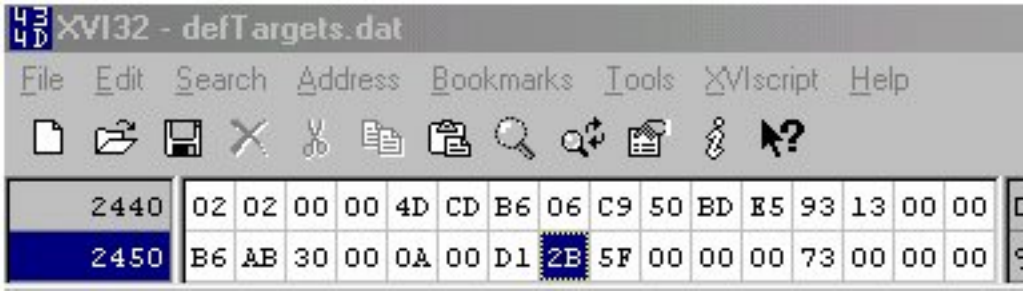
All that is needed is to *"zero"* the **Targets.dat** byte 19 *(byte 20 of 32)* which is described by **Moggy** in his techtargets.htm as, *"Bytes 18-19 fix the numbers of records (or lines) pertinent to this target location in tardata.dat, and therefore the number of actual target mods in this location."*

Note that; as far as I know, only byte 19 is used! - I believe this was confirmed by **Moggy** *in a recent post.*

This *"zeroing"* of that byte 19 "tells" **EAW** that no targets are present at the base for targeting, and thus the bases are not selected bomber missions, etc.

(edited 4/2007) **********

Here's an example of **Berlin**'s address byte 19 ..



Berlin has **43** tmods present by *defaut* which converted to hexidecimal = **2B**.

If you added more tmods(objects) at the tardata location or removed some,you would need to recode this number.If you wanted none at all to appear or be targeted, you would need to zero it.

Of course there is even a remedy for this replacing process, in that; if you use newer Tardata edit tools to code the the bases, usually those programs will recode the byte 19 with the new number of *tmods* present.

****

~ Bases chosen for the scenario ~

For my tutorial I decided to just use the 4 Airbases for each side and additionally, for the **Allies** ; **Stralsund** and **Tutow** coded just as they are.For the **Axis** including **Brandeburg** , **Erkner** and **Anklam** coded also as they are currently.

more

OAW / EAW Mission Making in 2005

in 2005 there were more tools available for editing EAW files.Mr. Jelly, Gurney, and myself all have some tools for various areas..Much of a scenario as described can be done without hex editing.And it saves much time!
No doubt at one or two points you may need some hex editing for minor fixes.Still even with the other tools you are well advised to understand EAW Mission editing matters to make functioning scenarios without errors.So be sure to read up on all you can!

In light of the tools available I've decided to not continue to finish this tutorial.Hopefully I have provided at least enough info to get you on your way.With the other tools and a bit of investigation you should be able to finish a Mission now yourself.Be sure to ask at the SimHQ EAW Forum for any additional help.

And be sure to try my SMF program, which can produce OAW Type mission edits like this from Default EAW or other Scenarios' files in a few minutes!

Mission Making in 2007 :

..Now there are even newer tools made by MrJelly that can easily code a whole mission, and are quite reliable, never-the-less knowledge of the eaw files and coding as described is important if you wish to understand how things should be coded and correct errors if they occur.One of the main differences you should be aware of about missons made by newer tools is that Airfield.dat and Targets.dat and Tardata.dat locations might not be using the conventional locations at all, so you really have to check the data thoroughly to edit them by hand.

-S!
RAF_Roy
April 2007
www.raf-roy.com

added Bonus: My old XVI32 hex editing notes:

XVI32notes.html

XVI32 Notes: Tips on XVI32 Hex editing

Get XVI32 at: Christian Maas's Website

This page describes how to use XVI32 especially with EAW files.
(republished 4/2007 from my 2003 version)

Well first I tell how to set the XVI:
1.When u click on a file there will be a setup for the right click in Windows Explorer: send to : XVI32 that is what I use to open a file with it.

2.The XVI hex editor doesn't make a change saved to a file unless you save it. Some hex editors do whenever you open it.That can be most bad, as soon as you open in those type it changes the filedate!!!:(

3.Always make a new filename save when editing!Or you will get lost quickly!I add a number to the end of the name,etc.I keep track this way.

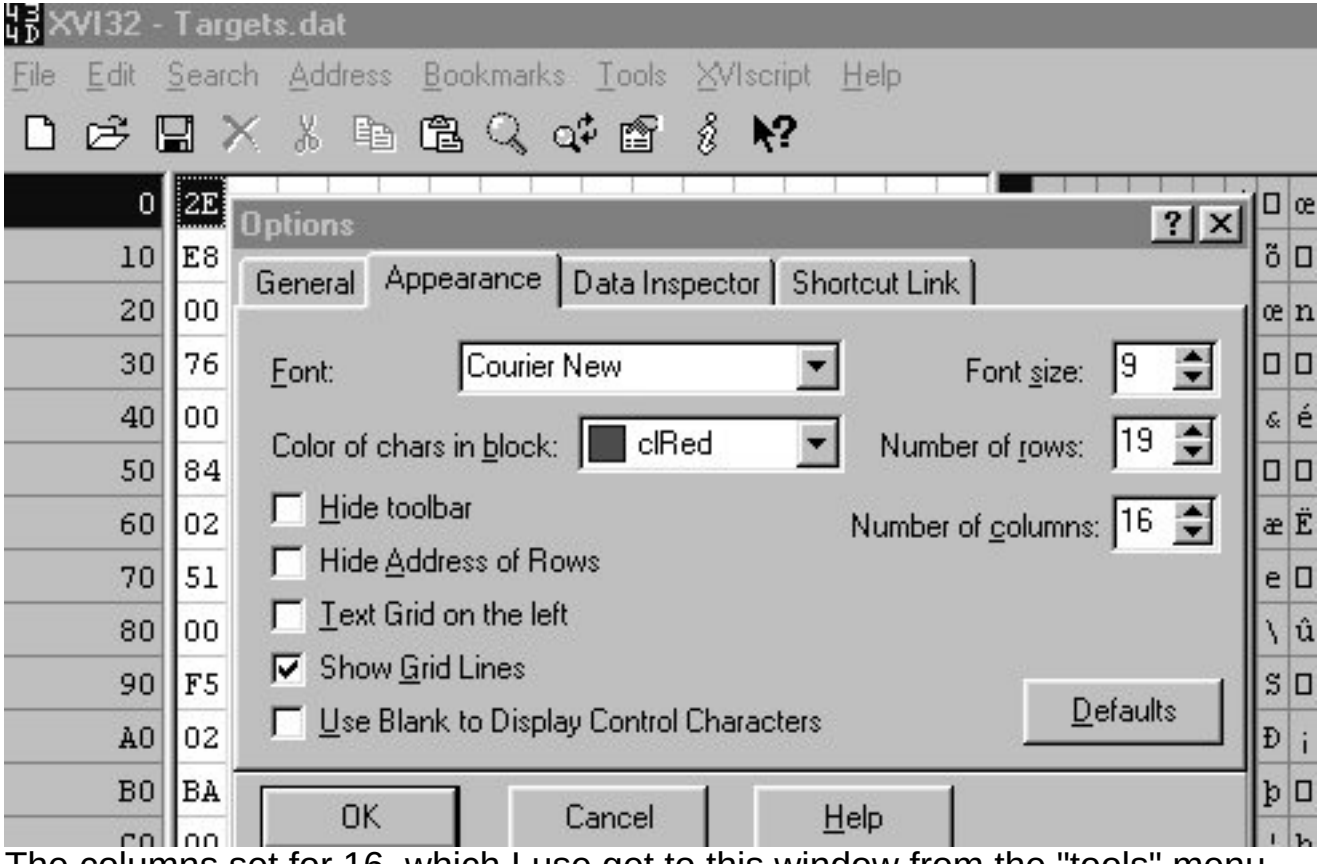
4.At first hex editing very hard to follow. After a few days you will feel it is so easy!

---

5. Open XVI with a file: The next step is to get the window showing the number of "columns" you want.By default it shows i think 17:
Select "tools" from menu,then: "options",then: "appearance", then set the "number of Columns" that is the width of the window.Ignore the rows, it won't matter much.
I use 16 Columns usually.This makes a good line up for most files.Much of the data for EAW is 32 byte sections to edit.So this makes it easy to see 2 rows will contain that area. Sometimes,like for griddata.dat I prefer to use only 8 "columns". It just depends what u find u like.Keep it a even number and you will see it is easier to look at a file.

Maybe also increase the font size to see better.

Example:

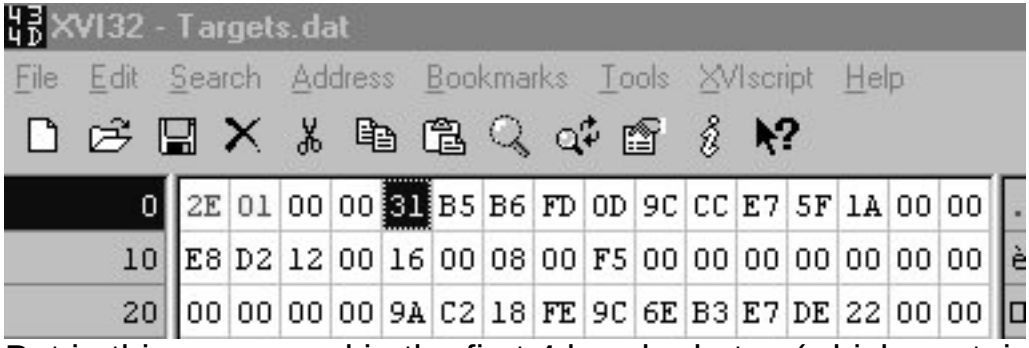


The columns set for 16, which I use.get to this window from the "tools" menu, then: "options",then: "appearance".

6.Other settings: You won't need to know much or touch these usually, they are set good by default.Except the editing functions and the "address" : "jump width".

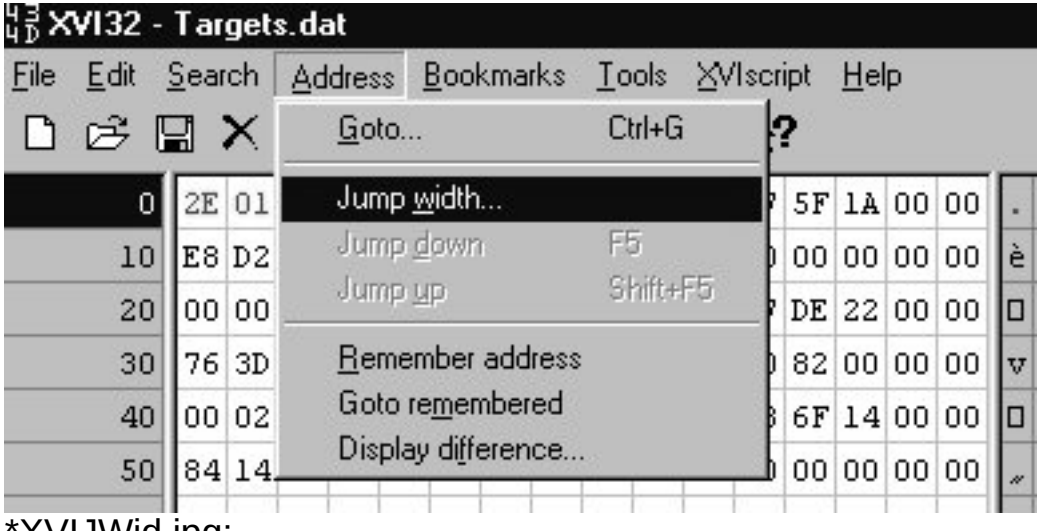
7."Address" this is where you go to in the hex file.
Normally we would start with cursor at beginning of file,

Tutorial misc.
About the "Jump



But in this case we skip the first 4 header bytes (which contain 2E 01 followed by 00 00) and start at the 5th byte of the Targets.dat file.
(Use the arrows on your keyboard to move the cursor)

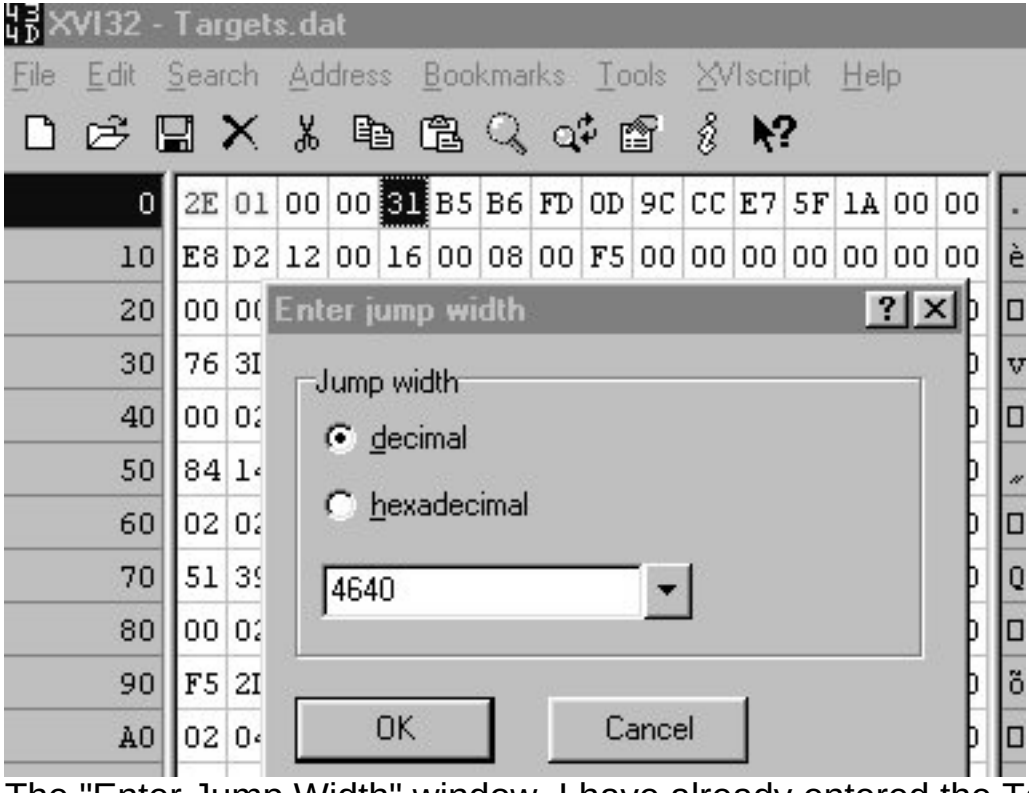
-Open "address" menu, then "jump width" leave it on "decimal" button; as mostly the notes will tell you decimal (regular) numbers for an address: Just enter the number,o.k.!Then u press F5 to go there and Shift+F5 to go back (or use scroll, etc.)



*XVIJWid.jpg:
The XVI32 "Address" menu (the file Targets.dat is open also) and the "Jump Width" being ready to be selected.

Address" : The jump address will remain the same in XVI32 until I change it; so if I pressed F5 again, I would jump 4640 again.

About using the jump when I'm already at an address : Since I might want to jump to the next record in the file from where aI'm at and I know that each record is 32 bytes long in this



The "Enter Jump Width" window. I have already entered the Targets.dat address for Brussels in the window and the selector button is on "Decimal" (the addresses listed in most files are decimal); I just have to click "O.K." and the jump address will be entered.. after this I'm ready to jump by pushing F5 on my keyboard.

Example of "Address"

From Dom's EAWK3.wdb document (converted to HTML by me as the EAWK3wdb.html)

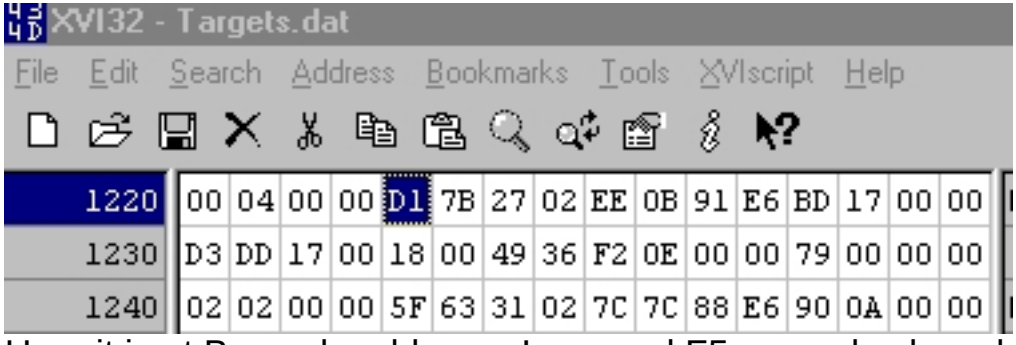
file, I could enter 32 as a new "Jump Address" and then press F5 and then I'd jump 32.

How to jump up? : Shift + F5 (or use the menu with the mouse)

Help: There are help files in XVI32.

Why does the Targets.dat shown here look different than the EAW default one?

Shows the EAWK3wdb.html document at the Targets.dat address area for Brussels - 4640-4671,(starts at 4640 and contains 32 bytes including 4671).This would be the the address to jump to from where the cursor was at the 5th byte (thus skipping the header bytes): 4640.
Also seen to the left of the address is the 8 byte coordinates of Brussels in the EAW World.



Here it is at Brussels address.. I pressed F5 on my keyboard.(I started of course at the 5th byte of the beginning of the Targets.dat so I am at the correct address as listed in EAWK3wdb.html; I can confirm this also by looking at the 8 bytes starting at where the cursor is; as you can see the EAW World coordinate address is shown just as listed in the EAWK3wdb.html.

(In **Moggy's Notes**, the document; "techtarget.htm" tells us that the first 8 bytes in a record here in Targets.dat are the EAW coordinates.)

--What about the address on the left?Those are the end of the previous record. Because of the way I prefer to show the use of XVI32 with 16 columns shown and using a Targets.dat WITHOUT the header stripped it will look like this.If I were to have "stripped" (removed) the first 4 bytes of the file, it would all line up nice with the columns.But personally I prefer it this way.I don't recommend stripping the header.It also is easy to see where I'm at anyway.You will get used to it! -If you

Because shown here is the Targets.dat from OAW Mission1.It is customized, but the address here is the same as a default, though you might notice that some other data has been changed.. like for instance the number of targets at the location and the location pointer address for Tardata.dat has been

want to keep jumping once you there in the file it will "jump" from where you are. So if i was looking at Brussels in Targets.dat and wanted to go easy to the next Target I would then open the "jump address" box again and set "32" that would put me at Grimbergen's target address.

Note; You have to open and say "ok" every time you change a jump width.Or if you close and open XVI.

8.About bytes: and Hexidecimal: and various EAW notes;
-Usually some people's notes will use the convention when taking about the actual bytes of the data to edit is (for example a 32 byte block) 0-31.
This is confusing.(Just remember its a way of talking due to their "hex brains" ..lol) 32 bytes is 32 bytes.
if you wanted to see, and they say "then at byte 7" be advised that they may be saying "7: of 0-31"
actually it would be "8" if you count 1-32, like i do!So i always doublecheck.If i write notes i will say "byte 8 of 32" this tells exactly where!!!
-About Bytes:
Each space you see in XVI is a byte,(on the left side main window,the Hexnumbers/00 to FF: ignore the right side window;you will not be wise to edit from letters on right side window,there is too much complications to explain) in the default mode.
-Hexidecimal:
The numbers 00 -FF (256: 0-255) in hex.Learn a little about hex. system.Mostly you need to know little.Each space in the XVI is a byte.To convert to hex just use Windows Calculator.Install it from Windows setup if u don't have it.Then select the "scientific" mode.Then you can convert Hexidecimal to Decimal easy, etc.
-The numbers in hexidecimal are ALWAYS Hexidecimal.It just so happens that numbers 0-9 in deciaml are the same on hexidecimal.0=0 1=1, etc.until you get to 10 decimal.10 decimal is "0A" or simply "A".a zero will always go in front of single

moved; (it now points to where I added on record area in that file and not the original address.. *Isn't learning this EAW editing great?!!! ;)*

numbers.00=0 01=1, etc.hexidecimal always has 2 characters in each the byte to edit. So "F0C" is really 0F 0C : 0F in one byte,0C in another.FOC would be 3852 in decimal.Really is should be spelled 0F0C.

9."Offset" what is it?
If you ever see "offset" or a number like F0C:08 what the heck is that?
That is Stupids, being stupidier.. lol.There is no Hexidecimal number like that!!If you wanted to find it you would go to F0C (0F0C) address (3852) then look at the 8 byte once you get to that row.Remember that in some peoples notes, they may be saying 8 of 0-31..lol.. really it is 9 of 1-32...
they are really saying: "Of the 3852th record look for this record there" It is useful if looking at millions of records of bytes.

10.Confused yet??
hehe.. just find the proper location of the data you look for... Then the number to be entered in those spaces.Then type it in when cursor over it.Save as new filename.Then "poof" , test!

Warning!!!!!
NEVER ever push the backspace in XVI !!! it will screw up the "columns" you see.Like the file has shrunk!If you do by mistake close the file!!Be most careful about this.Or you find strange mistakes in edits...lol! Use the arrow keys to move the cursor!!

More notes: --About the Tardata.dat file header; (Tip by Moggy);
(The tardata.dat header is F20E).
((for a default size one- the Tardata can be customized and additional entries added, the header would have to be recalculated to show correctly the new record size-- for instance in my OAW mission 1 the tardata is larger - ;)Tip by

RAF_Roy))
This data format is however back to front and should be read as "0EF2", the decimal equivalent of which is 3826, which is the number of records.)
--((Targets.dat ; never change the header or size.))