

URU Hacking Manual

W/XP1 Information

April 6, 2004

Revision 3.0

Contents

NOTES:.....	2
Version Discussion.....	3
Types of Hacks.....	4
The Trainer – New.....	4
File Omission Hack – First Hack Discovered.....	4
RAM Hack – Second Hack Discovered.....	4
PRP File Editing – Third Hack Discovered.....	4
SDL File Editing – Fourth Hack Discovered.....	4
CDC Disable Hack – Fifth Hack Discovered.....	4
CDC Work-Around Hacking – Sixth Hack.....	5
File Manipulation Hack – First (Not needed in XP1) URU 2003 Initial Game Hack – 3/5/04 Rev1.2.....	6
Great Zero Access (Not needed in XP1).....	9
Additional Notes – Cleft/Relto Problem.....	9
WinHex RAM Hack for Removing Barricades.....	10
Recovery Notes.....	11
SDL File Hacking Edits.....	12
Help.....	13
Directions for the Trainer.....	14
CRC Disable Hack.....	15
Replay the Cleft Ending.....	15
PRP Files Hack.....	16
Vault Hacking.....	18

NOTES:

I put this manual together for myself. I wanted a collection of the hacks and tools available. I often cannot participate in or play Uru for days or weeks because work interferes with my life. This manual is a source of instruction and reminders for me.

This manual contains information from several sources and many people. I have tested most of these procedures. I am testing or playing with others. I was only including those items that I had tested and verified that they work. Now I have included some from participants in COBBS, UO and UBI and other forums that have shown they are worthy of trust, even when I have not yet been able to use their programs or methods.

This material is time sensitive. As we learn more and new tools become available this manual changes. Check for updates. ClockworkOrangeBBS (COBBS) has links to the source file for much this manual. The target of those links is to the source file so those links are always current.

This manual reflects some of the history of the process of cracking URU. All of the information is pertinent to for those that want maximum control over the game. Because this information is developing over time and since some of the information is ambiguous and conflicts with other working solutions, none of it is guaranteed. Use this information at your own risk. Understand that use of some of these methods alters parts of the computer's active memory and any mistakes you make may disable the game and/or your computer. **Backup the game and your computer because the Uru community in general and particularly the forums and I accept no liability for any damages. You're on your own, bay-be.**

Those wanting to

Thanks go to more people than I can list. However, I do want to name COBBS as the forum providing the least restrictive forum. I also recommend COBBS as an excellent source of the latest working information.

Version Discussion

Understand that the community of URU Explorers is vast, over 350,000. These explorers are at different points in the game's evolution. Depending on which game version you play your method of hacking the game must change. The addition of XP1 increases the number of versions in use.

The Versions

Game Version COBBS#1

This version is officially known as version 1.0 and is the version on the original DVD distribution disk. The latest file dates are 10/9/03. A brand new install or uninstall and reinstall of URU provides the explorer this version. There are several things in this version that were modified or changed in later versions. Later versions also add other objects and features that are not in the original. This is a good experimental setup for hacking.

Game Version COBBS#2

There is an update available at Ubisoft, which updates the game to version 1.2. This update can be downloaded and installed at any time. Officially this is known as Update 1.2. The latest file date is 11/?/03. The problem with this update is it adds some type of checksum validation process to URU. Changes and omission to/of files is detected and the game load aborted. It fixes some minor problems in URU. This is a good update if you are not planning to hack the game. SDL files can be modified and not cause an abort.

Version COBBS#3

On line another update was available from LIVE. In the community this is called the online or LIVE update. This update is no longer available. The update adds many features and objects. This is an ideal version for hacking if one is content to live with the checksum limitations.

Version COBBS#4

This version is a game modification used by most of the hacking community, at least those that made it to LIVE. The version is the Version #3 game modified. The CD install is run and the game returned to version 1.0. Uninstall is avoided and the game is installed over the existing game. Many LIVE files remain untouched. The checksum feature is effectively removed. Update 1.2 is avoided.

Version COBBS#5 – March 13 Modification

I expect this to become the preferred version for hacking. This will be the COBBS#3 setup with the CRC Disable Hack. This hack removes the limitations inherent in the COBBS #3.

Version COBBS#6 – April XP1 Modification

With the release of XP1 (expansion pack 1) there are some basic changes to hacking. XP1 adds more anti-hacking measures. One may use either a pristine install from the DVD or a final working copy of the LIVE game. XP1 seems to be able to patch either and update it.

See the thread on COBBS for the latest info.

Types of Hacks

There are several ways to tweak URU. Some hacks are easy and some very complex. These are the ones I know about now (see Rev date).

The Trainer – New

This is a Windows program being developed that allows one to start URU then the trainer. The trainer then displays the list of things you can tweak. This is the easiest way to gain access to the City and other portions of D'ni not accessible in the basic game, known as Prime. This provides good game play. At this writing there are problems using the Trainer and Win9x users seem to be having more problems than most. Currently evolving with a large number of changes daily.

File Omission Hack – First Hack Discovered

This hack requires one play the CD version 1.0 of the game or COBBS #4 version. Files are renamed or moved and the game started. This causes misbehavior and allows one to gain access to otherwise inaccessible areas. One can see many hidden items but it removes many functions. While this is a simple hack, it does not provide good game play.

RAM Hack – Second Hack Discovered

This requires editing the active memory of the computer to change the game. It requires a RAM editor and mistakes can be disastrous. Still it is pretty straightforward and mistakes can usually be fixed by restarting the computer. Good game play but the hack must be repeated each time the game is started. The Trainer edits RAM and simplifies the changes.

PRP File Editing – Third Hack Discovered

Considerable experimentation was done on these files. These edits allow much to be done with the game and provide good game play that lasts between play sessions. These edits are reasonable safe but tedious. This also requires a version 1.0 game or a COBBS #4 game.

SDL File Editing – Fourth Hack Discovered

This is the most recent type of hack. It requires decrypting the SDL files, editing, which is straightforward and easy as the SDL's are text files, and then encrypting of the file. There are a couple of decrypt/encrypt programs available. I think this hack and the Trainer provides the best game play. The de/encrypt programs are reasonably stable now. Changes to the user interface are in progress now.

CDC Disable Hack – Fifth Hack Discovered

This hack removes the need to uninstall the LIVE or Update 1.2 files and stops the 'File missing or corrupted' message. One can edit and change PRP files and the game will allow it. Previously that was only possible if the LIVE or 1.2 updates had not been added.

CDC Work-Around Hacking – Sixth Hack

Visit COBBS to get a copy of URUSUM. This program allows one to edit PRP files and update the CDC md5 value. This value is the value used by XP1 to tell if the file has been modified. Look in the thread:

Clockwork Orange BBS > Uru > Uru General > H'uru > Tools

File Manipulation Hack – First (Not needed in XP1)

URU 2003 Initial Game Hack – 3/5/04 Rev1.2

- 1) ~~This can be done only with the Original 2003 URU game DVD.~~ If you are using XP1 the 2004 game you do not need to do this. With the CDC Disable this is no longer true (3/13/04). With the release of URUSUM there is a new work-around to file missing or corrupt errors. You will need one or the other for some hacks to work.
- 2) Finish the game COMPLETELY. You must have already acquired several game components for this to work. If you have played LIVE it is even better. Original games files are dated Oct and earlier. LIVE game files are dated Jan. In some cases they will work with the original game and provide added features/toys. In other cases they crash the game and possibly the computer.
- 3) **Back up the entire game folder.** This takes 1.9gb of disk space raw or 1.3gb zipped. It is easiest to burn this into a DVD. Otherwise, it takes 4 CD's and you must do a split file. If you have to split the file across CD's try to get all the *.prp files on the same CD. There is 810mb of PRP files. Also save folder names with the zip if you go that way. If you do not know how to do the backup or burn a DVD, stop now. It gets more complex from here on.
- 4) **You should also have a full system backup. Crashes of the hacked game have created other problems. Those running XP should set a Recovery Point before starting to hack the game. Set additional Restore Points as you play.**
- 5) Also, backup the game's SAV folder. Uru Obsession has a good thread on backing up your game and how to do reinstalls. The short story is: make a copy of the SAV folder, which can be found at: **C:\Program Files\Ubi Soft\Cyan Worlds\Uru - Ages Beyond Myst\SAV** This folder should be copied to a safe place. From time to time you may need to copy this folder to the game.
- 6) Once the back up is complete, reinstall the game*. You can skip this if you have not updated the game or played LIVE. Otherwise you must or this will not work. On the DVD go to the [/installer/install.exe](#) program and run it. Avoid uninstall. You are installing over the previous game.
- 7) You are done installing. Do **NOT** install the version 1.2 update*. The update will defeat the purpose of the reinstall.
- 8) Find the PRP files... [C:\Program Files\Ubi Soft\Cyan Worlds\Uru - Ages Beyond Myst\dat](#)
 - a. Use Windows Explorer – Look in Program Files
 - b. Find UBISoft\Cyan Worlds\Uru - Ages Beyond Myst\dat
- 9) Find **City_District_GreatStair.prp** and rename it **City_District_GreatStair.prp2**
- 10) Start the game and go to your Relto.
- 11) Open the City Book (7th – brown) and link to the rooftop with the carpets and stacked cases and 3 tables and a telescope at one end, often called the Takotah Roof Top. There are a several journals here too. Short the Great Stair file the computer sends you to the Ferry Landing in D'ni Ae'gura. Explore if you want.
- 12) Go to the linking station and place your KI in the station, which will cause a link to be added to it.
- 13) Use the linking book at the station to travel to the Nexus.
- 14) Use the Nexus to travel to your hood. Your hood is the link at the top, which will be your name. You may need to select Personal Ages for it to work.
- 15) Once in the hood go to the link book room, update your KI and link to the Nexus again.
- 16) From the Nexus, use your Relto book and link to your Relto. Check your books. You should have a Nexus book.

- 17) Exit the game. You must exit, otherwise you will crash when you try the next steps. **Note:** *Now that we can change the SDL files you can save some time by skipping the remainder of this hack. To skip the remainder of the hack and proceed to SDL modifications, restore the file renamed in step 9. Use the SDL mods to remove the barricades within the city. You will be able to reach all the places to which the remaining steps take you.*
- 18) We will repeat this process of renaming a file, playing, exiting and repeating several times.
- 19) Rename the following files as we did above.
 - a. City_District_Ferry
 - b. Neighbourhood_District_Classroom
 - c. Neighbourhood_District_nb01
 - d. Neighbourhood_District_Private

- These 3 are optional. You can do them one at a time to visit different parts of the hood.
- 20) Start the game, use the new Nexus book and in the Nexus select the Ferry Landing. You will be taken to Concert Hall foyer. Update you KI. Return to the Nexus. Visit the hood, if you want, see the Common Room then exit the game.
- 21) Rename the following files as we did above:
 - a. city_District_canyon.prp
 - b. Neighborhood_District_BuiltIn.prp
 - c. Neighborhood_District_CommonRoom.prp
- 22) Restore the file named Neighbourhood_District_Classroom. Start the game, use the Nexus book and in the Nexus select the Ferry Landing. You will be taken to the Dakota Alley. Update you KI. Check out the view and head up the stairs to the Kings Hall. Jump the barricades at the far right side. A cone helps. Find the next linking station and update your KI again. Link to the Nexus and then your hood. You will appear in the classroom and the KI manual and a piece of paper will be there.
- 23) Rename the following files as we did above:
 - a. city_District_KadishGallery.prp
 - b. city_District_courtyard.prp
- 24) Running the game now causes the Ferry Landing link to take you to the Pub. You may need to be running as you materialize, as things are unstable. You can hold down the forward key as you link. **Note:** *With this hack and removal of barricades within the city via SDL modification one can visit the pub without attempting these two steps. If you are falling through the world, just proceed to the next steps and return to the pub after your SDL changes.*
- 25) Rename the following files as we did above:
 - a. city_District_KahloPub.prp
 - b. city_District_kahlopubtunnel.prp
- 26) The Ferry Landing link will now take you to the Library. Find the Link station and update KI.
- 27) Rename these files as we did above:
 - a. city_District_library.prp
- 28) The Ferry Landing link will now take you to the Library interior.
- 29) Rename these files as we did above:
 - a. city_District_LibraryInterior.prp
- 30) The Ferry Landing link will now take you to the museum.
- 31) Exit the game and this time; restore the names of all the files you changed. Except, be sure these files are renamed as prp2 so the game cannot find them:
 - a. city_District_BuiltIn.prp
 - b. Neighborhood_District_BuiltIn.prp
- 32) If you have played LIVE you can restore the above files from your backup. Also, restore your hood and city texture files too.

33) Start the game and explore.

34) Backup the hacked game. As you add more hacks, back up after each successful change.

You have totally voided your warrantee on the game...

***NOTE:** These steps are only needed if you will **not** apply the CDC Disable. With CDC Disable applied these steps are not needed.

Information on reaching additional portions of the city... experiment and see what you find. The changes above get one every place one can reasonable go. If one removes enough locations, eventually one links and falls out of the world.

Great Zero Access (Not needed in XP1)

QUOTE:

Originally posted by: Greypiffle

I REDID THE ZERO HACK

- 1) Move all your city files from the dat folder into a temp folder
- 2) COPY all your GreatZero files into that same folder
- 3) In the Dat folder, rename GreatZero to city in all those files
- 4) Rename the city_District_LinkInRoom.prp
or city_District_GreatZeroInterior.prp
or city_District_GreatZero.prp
to city_District_ferry.prp
- 5) start the game
- 6) link to the ferry
- 7) have fun
- 8) Exit Uru
- 9) delete the renamed city files
- 8) move all the files from the temp folder back into the DAT folder.

YOU CAN ALSO TRY RENAMING city_District_LinkInRoom.prp TO
city_District_LinkInRoom.prp1

Additional Notes – Cleft/Relto Problem

Vernsh @ UBI posted Wed February 25 2004 10:11 PM

Your Relto cleft will only close if you take and touch the cleft book that hologram Yeesha gives you. You will then be linked to an Age where you meet Yeesha in the flesh. She'll babble some and then leave, closing the door. You can then get the rainmaker page from the green imager. If you have hacked the game (like loading an old sav file) and already have the page, when you touch the book and return, she will not be there and the cleft in Relto will not close. If you leave the Cleft after meeting Yeesha, you get to see the Bahro enter the Volcano and the cleft in Relto will be gone when you link there.

I've been trying figure out why there is a rainy page and dry page. The blue imager is dead in the rainy age but active in the dry. Maybe the xpack will give us a new code to enter to meet with Yeesha again. I tried other code combinations to see if there was maybe a hidden message there but so far, nothing.

WinHex RAM Hack for Removing Barricades

WARNING: If you are unfamiliar with programming, operating systems or have limited knowledge of how computers work, this is not something you want to try. Believe me, please and save yourself grief. On the other hand, none of this is overly complicated. If you are learning, using a through-away computer is advisable. If you screw it up you can format the disk, reload Windows and start over. Backups are always a good idea.

- 1) First you need WinHex. Search Google and find a download. It has a free look-only mode and 3 paid for modes, \$50, \$92 and \$145. There are other programs that provide the same capabilities. ArtMoney is one and it has a free version. WinHack (\$20) 1.10 and 2.00 is also useable. The author of WinHack died and there is no way to register it or purchase an unlock code. It has been cracked and the unlock codes are available in various places. (*WinHack 1.10 User Name : Jeremy Pallant Reg Code : GAG-12312-16766*) See [ClockworkOrangeBBS](#) for more information. The WinHex people have a free RamCheat. It is not what you need.
- 2) If you have removed **city_District_BuiltIn.prp** or other BuiltIn.prp's per the basic hack above, you need to restore them.
- 3) Set Uru to use Window mode, you do this before clicking PLAY. It is a checkbox in the Graphics settings. Start Uru.
- 4) Link to the city.
- 5) Press Ctrl-Exc or the Windows key to popup your Start Menu. Start WinHex.
- 6) Open the RAM editor and select UruExplorer.
- 7) Select Primary Memory
- 8) Search for **blocker** and make sure your search is NOT case sensitive. You will see several 'blocker' entries; you are looking for 'islmCityBlocker02Vis.' The '02' part changes. When in other parts of D'ni and wanting to remove barricades you will find the **City** part changes too.
- 9) Count 13 characters from the end of the string **islmCityBlocker02Vis**. The character there will be a 0 or 1 (hex 30 or 31). 0 or 30 = off and 1 or 31 = on.
 - a. UBI's LiquorCooChee says, "if you are using winhex, just use the ascii pane on the right side. The values on the left are in hexidecimal format, so the hex value for a one is 31 and the hex value for a zero is 30. By using the ascii pane on the right, all you need to do is count 13 after the name and it should be either a zero or a one, and you may just change it accordingly....let me know if this helps, if not i can post a pic for you." Note: [Picture Here](#)
- 10) Once the values are changed, link out of the city, Relto is good, and then link back to the City. The barricades will be gone and you are free to explore.
- 11) Other objects can be changed, doors opened, fireworks turned on, etc...

Notes: The in memory (RAM) changes have to be made each time you play the game. LiquorCooChee is making a trainer to simplify the process. You can find his web site [here](#). More work is being done so that the PRP files can be changed to make these changes permanent. See threads on ClockworkOrangeBBS.

Recovery Notes

Posted by: **maztec** on [UBI](#) - Thu February 12 2004 02:37 PM

So, final words of recommendation? Backup vault.dat regularly if you are having issues with file corruption.

If your vault is corrupted and you have to restart. But, you really don't want to solve all of the puzzles again.

- 1) Start a new game.
 - 2) Go to the Cleft.
 - 3) Quit.
 - 4) Copy the old Cleft_####.sav file over, change the ###'s to the ones on the CLeft_ file already in the current directory. Current being the directory under <sav>.
 - 5) Restart.
 - 6) Beat the Cleft, get the Yeesha Clothes, go to Relto.
 - 7) Go to each of the ages.
 - 8) Get your Kl.
 - 9) Quit.
 - 10) Copy over all of the remaining age files, thus restoring them to their solved states if that is where you left them earlier.
 - 11) Restart.
 - 12) Go get all your Yeesha Clothes.
- Walla!

SDL File Hacking Edits

This hack lasts from game to game. To make these hacks one may use any game version COBBS #1 to #4 and #6.

1. Obtain a decrypt/encrypt program. See TOOLS at COBBS.
2. Get a copy of URUSUM.
3. Back up everything.
4. Decide how to keep track of the changing files.
 - a. I decrypt an SDL file and name the result filename.sdl.txt
 - b. Once I have the decrypted text file I rename the original SDL file. When editing my copy of the LIVE game I renamed the file to filename.sdl.live.
5. Edit the decrypted file (filename.sdl.txt).
 - a. Some people use Notepad for editing and have problems. I use Notepad in WinXP Pro and it works fine. If you have problems you will need to find another text editor. Any editor that changes the linefeed/carriage return character will cause problems. MS Word will definitely not work. I have not tested Wordpad.
 - b. **IMPORTANT:** Within the Personal.sdl* file from LIVE there is a comment that says NOT to change existing record in the existing file... but to add a copy of the record and change the copy. In the files from LIVE the records are numbered as versions. For instance, my Neighborhood.sdl starts with **STATEDESC Neighborhood { VERSION 19** and ends with version 24.
 - c. **Important:** Notice the order in which the records appear. I have found some have the newest number at the beginning and others have it at the end.
 - d. Within the editable sdl.txt search through the file to find the STATEDESC record with the highest version number.
 - e. Copy everything from the line with STATEDESC to the final '}' symbol of the highest numbered record.
 - f. Move to just ahead or just behind that highest numbered record; depending on whether they are numbered low to high or high to low. Maintain the order.
 - g. Paste in the copy and increment the version number. Make sure there is one blank line between your new copy and previous record.
 - h. Edit the new record.
 - i. Example – before and after
 - i. VAR BOOL nb01DniPaperVis[1] DEFAULT=0 DEFAULTOPTION=VAULT
 - ii. VAR BOOL nb01DniPaperVis[1] DEFAULT=1 DEFAULTOPTION=VAULT
 - j. There are rumors of people changing the VAULT to a numerical value as an alternative
6. Once editing is complete save the file.
7. Encrypt the file and set the output filename to filename.sdl. If you write this file to the original game directory it will replace the original, which is why I rename the original in step 3.b
8. Play the game.

Several others and I have not been able to remove the barricades in the hood with this method. Remember. You do not want everything changed to DEFAULT=1.

* Note: This note may only apply to the Personal.sdl file...

```
#####  
# READ: When modifying an SDL record, do *not* modify the  
# existing record. You must copy and paste a new version  
# below the current one and make your changes there.  
#####
```

Help

Visit **ClockworkOrangeBBS (COBBS)** for more information and up to date news. COBBS is not responsible for this document nor does it express their opinions. I did find much of the information contained herein at COBBS.

Directions for the Trainer

Dara100 posted @ UBI Forum Thu March 11 2004 11:29 AM

I've decided to post my version of using the trainer so that late-comers won't have to slog through 40 pages. Forgive it if it sounds simplistic, as I wanted everyone to be able to enjoy using it.

The trainer is a work in progress. cjkelly1 and Liquor ChooChee deserve many props for their hard work as well as the testers who have given their input. As of today, the Yeesha pages (sticks, rain, dock, etc.) and most of the neighborhood selections are working well, however there is still work being done on the Ae'gura. Here's how I use it:

I am running WinXP Home. I'm using Uru Live files as the game was left when Live closed, but I have tried this on a new install and the Yeesha pages still worked, as did some of the neighborhood selections.

1. Download the latest Version (6) of the trainer and save anywhere. <http://members.tripod.com/uruxtras/> Put a shortcut on the desktop.
2. START your Uru game. When the game has finished loading hit the Windows key to take you to the desktop.
3. START the trainer from the shortcut on the desktop. Click on Populate INI file. When it finishes, check all the things you want to turn ON. SHOW all the things in the neighborhood. You'll know which ones don't work yet by the error messages.
4. Click on Uru game in the taskbar to bring it back up. Your choices will not have changed anything yet. You need to go somewhere so the relto can be redrawn.
5. Click on a book, choose a page and go there. As soon as you get there click on your relto book and come back. Voila! You now have definite changes on your relto!

These changes are temporary, unless you do something in the game that changes the save file, because the trainer must be repopulated each time you start the game.

Now, a bit of a complication. The "All three linking books" selection does not yet work in my neighborhood selections yet (or yours, probably). This leaves me with no way to get into the neighborhood, since I don't have the Nexus book, the one with the gear on it. I guess I could throw myself off the balcony, but there's an easier way: editing .prp files. Don't panic, it's easy. Read the first post in this thread <http://ubbxforums.ubi.com/6/ubb.x?q=Y&a=tpc&s=400102&f=5451034&m=890103502&p=1> by shadowcats to learn how.

Important: before you do any editing of files, back up your entire game to a different drive or new folder.

NOTE: When installing new versions of the trainer, remove its prior INI files.

CRC Disable Hack

Prior to this hack the 1.2 Update and LIVE Update added a check to detect changes to the game files. Cyan's idea was to keep everyone on the same playing level in the LIVE game. Also, to avoid more problems than they already had with a Beta version game. Changes to the game files caused the game to crash to Desktop and/or error message files corrupted or missing. The CRC disable stops this problem for hackers.

This hack is only for a game version with the 1.2 or LIVE update applied.

Contributed by **n4du** @ ClockworkOrangeBBS

Patch for uru-live

File Version: UruExplorer.exe Build37 Branch - Built 1/19/2004 at 10:32 AM

offset: 44e7c2 (hex)

Original: 84 C0 **75** 29 64 03 64 01

Patch : 84 C0 **EB** 29 64 03 64 01

'CRC' check disabled...

You can use WinHex or HHD Hex Editor. Open the **UruExplorer.exe** file and move to the offset. I have tried searching on the string indicated and had no luck. I was able to search on 84 C0 75 29 and find it. That hex string only occurred once in my file. I strongly suggest you check the offset.

Replay the Cleft Ending

This hack allows you to see the Bahro creatures again, see the credits and hear the music.

Unknown-One posted @ UBI Wed March 17 2004 02:28 PM

I just figured out how to see the ending again, and again, and again...

1. Move JUST the cleft file from your save folder
2. go to the dry cleft (wave hi to Zandi)
3. turn the power back on
4. link back to Relto
5. link to the rainy cleft (you will see Yeesha again)
6. climb out of the cleft (you will get to see the animal things again)
7. Finally the credits will pop back up, and you can listen to the song again.

PRP Files Hack

These hacks are changes made to the PRP files. The files are in the game's DAT folder. These files are binary files and you will need a hex editor just as you do for memory hacks. See the Tools topic at Clockwork for available tools.

These files are binary and have some portions of the file encrypted. Many of the changes you need to make can be made without decrypting. I'll get to the decryption later.

1. With your hex editor open the PRP file.
2. Search for the text string VIS (case should not matter).
3. You will find blocks of entries that have string entries followed by binary data. The string and data repeat some number of times. Typically the 10th character after the end of the text is the character/byte to change.
 - a. There is some debate about whether the 6th, 10th or 13th character is the one to change. My experience and I think the consensus at Clockwork is that the 10th character is most effective. My notation is that the position is denoted by #10 for the 10th position. Hex notation is denoted by my adding an 'h.' Changing the #10 from a 00h to 01h makes something visible or enabled. Changing from 01h to 00h makes it hidden or non-functional. Some people use 30h or 31h in place of 00h and 01h.
 - b. There are entries that have a 0,1 or 1,1 or 0,0 at the 13th or later position. Enabling a feature for these entries usually requires changing 0,1 to 1,1 or changing 0,0 to 0,1 and the reverse to disable.
4. All occurrences of an entry must be the same. Change them all. Using the REPLACE function makes this easy.
5. Once your changes are made, save the file and play the game. You should see your changes.
- 6.

If you blow the edit too badly the game will crash to desktop. In some cases the edited PRP file will be deleted. In these cases restore the file from your backup and try again.

In XP1 you will need to process modified PRP files with URUSUM for them to work. URUSUM can be found at ClockworkOrangeBBS.org. Current instructions and update information can be found there.

Zorro 03-27-2004, 03:43 PM @ COBBS Posted:

OK, for my first contribution, here [COBBS] is a tool to regenerate the .sum file for an age. It is a console command app (i.e. you must run it from a command prompt window). You must run it from the top level directory that Uru is installed in (i.e. not in the dat directory, but the directory one level above that).

The command takes one argument, the age name. For example:

```
urusum city
```

The above example would open the dat\city.sum file, decrypt it, read each file entry, do an md5 checksum on the file and also read the stat mtime and update the entries as needed. It would then

encrypt the new data and write out a new version of city.sum.

This will allow you to now start hacking on prp files again. After you modify a prp you can then run urusum on the age that the prp belongs to. Once you do that XP1 will be happy with the file again. Note that this tool is only necessary for XP1 hackers.

Vault Hacking

At COBBS is a program to disassemble and reassemble vault files. It consists of SPLITVAULT and JOINVAULT. The program includes decryption and encryption.

Trylon 03-21-2004, 09:33 PM @ COBBS

Here's a set of commandline tools I wrote to disassemble and reassemble the vault file into a lot of pieces.

Splitvault takes 2 arguments:

- 1) The vault file
- 2) The name of the folder to store all the blocks in

After running it, you'll have a subfolder in the folder in which you ran the tool, which contains files named vaultXXXXXXXXX.bin the X's are a number representing the internal index of the blocks. vault_startfield.bin is the header, while vault.dsc is a text file specifying the field files and the order in which they should be rebuilt.

Note that the last field file contains the (by lack of a better word) "dependency block" which is in my opinion not actually part of the last block, but located after it.

The tool joinvault takes 2 arguments too:

- 1) The name of the folder in which the vault blocks are stored
- 2) The name of the file to rebuild the vault into.

Note 1:

The tools handle the encoding of the vault file, no need to decode them first

Note 2:

The source is included in the zip files, it was compiled under Linux, using the i386-mingw32 version of the gcc compiler - there's not much comments in it, but there are plenty of debug statements

Good luck with it.