taking the wiz out of...

Wizardry

by Rob Hall

Requirements:
A Wizardry program
A good sector editor
A scenario disk with six characters
A blank disk to copy your scenario disk

Most veteran wizardry players know that, in "Proving Grounds", if your Bishop successfully "Identifies item number "9", he'll receive 100,000,000 experience points. Also, if he successfully "Identifies "S", the character below the bishop will receive 100,000,000 experience points. And by "Identifing "J", he gives the character below him 100,000,000 gold pieces. This technique allows you to create almost unbeatable characters in "Proving Grounds" and when you transfer your characters to "Knight of Diamonds", they keep their experience and powers. But just when you think you've got all the answers Sir Tech throws you a curve.

Yes, this technique doesn't work with "Legacy of Llylgamyn" and you can't just transfer your characters from a previous scenario, you must perform a "rite of passage". This "rite of passage" creates new characters who are descendants of your characters, but have minimal experience and power. Are all those months, even years, of wandering through dungeons and tunnels, "lost forever"?? Not if you grab your handy sector editor and read on.

The Scenario Disk

In all the Wizardry games, the scenario disk is the key to your adventure. On this disk is stored all the information about the maze, the monsters and your characters. Your character information is usually located on track $1A, sector $01 through track $1B, sector $0F (track $1D for "Proving Grounds"). This information is $CF bytes long and is formatted as follows:

bytes	information
00	Number of letters in name
01-0F	Name (15 letters maximum)
10	Number of letters in password
11-1F	Password (15 letters maximum)
20	($01) character is "on expedition" ($00) character is available
22	Race: see Table I
24	Class: see Table II
26-27	Age: see Table III
28	Life: ($00) character is OK, ($05) indicates character is dead, ($07) indicates character is lost
2A	Alignment: see Table IV
2C-2F	Characteristics: ($52 4A 52 4A is perfect)
34-38	Gold: see Table V
3A	# of pieces of equipment (8 max)
3C-7B	Equipment information: see Table VI
7C-80	Experience (like gold: see Table V)
82	Last level of character
84	Current level of character
86-87	# of hit points character has
88-89	max # of hit points you can possess
8A-91	Type of spells: see Table VII
92	# of level 1 mage spells can cast
94	2
96	3
98	4
9A	5
9C	6
9E	7
A0	# of level 1 priest spells can cast
A2	2
A4	3
A6	4
A8	5
AA	6
AC	7
AE-AF	Last armor class
B0-B1	Current armor class
B6-BF	Measures effect of weapons & items
CE-CF	Indicates honors

Now that you know how your character is formatted, it's time to turn your wimp into a wizard.

Using the Sector Editor

Before creating your new character, you should make backup copy of your scenario disk. The scenario disk is not copy protected so you can use COPYA or any fast copy program to duplicate it. To get the most out of this procedure, I recommend that your scenario disk contains at least six characters you would like to strengthen.

For a start, read track $1A or $1B ($1D for proving grounds) to do some investigation work. The location of your character within a sector or track will vary depending on the sequence that your characters were created on the disk. However, it is easy to find the beginning of your character's information by looking for the flashing ASCII representation of your character's name. This will be the first line of information, bytes $01 to $0F (remember that byte $00 is the number of letters in your character's name).

If you're lucky, your character's information will start at the start of a sector. However, it is more likely that your character's information will start in the middle of a sector. This is because each character's information block is only $CF bytes long and new characters are added immediately after old characters. If your character does not start at byte 0 of a sector, count bytes starting with the byte to the left of your character's name (starting at 0) and use the chart to find the feature you want changed.

Table I

01	Human
02	Elf
03	Dwarf
04	Gnome
05	Hobbit

Table II

00	Fighter
01	Mage
02	Priest
03	Thief
04	Bishop
05	Samurai
06	Lord
07	Ninja

Unfortunately, the character's information is usually not ordered in sequential sectors (starting with sector $1 and finishing in sector $2). It is usually in reverse order (starting with sector $F and finishing in sector $E) or may jump from the beginning of a track to the end. Careful attention to the length of each character's information block and a little trial and error can solve this problem.

The Little Fix

Along with the literature Sir Tech provides with its program, a note warns of tampering with the characters: "While it may seem appealing to use these products (cheat programs), we urge you not to succumb to the temptation. It took more than four years of careful adjustment to properly balance Wizardry." Well, it took me all of last summer

Table III

Age is calculated using bytes $26 and $27 under the following formula:

[($26) / $34] + [($27) X 5] = years of character (decimal)

Therefore, if $26 and $27 are $D0 and $04 respectively; your character's age is 24.

to get through "Proving Grounds" even using the bishop trick. If these games are really balanced, those dungeon monsters sure weigh a lot. In fact, I was quite surprised at the number of items I never came across when I played Proving Grounds and Knight of Diamonds the normal and laborious way. Wouldn't it be nice to use a "great mage wand" for a change?

Anyway, for those afraid to upset the proper balance of a Wizardry game, may I suggest the "little fix":

● change the gold bytes ($34-38) to "00 00 00 01 00" ● change the experience bytes ($7C-80) to "00 00 00 01 00" ● take your character to the "Adventurer's Inn" and have him "rest" there several times.

This method will allow your character to progress normally, learning and acquiring normal spells and powers. It will also give him enough hit points to survive most levels. In addition, you now have the money to buy the items you want from Boltac's Trading Post.

Table IV

01	Good
02	Neutral
03	Evil

Table V

Gold is calculated by bytes $34 to $38 using the following formula:

```
byte $34, 1st nybble: 16's place
          2nd nybble: 1's place
byte $35, 1st nybble: 4,096's place
          2nd nybble: 256's place
byte $36, 1st nybble: 160,000's place
          2nd nybble: 10,000's place
byte $37, 1st nybble: 40,960,000's place
          2nd nybble: 2,560,000's place
byte $38, 1st nybble: 1,600,000,000's place
          2nd nybble:  100,000,000's place
```

Experience is calculated in the same way by bytes $7C to $80.

The Super Lord

And for those who have no mercy for monsters and the creatures of the dungeon, I suggest the creation of a "super lord":

● change the class byte ($24) to "06" ● change age bytes ($26-27) to "00 04" ● insure life byte ($28) is "00" ● insure alignment byte ($2A) is "01" ● change the characteristic bytes ($2C-2F) to "52 4A 52 4A" - change the gold bytes ($34-38) to "00 00 00 00 01" ● change equipment possession byte ($3A) to "08" ● equip the character with eight items as explained in Table VI

Table VI

Each piece of equipment is represented by an eight byte string. The string contains the following:

```
byte 1:  status of possession ($00 = unequiped, $01 = equiped)
byte 2:  not used
byte 3:  not used
byte 4:  not used
byte 5:  status of equipment ($00 = unidentified, $01 = identified)
byte 6:  not used
byte 7 and 8:  actual equipment
```

When giving a character a piece of equipment; insure all "not used" bytes are $00, set byte #1 to $00 (unequiped), byte #5 to $01 (identified), and bytes #7-#8 as follows:

Proving Grounds Of The Mad Overlord

7/8 Byte	Equipment	7/8 Byte	Equipment	7/8 Byte	Equipment
0100	Long Sword	0200	Short Sword	0300	Anointed Mace
0400	Anointed Flail	0500	Staff	0600	Dagger
0700	Small Shield	0800	Large Shield	0900	Robes
0A00	Leather Armor	0B00	Chain Mail	0C00	Breast Plate
0D00	Plate Mail	0E00	Helm	0F00	Dios Potion
1000	Latumofis Pot	1100	Long Sword + 1	1200	Short Sword + 1
1300	Mace + 1	1400	Staff of Mogref	1500	Scroll/Katino
1600	Leather + 1	1700	Chain Mail + 1	1800	Plate Mail + 1
1900	Shield + 1	1A00	Breast Plate + 1	1B00	Scroll/Badios
1C00	Scroll/Halito	1D00	Long Sword - 1	1E00	Short Sword - 1
1F00	Mace - 1	2000	Staff + 2	2100	Dragon Slayer
2200	Helm + 1	2300	Leather - 1	2400	Chain - 1
2500	Breast Plate - 1	2600	Shield - 1	2700	Jeweled Amulet
2800	Scroll/Badios	2900	Potion of Sopic	2A00	Long Sword + 2
2B00	Short Sword + 2	2C00	Mace + 2	2D00	Scroll/Lomilwa
2E00	Scroll/Dilto	2F00	Copper Gloves	3000	Leather + 2
3100	Chain + 2	3200	Plate Mail + 2	3300	Shield + 2
3400	Helm + 2 (evil)	3500	Potion of Dial	3600	Ring of Porfic
3700	Were Slayer	3800	Mage Masher	3900	Mace Pro Poison
3A00	Staff/Montino	3B00	Blade Cusinart'	3C00	Amulet/Manifo
3D00	Rod of Flame	3E00	Evil Chain + 2	3F00	Neut P-Mail + 2
4000	Evil Shield + 3	4100	Amulet/Makanito	4200	Diadem of Malor
4300	Scroll/Badial	4400	Short Sword - 2	4500	Dagger + 2
4600	Mace -2	4700	Staff - 2	4800	Dagger of Speed
4900	Cursed Robe	4A00	Leather - 2	4B00	Chain - 2
4C00	Breast Plate - 2	4D00	Shield - 2	4E00	Cursed Helmet
4F00	Breast Plate + 2	5000	Silver Gloves	5100	Evil Sword + 3
5200	Evil Ssword + 3	5300	Thieves Dagger	5400	Breast Plate +3
5500	Lords Garb	5600	Murasama Blade	5700	Shuriken

● change the experience bytes ($7C-80) to "00 00 00 00 01" ● change level bytes ($82) and ($84) to "60" ● change status bytes ($86-87) to "00 03" ● change hits bytes ($88-89) to "00 03" ● change spell type bytes ($8A-91) to "FE FF FF FF FF FF 07" ● change spell bytes ($92-AC) to "09 00 09 00 09 00 09 00, etc." ● equip your lord in "camp" or at "Gigamesh's Tavern" This will give you a "super being" which will defeat all your foes, if you play your "spells" right!

Other Uses

There are quite a few other uses for your sector editor. For instance, Sir Tech will charge you $15.00 to delete a password you have forgotten. Now all you have to do is to insert $00 from bytes $10 to $1F to delete your password or better yet, just look at these bytes to see your password.

If you have a power failure or you accidentally press reset while you're playing Wizardry, your character's record on the disk will be logged as "on expedition". Normally, you would not be able to use your character until you recovered it using the utility recover program. Now you may recover your character on your own by placing a "$00" in byte $20.

If you own Legacy of Llylgamyn and have always had less then twenty characters on your scenerio disk you will be in for a surprise. As you examine the character information sectors, you are likely to find many ghosts of past

5800	Chain Pro Fire	5900	Evil Plate + 3	5A00	Shield + 3
5B00	Ring of Healing	5C00	Ring Pro Undead	5D00	Deadly Ring
5E00	Werdna's Amulet	5F00	Statuette/Bear	6000	Statuette/Frog
6100	Bronze Key	6200	Silver Key	6300	Gold Key
6400	Blue Ribbon				

Knight of Diamonds

Same as "proving grounds" with the following exceptions:

7/8 Byte	Equipment	7/8 Byte	Equipment	7/8 Byte	Equipment
5E00	Rod of Raising	5F00	Amulet of Cover	6000	Robe + 3
6100	Winter Mittens	6200	Nklc. Pro. Magic	6300	Staff of Light
6400	Long Sword + 5	6500	Swd./Swinging	6600	Priest Puncher
6700	Priest's Mace	6800	ShSwd./Swinging	6900	Ring Pro Fire
6A00	Cursed + 1 Plate	6B00	Plate + 5	6C00	Staff of Curing
6D00	Ring of Regen	6E00	Metamorph Ring	6F00	Stone Stone
7000	Dreamer's Stone	7100	Damien Stone	7200	Great Mage Wand
7300	Coin of Power	7400	Stone of Youth	7500	Mind Stone
7600	Stone of Piety	7700	Blarney Stone	7800	Amulet of Skill
7900	Amulet of Skill	7A00	Great Mage Wand	7B00	Coin of Power
7C00	Staff of Gnilda	7D00	Hrathnir	7E00	Kod's Helmet
7F00	Kod's Shield	8000	Kod's Gauntlets	8100	Kod's Armor

Legacy Of Llylgamyn

7/8 Byte	Equipment	7/8 Byte	Equipment	7/8 Byte	Equipment
0104	Haubeck	0204	Breast Plate	0304	Plate Armor
0404	Sallet	0504	Potion of Dios	0604	Latumofis Oil
0704	Short Sword + 1	0804	Broadsword + 1	0904	Mace + 1
0A04	Battle Axe + 1	0B04	Nunchaka	0C04	Dagger + 1
0D04	Katino Scroll	0E04	Cuirass + 1	0F04	Hauberk + 1
1004	Breastplate + 1	1104	Plate Armor + 1	1204	Heater + 1
1304	Bascinet	1404	Iron Gloves	1504	Badios Scroll
1604	Halito Potion	1704	Short Sword - 1	1804	Broadsword -1
1904	Mace - 1	1A04	Dagger - 1	1B04	Battle Axe - 1
1C04	Margauz's Flail	1D04	Bag of Gems	1E04	Wizard's Staff
1F04	Flametougue	2004	Round Shield - 1	2104	Cuirass - 1
2204	Hauberk - 1	2304	Breastplate - 1	2404	Plate Armor - 1
2504	Sallet - 1	2604	Sopic Philtre	2704	Gold Ring
2804	Salamander Ring	2904	Serpent's Tooth	2A04	Short Sword + 2
2B04	Broadsword + 2	2C04	Battle Axe + 2	2D04	Ivory Dagger
2E04	Ebony Dagger	2F04	Amber Dagger	3004	Mace + 2
3104	Mithril Gloves	3204	Dialko Amulet	3304	Cuirass + 2
3404	Heater + 2	3504	Displacer Robes	3604	Hauberk + 2
3704	Breastplate + 2	3804	Plate Armor + 2	3904	Armet
3A04	Wargan robes	3B04	Giant's Club	3C04	Blade Cuisinart
3D04	Shepherd Crook	3E04	Unholy Axe	3F04	Rod of Death
4004	Gem of Exorcism	4104	Bag of Emeralds	4204	Bag of Garnets
4304	Blue Pearl	4404	Ruby Slippers	4504	Necrology Rod
4604	Book of Life	4704	Book of Death	4804	Dragon's Tooth
4904	Trollkin Ring	4A04	Rabbit's Foot	4B04	Thief's Pick
4C04	Book of Demons	4D04	Butterfly Knife	4E04	Gold Tiara
4F04	Mantis Gloves	FF03	Mage's Robe	FE03	Heater Shield
FD03	Round Shield	FC03	Flail	FB03	Dagger
FA03	Battle Axe	F903	Hand Axe	F803	Staff
F703	Mace	F603	Broadsword	F503	Short Sword
F403	Butterfly Knife	F303	Orb of Mhuuzfis	F203	Gold Medallion
F103	Rod of Fire	F003	Holy Water	EF03	Amulet of Air
EE03	Staff of Earth	ED03	Ship in Bottle	EC03	Crystal of Good
EB03	Crystal of Evil	EA03	Neutral Crystal	E903	Orb of Earithin
E803	Broken Item				

Once your characters have the proper equipment, they can "equip" themselves in "camp" or at "Gigamesh's Tavern."

explorers. No one is sure where they came from! These characters are usually "lost" (byte $28 is "$07") and may have "$00" in byte $00 (number of letters in name). To resurrect these explorers, place a "$00" in byte $28 and place a hex number corresponding to the number of letters in the explorer's name in byte $00. Be careful with these characters. I wouldn't trust a character named "6502."

Table VII

The type of spells a character can cast is determined by bytes $8A to $90.

bytes:	$8A	8B	8C	8D	8E	8F	90
all spells:	FE	FF	FF	FF	FF	FF	07
all mage spells:	FE	FF	3F	00	00	00	00
all priest spells:	00	00	C0	FF	FF	FF	07

Each bit in these bytes represents a type of spell. If the bit is on ("1"), that spell is known by the character. Don't forget that in order for a character to cast a spell, he must have "spells left" in that level. The "spells left" are indicated in bytes $92-$AD.

Mage Spells

	byte 8A	byte 8B	byte 8C
bit 0:	not used	0:MOLITO	0:ZILWAN
1:	HALITO	1:MORLIS	1:MASOPIC
2:	MOGREF	2:DALTO	2:HAMAN
3:	KATINO	3:LAHALITO	3:MALOR
4:	DUMAPIC	4:MAMORLIS	4:MAHAMAN
5:	DILTO	5:MAKANITO	5:TILTOWAIT
6:	SOPIC	6:MADALTO	6:pst spell
7:	MAHALITO	7:LAKANITO	7:pst spell

Priest Spells

	byte 8C	byte 8D	byte 8E
bit 0:	not used	0:BADIOS	0:ZILWAN
1:	mage spell	1:MILWA	1:DIALKO
2:	mage spell	2:PORFIC	2:LATUMAPIC
3:	mage spell	3:MATU	3:BAMATU
4:	mage spell	4:CALFO	4:DIAL
5:	mage spell	5:MANIFO	5:BADIAL
6:	KALKI	6:MONTINO	6:LATUMOFIS
7:	DIOS	7:LOMILWA	7:MAPORFIC

	byte 8F	byte 90
bit 0:	DIALMA	0:MABADI
1:	BADIALMA	1:LOKTOFEIT
2:	LITOKAN	2:MALIKTO
3:	KANDI	3:KADORTO
4:	DI	4:not used
5:	BADI	5:not used
6:	LORTO	6:not used
7:	MADI	7:not used

A character with all "spells left" is indicated on the status screen as:

```
  MAGE  9/9/9/9/9/9/9
PRIEST  9/9/9/9/9/9/9
```

and we find bytes $92 to $AC are:

```
byte:
 92 93 94 95 96 97 98 99 9A 9B 9C 9D 9E 9F
value:
 09 00 09 00 09 00 09 00 09 00 09 00 09 00
byte:
 A0 A1 A2 A3 A4 A5 A6 A7 A8 A9 AA AB AC
value:
 09 00 09 00 09 00 09 00 09 00 09 00 09
```