The AnlagenProjekt for Anno 1503
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AnlagenProjekt (c) Dieter Robert Kohler

Due to too much work, this file is no longer upated regularly. (Autotranslate the German file ifrequired..)

Preparations

Before you can use the new AnlagenProjekt, some preparations have to be done.

System requirements

This version of the AnlagenProjekt is compiled for 64bit-systems, in particular the Anno1503-History Edition.

Create a directory where the AnlagenProjekt should reside. (The software does not need any Registry-settings). At best the files should reside in the same directory as the MapEditor/ GFXExtractor. If you have an older version of the AnlagenProject, remove those files.

The zip-file should contain the following files::

<Subdirectory> Deutsch :	required text file AmainStrings.txt Struktur_der_Anlagen.odf Manual in German
<Subdirectory> Englisch :	required text file AMainStrings.txt Manual in English.
AnlagenProjekt.exe:	The program to create the textures and more

Index-Files
FORSCHTYPE.txt
IDENTIFIERS.txt'
INFRAMIN.txt
PRODTYPE.txt'
WARE.txt

One of the AMainStrings.txt files defines the program‘s language. It should be copied into the same directory as AnlagenProjekt.exe.

The text files should never be changed (except correcting spelling errors in AMainStrigs.txt), as they are required for controlling the program. (The text file for the Mapeditor is called MainStrings.txt, the text file for the GFXExtractor is called TMainStrings.txt, so all three programs can coexist in the same directory).

With the first start of the program, an ini-file AnlagenProjekt.ini is created. This text filec ontains some paths to various subdirectorys which are used regularly (for example the path to the \GFXImages data, etc).

This program is one of several Anno-projects, which are worked on from time to time. Hence the software may contain many options which are (not yet) implemented.

What does AnlagenProjekt do?

At present, the program can only extract the textures from the system data file Anlagen.addon as bitmaps.

All textures exist in three versions, corresponding to the three zoom levels in the game. All bitmap resolutions can be extracted, including shadow and special elements (animations like smoke,fore xample).

The format of the bitmaps is the same as the ground texture bitmaps,an image with a color palette of 256 entries.
The bitmaps are images of the plants, rocks, buildings, etc, as well as some shadow textures.

The final goal of the project is to add one‘s own/modified textures to the system file Anlagen.addon.

Such a program already existed many years ago. Unfortunately all sources (and most of the information about the structure of the Anagen.addon file) was lost.

This project is an attempt to recreate a new version. This is an enormuously tedious work

The main window

The button „Open Anlagen.addon“ loads the system file Anlagen-addon.addon. As this is a very large file, this may take a few seconds. The contents of the file is shown at left.

Open Anlagen.addon | D:\Anno1503\GFXExtractor\Anlagen.addon.addon

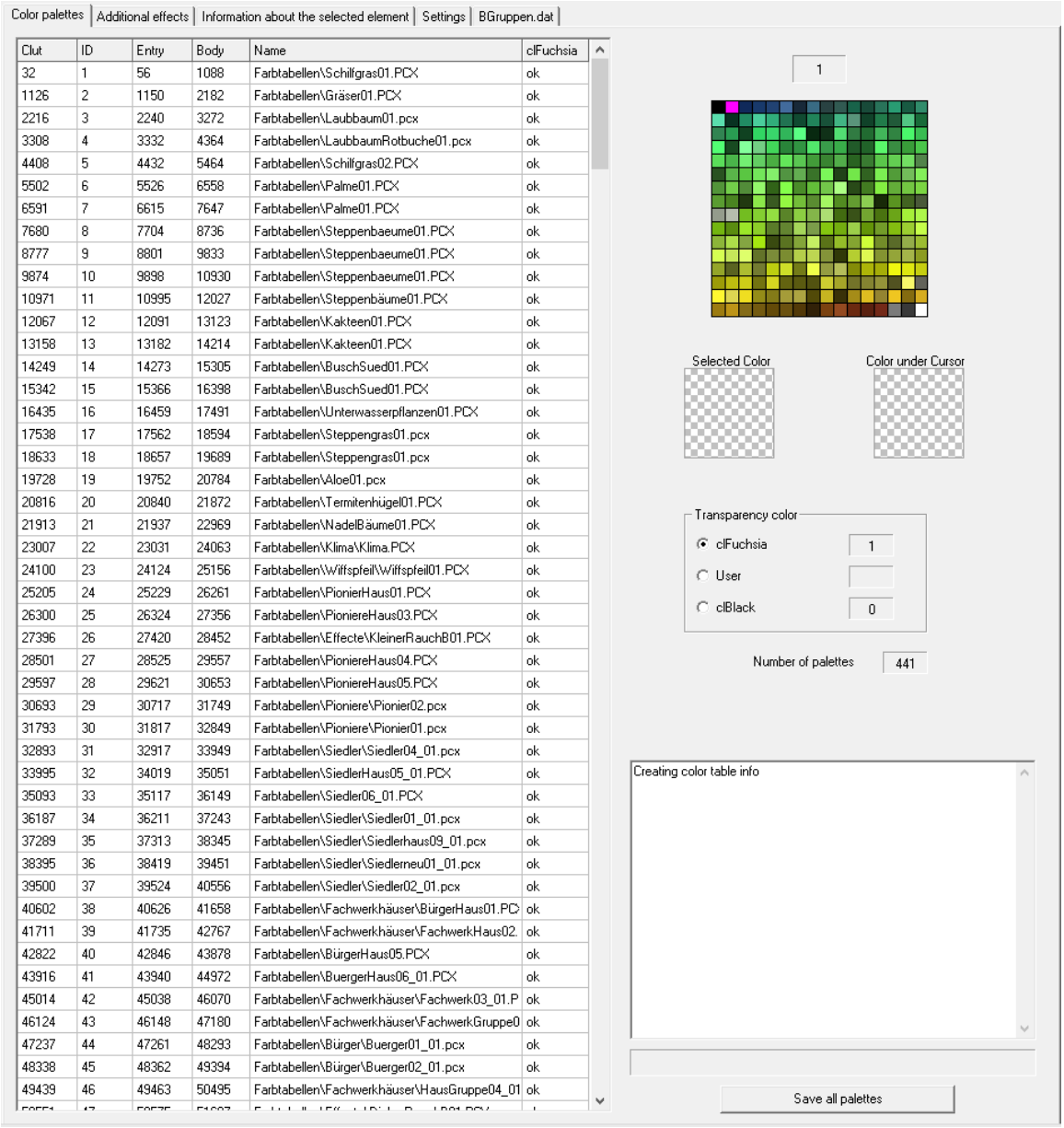
ID	TileX	TileY	GFX string	Title String	Pal0	Pal1	Pal2	Shadow
1327	3	3	Richtstätte_Anim\Richtstätte01_001.tga	Richtstätte02	150			
1330	6	8	Kapellen&Dom01\Dom01_01.tga	Dom01	151			
1335	4	3	Wirtshaeuser\Wirtshaus01_01.tga	Wirtshaus01	0	152		
1336	4	4	GrossesWirtshaus01\GrossesWirtshausC	GrossesWirtshaus01	0	153	0	
1337	4	4	Medicus\Medicus01_01.tga	Medicus01	154			
1339	3	3	Gericht\Gericht01_01.tga	Gericht01	0	155		
1341	1	1	Brunnen01\Brunnen01_01.tga	Brunnen01	156			
1342	1	1	Brunnen_Groß\Brunnen01_01.tga	Brunnen02	0	157		
1346	4	4	KlosterschuleKlein\KlosterschuleKlein01_	KlosterSchule	0	158		
1347	4	4	Klosterschule\Klosterschule01_01.tga	KlosterSchule (Gross)	0	0	159	
1350	3	3	Feuerwehr Stufe2\Feuerwehr01_01.tga	Feuerwehr02	160			
1376	7	6	Theater\Theater01_01.tga	Theater01	161			
1377	5	6	Badehaus\BadeHaus01_01.tga	BadeHaus01	0	162	163	
1378	5	6	Bibliothek\Bibliothek01_01.tga	Bibliothek01	164			
1379	8	8	Universität\Uni01_01.tga	Universität01	165			
1380	4	7	Schloss\SchlossHauptteil01_01.tga	SchlossHauptteil01	166			
1381	2	4	Schloss\SchlossFlügel01_01.tga	SchlossFlügel01	166			
1382	4	4	Schloss\SchlossEckturm01_01.tga	SchlossEckTurm01	166			
1383	2	4	Schloss\SchlossBogenelement01_01.tga	SchlossBogenelement01	166			
1384	2	4	Zierobjecte\Schlossteil02_01.tga	SchlossBogenelement02	167			
1385	4	4	Zierobjecte\Schlossteil01_01.tga	SchlossHauptteil02	168			
1386	3	3	Pavillion\Pavillion01_01.tga	Pavillion01	0	169		
1387	4	1	Zierobjecte\Schlosstor01_01.tga	SchlossTor01	170			
1388	5	6	Zierobjecte\Feldherrenhalle01_01.tga	Feldherrenhalle	171			
1389	3	3	Zierobjecte\Löwenportal01_01.tga	Löwenportal	172			
1390	2	2	Zierobjecte\Reiterstandbild01_01.tga	Reiterstandbild	173			
1391	2	2	Zierobjecte\Venusbrunnen01_01.tga	Venusbrunnen	174			
1392	4	4	Schloss\Schlossteil03_01.tga	SchlossEckflügel01	0	166		
1393	2	2	Zierobjecte\Ziergarten01_01.tga	Ziergarten01	175			
1394	1	1	Zierobjecte\Prunkflagge01_001.tga	Prunkflagge01	176			
1395	1	1	Zierobjecte\Prunkflagge01_001.tga	Prunkflagge01	176			
1400	2	2						
1401	2	2						
1402	2	2						
1403	2	2						
1404	2	2						
1405	2	2						
1406	2	2						
1407	2	2						
1408	4	2						
1409	2	2						
1410	1	1	Ruinen\Marktstände\Marktstand01_01.t	Ruine Marktstand01	140			
1412	4	4						
1413	4	4	Markthaupt01\Kontor03_hin_01.tga	DamagedKontor03	0	177	109	
1414	4	3	Markthaupt01\Markthaupt_hin_01_01.tg	DamagedMarkthaupt01	0	109	178	
1415	4	4	Markthaupt01\Kontor_hin_01_01.tga	DamagedKontor01	0	109	178	
1416	4	3	Markthaupt01\Markthaupt_hin_02_01.tg	DamagedMarkthaupt02	179	109		

Clicking onto the table displays the selected texture at right with its associated color palette in the Palette tab at right.

Most textures contain four bitmaps, one for each direction of view. Some simple textures look identical in every direction (small trees, fiields), so there is only one bitmap. Some textures contain an entire growth sequence.

Some textures do not possess a bitmap in the system file. These are either unused textures or system textures (sea surface, for example), that are stored in some other location.

Color Palettes



The table lists all color palettes in the file.

Save all palettes saves all color palettes into a subdirectory *Cluts* of the path defined in the settings tab.
These indivudual palettes are used when the Anlagen.addon file was dissected into its indivudual elements and a new version of the file is reassembled,with altered or additional elements in it.

Additional Effects

Color palettes | Additional effects | Information about the selected element | Settings | Debug info

ID of elemente	Title of element	GFX Name	Title Name
505	Pionierhaus03	Effekte\KleinerRauchB\rauch-b060.tga	KleinerRauchB01
513	Pionierhaus07	Effekte\KleinerRauchB\rauch-b060.tga	KleinerRauchB01
526	SiedlerHaus11	Effekte\KleinerRauchB\rauch-b060.tga	KleinerRauchB01
545	B?rgerhaus06	Effekte\KleinerRauchB\rauch-b060.tga	KleinerRauchB01
560	Kaufleute01	Effekte\GanzKleinerRauch01\rauch-a060.tga	GanzKleinerRauchB01
561	Kaufleute02	Effekte\KleinerRauchB\rauch-b060.tga	KleinerRauchB01
567	Kaufleute09	Effekte\KleinerRauchB\rauch-b060.tga	KleinerRauchB01
585	Aristokraten06	Effekte\KleinerRauchB\rauch-b060.tga	KleinerRauchB01
801	Holzf?ller01	Holzfäller\Holzstapel01_001.tga	HolzStapel01
803	Mamorsteinmetz	Marmorsteinmetz\Marmorsteine01_001.tga	Mamorsteine
804	Steinmetz01	Steinmetz\SteinmetzSteine01_001.tga	SteinmetzSteine01
1002	Windmuehle02	Windmuehle\Muehle01.tga	Windmuehle01
1004	B?cker01	Effekt_Hausrauch01\Smoke01_001.tga	Rauch01
1005	Weber02	Effect_Hausrauch04\Smoke04_001.tga	KleinerRauchB01
1006	Bogenmacher01	EffectHausrauch03\Smoke03_001.tga	KleinerRauchB01
1008	Tabakverarbeiter01	EffectHausrauch03\Smoke03_001.tga	KleinerRauchB01
1009	F?rberei	EffectHausrauch03\Smoke03_001.tga	KleinerRauchB01
1012	B?chsenmacher01	Effect_Hausrauch04\Smoke04_001.tga	KleinerRauchB01
1013	Rumbrennerei01	EffectHausrauch03\Smoke03_001.tga	KleinerRauchB01
1014	Brauerei01	Effekt_Hausrauch01\Smoke01_001.tga	Rauch01
1017	Erzschmelze01	Erzschmelze01\ErzSchmelze01_01_001.tga	Erzschmelze01
1018	Fleischer01	EffectHausrauch03\Smoke03_001.tga	KleinerRauchB01
1019	Schmied01	Schmied\Schmied01_001.tga	SchmiedAnim01
1020	KleineWerft	Flaggen01\Flagge01_001.tga	Flagge01
1021	GrosseWerft	Flaggen01\Flagge01_001.tga	Flagge01
1022	Saline	EffectHausrauch03\Smoke03_001.tga	Hausrauch03
1023	KleinerGerber	Effect_Hausrauch04\Smoke04_001.tga	KleinerRauchB01
1027	Schneider	EffectHausrauch03\Smoke03_001.tga	KleinerRauch 01
1028	Transiederei	Effect_Hausrauch04\Smoke04_001.tga	KleinerRauch 01
1029	Ruestungsbau	Effect_Hausrauch04\Smoke04_001.tga	KleinerRauch 02
1034	GrosseErzschmelze01	Effect_Hausrauch02\Smoke02_001.tga	Rauch01
1035	K?hler01	Effect_Hausrauch04\Smoke04_001.tga	KleinerRauch02
1036	Waffenschmied02	Effekt_Hausrauch01\Smoke01_001.tga	Rauch01
1037	Waffenschmied01	Effect_Hausrauch04\Smoke04_001.tga	KleinerRauchB01
1038	KanonenGiesser01	Effect_Hausrauch02\Smoke02_001.tga	Rauch01
1216	TiefeErzmine01	TiefeErzmine\TiefeErzMine01_001.tga	TiefeErzmine01_001
1217	TiefeErzmineSued01	TiefeErzmine\TiefeErzMineSüd01_001.tga	TiefeErzmineSued01
1301	Markthaupt01	Flaggen01\Flagge01_001.tga	Flagge01
1302	Kontor01	Flaggen01\Flagge01_001.tga	Flagge01
1303	Markthaupt02	Flaggen01\Flagge01_001.tga	Flagge01
1304	Kontor02	Flaggen01\Flagge01_001.tga	Flagge01
1305	Markthaupt03	Flaggen01\Flagge01_001.tga	Flagge01
1306	Kontor03	Flaggen01\Flagge01_001.tga	Flagge01
1377	BadeHaus01	Badehaus\Pool01_001.tga	Pool01
1413	DamagedKontor03	Flaggen01\Flagge01_001.tga	Flagge01
1414	DamagedMarkthaupt01	Flaggen01\Flagge01_001.tga	Flagge01

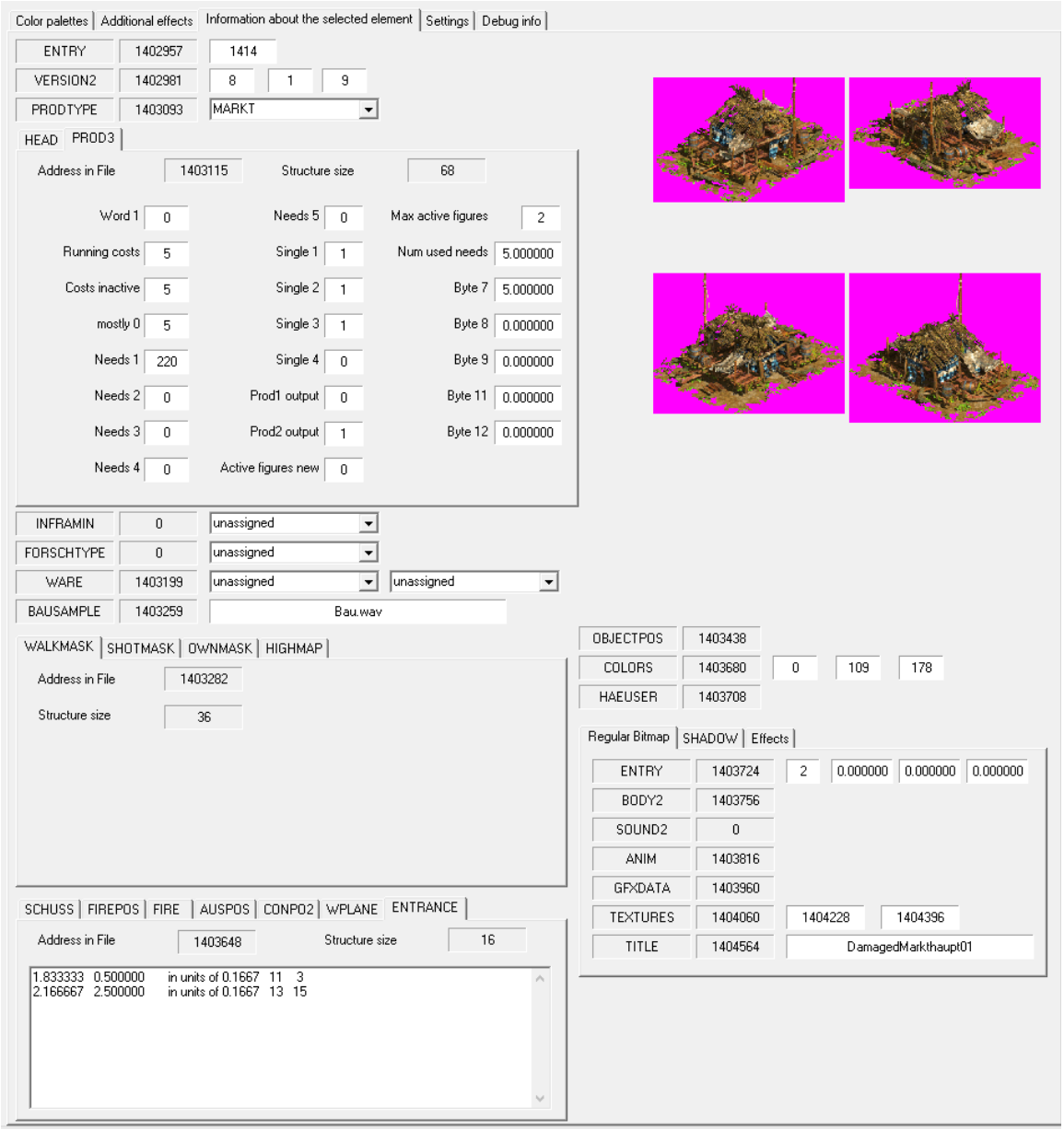
Some elements contain additional bitmaps (Smoking chimneys, for example).

These additional Elements are listed in this table, with the connection where they appear in the main elements.

Some elements contain additional shadow bitmaps.

These additional Elements are listed in the **Shadows table**, with the connection where they appear in the main elements.

Information about the selected element



This tab display the bitmaps of the selected element,as well as information about its data structure. The functions of many of parameters are unknown at this time.

Settings

Path settings :The paths to the bitmap locations can be set by clicking on a panel.

The bitmaps of the shadow textures are saved into the subdirectory “Schatten“.The bitmaps of the effects textures are saved into the subdirectory “Effekte“.

The individual elements of the Anlagen.addon file are saved into the directory given by *Path to all single elements..*

BGruppen-files are saved into a directory given by *Path to BGruppen.dat files*
.
The button „Create Buildings.txt“ writes a text file Buildings.txt that contains the list of textures in a csv format
20,1,1,GrasSued01(Wachs) (corresponds to: ID, Size X, Size Y, Name of the texture)
This list is used in the old Anno1503 island editors.

The button „Just IDs“ writes a simpler text file Buildings.txt that contains the list of textures in the format
20 GrasSued01(Wachs) (corresponds to: ID Name of the texture)

The button “Save all bitmaps“ speichert die Bilder aus der Liste im Hauptfenster.

The button “Save shadow bitmaps only“ saves the shadow ibitmaps of all elements that define a shadow.

The button “Save effects bitmaps only “ saves the bitmaps in the table **Effects.**

The setting *Path settings* definies which zoom factor is used (High, Middle or Low bitmap resolution).

Bitmaps with middle resolution have half the width/height of hires bitmaps. Bitmaps with low resolution have roughly a fourth of the width/height.

BGruppen.dat

The file BGruppen.dat Datei contains all data parameters that define the game behaviouren of Anno1503. Which goods and buildings at which staqe of the game are required. The prices of things on dfferent islands, how many folks are in a house, etc.

As countless modders and cheaters have found out the hard way, changing the values is the fastest way to destroy the delicate balancing of the game,or even killing the game entirely. All values arecarefully balanced, and any careless changes can lead to unpredictable results.

The obvious rule is: Modified Bgruppen-files should only be used in endless games, they will most likely brake scenario and campaign maps.

The auxiliary window

The auxiliary window hides behind the main window.
It basically is a playground, to look at various data bytes in the system file Anlagen.addon.

The table at left contains all tags that define a texture.
A click on a tag list all addresses of the tag in the file. In the example above, the tag “HEAD“ is selected.
A click on a number dumps the bytes from this address into the table at right.

At the end of the list of addresses, there is a line “Found xxx“. This is the number of occurencies of the tag.
Clicking onto this line, the list at right shows the first „Row width“ bytes for every occurence of the tag in the file.
This enables a direct comparison of the byte structure for the selected tag in the file.

The setting of “padding“ can be used to enter a +/- ofset of the list start.

With a right mouse button click into the right display, the list can be saved to disc..

Using the “?“ field,one can search the file for a particular text.
Do not search for a single letter, as the file size of Anlagane.addon is over 200Mbytes.

The debug window is a part of the auxiliary window now. It displays various internal ssettings and is used for debugging only, so there is nothing interesting to see here.