

Ultima Online Protocol

Packet #	Packet Name	Length	Client	Server	Obsolete
----	Data Types	----	----	----	----
----	Encrypted Login Seed	0x0004	✓	X	X
0x00	Character Creation	0x0068	✓	X	X
0x01	Logout	0x0005	✓	X	✓
0x02	Request Movement	0x0007	✓	X	X
0x03	Speech	dynamic	✓	✓	✓
0x04	Request God Mode	0x0002	✓	X	✓
0x05	Attack	0x0005	✓	X	X
0x06	Double Click	0x0005	✓	X	X
0x07	Take Object	0x0007	✓	X	X
0x08	Drop Object	0x000E	✓	X	X
0x09	Single Click	0x0005	✓	X	X
0x0A	Edit	0x000B	✓	X	✓
0x0B	Edit Area	0x010A	?	?	✓
0x0C	Tile Data	dynamic	✓	✓	✓
0x0D	NPC Data	0x0003	?	?	✓
0x0E	Edit Template Data	dynamic	?	?	✓
0x0F	Paperdoll (Old)	0x003D	?	?	✓
0x10	Hue Data	0x00D7	?	?	✓
0x11	Mobile Stats	dynamic	X	✓	X
0x12	God Command	dynamic	✓	X	X
0x13	Equip Item Request	0x000A	✓	X	X

0x14	Change Elevation	0x0006	✓	X	✓
0x15	Follow	0x0009	?	✓	X
0x16	Request Script Names	0x0001	✓	X	✓
0x17	Script Tree Command	dynamic	✓	X	✓
0x18	Script Attach	dynamic	✓	X	✓
0x19	NPC Conversation Data	dynamic	✓	X	✓
0x1A	Show Item	dynamic	X	✓	X
0x1B	Login Confirm	0x0025	X	✓	X
0x1C	Text	dynamic	X	✓	X
0x1D	Destroy	0x0005	✓	✓	X
0x1E	Animate	0x0004	?	?	✓
0x1F	Explode	0x0008	X	✓	✓
0x20	Teleport 	0x0013	X	✓	X
0x21	Block Movement	0x0008	X	✓	X
0x22	Accept Movement/Resync Request	0x0003	✓	✓	X
0x23	Drag Item	0x001A	X	✓	X
0x24	Open Container	0x0007	X	✓	X
0x25	Object to Object	0x0014	X	✓	X
0x26	Old Client	0x0005	X	✓	✓
0x27	Get Item Failed	0x0002	X	✓	X
0x28	Drop Item Failed	0x0005	X	✓	✓
0x29	Drop Item OK	0x0001	X	✓	✓
0x2A	Blood	0x0005	?	?	✓

0x2B	God Mode	0x0002	X	✓	✓
0x2C	Death	0x0002	✓	✓	✓
0x2D	Health	0x0011	?	?	✓
0x2E	Equip Item	0x000F	X	✓	X
0x2F	Swing	0x000A	X	✓	X
0x30	Attack OK	0x0005	X	✓	✓
0x31	Attack End	0x0001	?	?	✓
0x32	Hack Mover	0x0002	X	✓	✓
0x33	Group	0x0002	?	✓	✓
0x34	Client Query	0x000A	✓	X	X
0x35	Resource Type	0x028D	✓	✓	✓
0x36	Resource Tile Data	dynamic	✓	X	✓
0x37	Move Object	0x0008	✓	X	✓
0x38	Follow Move	0x0007	?	✓	✓
0x39	Groups	0x0009	?	✓	✓
0x3A	Skills	dynamic	✓	✓	X
0x3B	Accept Offer	dynamic	✓	✓	X
0x3C	Container Contents	dynamic	X	✓	X
0x3D	Ship	0x0002	?	X	✓
0x3E	Versions	0x0025	?	✓	✓
0x3F	Update Statics	dynamic	X	✓	✓
0x40	Update Terrain	0x00C9	X	✓	✓
0x41	Update Tiledata	dynamic	X	✓	✓
0x42	Update Art	dynamic	X	✓	✓

0x43	Update Anim	0x0229	X	✓	✓
0x44	Update Hues	0x02C9	X	✓	✓
0x45	Ver OK	0x0005	X	✓	✓
0x46	New Art	dynamic	✓	X	✓
0x47	New Terrain	0x000B	✓	X	✓
0x48	New Anim	0x0049	✓	X	✓
0x49	New Hues	0x005D	✓	X	✓
0x4A	Destroy Art	0x0005	✓	X	✓
0x4B	Check Ver	0x0009	✓	X	✓
0x4C	Script Names	dynamic	?	✓	✓
0x4D	Script File	dynamic	?	?	✓
0x4E	Light Change	0x0006	X	✓	X
0x4F	Sunlight	0x0002	X	✓	X
0x50	Board Header	dynamic	X	✓	✓
0x51	Board Message	dynamic	X	✓	✓
0x52	Post Message	dynamic	✓	X	✓
0x53	Login Reject	0x0002	X	✓	X
0x54	Sound	0x000C	X	✓	X
0x55	Login Complete	0x0001	X	✓	X
0x56	Map Command	0x000B	✓	✓	X
0x57	Update Regions	0x006E	X	✓	✓
0x58	New Region	0x006A	✓	X	✓
0x59	New Context FX	dynamic	✓	X	✓
0x5A	Update Context FX	dynamic	X	✓	✓

0x5B	Game Time	0x0004	X	✓	X
0x5C	Restart Ver	0x0002	X	✓	✓
0x5D	Pre Login	0x0049	X	✓	X
0x5E	Server List	dynamic	?	?	✓
0x5F	Add Server	0x0031	?	?	✓
0x60	Server Remove	0x0005	?	?	✓
0x61	Destroy Static	0x0009	✓	X	✓
0x62	Move Static	0x000F	✓	X	✓
0x63	Area Load	0x000D	✓	X	✓
0x64	Area Load Request	0x0001	✓	X	✓
0x65	Weather Change	0x0004	X	✓	X
0x66	Book Contents	dynamic	✓	✓	X
0x67	Simple Edit	0x0015	✓	X	✓
0x68	Script LS Attach	dynamic	?	?	✓
0x69	Friends	dynamic	?	?	✓
0x6A	Friend Notify	0x0003	?	✓	✓
0x6B	Key Use	0x0009	?	?	✓
0x6C	Target	0x0013	✓	✓	X
0x6D	Music	0x0003	X	✓	X
0x6E	Animation	0x000E	X	✓	X
0x6F	Trade	dynamic	✓	✓	X
0x70	Effect	0x001C	X	✓	X
0x71	Bulletin Board	dynamic	✓	✓	X
0x72	Combat	0x0005	✓	✓	X

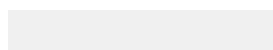
0x73	Ping	0x0002	✓	✓	X
0x74	Shop Data	dynamic	X	✓	X
0x75	Rename MOB	0x0023	✓	X	X
0x76	Server Change	0x0010	?	?	✓
0x77	Naked MOB	0x0011	X	✓	X
0x78	Equipped MOB	dynamic	X	✓	X
0x79	Resource Query	0x0009	?	?	✓
0x7A	Resource Data	dynamic	?	?	✓
0x7B	Sequence	0x0002	?	✓	✓
0x7C	Object Picker	dynamic	X	✓	X
0x7D	Picked Object	0x000D	✓	X	X
0x7E	God View Query	0x0002	✓	?	✓
0x7F	God View Data	dynamic	X	✓	✓
0x80	Account Login Request	0x003E	✓	X	X
0x81	Account Login OK	dynamic	X	✓	X
0x82	Account Login Failed	0x0002	X	✓	X
0x83	Account Delete Character	0x0027	✓	X	X
0x84	Change Character Password	0x0045	✓	X	✓
0x85	Delete Character Failed	0x0002	X	✓	X
0x86	All Characters	dynamic	X	✓	X
0x87	Send Resources	dynamic	X	✓	✓
0x88	Open Paperdoll	0x0042	X	✓	X
0x89	Corpse Equipment	dynamic	X	✓	X

0x8A	Trigger Edit	dynamic	✓	?	✓
0x8B	Display Sign	dynamic	X	✓	✓
0x8C	Server Redirect	0x000B	X	✓	X
0x8D	Unused3	dynamic	X	X	✓
0x8E	Move Character	dynamic	?	?	✓
0x8F	Unused4	dynamic	X	X	✓
0x90	Open Course Gump	0x0013	X	✓	X
0x91	Post Login	0x0041	✓	X	X
0x92	Update Multi	dynamic	X	✓	✓
0x93	Book Header	0x0063	X	✓	X
0x94	Update Skill	dynamic	X	✓	✓
0x95	Hue Picker	0x0009	✓	✓	X
0x96	Game Central Monitor	dynamic	✓	?	✓
0x97	Move Player	0x0002	?	✓	X
0x98	MOB Name	dynamic	✓	✓	X
0x99	Target Multi	0x001A	X	✓	X
0x9A	Text Entry	dynamic	✓	✓	X
0x9B	Request Assistance	0x0102	✓	X	X
0x9C	Assist Request	0x0135	?	?	✓
0x9D	GM Single	0x0033	✓	?	✓
0x9E	Shop Sell	dynamic	X	✓	X
0x9F	Shop Offer	dynamic	✓	X	X
0xA0	Server Select	0x0003	✓	X	X
0xA1	HP Health	0x0009	X	✓	X

0xA2	Mana Health	0x0009	X	✓	X
0xA3	Fat Health	0x0009	X	✓	X
0xA4	Hardware Info	0x0095	✓	X	X
0xA5	Web Browser	dynamic	X	✓	X
0xA6	Message	dynamic	X	✓	✓
0xA7	Request Tip	0x0004	✓	X	✓
0xA8	Server List	dynamic	X	✓	X
0xA9	Character List	dynamic	X	✓	X
0xAA	Current Target	0x0005	X	✓	X
0xAB	String Query	dynamic	X	✓	X
0xAC	String Response	dynamic	✓	X	X
0xAD	Speech Unicode	dynamic	✓	X	X
0xAE	Text Unicode	dynamic	X	✓	X
0xAF	Death Animation	0x000D	X	✓	X
0xB0	Generic Gump	dynamic	X	✓	X
0xB1	Generic Gump Trigger	dynamic	✓	X	X
0xB2	Chat Message	dynamic	✓	X	X
0xB3	Chat Text	dynamic	X	✓	X
0xB4	Target Object List	dynamic	?	?	X
0xB5	Open Chat	0x0040	✓	✓	X
0xB6	Help Request	0x0009	✓	X	✓
0xB7	Help Text	dynamic	X	✓	✓
0xB8	Character Profile	dynamic	✓	✓	X
0xB9	Features	0x0003	X	✓	X

0xBA	Pointer	0x0006	X	✓	X
0xBB	Account ID	0x0009	✓	✓	X
0xBC	Game Season	0x0003	X	✓	X
0xBD 	Client Version	dynamic	✓	X	X
0xBE	Assist Version	dynamic	?	?	✓
0xBF	Generic Command	dynamic	✓	✓	X
0xC0	Hued FX	0x0024	X	✓	X
0xC1	Localized Text	dynamic	X	✓	X
0xC2	Unicode Text Entry	dynamic	✓	✓	X
0xC3	Global Queue	dynamic	X	✓	X
0xC4	Semivisible	0x0006	X	✓	X
0xC5	Invalid Map	0x00CB	X	✓	X
0xC6	Invalid Map Enable	0x0001	X	✓	X
0xC7	Particle Effect	0x0031	X	✓	X
0xC8	Change Update Range	0x0002	✓	✓	X
0xC9	Trip Time	0x0006	✓	✓	✓
0xCA	UTrip Time	0x0006	✓	✓	✓
0xCB	Global Queue Count	0x0007	X	✓	X
0xCC	Localized Text Plus String	dynamic	X	✓	X
0xCD	Unknown God Packet	0x0001	?	✓	X
0xCE	IGR Client	dynamic	X	✓	X
0xCF	IGR Login	0x004E	✓	X	X
0xD0	IGR Configuration	dynamic	✓	✓	X
0xD1	IGR Logout	0x0002	✓	✓	X

0xD2	Update Mobile	0x0019	X	✓	X
0xD3	Show Mobile	dynamic	X	✓	X
0xD4	Book Info	dynamic	✓	✓	X
0xD5	Unknown Client Packet	dynamic	✓	X	X
0xD6	Mega Cliloc	dynamic	X	✓	X
0xD7	AOS Command	dynamic	✓	✓	X
0xD8	Custom House	dynamic	X	✓	X
0xD9	Metrics	0x010C	✓	X	X
0xDA	Mahjong	dynamic	✓	✓	X
0xDB	Character Transfer Log	dynamic	X	✓	X

Item**Meaning**

X

?

Obsolete packets

Yes

No

Unknown

Ultima Online Protocol :: Data Types

Packet #	Packet Name	Length	Client	Server	Obsolete
----	Data Types	----	----	----	----
Data Type	Description				
byte	An 8-bit unsigned integer.				
sbyte	An 8-bit signed integer.				
bool	An 8-bit unsigned integer representing a boolean value. 0=False, 1=True				
char	An 8-bit unsigned integer that represents a single ASCII character.				
uni	A 16-bit unsigned integer that represents a single unicode character.				
short	A 16-bit signed integer.				
ushort	A 16-bit unsigned integer.				
int	A 32-bit signed integer.				
uint	A 32-bit unsigned integer.				

Ultima Online Protocol :: Encrypted Login Seed

Packet #	Packet Name	Length	Client	Server	Obsolete
----	Encrypted Login Seed	0x0004	✓	X	X
Data Type	Description				
uint Seed	The encryption seed for a particular client.				
<p>Packet Description:</p> <p>This is a special packet sent by the client after it first connects to the server.</p> <p>The packet is a 32-bit value sent to the server to be used with encrypted login packets, and is usually the user's IP address.</p> <p>This packet is sent again before logging on to a game server to be used with the game encryption.</p>					

Ultima Online Protocol :: Character Creation

Packet #	Packet Name	Length	Client	Server	Obsolete
0x00	Character Creation	0x0068	✓	X	X
Data Type	Description				
byte 0x00	The packet number.				
uint 0xEDEDEDED	Unknown				
uint 0xFFFFFFFF	Unknown				
byte 0x00	Unknown				
char[30] Name	The character's name.				
char[30] Password	The character's password.				
byte Gender	The character's gender (C#VB7).				
byte Strength	The character's strength.				
byte Dexterity	The character's dexterity.				
byte Intelligencer	The character's intelligence.				
byte Skill1	The character's first skill (See List).				
byte Skill1Amount	The character's first skill value.				
byte Skill2	The character's second skill (See List).				
byte Skill2Amount	The character's second skill value.				
byte Skill3	The character's third skill (See List).				
byte Skill3Amount	The character's third skill value.				
ushort Hue	The character's skin color.				
ushort HairStyle	The artwork number for the character's hair.				
ushort HairColor	The character's hair color.				

ushort BeardStyle	The artwork number for the character's beard.
ushort BeardColor	The character's beard color.
ushort City	The character's starting city (as listed in the character list).
ushort 0x0000	Unknown.
ushort Slot	The character slot number.
uint Key	The user's gameplay encryption key.
ushort Shirt	The color of the character's shirt.
ushort Pants	The color of the character's pants.
Packet Description: This is sent to create a new character.	

Ultima Online Protocol :: Logout

Packet #	Packet Name	Length	Client	Server	Obsolete
0x01	Logout	0x0005	✓	X	✓
Data Type	Description				
byte 0x01	The packet number.				
uint 0xFFFFFFFF	Unknown				
Packet Description: This is sent by the client when the user logs off and returns to the main menu.					

Ultima Online Protocol :: Request Movement

Packet #	Packet Name	Length	Client	Server	Obsolete
0x02	Request Movement	0x0007	✓	X	X
Data Type	Description				
byte 0x02	The packet number.				
byte Direction	The direction (C# VB7) the player is moving.				
byte Sequence	The current value in a sequence of numbers ranging from 0 to 255.				
	The value increases each time the player successfully moves. After this value reaches 255, it gets reset to 1 when the player next moves and the sequence is repeated.				
uint Key	A value used with fast walk prevention.				
Packet Description: This packet is sent by the client when the player tries to walk, run, or change his direction.					

Ultima Online Protocol :: Request God Mode

Packet #	Packet Name	Length	Client	Server	Obsolete
0x04	Request God Mode	0x0002	✓	✓	✓
Data Type	Description				
byte 0x04	The packet number.				
bool enable	Requested god mode status.				
Packet Description: This is sent by the god client after it logs in until it receives a God mode packet.					

Ultima Online Protocol :: Attack

Packet #	Packet Name	Length	Client	Server	Obsolete
0x05	Attack	0x0005	✓	X	X
Data Type	Description				
byte 0x05	The packet number.				
uint Serial	The serial of the character to attack.				
Packet Description: This is sent by the client to begin attacking another character.					

Ultima Online Protocol :: Double Click

Packet #	Packet Name	Length	Client	Server	Obsolete
0x06	Double Click	0x0005	✓	X	X
Data Type	Description				
byte 0x06	The packet number.				
uint Serial	The serial of the object being double clicked. If this includes 0x80000000 then the target is self.				
Packet Description: This is sent by the client when it double clicks an object.					

Ultima Online Protocol :: Take Object

Packet #	Packet Name	Length	Client	Server	Obsolete
0x07	Take Object	0x0007	✓	X	X
Data Type	Description				
byte 0x07	The packet number.				
uint Serial	The serial of the item to take.				
ushort Amount	The amount of the item to take.				
Packet Description: This is sent by the client when the player picks up an item.					

Ultima Online Protocol :: Drop Object

Packet #	Packet Name	Length	Client	Server	Obsolete
0x08	Drop Object	0x000E	✓	X	X
Data Type	Description				
byte 0x08	The packet number.				
uint Serial	The serial of the item to take.				
ushort X	The X-axis position at which the item is being placed.				
ushort Y	The Y-axis position at which the item is being placed.				
sbyte Z	The Z-axis position at which the item is being placed.				
uint Container	The serial of the container in which the item is being placed. If this is 0xFFFFFFFF, the container is the ground.				
Packet Description: This is sent by the client when the player drops an item.					

Ultima Online Protocol :: Single Click

Packet #	Packet Name	Length	Client	Server	Obsolete
0x09	Single Click	0x0005	✓	X	X
Data Type	Description				
byte 0x09	The packet number.				
uint Serial	The serial of the object the character is clicking.				
Packet Description: This is sent by the client when the player clicks an object.					

Ultima Online Protocol :: Edit

Packet #	Packet Name	Length	Client	Server	Obsolete
0x0A	Edit	0x000B	✓	X	✓
Data Type	Description				
byte 0x0A	The packet number.				
byte Command	<div>The command being sent.</div> <div><ul style="list-style-type: none">0x0004 - Add New Dynamic Item0x0006 - Hackmove Request0x0007 - Add New NPC0x000A - Add New Static Item</div>				
ushort X	<div>The new object's x-axis position.</div> <div>If Command is HackMove Request, this will be a boolean value (still 16-bit) representing the requested mode.</div>				
ushort Y	The new object's y-axis position.				
ushort ItemID	The new object's id. If Command is Add New NPC, this is the template number.				
byte Z	The new object's z-axis position.				
ushort Extra	Extra data.				
<div>Packet Description:</div> <div>This packet is used by the god client to perform various tasks, most of them related to adding things.</div>					

Ultima Online Protocol :: Tile Data

Packet #	Packet Name	Length	Client	Server	Obsolete
0x0C	Tile Data	dynamic	✓	✓	✓
Data Type	Description				
byte 0x0C	The packet number.				
ushort Size	The size of the packet.				
ushort Tile_Num	The number of the tile to edit. If Tile_Num includes 0x8000 then it is a map tile.				
uint Flags	The tiledata flags for the item.				
byte Weight	How much the item weighs.				
byte Quality	The item's quality rating.				
ushort Unknown1	Unknown.				
byte Unknown2	Unknown.				
byte Quantity	The item's quantity value.				
ushort Anim_Frame	The frame number of the animation.				
byte Unknown3	Unknown.				
byte Hue	Unknown.				
byte Unknown4	Unknown.				
byte Value	The item's value.				
byte Height	The item's height.				
char[20] Name	The item's name.				
Packet Description: This is sent by the god client to edit tiledata.mul.					

Ultima Online Protocol :: Mobile Stats

Packet #	Packet Name	Length	Client	Server	Obsolete
0x11	Mobile Stats	dynamic	X	✓	X
Data Type	Description				
byte 0x11	The packet number.				
ushort Size	The size of the packet.				
uint Serial	The character's serial.				
char[30] Name	The character's name.				
ushort CurrentHP	The character's current amount of hit points.				
ushort MaximumHP	The character's maximum amount of hit points.				
byte flagName	<ul style="list-style-type: none"> 0x00 - Normal 0xFF - The user can set the character's name. 				
byte flagDisplay	<ul style="list-style-type: none"> 0x01 - Normal 0x02 - Display Stat Cap 0x03 - Display Stat Cap and Followers. 0x04 - Display Stat Cap, Followers, and Resistances 				
byte Gender	<ul style="list-style-type: none"> 0x00 - Male 0x01 - Female 				
ushort Strength	The character's Strength.				
ushort Dexterity	The character's Dexterity.				
ushort Intelligence	The character's Intelligence.				
ushort currentStamina	The character's current Stamina.				
ushort maximumStamina	The character's maximum Stamina.				

ushort currentMana	The character's current Mana.
ushort maximumMana	The character's maximum Mana.
uint Gold	How much gold the character is currently carrying.
ushort resistPhysical	The character's physical resistance value (old clients: AC).
ushort Weight	The character's current weight value.
ushort StatCap	The character's total allowable sum of Strength, Intelligence, and Dexterity.
byte currentFollowers	The number of "Follower Slots" that are currently being used.
byte maximumFollowers	The maximum number of "Follower Slots" the character has available.
ushort resistFire	The character's resistance to fire.
ushort resistCold	The character's resistance to cold.
ushort resistPoison	The character's resistance to poison.
ushort resistEnergy	The character's resistance to energy.
ushort Luck	The character's Luck value.
ushort minDamage	The minimum amount of damage the character can deal.
ushort maxDamage	The maximum amount of damage the character can deal.
ushort TithingPoints	The character's current amount of Tithing points.

Packet Description:

Sends data containing information about various character stats that are displayed in the Status window.

Ultima Online Protocol :: God Command

Packet #	Packet Name	Length	Client	Server	Obsolete
0x12	God Command	dynamic	✓	X	X
Data Type	Description				
byte 0x12	The packet number.				
ushort Size	The size of the packet.				
byte Command	The command number. 0x00 - God Mode Teleport 0x24 - Use Skill 0x56 - Macro Spell 0x58 - Open Door 0x6B - God Mode Command 0xC7 - Action				
char[] Args	Arguments for the command. The string is null terminated.				
byte 0x00	Null terminator for Args.				
Packet Description: This packet is used for various things.					

Ultima Online Protocol :: Equip Item Request

Packet #	Packet Name	Length	Client	Server	Obsolete
0x13	Equip Item Request	0x000A	✓	X	X
Data Type	Description				
byte 0x13	The packet number.				
uint Item_Serial	The serial of the item to equip.				
byte Layer	The item's layer.				
uint Target_Serial	The serial of the character to equip the item.				
Packet Description: This packet is sent by the client to equip an item.					

Ultima Online Protocol :: Change Elevation

Packet #	Packet Name	Length	Client	Server	Obsolete
0x14	Change Elevation	0x0006	✓	X	✓
Data Type	Description				
byte 0x14	The packet number.				
ushort x	The map tile's x coordinate.				
ushort y	The map tile's y coordinate.				
sbyte z_increase	The amount to increase the tile's elevation.				
Packet Description: This packet is sent by the god client to alter the elevation of a map tile.					

Ultima Online Protocol :: Follow

Packet #	Packet Name	Length	Client	Server	Obsolete
0x15	Follow	0x0009	?	✓	X
Data Type	Description				
byte 0x15	The packet number.				
uint unknown	Maybe the person to follow.				
uint follower	The serial of the character doing the following.				
Packet Description: Sending this packet will notify a player that someone is following something.					

Ultima Online Protocol :: Show Item

Packet #	Packet Name	Length	Client	Server	Obsolete
0x1A	Show Item	dynamic	X	✓	X
Data Type	Description				
byte 0x1A	The packet number.				
ushort Size	The size of the packet.				
uint Serial	The item's serial. Include the flag 0x80000000 if the item's amount is greater than one.				
ushort Artwork	The item's artwork number. Include the flag 0x8000 if the item's stackid is greater than zero.				
ushort Amount	The amount of the item present. This should always be greater than zero. This is only included if Serial includes 0x80000000.				
byte StackID	The number to add to the item's artwork when Amount > 1. Include this only if Artwork includes 0x8000.				
ushort X	The item's X-axis position. If the item's direction is not zero, include the flag 0x8000.				
ushort Y	The item's Y-axis position. If the item's status is not zero, include the flag 0x4000. If the item's hue is not zero, include the flag 0x8000.				
byte Direction	The direction (C# VB7) the item is facing. Include this only if X includes 0x8000.				
byte Z	The item's Z-axis position.				
ushort Hue	The item's hue. Include this only if Y includes 0x8000.				
byte Status	The item's status. Include this only if Y includes 0x4000.				
Packet Description: This is sent by the server to display an item on the ground.					

Ultima Online Protocol :: Login Confirm

Packet #	Packet Name	Length	Client	Server	Obsolete
0x1B	Login Confirm	0x0025	X	✓	X
Data Type	Description				
byte 0x1B	The packet number.				
uint Serial	The player's serial.				
uint 0x00000000	Unknown.				
ushort Body	The player's body number.				
ushort X	The player's X-axis position.				
ushort Y	The player's Y-axis position.				
byte 0x00	Unknown.				
sbyte Z	The player's Z-axis position.				
byte Direction	The character's direction.				
uint 0x00000000	Unknown.				
uint 0x00000000	Unknown.				
byte 0x00	Unknown.				
ushort MapWidth	The total number of tiles in the X-axis minus eight.				
ushort MapHeight	The total number of tiles in the Y-axis.				
ushort 0x0000	Unknown.				
uint 0x00000000	Unknown.				
<div>Packet Description:</div> <div>This is sent to confirm a login on a shard.</div>					

Ultima Online Protocol :: Text

Packet #	Packet Name	Length	Client	Server	Obsolete
0x1C	Text	dynamic	X	✓	X
Data Type	Description				
byte 0x1C	The packet number.				
ushort Size	The size of the packet.				
uint Serial	The serial of the object displaying the message. 0xFFFFFFFF is used for system messages.				
ushort Body	The body number of the object displaying the message. 0xFFFF is used for system messages.				
byte Type	The type of message to send. <ul style="list-style-type: none">0x00 - Normal0x01 - Broadcast0x02 - Emote0x06 - System0x07 - Message0x08 - Whisper0x09 - Yell				
ushort Hue	The color of the text.				
ushort Font	The text's font number. Normal message font is 0x0003.				
char[30] Name	The name of the speaker. "System" is used for system messages.				
char[] Text	The text to display.				
byte 0x00	Null terminator for Text.				
Packet Description: This is sent to display character names, system messages, object messages, etc.					

Ultima Online Protocol :: Destroy

Packet #	Packet Name	Length	Client	Server	Obsolete
0x1D	Destroy	0x0005	✓	✓	X
Data Type	Description				
byte 0x1D	The packet number.				
uint Serial	The serial of the object to remove.				
Packet Description: This is sent by the server to remove an item from the player's sight. This packet is also sent by the god client to delete a dynamic item.					

Ultima Online Protocol :: Teleport

Packet #	Packet Name	Length	Client	Server	Obsolete
0x20	Teleport	0x0013	X	✓	X
Data Type	Description				
byte 0x20	The packet number.				
uint Serial	The player's serial.				
ushort Body	The player's body number.				
byte 0x00	Unknown.				
ushort Hue	The player's hue.				
byte Status	The player's status (C# VB7).				
ushort X	The player's X-axis position.				
ushort Y	The player's Y-axis position.				
ushort 0x0000	Unknown.				
byte Direction	The player's direction (C# VB7).				
sbyte Z	The player's Z-axis position.				
Packet Description: This is sent to teleport the player. This packet should only be used with the player that it is sent to.					

Ultima Online Protocol :: Block Movement

Packet #	Packet Name	Length	Client	Server	Obsolete
0x21	Block Movement	0x0008	X	✓	X
Data Type	Description				
byte 0x21	The packet number.				
byte Sequence	The movement sequence that was blocked.				
ushort X	The X-axis position to jump back to.				
ushort Y	The Y-axis position to jump back to.				
byte Direction	The direction (C#VB7) the player was facing.				
byte Z	The Z-axis position to jump back to.				
<p>Packet Description:</p> <p>This is sent by the server to reject a movement request.</p> <p>Note that sending this packet will reset the client's movement sequence to zero.</p>					

Ultima Online Protocol :: Accept Movement/Resync Request

Packet #	Packet Name	Length	Client	Server	Obsolete
0x22	Accept Movement/Resync Request	0x0003	✓	✓	X
Data Type	Description				
byte 0x22	The packet number.				
byte Sequence	The movement sequence that was accepted.				
byte Status	The player's status (C# VB7).				
<p>Packet Description:</p> <p>This is sent by the server to accept a movement request.</p> <p>The client will send this packet to request a resync. The proper response is a Teleport packet.</p>					

Ultima Online Protocol :: Drag Item

Packet #	Packet Name	Length	Client	Server	Obsolete
0x23	Drag Item	0x001A	X	✓	X
Data Type	Description				
byte 0x23	The packet number.				
ushort Artwork	The item's artwork number.				
byte 0x00	Unknown.				
ushort 0x0000	Unknown.				
ushort Amount	The amount of the item being dragged.				
uint Source_Container	The serial of the source container. The serial 0xFFFFFFFF is used for the ground.				
ushort X	The X-axis position of the source.				
ushort Y	The Y-axis position of the source.				
byte Z	The Z-axis position of the source.				
uint Target_Container	The serial of the target container. The serial 0xFFFFFFFF is used for the ground.				
ushort X	The X-axis position of the target.				
ushort Y	The Y-axis position of the target.				
byte Z	The Z-axis position of the target.				
Packet Description: This is sent by the server to display an item being dragged from one place to another. Note that this does not actually move the item, it just displays an animation.					

Ultima Online Protocol :: Open Container

Packet #	Packet Name	Length	Client	Server	Obsolete
0x24	Open Container	0x0007	X	✓	X
Data Type	Description				
byte 0x24	The packet number.				
uint Serial	The serial of the container.				
ushort Model	The model number of the container.				
Packet Description: This is sent by the server to open a container or game board (which is also a container).					

Ultima Online Protocol :: Object to Object

Packet #	Packet Name	Length	Client	Server	Obsolete
0x25	Object to Object	0x0014	X	✓	X
Data Type	Description				
byte 0x25	The packet number.				
uint Serial	The serial of the item to add.				
ushort Artwork	The artwork number of the item.				
byte StackID	The number to add to the item's artwork if Amount is greater than one.				
ushort Amount	The amount of the item (this is not the amount being added). This should always be greater than zero.				
ushort X	The number of pixels within the container from the left-hand side at which the item will be placed.				
ushort Y	The number of pixels within the container from the top at which the item will be placed.				
uint Container	The serial of the container.				
ushort Hue	The item's hue.				

Packet Description:

This is sent by the server to add a single item to a container.

Note that this packet should be used only when a player moves an item into a container, not to display its contents.

To display a container's contents, use the [Container Contents](#) packet.

Ultima Online Protocol :: Get Item Failed

Packet #	Packet Name	Length	Client	Server	Obsolete
0x27	Get Item Failed	0x0002	X	✓	X
Data Type	Description				
byte 0x27	The packet number.				
byte Reason	0x00 - Display "You cannot pick that up." 0x01 - Display "That is too far away." 0x02 - Display "That is out of sight." 0x03 - Display "That item does not belong to you. You will have to steal it." 0x04 - Display "You are already holding an item." 0x05 - Destroy the item. 0x06 - No message.				
Packet Description: This is sent to deny the player's request to get an item.					

Ultima Online Protocol :: God Mode

Packet #	Packet Name	Length	Client	Server	Obsolete
0x2B	God Mode	0x0002	X	✓	✓
Data Type	Description				
byte 0x2B	The packet number.				
bool enabled	If true, god mode is enabled and access to god client features is allowed.				
<p>Packet Description:</p> <p>This packet is sent by the server to either enable or disable god mode.</p> <p>Send this packet after receiving a Request God Mode packet.</p>					

Ultima Online Protocol :: Equip Item

Packet #	Packet Name	Length	Client	Server	Obsolete
0x2E	Equip Item	0x000F	X	✓	X
Data Type	Description				
byte 0x2E	The packet number.				
uint Serial	The serial of the item to equip.				
ushort Artwork	The item's artwork number.				
byte 0x00	Unknown.				
byte Layer	The item's layer (C# VB7).				
uint Container	The serial of the character on which the item will be equipped.				
ushort Hue	The item's hue.				

Packet Description:

This is sent by the server to equip a single item on a character.

Note that this packet should be used only to update a character with a single item; for multiple items, use the [Equipped MOB](#) packet.

Ultima Online Protocol :: Swing

Packet #	Packet Name	Length	Client	Server	Obsolete
0x2F	Swing	0x000A	X	✓	X
Data Type	Description				
byte 0x2F	The packet number.				
byte 0x00	Unknown.				
uint Player	The serial of the player receiving this packet.				
uint Target	The serial of the target character.				
Packet Description: This is sent by the server to signal the client to swing during an attack.					

Ultima Online Protocol :: Hack Mover

Packet #	Packet Name	Length	Client	Server	Obsolete
0x32	Hack Mover	0x0002	X	✓	✓
Data Type	Description				
byte 0x32	The packet number.				
bool enabled	If true, hack mover is enabled client-side.				
<p>Packet Description:</p> <p>This packet enables or disables "hack moving" for the god client. If enabled, the god client will ignore impassable static/map tiles.</p> <p>This should be sent after receiving a hack move request in the Edit packet.</p>					

Ultima Online Protocol :: Client Query

Packet #	Packet Name	Length	Client	Server	Obsolete
0x34	Client Query	0x000A	✓	X	X
Data Type	Description				
byte 0x34	The packet number.				
uint 0xEDEDEDED	Unknown.				
byte Type	<div>The type of query.</div> <div><ul style="list-style-type: none">0x00 - Verdata Query0x03 - Unknown0x04 - Character Status0x05 - Character Skills</div>				
uint Serial	<div>The serial of the character if Type is 0x04 or 0x05.</div> <div>If Type is 0x00 it is the verdata type.</div>				
<div>Packet Description:</div> <div>This is sent by the client to query various things.</div>					

Ultima Online Protocol :: Resource Type

Packet #	Packet Name	Length	Client	Server	Obsolete
0x35	Resource Type	0x028D	✓	✓	✓
Data Type	Description				
byte 0x35	The packet number.				
byte 0x00	Unknown.				
byte 0x01	Unknown.				
ushort tile_id	<p>The tile to attach the resource to.</p> <p>A flag of 0x8000 means it is a map tile.</p>				
char[127] internal_name	The internal resource name.				
byte 0x00	Null terminator.				
char[127] food_name	The food resource name.				
byte 0x00	Null terminator.				
char[127] shelter_name	The shelter resource name.				
byte 0x00	Null terminator.				
char[127] desire_name	The desire resource name.				
byte 0x00	Null terminator.				
char[127] production_name	The production resource name.				
byte 0x00	Null terminator.				
uint make_consumer	If set to one, then make a consumer if excess in world.				
uint make_producer	If set to one, then make a producer if excess in bank.				

Packet Description:

This packet is sent by the god client to add a new resource.

Ultima Online Protocol :: Move Object

Packet #	Packet Name	Length	Client	Server	Obsolete
0x37	Move Object	0x0008	✓	X	✓
Data Type	Description				
byte 0x37	The packet number.				
uint serial	The target object's serial.				
sbyte z_increase	The amount to increase the object's z-axis position.				
sbyte y_increase	The amount to increase the object's y-axis position.				
sbyte x_increase	The amount to increase the object's x-axis position.				
Packet Description: This packet is sent by the god client to move a dynamic object.					

Ultima Online Protocol :: Groups

Packet #	Packet Name	Length	Client	Server	Obsolete
0x39	Groups	0x0009	?	✓	✓
Data Type	Description				
byte 0x39	The packet number.				
uint player_serial?	The player's serial. If this is zero, then remove target_serial from the group.				
uint target_serial	The target's serial.				
	If player_serial is zero, remove target_serial from the group. If target_serial is the player's serial, it will show "Removed from group."				
Packet Description: Not really sure what this is for. I think it's a classical packet.					

Ultima Online Protocol :: Skills

Packet #	Packet Name	Length	Client	Server	Obsolete
0x3A	Skills	dynamic	✓	✓	X
Data Type	Description				
byte 0x3A	The packet number.				
ushort Size	The size of the packet.				
byte Type	<div>The type of packet:</div> <div><ul style="list-style-type: none">0x00 - Basic0x01 - God View0x02 - Basic + Skill Cap0x03 - God View + Skill Cap0xDF - Skill Update + Skill Cap0xFF - Skill Update</div>				
<pre>loop { ushort SkillID ushort Value ushort BaseValue byte Status ushort MaxValue }</pre>	<div>This loop contains information for each skill. Loop only one time if Type is 0xFF, otherwise loop until SkillID is zero.</div> <div>SkillID: 1-based skill number (See List).</div> <div>Value: The value of the skill.</div> <div>BaseValue: The base value of the skill (what shows up when you click "Show Real").</div> <div>Status: The lock status of the skill (C#VB7).</div> <div>MaxValue: The skill cap. This is only present if specified in the Type.</div>				
<div>Packet Description:</div> <div>This is sent by the server to display and update skills.</div> <div>The client sends this packet to alter skill locks.</div> <div>Since the client version of this packet is so different from the server version, it is documented on a separate page.</div>					

Ultima Online Protocol :: Accept Offer

Packet #	Packet Name	Length	Client	Server	Obsolete
0x3B	Accept Offer	dynamic	✓	✓	X
Data Type	Description				
byte 0x3B	The packet number.				
ushort Size	The size of the packet.				
uint Vendor	The vendor's serial.				
byte NumItems	The number of items in the list.				
	Setting this to zero will remove the gump.				
loop { byte Layer uint Serial ushort Amount }	This loop contains information for each item in the shop. Loop for NumItems. Layer: The shop layer (C# VB7) that the item is in (usually 0x1A). Serial: The item's serial. Amount: The amount of the item to buy.				
Packet Description: This is sent by the client to buy items from a vendor. This is sent by the server to remove the list.					

Ultima Online Protocol :: Container Contents

Packet #	Packet Name	Length	Client	Server	Obsolete
0x3C	Container Contents	dynamic	X	✓	X
Data Type	Description				
byte 0x3C	The packet number.				
ushort Size	The size of the packet.				
ushort Count	The number of items in the container.				
loop { uint Serial ushort Artwork byte StackID ushort Amount ushort X ushort Y uint Container ushort Hue }	This loop contains information for each item in the container. Loop for Count number of times. Serial: The serial of the item to add. Artwork: The artwork number of the item. StackID: The number to add to the item's artwork if Amount is greater than one. Amount: The amount of the item. This should always be greater than zero. X: The number of pixels within the container from the left-hand side at which the item will be placed. Y: The number of pixels within the container from the top at which the item will be placed. Container: The serial of the container. Hue: The item's hue.				
Packet Description: This is sent to display the contents of a container.					

Ultima Online Protocol :: Versions

Packet #	Packet Name	Length	Client	Server	Obsolete
0x3E	Versions	0x0025	?	✓	✓
Data Type	Description				
byte 0x3E	The packet number.				
uint ver_1	Unknown.				
uint ver_2	Unknown.				
uint ver_3	Unknown.				
uint ver_4	Unknown.				
uint ver_5	Unknown.				
uint ver_6	Unknown.				
uint ver_7	Unknown.				
uint ver_8	Unknown.				
uint ver_9	Unknown.				
<p>Packet Description:</p> <p>My current theory for this packet is that it has to do with the versioning of edited mul files when groups of worldbuilders login and edit the world together. Reason: There are nine mul-editing packets sent by the server, and any good worldbuilding server would use versioning to track each client's status. Of course, I could be wrong.</p>					

Ultima Online Protocol :: Update Statics

Packet #	Packet Name	Length	Client	Server	Obsolete
0x3F	Update Statics	dynamic	X	✓	✓
Data Type	Description				
byte 0x3F	The packet number.				
ushort Size	The size of the packet.				
uint Block_Num	<p>The block number of the statics grid. This can be derived by the following formula:</p> <p>Block_Num = X / 8 * MapHeight + Y / 8</p> <p>MapHeight is equal to the total number of tiles in the Y-axis divided by eight (0x0200 for map0.mul).</p>				
uint Statics	The number of static items in the grid.				
uint Extra	The "Extra" value in the statics index file.				
loop { ushort Artwork byte X byte Y sbyte Z ushort Hue }	<p>This loop contains the information below for each map cell in the 8x8 grid.</p> <p>Artwork: The item's artwork id. X: The item's X-axis position relative to the top-left corner of the grid. Y: The item's Y-axis position relative to the top-left corner of the grid. Z: The item's Z-axis position. Hue: The item's hue.</p>				
<p>Packet Description:</p> <p>This is sent by the server to update an 8x8 statics grid.</p> <p>For this packet to work, the server must be an Edit Server and the map width and height must be correctly specified in the Login Confirm packet.</p>					

Ultima Online Protocol :: Update Terrain

Packet #	Packet Name	Length	Client	Server	Obsolete
0x40	Update Terrain	0x00C9	X	✓	✓
Data Type	Description				
byte 0x40	The packet number.				
uint Block_Num	<p>The block number of the map grid. This can be derived by the following formula:</p> $\text{Block_Num} = X / 8 * \text{MapHeight} + Y / 8$ <p>MapHeight is equal to the total number of tiles in the Y-axis divided by eight (0x0200 for map0.mul).</p>				
<pre>loop { ushort tile_num sbyte z }</pre>	<p>This loop contains the information below for each map cell in the 8x8 grid.</p> <p>tile_num: The map tile number. z: The z-axis position of the map tile.</p>				
uint Header	The map grid header.				
<p>Packet Description:</p> <p>This is sent by the server to update an 8x8 map grid.</p> <p>For this packet to work, the server must be an Edit Server and the map width and height must be correctly specified in the Login Confirm packet.</p>					

Ultima Online Protocol :: New Terrain

Packet #	Packet Name	Length	Client	Server	Obsolete
0x47	New Terrain	0x000B	✓	X	✓
Data Type	Description				
byte 0x47	The packet number.				
ushort x	The x-axis position where the tile is.				
ushort y	The y-axis position where the tile is.				
ushort tile_num	The tile number. The flag 0x8000 is used to indicate a map tile.				
ushort width	The number of tiles to place in the positive x direction.				
ushort height	The number of tiles to place in the positive y direction.				
Packet Description: This god client packet is sent to the server to edit the map through the Terrain Editor.					

Ultima Online Protocol :: Light Change

Packet #	Packet Name	Length	Client	Server	Obsolete
0x4E	Light Change	0x0006	X	✓	X
Data Type	Description				
byte 0x4E	The packet number.				
uint	The target object's serial.				
byte Level	The target's personal light level.				
Packet Description: This is sent to change the personal light level of an object.					

Ultima Online Protocol :: Sunlight

Packet #	Packet Name	Length	Client	Server	Obsolete
0x4F	Sunlight	0x0002	X	✓	X
Data Type	Description				
byte 0x4F	The packet number.				
byte Level	The region's light level (zero is brightest).				
Packet Description: This is sent to change the user's level of sunlight.					

Ultima Online Protocol :: Login Reject

Packet #	Packet Name	Length	Client	Server	Obsolete
0x53	Login Reject	0x0002	X	✓	X
Data Type	Description				
byte 0x53	The packet number.				
byte Reason	0x00 - Incorrect Password				
	0x01 - This character does not exist any more!				
	0x02 - This character already exists.				
	0x03 - Could not attach to game server.				
	0x04 - Could not attach to game server.				
	0x05 - Another character is logged in.				
	0x06 - Synchronization Error.				
	0x07 - Idle too long.				
	0x08 - Could not attach to game server.				
0x09 - Character Transfer.					
Packet Description: This is sent to display a variety of messages, most of them related to logging in to a shard.					

Ultima Online Protocol :: Sound

Packet #	Packet Name	Length	Client	Server	Obsolete
0x54	Sound	0x000C	X	✓	X
Data Type	Description				
byte 0x54	The packet number.				
bool Singular	If false, the sound repeats indefinitely.				
ushort Effect	The sound effect number.				
ushort 0x0000	Some call it Volume, but changing it seems to have no effect.				
ushort X	The X-axis position from which the sound originates.				
ushort Y	The Y-axis position from which the sound originates.				
ushort Z	The Z-axis position from which the sound originates.				
Packet Description: This is sent to play a sound effect.					

Ultima Online Protocol :: Login Complete

Packet #	Packet Name	Length	Client	Server	Obsolete
0x55	Login Complete	0x0001	X	✓	X
Data Type	Description				
byte 0x55	The packet number.				
Packet Description: This is sent the notify the client that the login process is complete and causes the game window to display.					



Ultima Online Protocol :: Map Command

Packet #	Packet Name	Length	Client	Server	Obsolete
0x56	Map Command	0x000B	✓	✓	X
Data Type	Description				
byte 0x56	The packet number.				
uint Serial	The map's serial.				
byte Command	<div>The type of map command.</div> <div><ul style="list-style-type: none">0x01 - Add Pin0x03 - Move Pin0x04 - Delete Pin0x05 - Open Map0x06 - Request Edit Mode0x07 - Toggle Edit Mode</div>				
byte Pin	<div>The 0-based pin number to modify.</div> <div>If Command is Request Edit Mode or Toggle Edit Mode, this will be a boolean value representing the mode.</div>				
ushort X	The pixel from the left-hand side at which the map pin is positioned.				
ushort Y	The pixel from the top at which the map pin is positioned.				
<div>Packet Description:</div> <div>The client and server send this to edit course maps.</div>					

Ultima Online Protocol :: Game Time

Packet #	Packet Name	Length	Client	Server	Obsolete
0x5B	Game Time	0x0004	X	✓	X
Data Type	Description				
byte 0x5B	The packet number.				
byte Hour	The hour of the day.				
byte Minute	The number of minutes that have passed in the hour.				
byte Second	The number of seconds that have passed in the minute.				
Packet Description: The server sends this packet to set the time within the game.					

Ultima Online Protocol :: Pre Login

Packet #	Packet Name	Length	Client	Server	Obsolete
0x5D	Pre Login	0x0049	X	✓	X
Data Type	Description				
byte 0x5D	The packet number.				
uint 0xEDEDEDED	Unknown.				
char[30] Name	The character's name.				
char[30] Password	The character's password. 				
uint Slot	The character's slot in the character list.				
uint Key	The user's encryption key. 				
Packet Description: The is sent by the client after the user picks a character to login with.					

Ultima Online Protocol :: Destroy Static

Packet #	Packet Name	Length	Client	Server	Obsolete
0x61	Destroy Static	0x0009	✓	X	✓
Data Type	Description				
byte 0x61	The packet number.				
ushort x	The x-axis position where the tile is.				
ushort y	The y-axis position where the tile is.				
short z	The z-axis position where the tile is.				
ushort tile_num	The tile number.				
Packet Description: This god client packet is sent to destroy a static object. To destroy a static, hold shift and select the item or items and then press the delete key.					

Ultima Online Protocol :: Move Static

Packet #	Packet Name	Length	Client	Server	Obsolete
0x62	Move Static	0x000F	✓	X	✓
Data Type	Description				
byte 0x62	The packet number.				
ushort x	The x-axis position where the tile is.				
ushort y	The y-axis position where the tile is.				
short z	The z-axis position where the tile is.				
ushort tile_num	The tile number.				
short z_inc	The amount to increase the item's z-axis position.				
short y_inc	The amount to increase the item's y-axis position.				
short x_inc	The amount to increase the item's x-axis position.				
<p>Packet Description: This packet is sent by the god client to move a static item.</p> <p>To move a static, enable "Click Drag Statics" under the Toggles menu and simply move a static. You can also move a static by selecting (shift-click) it and pressing a directional key while holding shift.</p>					

Ultima Online Protocol :: Weather Change

Packet #	Packet Name	Length	Client	Server	Obsolete
0x65	Weather Change	0x0004	X	✓	X
Data Type	Description				
byte 0x65	The packet number.				
byte Type	<div>The type of weather.</div> <div><ul style="list-style-type: none">0x00 - It starts to rain.0x01 - A fierce storm approaches.0x02 - It begins to snow.0x03 - A fierce storm is brewing.0xFF - End weather effects.</div>				
byte Effects	The number of particles to display on the screen. The maximum is seventy.				
byte Temperature	The current temperature. Use is unknown.				
<div>Packet Description:</div> <div>The is sent by the client after the user picks a character to login with.</div> <div>To display snow and rain, send a rain packet first and then send a snow packet with the number of effects equal to the number sent in the rain packet plus the number of snow effects to add.</div> <div>Weather ends after six minutes.</div>					

Ultima Online Protocol :: Book Contents

Packet #	Packet Name	Length	Client	Server	Obsolete
0x66	Book Contents	dynamic	✓	✓	X
Data Type	Description				
byte 0x66	The packet number.				
ushort Size	The size of the packet.				
uint Serial	The book's serial.				
ushort Pages	The number of pages being sent.				
loop { ushort Index ushort Lines loop { char[] Text byte 0x00 } }	This loop contains information relative to each page being sent. Loop for Pages. Index: The page's 1-based index within the book (not the loop). Lines: The number of lines on the page (normally, the maximum should be eight). - If this is 0x0000 in a client message, it is a request for the page contents. Text: The text to appear on a certain line. 0x00: Null terminator for a line of text.				
Packet Description: This is sent by the server to display book contents, and by the client to edit book contents.					

Ultima Online Protocol :: Target

Packet #	Packet Name	Length	Client	Server	Obsolete
0x6C	Target	0x0013	✓	✓	X
Data Type	Description				
byte 0x6C	The packet number.				
byte Type	The type of target. <ul style="list-style-type: none">• 0x00 - Target Object• 0x01 - Target Ground				
uint Serial	The targeting cursor's serial (usually this is just the player's serial).				
byte Flag	<ul style="list-style-type: none">• 0x00 - Normal• 0x01 - Criminal Action• 0x02 - Unknown• 0x03 - Cancel Target (server-side)				
uint Target	The target object's serial. 0x00000000 is the ground or a static object.				
ushort X	The X-axis position where the target is. 0xFFFF is used to cancel the target.				
ushort Y	The Y-axis position where the target is. 0xFFFF is used to cancel the target.				
short Z	The Z-axis position where the target is.				
ushort Artwork	The target object's artwork number (or body number if the target is a mobile). 0x0000 is the ground if Type is 0x01.				
Packet Description: The server sends this packet to bring up a targeting cursor, and the client sends it back after targeting something or pressing the Escape key.					

Ultima Online Protocol :: Music

Packet #	Packet Name	Length	Client	Server	Obsolete
0x6D	Music	0x0003	X	✓	X
Data Type	Description				
byte 0x6D	The packet number.				
ushort Number	The song number to play (See List).				
Packet Description: This is sent to play music.					

Ultima Online Protocol :: Animation

Packet #	Packet Name	Length	Client	Server	Obsolete
0x6E	Animation	0x000E	X	✓	X
Data Type	Description				
byte 0x6E	The packet number.				
uint Serial	The serial of the object performing the animation.				
ushort Number	The animation number.				
ushort Unknown	Unknown.				
ushort Direction	The direction of the animation.				
ushort RepeatNum	The number of times to repeat the animation (0x0000 is indefinite).				
bool Backwards	If true, the animation will be performed backwards.				
bool Repeat	If true, the animation is repeating.				
byte Speed	The speed at which the animation is performed (0x00 is fastest).				
Packet Description: This is sent by the server to display an animation.					

Ultima Online Protocol :: Bulletin Board

Packet #	Packet Name	Length	Client	Server	Obsolete
0x71	Bulletin Board	dynamic	✓	✓	X
Data Type	Description				
byte 0x71	The packet number.				
ushort Size	The size of the packet.				
byte Command	The command being sent.				
	<ul style="list-style-type: none">• 0x00 - Display Bulletin Board• 0x01 - Message Summary• 0x02 - Message Data• 0x03 - Request Message• 0x04 - Request Message Summary• 0x05 - Post Message• 0x06 - Delete Message				
Packet Description: This packet is used to perform various bulletin board functions.					

Ultima Online Protocol :: Combat

Packet #	Packet Name	Length	Client	Server	Obsolete
0x72	Combat	0x0005	✓	✓	X
Data Type	Description				
byte 0x72	The packet number.				
bool Fighting	If true, war mode is enabled.				
byte 0x00	Unknown.				
byte 0x32	Unknown.				
byte 0x00	Unknown.				
Packet Description: This packet is sent by the client to request a war mode change, and by the server to set war mode.					

Ultima Online Protocol :: Ping

Packet #	Packet Name	Length	Client	Server	Obsolete
0x73	Ping	0x0002	✓	✓	X
Data Type	Description				
byte 0x73	The packet number.				
byte Value	The ping's value (usually 0x00).				
Packet Description: This is sent by the client to ping the server, and by the server to ping the client.					

Ultima Online Protocol :: Shop Data

Packet #	Packet Name	Length	Client	Server	Obsolete
0x74	Shop Data	dynamic	X	✓	X
Data Type	Description				
byte 0x74	The packet number.				
ushort Size	The size of the packet.				
uint Vendor	The serial of the vendor.				
byte NumItems	The number of items in the list.				
loop { uint Price byte Length char[] Name }	This loop contains information for each item in the shop inventory. Price: The price of the item. Length: The length of the item's name. Name: The name of the item.				
Packet Description: This is used to send shop inventory information to the client.					

Ultima Online Protocol :: Rename MOB

Packet #	Packet Name	Length	Client	Server	Obsolete
0x75	Rename MOB	0x0023	✓	X	X
Data Type	Description				
byte 0x75	The packet number.				
uint Serial	The target character's serial.				
char[30] Name	The target character's new name.				
Packet Description: This is sent by the client to alter the name of a mobile.					

Ultima Online Protocol :: Naked MOB

Packet #	Packet Name	Length	Client	Server	Obsolete
0x77	Naked MOB	0x0011	X	✓	X
Data Type	Description				
byte 0x77	The packet number.				
uint Serial	The character's serial.				
ushort Body	The character's body number.				
ushort X	The character's x-axis position.				
ushort Y	The character's y-axis position.				
sbyte Z	The character's z-axis position.				
byte Direction	The character's direction (C# VB7).				
ushort Hue	The character's hue.				
byte Status	The character's status (C# VB7).				
byte Notoriety	The character's notoriety.				
Packet Description: This packet is sent to update a character onscreen when it is walking or changing in some way.					

Ultima Online Protocol :: Equipped MOB

Packet #	Packet Name	Length	Client	Server	Obsolete
0x78	Equipped MOB	dynamic	X	✓	X
Data Type	Description				
byte 0x78	The packet number.				
ushort Size	The size of the packet.				
uint Serial	The character's serial.				
ushort Body	The character's body number.				
ushort X	The character's x-axis position.				
ushort Y	The character's y-axis position.				
sbyte Z	The character's z-axis position.				
byte Direction	The character's direction (C# VB7).				
ushort Hue	The character's hue.				
byte Status	The character's statu (C# VB7).				
byte Notoriety	The character's notoriety.				
loop { uint Item_Serial ushort Artwork byte Layer ushort Hue }	This is a loop of all equipped items on the character. Item_Serial: The serial of the item. Artwork: The item's artwork. - Add the flag 0x8000 if the item's hue is not zero. Layer: The item's clothing layer. Hue: The item's hue. Include this only if Artwork includes the flag 0x8000.				
uint 0x00000000	Signifies the end of the item loop.				
Packet Description: This packet is used to display a character.					

Ultima Online Protocol :: Object Picker

Packet #	Packet Name	Length	Client	Server	Obsolete
0x7C	Object Picker	dynamic	X	✓	X
Data Type	Description				
byte 0x7C	The packet number.				
ushort Size	The size of the packet.				
uint Dialog	The dialog's serial.				
ushort Menu	The menu's serial.				
byte Len_Title	The length of the title.				
char[] Title	The title of the dialog.				
byte Options	The number of options in the list.				
loop { ushort Artwork ushort Hue byte Length char[] Text }	This loop contains information for each option/item in the dialog. Loop for Options. Artwork: The item's artwork number. Use 0x0000 for an option menu. Hue: The item's hue. Length: The length of the option's text. Name: The text to display for the option.				
Packet Description: This is can be used to display either a gray menu with options or the old-fashioned object picker.					

Ultima Online Protocol :: Picked Object

Packet #	Packet Name	Length	Client	Server	Obsolete
0x7D	Picked Object	0x000D	✓	X	X
Data Type	Description				
byte 0x7D	The packet number.				
uint Dialog	The serial of the dialog to which this is responding.				
ushort Menu	The serial of the menu to which this is responding.				
ushort Option	The 1-based index of the option that was selected.				
ushort Artwork	The artwork number of the selected item.				
ushort Hue	The hue of the selected item.				
Packet Description: This is the client's response to the Object Picker packet.					

Ultima Online Protocol :: Account Login Request

Packet #	Packet Name	Length	Client	Server	Obsolete
0x80	Account Login Request	0x003E	✓	X	X
Data Type	Description				
byte 0x80	The packet number.				
char[30] Name	The name of the account.				
char[30] Name	The account's password.				
byte 0x00	Unknown.				
Packet Description: This is sent to login to the Login Server.					

Ultima Online Protocol :: Account Login Failed

Packet #	Packet Name	Length	Client	Server	Obsolete
0x82	Account Login Failed	0x0002	X	✓	X
Data Type	Description				
byte 0x82	The packet number.				
byte Reason	<div>The reason for the failure.</div> <ul style="list-style-type: none">0x00 - Incorrect name/password.0x01 - Someone is already using this account.0x02 - Your account has been blocked.0x03 - Your account credentials are invalid.0x04 - Communication problem.0x05 - The IGR concurrency limit has been met.0x06 - The IGR time limit has been met.0x07 - General IGR authentication failure.				
<div>Packet Description:</div> <div>This is sent to reject a login request.</div>					

Ultima Online Protocol :: Account Delete Character

Packet #	Packet Name	Length	Client	Server	Obsolete
0x83	Account Delete Character	0x0027	✓	X	X
Data Type	Description				
byte 0x83	The packet number.				
char[30] Password	The character's password.				
uint Index	The character's 0-based index within the character list.				
uint Address	The client's IP address (encryption key?).				
Packet Description: This is sent by the client to delete a character.					

Ultima Online Protocol :: Delete Character Failed

Packet #	Packet Name	Length	Client	Server	Obsolete
0x85	Delete Character Failed	0x0002	X	✓	X
Data Type	Description				
byte 0x85	The packet number.				
byte Reason	<div>The reason the delete request failed.</div> <div><ul style="list-style-type: none">0x00 - That character password is invalid.0x01 - That character does not exist.0x02 - That character is being played right now.0x03 - That character is not old enough to delete.0x04 - That character is currently queued for backup.0x05 - Couldn't carry out your request.</div>				
<div>Packet Description:</div> <div>This is sent to notify the client that the request to delete a character failed.</div>					

Ultima Online Protocol :: All Characters

Packet #	Packet Name	Length	Client	Server	Obsolete
0x86	All Characters	dynamic	X	✓	X
Data Type	Description				
byte 0x86	The packet number.				
ushort Size	The size of the packet.				
byte num_chars	The number of characters in the list.				
loop { char[30] name char[30] password }	This loop contains the name and password (if any) of each character in the list. Loop for num_chars.				
Packet Description: This is sent by the server after deleting a character. Some clients may require that all five characters be sent even if they are not used.					

Ultima Online Protocol :: Open Paperdoll

Packet #	Packet Name	Length	Client	Server	Obsolete
0x88	Open Paperdoll	0x0042	X	✓	X
Data Type	Description				
byte 0x88	The packet number.				
uint Serial	The target character's serial.				
char[60] Name	The name of the character (including any title he might have).				
byte Status	The player's status (C# VB7).				
	The CanAlterPaperdoll status flag allows the player to alter the target's appearance.				
Packet Description: This is sent by the server to open a character's paperdoll.					

Ultima Online Protocol :: Corpse Equipment

Packet #	Packet Name	Length	Client	Server	Obsolete
0x89	Corpse Equipment	dynamic	X	✓	X
Data Type	Description				
byte 0x89	The packet number.				
ushort Size	The size of the packet.				
uint Corpse	The serial of the corpse.				
loop { byte Layer uint Serial }	<div>This loop contains information about the equipment on the corpse. Exit the loop when Layer is zero.</div> <div>Layer: The item's layer (C# VB7).</div> <div>Serial: The item's serial.</div>				
<div>Packet Description:</div> <div>This tells the client which items in the matching Container Contents packet to equip on the corpse</div>					

Ultima Online Protocol :: Server Redirect

Packet #	Packet Name	Length	Client	Server	Obsolete
0x8C	Server Redirect	0x000B	X	✓	X
Data Type	Description				
byte 0x8C	The packet number.				
uint Address	The server's IP address.				
ushort Port	The server's port.				
uint Key	The gameplay encryption key. This is usually the same as the account number.				
Packet Description: This is sent to redirect a client to a gameserver after the user selects a shard.					

Ultima Online Protocol :: Open Course Gump

Packet #	Packet Name	Length	Client	Server	Obsolete
0x90	Open Course Gump	0x0013	X	✓	X
Data Type	Description				
byte 0x90	The packet number.				
uint Serial	The map item's serial.				
ushort 0x139D	The gumpart number.				
ushort X1	The upper-left X-axis position of the map.				
ushort Y1	The upper-left Y-axis position of the map.				
ushort X2	The lower-right X-axis position of the map.				
ushort Y2	The lower-right Y-axis position of the map.				
ushort Width	The width of the map in pixels.				
ushort Height	The height of the map in pixels.				
Packet Description: This is used to display a map.					

Ultima Online Protocol :: Post Login

Packet #	Packet Name	Length	Client	Server	Obsolete
0x91	Post Login	0x0041	✓	X	X
Data Type	Description				
byte 0x91	The packet number.				
uint Key	The gameplay encryption key. This is usually the account number.				
char[30] Name	The name of the account.				
char[30] Name	The account's password.				
Packet Description: This is sent to login to the Game Server.					

Ultima Online Protocol :: Book Header

Packet #	Packet Name	Length	Client	Server	Obsolete
0x93	Book Header	0x0063	X	✓	X
Data Type	Description				
byte 0x93	The packet number.				
uint Serial	The item's serial.				
bool IsEditable	If true, the client is able to edit the book.				
bool IsEditable	If true, the client is able to edit the book. (Yes, this is here twice on purpose.)				
ushort Pages	The number of pages in the book.				
char[60] Title	The title of the book.				
char[30] Author	The author of the book.				
<p>Packet Description:</p> <p>This is sent by the server to open a book, and by the client to change the title or author.</p> <p>In modern clients, this packet has been replaced with the Book Info packet.</p>					

Ultima Online Protocol :: Hue Picker

Packet #	Packet Name	Length	Client	Server	Obsolete
0x95	Hue Picker	0x0009	✓	✓	X
Data Type	Description				
byte 0x95	The packet number.				
uint Serial	The item's serial.				
ushort Artwork	The item's artwork number.				
ushort Hue	The number of the hue that was selected.				
Packet Description: This is sent by the server to display the dye menu, and by the client after selecting a color.					

Ultima Online Protocol :: Move Player

Packet #	Packet Name	Length	Client	Server	Obsolete
0x97	Move Player	0x0002	?	✓	X
Data Type	Description				
byte 0x97	The packet number.				
byte Direction	The direction (C# VB7) the player is moving.				
<p>Packet Description:</p> <p>This packet is sent by the server to force the player to move in a certain direction.</p> <p>This packet works with the latest clients, but is never used by the server.</p>					

Ultima Online Protocol :: MOB Name

Packet #	Packet Name	Length	Client	Server	Obsolete
0x98	MOB Name	dynamic	✓	✓	X
Data Type	Description				
byte 0x98	The packet number.				
ushort Size	The size of the packet.				
uint Serial	The target's serial.				
char[30] Name	The target's name. The client version does not include this.				

Packet Description:

If you hold ctrl+shift, the Third Dawn client sends this to retrieve the name of a character. The server should respond with a matching packet that includes the name.

Note: This packet was created long before the introduction of UO3D, so it possibly has other uses.

Ultima Online Protocol :: Target Multi

Packet #	Packet Name	Length	Client	Server	Obsolete
0x99	Target Multi	0x001A	X	✓	X
Data Type	Description				
byte 0x99	The packet number.				
byte 0x01	This is the target type. It should always be 0x01.				
uint Serial	The serial of the house deed.				
uint 0x00000000	Unknown.				
uint 0x00000000	Unknown.				
uint 0x00000000	Unknown.				
ushort Number	The house's multi number.				
uint Radius	The object's tile radius.				
ushort 0x0000	Unknown.				
Packet Description: This is sent to bring up a house-placing target. The client responds with a normal Target packet.					

Ultima Online Protocol :: Text Entry

Packet #	Packet Name	Length	Client	Server	Obsolete
0x9A	Text Entry	dynamic	?	?	X
Data Type	Description				
byte 0x9A	The packet number.				
ushort Size	The size of the packet.				
uint Serial	The player's serial.				
uint Prompt	The internal serial of the prompt.				
uint Type	The type of message. <ul style="list-style-type: none"> • 0x00 - Request/Cancel • 0x01 - Response 				
char[] Text	The text that was entered. This is included only if Type is Response.				
byte 0x00	Null terminator for Text.				

Packet Description:

The server sends this to prompt the user to enter a line of text, and the client sends it as a response.

This packet was replaced with the [Unicode Text Entry](#) packet.

Ultima Online Protocol :: Request Assistance

Packet #	Packet Name	Length	Client	Server	Obsolete
0x9B	Request Assistance	0x0102	✓	X	X
Data Type	Description				
byte 0x9B	The packet number.				
byte[257] Data	Empty array.				
Packet Description: This is sent when the client clicks the Help button.					

Ultima Online Protocol :: Shop Sell

Packet #	Packet Name	Length	Client	Server	Obsolete
0x9E	Shop Sell	dynamic	X	✓	X
Data Type	Description				
byte 0x9E	The packet number.				
ushort Size	The size of the packet.				
uint Vendor	The serial of the vendor.				
ushort NumItems	The number of items in the list.				
loop { uint Serial ushort Artwork ushort Hue ushort Amount uint Price byte Length char[] Name }	This loop contains information for each item in the shop inventory. Serial: The item's serial. Artwork: The item's artwork number. Hue: The item's hue. Amount: The amount of the item available. Price: The price of the item. Length: The length of the item's name. Name: The name of the item.				
Packet Description: This is sent to display the player's shop inventory when selling to a vendor.					

Ultima Online Protocol :: Shop Offer

Packet #	Packet Name	Length	Client	Server	Obsolete
0x9F	Shop Offer	dynamic	✓	X	X
Data Type	Description				
byte 0x9F	The packet number.				
ushort Size	The size of the packet.				
uint Vendor	The serial of the vendor.				
ushort NumItems	The number of items being sold.				
loop { uint Serial ushort Amount }	This loop contains the serial and amount of each item being sold to the vendor. Serial: The item's serial. Amount: The amount of the item being sold.				
Packet Description: This is sent by the client to sell items to a vendor.					

Ultima Online Protocol :: Server Select

Packet #	Packet Name	Length	Client	Server	Obsolete
0xA0	Server Select	0x0003	✓	X	X
Data Type	Description				
byte 0xA0	The packet number.				
ushort Index	The 0-based index of the server that was selected.				
Packet Description: This is sent by the client after selecting a server.					

Ultima Online Protocol :: HP Health

Packet #	Packet Name	Length	Client	Server	Obsolete
0xA1	HP Health	0x0009	X	✓	X
Data Type	Description				
byte 0xA1	The packet number.				
uint Serial	The target character's serial.				
ushort Maximum	The maximum amount of hit points.				
ushort Current	The current amount of hit points.				
Packet Description: This is sent to update a character's hitpoints.					

Ultima Online Protocol :: Mana Health

Packet #	Packet Name	Length	Client	Server	Obsolete
0xA2	Mana Health	0x0009	X	✓	X
Data Type	Description				
byte 0xA2	The packet number.				
uint Serial	The target character's serial.				
ushort Maximum	The maximum amount of mana.				
ushort Current	The current amount of mana.				
Packet Description: This is sent to update a character's mana.					

Ultima Online Protocol :: Fat Health

Packet #	Packet Name	Length	Client	Server	Obsolete
0xA3	Fat Health	0x0009	X	✓	X
Data Type	Description				
byte 0xA3	The packet number.				
uint Serial	The target character's serial.				
ushort Maximum	The maximum amount of stamina.				
ushort Current	The current amount of stamina.				
Packet Description: This is sent to update a character's stamina.					

Ultima Online Protocol :: Web Browser

Packet #	Packet Name	Length	Client	Server	Obsolete
0xA5	Web Browser	dynamic	X	✓	X
Data Type	Description				
byte 0xA5	The packet number.				
ushort Size	The size of the packet.				
char[] Address	The web address to open.				
byte 0x00	Null terminator for Address.				
Packet Description: This is used to direct the user to an internet address.					

Ultima Online Protocol :: Message

Packet #	Packet Name	Length	Client	Server	Obsolete
0xA6	Message	dynamic	X	✓	✓
Data Type	Description				
byte 0xA6	The packet number.				
ushort Size	The size of the packet.				
byte Type	The type of message. <ul style="list-style-type: none">• 0x00 - Tip• 0x01 - Update				
uint 0x0000	Update Number?				
uint Number	The tip number.				
ushort Length	The length of the message, including the null terminator.				
char[] Message	The body of the message.				
byte 0x00	Null terminator for Message.				
Packet Description: This is used to display a tip or update message.					

Ultima Online Protocol :: Request Tip

Packet #	Packet Name	Length	Client	Server	Obsolete
0xA7	Request Tip	0x0004	✓	X	✓
Data Type	Description				
byte 0xA7	The packet number.				
ushort Number	The number of the current tip. 0xFFFF is request first.				
byte Direction	The direction of the requested tip.				
	<ul style="list-style-type: none">0x00 - Previous0x01 - Next				
Packet Description: This is sent to request a tip.					

Ultima Online Protocol :: Server List

Packet #	Packet Name	Length	Client	Server	Obsolete
0xA8	Server List	dynamic	X	✓	X
Data Type	Description				
byte 0xA8	The packet number.				
ushort Size	The size of the packet.				
byte Flags	Server list flags.				
ushort Number	The number of servers in the list.				
loop { ushort Index char[32] name byte Full byte Timezone uint Address }	Index: The server's 0-based index. Name: The name of the server. Full: The percentage of players/maximum for the server. Timezone: The server's timezone bias. Address: The server's IP address in Big Endian.				
Packet Description: This displays the server list.					

Ultima Online Protocol :: Character List

Packet #	Packet Name	Length	Client	Server	Obsolete
0xA9	Character List	dynamic	X	✓	X
Data Type	Description				
byte 0xA9	The packet number.				
ushort Size	The size of the packet.				
byte num_chars	The number of characters in the list.				
<pre> loop { char[30] name char[30] password } </pre>	This loop contains the name and password (if any) of each character in the list. Loop for num_chars.				
byte num_cities	The number of cities in the list.				
<pre> loop { byte Index char[30] name byte 0x00 char[30] tavern byte 0x00 } </pre>	<p>This loop contains the name of each town and inn/tavern in the list of cities. Loop for num_cities.</p> <p>Index: The city's 0-based index number inside the loop. 0x00: Null terminator.</p>				
uint Flags	<p>Server features to enable:</p> <p>0x00000000 - None 0x00000001 - Unknown 0x00000002 - IGR Client 0x00000004 - Limit Characters 0x00000008 - Context Menus 0x00000010 - One Character - To enable this you must also include the 0x00000004 flag.</p> <p>0x00000020 - Age of Shadows 0x00000040 - Sixth Character Slot</p> <p>Note that Flags may not be present in the packet.</p>				

Packet Description:

This packet sends the list of characters and cities.

In older clients, the Login OK packet accomplished this.

Also, some clients may require that all five characters be sent even if they are not used.

Note: To enable the creation of AOS characters, the [Features](#) packet must be sent prior to this packet; the same goes for the Sixth Character Slot.

Ultima Online Protocol :: Current Target

Packet #	Packet Name	Length	Client	Server	Obsolete
0xAA	Current Target	0x0005	X	✓	X
Data Type	Description				
byte 0xAA	The packet number.				
uint Serial	The serial of the current attack target.				
Packet Description: This tells the client which target they are fighting.					

Ultima Online Protocol :: String Query

Packet #	Packet Name	Length	Client	Server	Obsolete
0xAB	String Query	dynamic	X	✓	X
Data Type	Description				
byte 0xAB	The packet number.				
ushort Size	The size of the packet.				
uint Serial	The query serial.				
byte 0x00	Unknown.				
byte 0x00	Unknown.				
ushort Length1	The length of the text that follows.				
char[] Text1	Text to appear at the top of the gump.				
bool Cancel	If true, the client is able to cancel the query.				
byte Type	The type of query. <ul style="list-style-type: none">0x01 - String0x02 - Number				
uint Max	If Type is String, this is the maximum length of the reply. If Type is Number, this is the maximum number that can be entered.				
ushort Length2	The length of the text that follows.				
char[] Text2	Text to appear above the entry box.				
Packet Description: This is used to elicit a string or numerical response from the client.					

Ultima Online Protocol :: String Response

Packet #	Packet Name	Length	Client	Server	Obsolete
0xAC	String Response	dynamic	✓	X	X
Data Type	Description				
byte 0xAC	The packet number.				
ushort Size	The size of the packet.				
uint Serial	The query serial.				
byte 0x00	Unknown.				
byte 0x00	Unknown.				
byte Type	<div>The message type.</div> <ul style="list-style-type: none">0x00 - Cancel0x01 - Normal				
ushort Length	The length of the response, including the null terminator.				
char[] Text	The client's text response.				
byte 0x00	Null terminator for text. If Length is zero, this is not included.				
<div>Packet Description:</div> <div>This is the client's response to the String Query packet.</div>					

Ultima Online Protocol :: Speech Unicode

Packet #	Packet Name	Length	Client	Server	Obsolete
0xAD	Speech Unicode	dynamic	✓	X	X
Data Type	Description				
byte 0xAD	The packet number.				
ushort Size	The size of the packet.				
byte Mode	<p>The speech mode.</p> <ul style="list-style-type: none"> • 0x00 - Regular • 0x01 - Broadcast • 0x02 - Emote • 0x06 - System • 0x07 - Message • 0x08 - Whisper • 0x09 - Yell <p>The flag 0xC0 is included if the message contains keyword information.</p>				
ushort Hue	The hue of the message.				
ushort Font	The font number.				
char[4] Language	The client's language preference.				
byte[] KeywordInfo	<p>If Mode includes the keyword flag (0xC0), this information will be present.</p> <p>This is an array of 12-bit integers padded into a byte array. The first 12-bit integer contains the number of keywords in the array.</p> <pre>nrKeywords = (KeywordInfo[0] << 4) + (KeywordInfo[1] >> 4); keyword1 = ((KeywordInfo[1] % 0x10) << 8) + KeywordInfo[2]; keyword2 = (KeywordInfo[3] << 8) + (KeywordInfo[4] >> 4); keyword3 = ((KeywordInfo[4] % 0x10) << 8) + KeywordInfo[5];</pre> <p>and so on...</p>				
uni[] Text	The client's message.				
byte 0x00	Null terminator for Text.				

Packet Description:

Clients send this packet when talking.

Ultima Online Protocol :: Text Unicode

Packet #	Packet Name	Length	Client	Server	Obsolete
0xAE	Text Unicode	dynamic	X	✓	X
Data Type	Description				
byte 0xAE	The packet number.				
ushort Size	The size of the packet.				
uint Serial	The serial of the character that is talking. 0xFFFFFFFF is used for system.				
uint Body	The body number of the character that is talking. 0xFFFF is used for system.				
byte Mode	<div>The speech mode.</div> <ul style="list-style-type: none">0x00 - Regular0x01 - Broadcast0x02 - Emote0x06 - System0x07 - Message0x08 - Whisper0x09 - Yell				
ushort Hue	The hue of the message.				
ushort Font	The font number.				
char[4] Language	The client's language preference.				
char[30] Name	The name of the character that is talking.				
uni[] Text	The message to send.				
short 0x0000	Null terminator for Text.				
<div>Packet Description:</div> <div>This is sent to tell the client that someone is talking.</div>					

Ultima Online Protocol :: Death Animation

Packet #	Packet Name	Length	Client	Server	Obsolete
0xAF	Death Animation	0x000D	X	✓	X
Data Type	Description				
byte 0xAF	The packet number.				
uint Serial	The serial of the dying character.				
uint Corpse	The serial of the corpse item.				
uint 0x00000000	Unknown.				
Packet Description: This is used to display a death animation.					

Ultima Online Protocol :: Generic Gump

Packet #	Packet Name	Length	Client	Server	Obsolete
0xB0	Generic Gump	dynamic	X	✓	X
Data Type	Description				
byte 0xB0	The packet number.				
ushort Size	The size of the packet.				
uint Player	The serial of the player.				
uint Serial	The serial of the gump.				
uint Left	The x position in pixels at which the gump will appear.				
uint Top	The y position in pixels at which the gump will appear.				
ushort Length_Data	The length of the gump data.				
char[] Data	The gump data.				
byte 0x00	Null terminator for Data.				
ushort Lines	The number of text lines in the gump.				
loop { ushort Length uni[] Text }	This loop contains textual data for the gump. Length: The length of the text. Text: The text.				
Packet Description: This is used to display a gump.					

Ultima Online Protocol :: Generic Gump Trigger

Packet #	Packet Name	Length	Client	Server	Obsolete
0xB1	Generic Gump Trigger	dynamic	✓	X	X
Data Type	Description				
byte 0xB1	The packet number.				
ushort Size	The size of the packet.				
uint Player	The serial of the player.				
uint Serial	The serial of the gump.				
uint Button	The serial of the button that was pressed.				
uint Switches	The number of switches in the loop.				
loop { uint SwitchID }	This is a loop of all selected switches (radios/checkboxes). SwitchID: The switch's serial.				
uint Entries	The number of text entry responses included in the list.				
loop { ushort Number ushort Length uni[] Text }	This loop contains textual data for the gump. Number: The text entry serial. Length: The length of the text. Text: The text.				
Packet Description: This is sent when the user responds to a gump.					

Ultima Online Protocol :: Features

Packet #	Packet Name	Length	Client	Server	Obsolete
0xB9	Features	0x0003	X	✓	X
Data Type	Description				
byte 0xB9	The packet number.				
ushort Flags	<p>Features to enable:</p> <ul style="list-style-type: none"> 0x0000 - None 0x0001 - Chat 0x0002 - LBR Animations 0x0004 - Unknown 0x0008 - Unknown2 0x0010 - Create Paladin/Necromancer 0x0020 - Sixth Character Slot <p>0x8000 - More Features</p> <ul style="list-style-type: none"> - This flag must be present to enable Age of Shadows features or the Sixth Character Slot. 				

Packet Description:

This packet enables various client-side features, and should be sent before the [Character List](#) packet.

Note that in order to create a Paladin or Necromancer or use the sixth character slot, the corresponding flags in the [Character List](#) packet must be set.

Ultima Online Protocol :: Unicode Text Entry

Packet #	Packet Name	Length	Client	Server	Obsolete
0xC2	Unicode Text Entry	dynamic	✓	✓	X
Data Type	Description				
byte 0xC2	The packet number.				
ushort Size	The size of the packet.				
uint Serial	The serial of the player.				
uint inputSerial	A unique serial for a specific input packet that is used by the server to keep track of return values sent by the client.				
uint 0x00000000	Unknown				
uint 0x00000000	Unknown				
uni[] Text	The client's response to the packet. If the player presses the Escape key, there is no text.				
Packet Description: This is sent by the server to get a string from the client which is entered like normal text and then returned by the client with another Text Input packet.					

Ultima Online Protocol :: Global Queue

Packet #	Packet Name	Length	Client	Server	Obsolete
0xC3	Global Queue	dynamic	X	✓	X
Data Type	Description				
byte 0xC3	The packet number.				
ushort Size	The size of the packet.				
uint 0x00000000	Unknown				
uint callSerial	The serial of the call.				
uint Customer	The caller's Customer serial.				
uint Customer2	The caller's Customer serial (this one's in parentheses).				
uint Caller	The serial of the character who made the call.				
ushort 0x0000	Unknown				
ushort LengthOfName	The length of the server name that the call was made on.				
char[] Server	An array of characters containing the name of the server on which the call was made.				
uint callTime	The time the call was placed, or maybe how long they've been waiting?				
ushort Facet	The facet (C# VB7) the call was made on.				
uint X	The character's X-position at the time the call was placed.				
uint Y	The character's Y-position at the time the call was placed.				
uint Z	The character's Z-position at the time the call was placed.				
uint Volume	???				
uint Rank	???				
uint 0xFFFFFFFF	Unknown				
uint CallType	The type of call (C# VB7) that was placed.				
byte 0x00	Unknown				

char[3] Language	The caller's language.
ushort Length	The length of the description the caller gave.
uni[] Reason	The reason for the call.

Packet Description:

This packet is used to display a built-in menu that lists information about a Counselor/GM call.

When the menu is right-clicked, the user is provided with various ways to handle the call.

If the user is using a regular 2D client, Counselor commands will be provided.

If the user is using a [God Client](#), GM commands will be provided.

The 3D client does not support this packet.

Ultima Online Protocol :: Semivisible

Packet #	Packet Name	Length	Client	Server	Obsolete
0xC4	Semivisible	0x0006	X	✓	X
Data Type	Description				
byte 0xC4	The packet number.				
uint serial	The target character's serial.				
bool enabled	Can the target see you?				
<p>Packet Description:</p> <p>This packet is used to distinguish players who are able to see a given staff member in invisible form.</p> <p>This packet is processed by the Third Dawn client, but nothing seems to happen.</p>					

Ultima Online Protocol :: Global Queue Count

Packet #	Packet Name	Length	Client	Server	Obsolete
0xCB	Global Queue Count	0x0007	X	✓	X
Data Type	Description				
byte 0xCB	The packet number.				
ushort unknown	Unknown.				
uint Count	The number of calls in the Global Queue.				
<p>Packet Description:</p> <p>This packet displays a system message (in red) that tells the user how many calls are in the Global Queue.</p> <p>The 3D client does not support this packet.</p>					

Ultima Online Protocol :: IGR Logout

Packet #	Packet Name	Length	Client	Server	Obsolete
0xD1	IGR Logout	0x0002	✓	✓	X
Data Type	Description				
byte 0xD1	The packet number.				
bool status	If true, the client is requesting to log off or the server is telling it okay.				
Packet Description: IGR clients send this packet to log off, and will wait until it receives this packet from the server before logging off.					

Ultima Online Protocol :: Update Mobile

Packet #	Packet Name	Length	Client	Server	Obsolete
0xD2	Update Mobile	0x0019	?	✓	X
Data Type	Description				
byte 0xD2	The packet number.				
uint Serial	The character's serial.				
ushort Body	The character's body number.				
ushort X	The character's x-axis position.				
ushort Y	The character's y-axis position.				
sbyte Z	The character's z-axis position.				
byte Direction	The character's direction (C# VB7).				
ushort Hue	The character's hue.				
byte Status	The character's status (C# VB7).				
byte Notoriety	The character's notoriety.				
ushort Unknown	Unknown.				
ushort Unknown	Unknown.				
ushort Unknown	Unknown.				
ushort Unknown	Unknown.				

Packet Description:

This packet updates a character onscreen, similar to the [Naked MOB](#) packet.

This packet works somewhat with an item, but whether or not this is intentional is not known.

The exact purpose of this packet is unknown.

Ultima Online Protocol :: Show Mobile

Packet #	Packet Name	Length	Client	Server	Obsolete
0xD3	Show Mobile	dynamic	X	✓	X
Data Type	Description				
byte 0xD3	The packet number.				
ushort Size	The size of the packet.				
uint Serial	The character's serial.				
ushort Body	The character's body number.				
ushort X	The character's x-axis position.				
ushort Y	The character's y-axis position.				
sbyte Z	The character's z-axis position.				
byte Direction	The character's direction (C#VB7).				
ushort Hue	The character's hue.				
byte Status	The character's status (C#VB7).				
byte Notoriety	The character's notoriety.				
ushort Unknown	Unknown.				
ushort Unknown	Unknown.				
ushort Unknown	Unknown.				
loop { uint Item_Serial ushort Artwork byte Layer ushort Hue }	This is a loop of all equipped items on the character. Item_Serial: The serial of the item. Artwork: The item's artwork. - Add the flag 0x8000 if the item's hue is not zero. Layer: The item's clothing layer. Hue: The item's hue. Include this only if Artwork includes the flag 0x8000.				
uint 0x00000000	Signifies the end of the item loop.				

Packet Description:

This packet is used to display a character, similar to the [Equipped MOB](#) packet.

The exact purpose of this packet is unknown.

Ultima Online Protocol :: Book Info

Packet #	Packet Name	Length	Client	Server	Obsolete
0xD4	Book Info	dynamic	✓	✓	X
Data Type	Description				
byte 0xD4	The packet number.				
uint Serial	The item's serial.				
bool IsEditable	If true, the client is able to edit the book.				
bool IsEditable	If true, the client is able to edit the book. (Yes, this is here twice on purpose.)				
ushort Pages	The number of pages in the book.				
ushort Title_Length	The length of the title plus one for the terminating byte.				
char[] Title	The title of the book.				
byte 0x00	Null terminator for the title. Be sure to include this in the Title_Length.				
ushort Author_Length	The length of the author plus one for the terminating byte.				
char[] Author	The author of the book.				
byte 0x00	Null terminator for the author. Be sure to include this in the Author_Length.				
Packet Description: This is sent by the server to open a book, and by the client to change the title or author.					

Ultima Online Protocol :: Mega Cliloc

Packet #	Packet Name	Length	Client	Server	Obsolete
0xD6	Mega Cliloc	dynamic	X	✓	X
Data Type	Description				
byte 0xD6	The packet number.				
ushort Size	The size of the packet.				
ushort 0x0001	Unkown				
uint Serial	The serial of the object (either a creature or an item).				
ushort 0x0000	Unknown				
uint Serial2	The serial of the object?				
loop { uint ClilocID ushort AppendSize uni[] Text }	<p>This is a loop with the object's special properties. Note that the first entry is the item's name ID.</p> <p>ClilocID: The special property's Cliloc index.</p> <p>AppendSize: The size of the text in unicode that will be inserted as a Cliloc Token.</p> <p>Text: The text in unicode to be inserted. This is not included if AppendSize is 0.</p> <p>If there are multiple strings to be inserted, the strings are separated inside of Text by the ushort value of 0x0009.</p> <p>Take this into consideration when calculating AppendSize.</p>				
uint 0x00000000	This indicates the end of the packet/entries.				
Packet Description: This packet typically follows any packet that displays a creature/item.					

Ultima Online Protocol :: AOS Command

Packet #	Packet Name	Length	Client	Server	Obsolete
0xD7	AOS Command	dynamic	✓	✓	X
Data Type	Description				
byte 0xD7	The packet number.				
ushort Size	The size of the packet.				
ushort Command	The command being sent.				
	<ul style="list-style-type: none">• 0x0002 - House Customization :: Backup• 0x0003 - House Customization :: Restore• 0x0004 - House Customization :: Commit• 0x0005 - House Customization :: Destroy Item• 0x0006 - House Customization :: Place Item• 0x000C - House Customization :: Exit• 0x000D - House Customization :: Place Multi (Stairs)• 0x000E - House Customization :: Synch• 0x0010 - House Customization :: Clear• 0x0012 - House Customization :: Switch Floors• 0x0019 - Special Moves :: Activate/Deactivate• 0x001A - House Customization :: Revert				
Packet Description: This packet is used to perform various actions, mostly related to AOS features.					

Ultima Online Protocol :: Custom House

Packet #	Packet Name	Length	Client	Server	Obsolete
0xD8	Custom House	dynamic	X	✓	X
Data Type	Description				
byte 0xD8	The packet number.				
ushort Size	The size of the packet.				
ushort Method	A number representing the compression method used by the packet. Setting this to 0x0000 will indicate that the packet is not compressed.				
uint Serial	The serial of the house.				
ushort 0x0000	Unknown				
ushort 0x0000	Unknown				
ushort Components	The number of items that make up the design.				
ushort dataSize	The size of the data that contains component information. Normally this is derived by multiplying Components by five.				
loop { ushort Artwork byte X byte Y byte Z }	This loop contains the information below for each item that makes up the design of the house. Artwork: The object's tile ID. X: The object's X-position relative to the center of the house. Y: The object's Y-position relative to the center of the house. Z: The object's Z-position relative to the center of the house.				
Packet Description: This packet is sent by the server to display a house that has been customized.					

Ultima Online Protocol :: Character Transfer Log

Packet #	Packet Name	Length	Client	Server	Obsolete
0xDB	Character Transfer Log	dynamic	X	✓	X
Data Type	Description				
byte 0xDB	The packet number.				
ushort Size	The size of the packet.				
uint 0x000000BB	Unknown.				
uint Size - 7	The remaining length of the packet.				
uint Transfer_ID	The ID number of the character transfer. This is in Big Endian format.				
uint 0x00000000	Unknown.				
uint 0x00000000	Unknown.				
<pre> loop { uint item_serial uint info_size loop { uint text_id byte token_length loop { uni[] token_text ushort 0x0009 } } } </pre>	<p>This loop contains all the items included in the character transfer.</p> <p>item_serial: The item's serial. This is in Big Endian format.</p> <p>info_size: The length of the info that follows in the next loop. This is in Big Endian format.</p> <p>text_id: The cliloc number of the item's name or property. If this is zero, it defaults to 'Transfer Crate.'</p> <p>token_length: The length of the following loop.</p> <p>token_text: The text to insert into the cliloc token.</p> <p>0x0009: This signals the end of a token.</p>				

Packet Description:

When a character transfer is confirmed, the server sends this to create a log of all the items being included in the transfer.

This log is saved to translog.txt.

Item properties are also included in this packet.

Be very careful about calculating lengths and sizes or you might end up with a very large log file.

Ultima Online Protocol :: Mobile Status (VB.NET)

```
Imports System
```

```
Namespace Common
```

```
    Public Enum MobileStatus
```

```
        Normal = 0x00
```

```
        Unknown = 0x01
```

```
        CanAlterPaperdoll = 0x02
```

```
        Poisoned = 0x04
```

```
        GoldenHealth = 0x08
```

```
        Unknown2 = 0x10
```

```
        Unknown3 = 0x20
```

```
        WarMode = 0x40
```

```
        Hidden = 0x80
```

```
    End Enum
```

```
End Namespace
```

The values in the enumeration are flags used to represent a character's status.

The CanAlterPaperdoll flag, if enabled in an [Open Paperdoll](#) packet, allows the player receiving the packet to add and remove the target's clothing.

Ultima Online Protocol :: Direction (VB.NET)

```
Imports System
```

```
Namespace Mobiles
```

```
    Public Enum Direction
```

```
        Northeast
```

```
        East
```

```
        Southeast
```

```
        South
```

```
        Southwest
```

```
        West
```

```
        Northwest
```

```
        North
```

```
    End Enum
```

```
End Namespace
```

The values in the enumeration run from 0 (Northeast) to 7 (North). When used with a packet (such as the [Request Movement](#) packet), the flag &H80 will indicate that the character is running in the specified direction.

Ultima Online Protocol :: Layer (VB.NET)

```
Imports System
```

```
Namespace Common
```

```
    Public Enum Layer
```

```
        None = 0
```

```
        LeftHand = 1
```

```
        RightHand = 2
```

```
        Shoes = 3
```

```
        Pants = 4
```

```
        Shirt = 5
```

```
        Hat = 6
```

```
        Gloves = 7
```

```
        Ring = 8
```

```
        Neck = 10
```

```
        Hair = 11
```

```
        Waist = 12
```

```
        Torso = 13
```

```
        Bracelet = 14
```

```
        MonGen = 15
```

```
        Beard = 16
```

```
        Sash = 17
```

```
        Ears = 18
```

```
        Arms = 19
```

```
        Back = 20
```

```
        Backpack = 21
```

```
        Robe = 22
```

```
        Skirt = 23
```

```
        Leggings = 24
```

```
        Mount = 25
```

```
        Vendor_Buy = 26
```

```
        Vendor_Restock = 27
```

```
        Vendor_Sell = 28
```

```
        Bank = 29
```

```
    End Enum
```

```
End Namespace
```

The values in the enumeration represent item layers.

Ultima Online Protocol :: Skills (Client Version)

Packet #	Packet Name	Length	Client	Server	Obsolete
0x3A	Skills (Client Version)	dynamic	✓	✓	X
Data Type	Description				
byte 0x3A	The packet number.				
ushort Size	The size of the packet.				
ushort SkillID	The 0-based skill number (See List).				
byte Status	The lock status of the skill (C# VB7).				
Packet Description: This is the client version of the Skills packet. The client sends this packet to change a skill lock.					