

Exxy says, "I'll do a speed-lecture through the preliminary information then."
Exxy says, "Since all three of you seem to be up to par."
Exxy asks, "Someone want to log this?"
>"Already am.You say, "Already am."
Exxy grins.
Exxy picks his nose for your log.
Exxy says, "There ya go"
Niomar says, "Hehe, always log (auto)."
THINK[Exxy]: "Natheme or Rhiann, can you spank 'Denial' for his poor OOC name choice?"
THINK[Natheme]: "will do, boss."
Exxy says, "Alright, we all know what a script is and what a script does."
Fros nods.
Exxy says, "They're a collection of commands written in a human-perceivable form that's saved on the server. The server uses them for all kinds of things."
Exxy says, "It's basically what runs the game."
Exxy says, "The name of the language that these commands are written in is simply called 'EaxiaSEL' right now."
Exxy says, "Eaxia Scripting Engine Language."
Exxy says, "Real original, I know"
Exxy grins.
Fros grins.
Niomar nods.
Exxy says, "There's a procedure for writing these scripts"
Exxy says, "Let's talk about that first."
Exxy says, "All of our programmers, with the exception of myself and Kaze (programming department manager) has to create their scripts locally on their hard drive and then upload them to a special FTP server."
Exxy says, "This server is plugged into a parallel game service on the server called the 'development server'.
Exxy says, "We generally have a development server running on a different port so you programmers can test your scripts out without interfering with live data."
Exxy says, "All scripts have to follow the same naming convention."
Exxy says, "When you go to create a script and need to test it, obtain a script number from Kaze or myself"
Exxy says, "This is vital"
Exxy says, "When you receive your script number, you will need to rename your script filename to follow our naming convention"
Exxy says, "That format is: MSxxxxxxx.TXT"
Exxy says, "Where 'xxxxxxx' is a six-digit, zero-padded ID of the script number."
Exxy says, "For instance."
Niomar asks, "Do we need to hold all questions till the end or ask as we go along?"
Exxy says, "I'll break every so often"
Exxy says, "Fros, if I told you to go create a JUMP command"
Niomar nods.
Exxy says, "And you did so and needed to begin testing/debugging your script"
Exxy says, "You would come to me or Kaze and say "please give me a script # for my script".
Fros nods.
Exxy says, "I'll give you some number... for example, 1850."
Exxy says, "And you would name your script MS001805.TXT"
Exxy says, "You would upload that file to the development game server"
Exxy says, "Log into the development game server"
Exxy says, "And test it out"
Exxy smiles.
Fros nods.
Exxy asks, "Any questions with the process so far?"
Niomar grins.
Niomar says, "I got two..."
Exxy nods to Niomar.
Exxy says, "Go ahead"
Fros says, "i've got one"
Niomar asks, "One is really kind of off topic, but what happens when we get over 1 million scripts

(while unlikely, it could happen)?"

Exxy grins.

Niomar says, "Seems unlikely now, but could easily happen."

Exxy says, "We've been up for just under a year now and only have used 522."

Exxy says, "So I'll cross that bridge when .. if we ever get to it."

Niomar nods.

Exxy asks, "Next?"

Exxy smiles at Niomar.

Niomar asks, "Can we get bundles of script numbers in advance incase we immediately come up with an idea, etc, and want to try it asap?"

Fros nods.

Exxy says, "Yes. We usually give a block of numbers to our dedicated programmers."

Fros smiles.

Niomar nods to Exxy.

Exxy says, "Stoneheart, for instance, has all of the 700's."

Niomar says, "Sounds great."

Exxy smiles.

Exxy nods.

Exxy asks, "Fros?"

Fros asks, "how does one log into the development game server?"

Exxy says, "Same way you log into the live server."

Exxy says, "Port 100 instead of port 347 though."

Fros says, "ok"

Exxy says, "Now"

>raise handYou raise your hand.

Exxy says, "The development game server is not always running"

Exxy says, "If it isn't, just bug me to start it up"

Exxy asks, "Yes, Liss?"

Exxy smiles at you.

>"How do you upload the scripts (in text files) onto the FTP, please?You ask, "How do you upload the scripts (in text files) onto the FTP, please?"

Fros grins.

Fros says, "took my next question"

Exxy says, "A lot of people don't have a seperate FTP client, which is what I use."

Exxy says, "So you're welcome to connect to the FTP server using Internet Explorer."

Exxy says, "Kind of a pain to set up"

Exxy says, "But you will want to point your browser to ftp://eaxia.com/"

Exxy says, "If a login prompt comes up automatically, wonderful"

Exxy says, "If not... it's real complicated getting it to"

Exxy grins.

Exxy says, "I hate IE."

Niomar chuckles at Exxy.

Exxy says, "Anyway, we'll assume that it does for now"

Fros grins.

Exxy says, "There is a special login for the development server"

Exxy says, "And it's shared among all coders"

Exxy says, "Let me get that info"

Exxy says, "The login id is: eaxdeveloper"

Exxy says, "The password is: gs45yas24dsg8vas"

<Note = no longer valid password>

Exxy says, "In IE, you drag-and-drop files from your hard drive folders to the FTP folder."

Exxy says, "Or from, if you want to download them from the server to your computer."

Exxy smiles and waits.

Niomar says, "Lol, got a question..."

Niomar says, "Feel really stupid for this one too"

Niomar says, "Hehe, and its IE related"

Niomar ducks.

Exxy grins.

Exxy says, "Go ahead"

Niomar says, "I auto-saved my information for the normal FTP eaxia site, any known way to log out

so I can log in to the development FTp/"

Exxy says, "File->Login As..."

Niomar says, "Ah, great."

Niomar says, "Never really dealt much for FTPs untill recently."

Niomar says, "Thanks, all set."

Exxy grins.

Exxy nods.

Exxy asks, "Any questions?"

Fros shakes his head.

Niomar shakes his head.

>"I'm good. Kleenex run, sorry.You say, "I'm good. Kleenex run, sorry."

>Exxy says, "After that point, the script goes to Kaze or myself in e-mail"

Exxy says, "We look the script over and QC it.. make sure that even though it worked the way you want it to, it's going to work in general"

Exxy says, "Big picture thing"

Exxy says, "Etc etc"

Exxy says, "Then we put it on the live server if everything looks good"

Niomar asks, "We personally email you (or Kaze) the script?"

Exxy nods to Niomar.

Exxy says, "Yeppers"

Niomar says, "Any email address in particular or just the @eaxia.com"

Exxy says, "Always the @eaxia.com"

>"May I please have a number? Just to save the text thingee as, I won't do anything else with it yet.You say, "May I please have a number? Just to save the text thingee as, I won't do anything else with it yet."

Exxy says, "Sure, umm one sec"

Exxy says, "1132."

>"Thanks.You say, "Thanks."

Exxy says, "Right now there are six types of scripts."

Exxy says, "Six different *basic* types of scripts"

Exxy says, "Player commands, NPCs, spells, rooms, objects, and utility."

Exxy says, "By "player commands" we mean "any script that is executed as a result of a connected character [player OR staff] typing in a command"."

Exxy says, "That includes all of our emotes"

Exxy says, "Everything"

Exxy says, "OLC commands"

Exxy says, "Everything"

Exxy says, "Room scripts are scripts attached to a room. Any time something is typed, the room script gets to run first and perform any actions it wants."

Exxy says, "Depending on how the room script reacts, the engine will either stop there, or continue to proceed to the player command scripts."

Exxy says, "This is what lets us override/change a default command in a room."

Exxy says, "As well as make rooms like 17 (lockout room)."

Niomar nods.

Exxy says, "Object scripts are attached to an object (woo, wonder why they're called object script right? <g>)."

Exxy says, "They are called in two ways"

Exxy says, "The first is through player command scripts"

Exxy says, "Take TAP for instance."

Exxy says, "The player command script for TAP does a lot of stuff most emotes do"

Exxy says, "Finds the player in the room they typed.."

Exxy says, "No player, try to tap an object"

Exxy says, "ETc etc."

Exxy says, "Well if an object is found, it'll try and go run that object's script first."

Exxy says, "This allows us to attach verbs to objects."

Exxy says, "Depending on what the object script returns back will tell the TAP player command script whether or not "TAP" was handled by the object script or if it should just do a default tap"

Exxy says, "The other way an object script is called is through a concept called 'events'."

Exxy says, "VB programmers are aware of this concept as well"

Exxy says, "Every few seconds, all objects that have a script attached are called by the engine"

Exxy says, "By 'called', we mean 'executed'/'launched'."

Exxy says, "This is called an 'event', because it's triggered by an event / action."

Exxy says, "In this case, the event is a timed interval... "every few seconds"."

Exxy says, "This lets us have fountains that bubble with water every once in a while"

Exxy says, "Wind whistling through trees"

Exxy says, "Etc etc."

Exxy says, "Every object script MUST handle the timer event first."

Exxy says, "We'll get into more details when we talk about objects specifically."

Exxy asks, "Any questions so far?"

Niomar shakes his head.

>raise handYou raise your hand.

Fros shakes his head.

Exxy nods to you.

Exxy asks, "Liss?"

Exxy smiles.

>"Lemme see if I have the order correctly... For example, I do an object look override thingee for LOOK something -- I can still make an invisible for the tap, right? Because it will do the room one first, then the object?You ask, "Lemme see if I have the order correctly... For example, I do an object look override thingee for LOOK something -- I can still make an invisible for the tap, right? Because it will do the room one first, then the object?"

>"Or would the invisible interfere with the look?You ask, "Or would the invisible interfere with the look?"

Exxy asks, "Explain what you mean by invisible?"

>"Yes, just an ordinary object that's invis and manip-invis.You say, "Yes, just an ordinary object that's invis and manip-invis."

>"Usually what we attach the 'look' to -- unless it's too long.You say, "Usually what we attach the 'look' to -- unless it's too long."

Exxy says, "I see"

Exxy says, "Let me explain the long way for Niomar and Fros and anyone else reading this log who might not be up to par about the situation we're talking about"

>nod exxYou nod to Exxy.

Exxy says, "Usually our full description (LOOK description) on an object is limited to 320 characters. We try to keep it under 310 to allow QC changes."

Exxy says, "If we need to expand on this, and we know the object is stationary, something we can do is to put the LOOK description in a room script."

Exxy says, "We override the LOOK command *only* if the script is refering to the object we want to override."

Exxy says, "Provide the messaging, etc."

Exxy says, "And then the engine knows to stop there, since we return back a value instructing it to stop."

>nodYou nod.

Exxy says, "For other objects..."

Exxy says, "Our room script would not override anything"

Exxy says, "The engine would proceed to the LOOK player command script"

Exxy says, "And we'd get the normal look description of that object."

>"Perfect. Thanks.You say, "Perfect. Thanks."

Niomar nods.

Exxy says, "Incidentally, the object being visible or invisible has nothing to do with this particular issue."

Exxy says, "So it won't hurt or help to have the object's flags and values set differently."

>nodYou nod.

Exxy says, "NPC scripts are incredibly complex, and we will not be covering them tonight."

Exxy says, "They are entirely event driven."

Exxy says, "Stay away from them for now."

Exxy grins.

Niomar asks, "When anticipating player events, must we type out every possible variation or does the core engine recognize and complete most of that for us?"

Exxy says, "That's a question relating to how our engine handles expressions"

Exxy says, "Such as IF/ELSE_IF/ELSE..."

Exxy says, "There are operators that you can use in your expression to check for abbreviations of

commands."
Exxy says, "for example"
Exxy says, "If I wanted to check \$parameter0 (which is the first word the player typed in room and player command scripts) to see if they typed LOOK"
Exxy says, "Then my expression line would look something like this:"
Exxy says, "IF (\$parameter0 \$\$ "LOOK")"
Exxy says, "The \$\$ (double dollar sign) operator checks all abbreviations of 'a' against 'b' and is non-case sensitive."
Niomar says, "Ah, got it."
Exxy says, "Something else to consider with this regard"
Niomar asks, "We can extend the dollar signs, correct?"
Exxy says, "Sometimes you want to override PANT, for instance"
Niomar asks, "As in having 3, 4 or 5, etc?"
Exxy says, "One moment please"
Niomar says, "Sorry for my question"
Exxy smiles at Niomar.
Exxy says, "Sometimes you want to override PANT, for instance"
Exxy says, "But the absolute abbreviation (P and PA) are abbreviations for PACE."
Exxy says, "There are two ways to handle this"
Exxy says, "The easiest is like this:"
Exxy says, "IF (\$parameter0 \$\$ "PANT") Not (\$parameter0 \$\$ "PACE")"
Exxy says, "Which is a true expression only if the first subexpression is true and not the second."
Exxy asks, "Niomar, your question?"
Niomar asks, "We can extend the dollar signs, correct?"
Niomar asks, "As in having 3, 4 or 5, etc?"
Exxy asks, "Give me an example?"
Niomar ponders.
Niomar says, "Actually, nevermind, wouldn't need to extend if you have the first two"
>"IF (\$parameter0 \$\$\$ "PANT")You say, "IF (\$parameter0 \$\$\$ "PANT")"
Fros asks, "\$\$ is just an operator, just like ++ in c, right?"
>nodYou nod.
Exxy says, "++ in C is an operator that changes data."
Exxy says, "\$\$ is an operator in EaxiaSEL that evaluates data"
Fros says, "well yeah, more like &&"
Exxy says, "Yes"
Niomar says, "I was thinking along the lines of Liss, but if they type PAN on the \$\$, then it should assume Pant from the start (I think that is right)."
Exxy says, "Visit <http://staff.eaxia.com/EaxiaSEL/>"
Exxy says, "Check out Expressions"
Exxy says, "(\$\$ isn't listed yet)"
Exxy says, "\$\$ is just the name of the operator. It has no bearing on how long it checks for"
Exxy says, "You could just as easily do: IF (\$parameter0 \$\$ "INVENTORY")"
Exxy says, "For: i, I, in, In, iN, IN, inv, inV, iNv, iNV, Inv, InV, INv, INV, inve.... etc."
Niomar shudders.
Exxy says, "It handles all of em"
Exxy says, "For ya"
Exxy grins.
Fros says, "question"
Exxy says, "Yes"
Exxy smiles.
Fros says, "how would we know in advance what commands should have precedence"
Fros says, "as in your example with pant and pace"
Exxy says, "Two ways"
Exxy says, "Easiest is trial and error"
Exxy grins.
Exxy paces around.
Exxy pants.
Fros grins.
Exxy grins.
Exxy says, "Second is to open COMMANDS.TXT"

Exxy says, "COMMANDS.TXT is an index of what player commands exist, what order they are in, and what scripts are attached to them."
Fros nods.
Fros says, "ok"
Exxy says, "The engine reads this file on startup."
Exxy says, "So the format has to be the same (no comments or extra spacing allowed, for instance)"
Exxy says, "But that's a big help for figuring out what went where"
Fros asks, "can i ask you a question that's kinda off topic?"
Exxy says, "Note if you change COMMANDS.TXT, you must type RELOAD_COMMANDS in game for the engine to re-load from the file."
Exxy says, "Sure"
Exxy smiles at Fros.
Fros nods.
Fros asks, "do you use a buffer manager of sorts when evaluating scripts, so that the server doesn't have to read from the disk all the time?"
Exxy says, "Nope. I've thought of keeping command scripts in memory for that reason"
Fros nods.
Exxy says, "But as of right now, there is absolutely no noticable delay."
Exxy says, "I've also fine-tuned the server for file-access speed"
Fros nods.
Fros says, "if you need help, let me know"
Exxy says, "If it becomes a problem, I will probably do that"
Fros grins.
Fros nods.
Exxy says, "I'll also be adding a RAID controller"
Exxy says, "For speed"
Fros nods.
Fros says, "sorry for the digression"
Exxy asks, "Any more questions?"
Exxy smiles.
Niomar shakes his head.
Exxy nods.
Fros shakes his head.
>shake head
Exxy says, "Okay, there are two more types of scripts"
>You shake your head.
Exxy says, "Utility scripts"
Exxy says, "C and VB programmers, you two should be familiar with functions."
Exxy says, "You can write a script that performs a few things and returns back a value."
Exxy says, "Then have another script call this script, requesting more information"
Exxy says, "For example"
Exxy says, "Say I want to write a utility script that performs a skill check"
Exxy says, "We use AD&D 3rd edition mechanics here"
Niomar grins.
Exxy says, "Everyone has a skill level in all the skills"
Exxy says, "Certain bonuses"
Exxy says, "Racial adjustments"
Exxy says, "Etc."
Exxy says, "When we want to check to see if someone can... climb something, for instance"
Exxy says, "We set a DC (difficulty check)"
Exxy says, "The DC is up to us, and determines how hard it is for the player to do this task"
Exxy says, "Say it's a log they have to climb over"
Exxy says, "Real easy.. DC of 5"
Exxy says, "Any Joe Schmoe can do it."
Exxy says, "The player gets their skill level + bonuses"
Exxy says, "And they get to "roll a 20-sided die"
Exxy says, "They add up the roll score and their skill level/bonus score"
Exxy says, "And if that beats the DC of 5, they climbed over the log"
Exxy says, "If not... they suck"
Niomar chuckles.

Niomar nods.

Exxy says, "Not an incredibly complex system"

Exxy says, "But a pain in the ass if we want to write all the variables and checks and random-number rolling for say 4 checks in a row"

Exxy says, "So we decide to write a utility script"

Exxy says, "The script we would write, we could have set up to accept the skill to be checked as \$parameter0, the DC as \$parameter1, and the skill level+bonuses in \$parameter2"

Exxy says, "The utility script would generate all the random numbers, blah blah, check the score versus the DC"

Exxy says, "And then return back a number like "0" for failed and "1" for success"

Exxy says, "Then all the other scripts in the game only need to talk to the utility script"

Exxy says, "Since the utility script does all the work"

Exxy says, "We currently have a utility script that checks the player's RT"

Exxy says, "If they have a RT still, it says "...wait XX second(s)" and tells the calling script to abort."

Exxy says, "There's a lot of room here for development."

Exxy asks, "Any questions?"

Fros shakes his head.

>shake headYou shake your head.

Niomar shakes his head.

Exxy smiles.

Exxy says, "Well I'm not as difficult to understand as I thought"

Exxy grins.

>grin exx

Exxy says, "Last script type are spell scripts"

>You grin at Exxy.

Exxy says, "These are also event-driven"

Exxy says, "Mostly from the engine, partially from the primary PREPARE player command script."

Exxy says, "Most of the work in the spell script is just providing messaging and doing the actual spell"

Exxy says, "Nothing incredibly complex."

Exxy says, "Currently, I'm the only one writing spell and NPC scripts, though Kaze is learning them too"

Exxy says, "So we'll leave those scripts off for another night."

Exxy says, "We'll dig into player command scripts, room scripts, and object scripts (in that order)."

Exxy says, "Utility scripts are what you make of them. They can be used anywhere, everywhere, and for tons of tasks... or you could never ever have a need for them. So there's not a lot more training I can give you there."

Exxy asks, "Sound good? Questions? Comments?"

Fros shakes his head.

>"All set.You say, "All set."

Niomar says, "I have one, hope I am not getting a head..."

Exxy says, "Sure, go ahead Niomar."

Niomar grins.

Niomar asks, "Hehe, on the shops that are being set up, I see most are being set up with the invis objects then using object scripts. Wouldn't it just be easier (and cleaner) to use room scripts like for "buy <weapon>", etc?"

Exxy says, "The room scripts that handle purchasing/buying objects rely on the FIND_OBJECT_xxx series of commands."

Exxy says, "That way the script is versatile in adapting to any kind of object."

Exxy says, "So you don't have to create a script that has all kinds of checks for all kinds of objects."

Exxy says, "As well, having an object that is "invisible" and "manipulatable while invisible" lets the player TAP, LOOK, READ, APPRAISE the item."

Exxy says, "So we just have it set up like that"

Exxy smiles.

Niomar chuckles.

Niomar says, "I must not be understanding something about how they are currently set up, would probably be best to just move on and then let me learn as after a few days of actual script coding."

Exxy says, "You may not be aware of how the object data is set up."

Exxy says, "What part don't you get? I'll explain"

Exxy smiles.

Niomar chuckles.

Niomar says, "Just seems easier if you had a room script that checked for "Buy <weapon>", then once that if statement is found true you could just run a routine to instantly create the item and hand it to the player (not even sure if you have made such commands for EaxiaSEL)"

Exxy says, "Yes, we could do that."

Exxy says, "The problem with doing that and not having the actual objects in the room is that it inflates the size of the script by an incredible amount, especially for large stores."

Exxy says, "Say you were selling 1 object."

Exxy says, "In a store"

Exxy says, "You would have to check "BUY SWORD""

Exxy says, "And "BUY SHORT SWORD"."

Exxy says, "And "BUY FIRST SWORD"."

Exxy says, "AND "BUY FIRST SHORT SWORD"."

Exxy says, "That's for 1 object."

Niomar asks, "Why the first?"

Exxy says, "Then when you've checked all four possibilities, you have to create the object on the spur of the moment."

Exxy says, "(Because some people type first <g>.. and when you have more than one sword, some people will definitely type second)"

Niomar chuckles.

Niomar says, "Two more questions before we move on if ya don't mind."

Exxy says, "Having the object on the ground lets us "FIND_COMPLEX_OBJECT_GET"."

Exxy says, "That will automatically check all the "my", "first", "other", descriptor, noun parts and provide back an object into \$object."

Niomar nods.

Exxy says, "Finding the object, we can use a command that duplicates the object and removes the gold at the same time"

Exxy says, "So all those lines of code just got reduced to a few lines."

Exxy says, "And the script is versatile. Add a new item and all you have to do is create the actual object"

Exxy says, "Of course, you have to adjust your catalog so that it shows the new object, but that's cake."

Niomar nods.

Exxy says, "So the point is efficiency. Helps debug the script for problems and to port it into new stores easily too."

Exxy says, "*efficient"

Exxy says, "But yes, we could technically do it all in a script if we wanted."

Exxy says, "One second"

Exxy says, "6 minute break. We'll pick it up at half-past the hour."

Niomar says, "Got two more questions for ya, though they really getting off topic (Still about scripts, but not directly in the order ya teaching), so they can wait till the end if need be."

Exxy nods.

Niomar asks, "First one is the get command...in order to make it so people can get second (other), third, etc <item>, would that require a few new commands for the EaxiaSEL or do the commands already exist, just lacks in the player command script?"

Niomar says, "Like, would there need to be a Find_Second_Complex_Object, etc."

Exxy says, "Commands already exist."

Niomar nods.

Exxy says, "The engine handles the parsing."

Exxy says, "It does all the filtering."

Exxy says, "Matches an object"

Niomar grins.

Exxy says, "And returns it back into \$object for the script."

Exxy says, "See the GET command on the server (script 4 I think)"

Niomar nods.

Niomar says, "On the second question, is there a command in the EaxiaSEL to move an object from one room to another (possible according to it's object number)? (without moving it to a players

hands, etc, just in the room)."

Exxy says, "To relocate an object? No."

Niomar chuckles.

Exxy says, "To create an object to a room by the room #? yes."

Exxy says, "To trash an object to room 100? Yes."

Exxy says, "There's been no need for object relocation, so no commands exist yet."

Exxy says, "None of our 193 commands"

Exxy grins.

Niomar nods.

Niomar says, "When ya say create an object to a room..."

Niomar asks, "Do ya mean you can create an object in the room even if no one is there (I.E. the object just appears on the ground)?"

Exxy says, "Yes."

Niomar nods.

Niomar says, "Okay, those were my only questions."

Niomar grins.

Exxy says, "The command creates a new objects, adds it to the list of items in the room specified, and retains a pointer/reference to that object in \$object."

Exxy says, "*object (not objects)"

Niomar nods.

Exxy says, "Our basic structure to our scripts relies on a few rules"

Exxy says, "All SEL commands need to be typed exactly as they appear"

Exxy says, "No abbreviations."

Exxy says, "No lowercase."

Exxy says, "All required parameters must be used or the entire line will be ignored."

Niomar nods.

Exxy says, "Style rules to follow:"

Exxy says, "Try to indent subsections together to make code more readable for programmers (as you'll see current examples do)."

Exxy says, "Include comments at the beginning of your script indicating what the script does, who wrote it, and any revision changes."

Niomar nods.

Exxy says, "Braces (which open/close code sections that are banchd by IF conditions) must be on their own line and must not have any spaces or tabs after them."

Exxy says, "Before them is fine (and encouraged)"

Exxy says, "Try to not get in the habbit of using RETURN by itself. Always return a number, even when it's not evident that it's important to. RETURN 0 instead of RETURN."

Exxy says, "Those are the style rules I like people to observe."

Niomar says, "Ah, that would explain why I was confused when looking at some of the scripts. Sometimes they were returning 0, other times 1, got it now...didn't mean anything."

Exxy says, "When debugging, it's helpful to put MSGR and MSGOR commands in your script (which displays a message to the room for room, spell, and player command scripts / displays messages to the room for object scripts) to see where the script stops/freezes or what data the script has."

Exxy shakes his head at Niomar.

Exxy says, "RETURN 1 and RETURN 0 do have a significant difference."

Niomar blinks.

Exxy says, "They don't mean a thing for player command scripts."

Exxy says, "But they do for room, object, and utility scripts."

Exxy says, "The point I was making is that I don't want to see people using "RETURN" by itself."

Exxy says, "I want to see "RETURN 0", not "RETURN"."

Niomar nods.

Exxy says, "So that it's evident what is being returned."

Exxy smiles.

Niomar asks, "Although I was talking about scripts that would just echo a message on a timer, some would say the return 0, others 1...in that example they didn't mean anything, right?"

Exxy says, "That's correct."

Niomar nods.

Niomar says, "Got it."

Exxy says, "On the handle-timer-event for object scripts, it doesn't matter."

Exxy says, "Let's get into player command scripts first and briefly, so we understand the script flow and some of the basic commands."

Exxy says, "Everyone please locate and open up script MS000044.TXT"
Exxy says, "Player command script 'TAP'."
Niomar says, "Opened."
>nodYou nod.
Fros nods.
Exxy says, "Reading from the top, we see that the script is nicely formatted into sections"
Exxy says, "This being one of my first scripts, I didn't include comments."
Exxy says, "The bottom-level / root portion of the script is divided into one section"
Exxy says, "Ehr"
Exxy says, "Two sections"
Exxy mutters.
Exxy says, "The first section asks the question "Is there any data in \$parameter1?" "
Exxy says, "\$parameter1 represents the second word the player typed."
Exxy says, "So if it has no data, then they typed TAP by itself."
Exxy says, "The first section contains code that is executed/parsed only when they typed TAP by itself."
Niomar nods.
Exxy says, "In this case, it's one line of code and all it does is send a message to the player (MeSsaGe to Player)."
Exxy says, "ELSE is a command that means "if the previous condition at this level failed, execute/parse the following commands...". "
Exxy says, "So if they *did* type something after TAP, the lower section handles it."
Exxy says, "The first thing that section does is it divides the section into three *more* parts."
Exxy says, "First it checks to see if the word they typed is someone in the room."
Exxy says, "If it is NOT, then the first section of code happens."
Exxy says, "If it is, and the person (\$target) is the player (\$ch), then they're tapping themselves, and the second section of code happens."
Exxy says, "For anything else, we can assume that they're tapping someone else in the room, so the last section of code happens."
Exxy asks, "Questions so far?"
Niomar asks, "Would it have mattered on the order of the check to see if it's a player vs an object?"
Exxy says, "Yes."
Exxy says, "The script first checks players."
Exxy says, "If a player and object have the same name, or if the word they typed was an abbreviation of both, then the player would be tapped."
Niomar nods.
Exxy says, "Because the 2nd-level of code is checking to see if the word matches a player. We haven't coded anything dealing with objects yet."
Exxy smiles.
Exxy asks, "Any other questions so far?"
Fros shakes his head.
>shake headYou shake your head.
Exxy smiles.
Exxy says, "Let's skip the first section, dealing with objects and work on the other two."
Exxy says, "The second section happens only if the player is tapping him/herself."
Exxy says, "So a message is sent to the player (MSGP) and to everyone else in the room (MSGE) that he/she is tapping him/herself."
Exxy says, "The variable construct \$ch:player:sexarticle will automatically contain 'his' if \$ch is male or 'her' if \$ch is female."
Exxy says, "So it would say"
Exxy taps his finger to his forehead.
Exxy says, "The third section happens when we've tapped someone else"
Exxy says, "We message the player (MSGP), message the victim (MSGV) (victim is another name for 'target'), and we message everyone else except for the victim (MSGNV)."
Exxy says, "That should be pretty straightforward too."
Exxy says, "Reading back up, let's filter out that first section."
Exxy says, "We've figured out that what they've typed isn't a player."
Exxy asks, "Maybe it's an object?"
Exxy says, "Only way to find out is to check."

Exxy says, "So we ask the engine to find an object matching what they typed."
Exxy says, "The FIND_COMPLEX_OBJECT_NEUTRAL does that."
Exxy says, "And it's very nice. It automatically uses the \$parameter variables."
Exxy says, "We don't need to give it any data."
Exxy says, "When it's done looking, it will put it's results of the search into \$object, which is a variable construct that we can use to work with objects in a script."
Exxy says, "So we need to do one of two things"
Exxy says, "Depending on if the FIND_COMPLEX_OBJECT_NEUTRAL command (a) found an object matching the text or (b) did not find an object."
Exxy says, "So we check '\$object:truenam'. '\$object:truenam' is the noun of an object."
Exxy says, "In some cases you will see '\$object:name'. This is the complete short description of an object."
Exxy says, "For instance."
Exxy taps some black leather trousers with red trim.
Exxy says, "These trousers have an '\$object:truenam' of 'trousers'.
Exxy says, "But they have an '\$object:name' of 'some black leather trousers with red trim'.
Exxy says, "Due to crashes, it's possible to have an object with no short description ('\$object:name'). But an object will *always* have a noun ('\$object:truenam')."
Exxy says, "So try to use that whenever you're checking to see if we found a valid object."
Exxy says, "If what they typed wasn't an object (that we can find using FIND_COMPLEX_OBJECT_NEUTRAL anyway) and we already know it wasn't a player in this room..."
Exxy says, "Then that's the first section. We simply message back to the player (MSGP) to go get a life."
Exxy grins.
Exxy says, "Otherwise..... we dig deeper one more level."
Exxy says, "I've been calling these 'levels' for a reason"
Exxy says, "The programming term for reaching another 'level' is called nesting."
Exxy says, "So we nest one level deeper to check one final thing."
Exxy says, "At this point we know we've found an object."
Exxy says, "But we need to give the object a chance to do anything special with the TAP command before doing anything else."
Exxy says, "So, if the object has a script attached, we go run it."
Exxy says, "When we come back from the script, we check a special variable called '\$returned'.
Exxy says, "We expect the object script to return 0 if it did not want to handle the TAP command and 1 (or any other number) if it did."
Exxy says, "Therefor, if we check \$returned, we know whether or not it's okay to proceed to the default messaging of what happens when \$ch taps \$object."
Exxy says, "This script actually has one slight bug here"
Exxy asks, "Anyone notice it?"
Niomar says, "Hehe"
Niomar shakes his head.
Exxy asks, "Liss? Wanna take a crack?"
Niomar says, "Wait"
>"It doesn't say what to do if the return is something other than 0? (No, that would mean it was handled by the object script)...You say, "It doesn't say what to do if the return is something other than 0? (No, that would mean it was handled by the object script)..."
Exxy nods to you.
>blushYou blush.
Exxy says, "Caught yourself. It does handle both."
Exxy nods.
Exxy asks, "Niomar?"
Exxy smiles.
Niomar ponders.
Niomar says, "Hehe, no idea."
Niomar says, "Will probably be something obvious."
Niomar gazes around.
Exxy says, "The script checks \$returned regardless of whether or not \$object has a script attached."
>nodYou nod.
Exxy says, "It shouldn't."
Exxy grins.

Exxy says, "It's possible to set \$returned by other commands."
Exxy says, "So we should not trust the value of \$returned unless we know where it's being set"
Exxy says, "Luckily, nothing is setting it and we can assume that unused data is always empty/0"
Exxy says, "So the script does work, but it does have that bug too."
Exxy says, "I'll fix it and show you what it *should* look like..."
Exxy says, "One sec."
Exxy says, "Saved."
Exxy says, "Re-download."
Exxy smiles.
Exxy asks, "Fros, Liss?"
Exxy asks, "have the new version opened?"
Fros nods.
>nodYou nod.
Exxy says, "Ah, good"
Exxy says, "Now notice the difference here."
Exxy says, "If there was no script attached, default messaging"
Exxy says, "If there was, but the \$returned from it was 0, default messaging."
Exxy says, "Now there's a more efficient way of doing this, but you can see how the bug was fixed."
Exxy asks, "Any questions?"
>shake headYou shake your head.
Niomar shakes his head.
Fros shakes his head.
Exxy preens. Someone's sure of themself!
Niomar chuckles.
Exxy asks, "Now anyone have any ideas on how we can make this more efficient?"
Exxy says, "The answer has to do with how the RETURN command automatically ends a script immediately and the fact that we have two things doing the same messaging -- we should try and combine them into one place."
Niomar says, "Hm..."
>"Nope, sorry. I'm just glad to understand it as it is.You say, "Nope, sorry. I'm just glad to understand it as it is."
>blushYou blush.
Niomar asks, "Just end the second first Else?"
Exxy giggles at you.
Niomar says, "er..."
Exxy asks, "Wha?"
Exxy grins at Niomar.
Niomar says, "Just end the first else (for this nest)...it checks to see if the item has a script"
Niomar says, "If it does, run it, if not, then exit this nest"
Niomar says, "Actually, that would end the script"
Niomar says, "Hold on."
Niomar ponders.
Exxy nods to Niomar.
Exxy says, "On the right track"
Exxy says, "Niomar is suggesting to remove the ELSE section in the deepest nest level."
Exxy says, "That's half right"
Niomar says, "Dont check for the no script first, check for script first?...lol, hard to put in words..."
Niomar says, "The first If for checking for object script..."
Exxy says, "What you need to do then is remove the ELSE command (and braces, but not the section) at the 3rd nest level."
Niomar says, "Should be IF (\$returned != 0)"
Exxy shakes his head.
Exxy says, "Nope that won't work"
Niomar flails his arms around.
Exxy says, "I'll make comments on what lines should be removed"
Exxy says, "Then have you each download/view it"
Niomar nods.
Exxy says, "Okay, go ahead."

Exxy smiles.
>"I looks the same.You say, "I looks the same."
>blushYou blush.
Niomar ponders.
Exxy ponders.
Exxy says, "No it doesn't"
Exxy grins.
Niomar asks, "Why is the return 0 needed then?"
Fros says, "makes sense"
Exxy says, "Hang on, let's make sure we're all on the same page"
Exxy asks, "Liss, try again?"
>"Am I just looking for the 0 or did you say you were putting in comments?You ask, "Am I just looking for the 0 or did you say you were putting in comments?"
Exxy says, "You should see '# REMOVED #' in front of the lines that should be removed."
Exxy says, "Those are my comments."
Exxy asks, "Do you see those?"
>"Nope.You say, "Nope."
Exxy says, "I'll IM"
Fros asks, "so # and | make the line a comment?"
Fros asks, "much like //?"
Niomar says, "I don't think it matters what it uses for the symbol cause it's outside the coding (the parenthesis)...could be wrong though."
Exxy says, "#, ', - are all comments"
Fros nods.
Exxy says, "Otherwise the script will try and parse it"
Fros says, "oh the -"
Fros grins.
Fros says, "got my symbols mixed up"
Niomar says, "Got a question when ya ready, Exxy."
Exxy says, "Okies"
>"Still didn't do it -- but I understand it in AIM which is good enough.You say, "Still didn't do it -- but I understand it in AIM which is good enough."
>grinYou grin.
Exxy nods to you.
Exxy says, "Okay, go ahead, Niomar"
Niomar asks, "So the return command is used to exit the current nest without doing a command (sometimes returning a needed value, other times just to exit)?"
Niomar says, "Hold on.."
Fros says, "it always exits the script with the value"
Exxy says, "No"
Exxy says, "Fros has the right idea"
Niomar says, "Not to exit the nest, but to exit the current if/else"
Exxy says, "RETURN exits the script immediately."
Exxy says, "Terminates it."
Fros nods.
Exxy says, "And returns back to the caller (whether another script or the engine) a value."
Niomar says, "Ah, forgot that the run_script was calling another up"
Exxy says, "In this case, we tell the engine that we ended with '0'. "
Niomar asks, "How about how the timed-event scripts that don't call up another, but still use the exit command?"
Niomar says, "er...still use the return command"
Exxy says, "..."
Exxy asks, "Try again?"
Exxy smiles.
Fros says, "same thing"
Niomar says, "The scripts that just echo some fluff, most have a return in them even though they don't call up another script."
Exxy nods to Fros.
Exxy says, "What he said"
Exxy grins.
Fros grins.

Exxy says, "RETURN tells the *caller* stuff."
Niomar says, "I understand what it uses, but not WHY it is used"
Niomar says, "er...what it does"
Niomar says, "Sorry, can't talk tonight."
Exxy says, "There are two things RETURN does."
Exxy says, "First is the most important: it stops the script. Immediately. Script is over."
Niomar nods.
Exxy says, "Second is optional in some cases: it gives a value back to the caller (the caller *can* be other scripts or the engine itself)."
Exxy says, "For the timer event in an object script, the RETURN command passes a value to the engine. The engine doesn't care."
Exxy says, "But it stops the script before it goes onto the rest of the script commands."
Exxy says, "That's the most important role of RETURN."
Exxy says, "In VB, this is an EXIT SUB."
Niomar says, "Ah, so when it stops the script, it both stops a script running itself and stops a script when calling up another within (gr, sorry if that sounds confusing)."
Exxy says, "..."
Exxy says, "Eh."
Niomar says, "Hehe, nevermind, I got it now."
Exxy says, "I'm not sure you're understanding how the operation of scripts run."
Exxy nods.
Exxy grins.
Exxy asks, "Everyone good?"
Niomar nods.
Exxy grins.
Niomar says, "It was throwing me off cause in VB they used different commands to do the same (like exit sub and end)"
Niomar says, "Hehe, actual testing will greatly help"
>nodYou nod.
Niomar grins.
Exxy says, "We'll move onto room scripts."
Exxy says, "Then we'll wrap it up. Next time we'll do object/spell scripts."
Exxy says, "Then we'll do the dreaded NPC scripts."
Niomar nods.
>raise handYou raise your hand.
Exxy asks, "Yep?"
Exxy smiles at you.
>"I'd REALLY like object scripts, please. Object and rooms are the ones that'll get us moving on these orders.You say, "I'd REALLY like object scripts, please. Object and rooms are the ones that'll get us moving on these orders."
Exxy nods.
Exxy asks, "Can you two stay up later to do object scripts?"
Fros nods.
Fros says, "seems pretty simple"
Niomar says, "Didn't sleep the night before, but am okay to go till ya leave."
Fros says, "just didn't remember the timer thing"
Exxy nods.
Exxy says, "Alright, then we'll do both."
Exxy stretches.
Exxy says, "Alright room scripts"
Exxy says, "Room scripts work almost exactly like player command scripts."
Exxy says, "A room script, just like a player command script, always gets \$ch assigned by default"
Exxy says, "There will always be a player who initiated a command"
Exxy says, "What happens is the room script needs to check what the player typed, and handle actions based on that."
Exxy says, "If the room script handles a command, it should RETURN a nonzero value (1, 2, 3, 4, 5, etc.)"
Exxy says, "What number specifically doesn't matter."
Exxy says, "I prefer 1."
Exxy says, "If it does not, it needs to RETURN 0"

Exxy says, "What the engine does with these returned values is:"
Exxy says, "If it's 0, the engine will proceed to check player command scripts for whatever they typed."
Exxy says, "If it's 1, the engine stops there and doesn't do anything else."
Exxy says, "So, if we had a room script with only one thing in it: RETURN 1"
Exxy says, "Then no one could type anything in that room"
Exxy grins.
Exxy says, "Because no matter what, anything they typed would tell the engine not to proceed to the player commands."
Exxy asks, "Questions?"
Niomar shakes his head.
>shake headYou shake your head.
Fros shakes his head.
Exxy says, "Open script 1125."
Niomar says, "Opened."
Fros says, "k"
Exxy says, "The first thing the script does is some general utility stuff"
Exxy says, "It sets up variables B0, B1, and B2 to be "her", "her", and "she" for a female \$ch and "him", "his", and "he" for a male \$ch."
Exxy says, "Just useful variables to have"
Exxy asks, "Everyone good on that so far?"
Fros nods.
>nod
Niomar nods.
>You nod.
Exxy chuckles.
Exxy says, "Guys are so quiet"
Niomar shakes his head.
Niomar says, "Hehe, jk"
Exxy says, "Notice that we have to check "\$parameter0" to see what command we're filtering"
>"Trying to figure out what makes sense already and what doesn't."
Exxy says, "In this script, it's climb"
>nodYou say, "Trying to figure out what makes sense already and what doesn't."
>You nod.
Exxy says, "C, CL, CLI, CLIM, and CLIMB."
Exxy says, "We check to see if they're trying to climb something valid."
Exxy says, "Then we try and run script 56, which is a utility script for checking the player's roundtime."
Exxy says, "The script will abort if they have a roundtime."
Exxy says, "Then there's two things they can climb."
Exxy says, "I won't go into details unless you say something there looks confusing."
Exxy says, "And then the script ends."
Exxy asks, "Confusing at all?"
Niomar shakes his head.
>raise handYou raise your hand.
>"One question.You say, "One question."
Exxy asks, "Yes, Liss?"
Exxy smiles at you.
>"Under the parameter1 (rope) you have one MSGP with text and then a blank one. How come the blank one, please?You ask, "Under the parameter1 (rope) you have one MSGP with text and then a blank one. How come the blank one, please?"
Exxy says, "When relocating a player, it's nice to put a space between the message and the room description."
Exxy says, "To help sort things out"
Exxy says, "And not jumble it together."
Exxy says, "Relocating a player automatically sends them the LOOK of that room too."
>"So, it's just a way to have a space. Okies.You say, "So, it's just a way to have a space. Okies."
Exxy nods.
Fros raises his hand.
Exxy smiles.

Exxy asks, "Yes, Fros?"
Fros asks, "what's the difference between find_player and find_player_in_world?"
Exxy says, "FIND_PLAYER / FIND_PERSON (both variants) checks for players in the same room as \$ch that \$ch has access to see (not invisible, hidden, etc.)."
Fros says, "err, player yeah"
Fros blushes.
Fros flails his arms around.
Fros says, "person"
Fros rubs his eyes.
Exxy says, "FIND_PLAYER_IN_WORLD / FIND_PERSON_IN_WORLD (both variants) checks for players in the game, regardless of what room or flags. \$ch doesn't need to be set."
Fros nods.
Fros says, "ok"
Fros says, "thanks"
Exxy nods.
Exxy smiles.
Exxy asks, "Everything else okay?"
>"So far so good.You say, "So far so good."
Exxy says, "Want to note here that SET_PLAYER_ROUNDTIME works only on \$target. So to obtain a target, we FIND_PERSON_IN_WORLD on \$ch."
Niomar nods.
Fros nods.
>"Oh!You exclaim, "Oh!"
>nodYou nod.
Exxy says, "There are three variants of RELOCATE_PERSON"
Exxy says, "RELOCATE_PERSON itself relocates \$target to a new room and gives them messaging that you see when a staff person is teleporting another player."
Exxy says, "RELOCATE_PERSON2 relocates \$ch to a new room and provides no messaging."
Exxy says, "RELOCATE_PERSON3 relocates \$target to a new room and also provides no messaging."
Exxy says, "The FIND_PERSON section of the rope-climbing is unnecessary."
Exxy says, "It sets \$target, which isn't used in any commands for that section."
Exxy shrugs.
Exxy says, "I probably used it for something but removed it... and forgot to remove the FIND_PERSON too"
Fros raises his hand.
Exxy says, "Yes, Fros"
Exxy smiles.
Fros asks, "when FIND_PERSON does not find the person in the world, what is \$target set to?"
Exxy says, "To nothing."
Exxy says, "When you have \$ch and FIND_PERSON tries to find \$ch, it always succeeds."
Fros asks, "how do we check for nothing?"
Exxy says, "So there's no need to check it."
Fros nods.
Exxy says, "\$target:player:name"
Fros says, "ok"
Exxy says, "Check it to see if it's "" (empty)."
Fros nods.
Exxy says, "The object always exists, but if the data is empty, then \$target is empty."
Fros nods.
Niomar asks, "\$ch is always set to the player who started the script?"
Exxy says, "Yes, for room and player-command scripts."
Exxy says, "The engine assigns \$ch."
Niomar nods.
Exxy says, "There's no way for a script to assign \$ch."
Exxy says, "Utility scripts run from a script that has \$ch will also "inherit" it."
Exxy says, "Spell scripts always have \$ch"
Exxy ponders.
Exxy says, "Object scripts don't have \$ch only during the timer event, otherwise it *does* have a \$ch"
Exxy says, "NPC scripts never have a \$ch"

Exxy asks, "Good?"
Exxy smiles.
Niomar ponders.
Niomar says, "So the \$ch doesn't work during event timer?...got a little confused on your last sentence."
Exxy says, "Correct."
Exxy says, "There is no player starting the script"
Exxy says, "The event starts the script"
Exxy says, "So \$ch doesn't exist (usually)"
Exxy says, "However, if the event is triggered by the timer.. and the object is held by a player, then \$ch *IS* set."
Exxy says, "Otherwise, the object is on the ground"
Exxy says, "So \$ch doesn't exist"
Exxy smiles.
Niomar ponders.
Fros nods.
>raise handYou raise your hand.
Niomar raises his hand after Liss.
Fros asks, "and if \$ch is not set, it's fields are empty?"
Fros teases you.
Exxy smiles.
Exxy says, "Yes."
Exxy nods to Fros.
Fros nods.
>"When we move on to objects can we do one that has a timer, as well, please? A lot of the 'areas' need timer events -- player homes, etc. As well as the random 'pet-type' event stuff.You say, "When we move on to objects can we do one that has a timer, as well, please? A lot of the 'areas' need timer events -- player homes, etc. As well as the random 'pet-type' event stuff."
Exxy says, "Oh yes"
Exxy nods to you.
>"Thank you.You say, "Thank you."
Niomar says, "My question is kind along the same lines..."
Exxy says, "The only difference between an object script and a room script is the addition of the timer event"
Exxy says, "And that's the ONLY difference."
Exxy asks, "Niomar?"
Exxy smiles.
Niomar asks, "What if the timer event script echos with the \$cha variable (which would be okay when the item is worn), but what about when it's on the ground. Will it just say "'s bear sneezes" when it would normally say "Natheme's bear sneezes" when he has it?"
Exxy says, "You need to check to see if the object has a \$ch first."
Fros says, "you'd check for the name"
Exxy says, "If it doesn't, you need to make sure your script does not have messaging and such that requires \$ch."
Niomar says, "Ah, I see."
Exxy says, "For instance, you can use a command that randomly picks someone from the room."
Exxy says, "And use \$target instead, if anyone's there."
Exxy says, "Or you can just have it do neutral messaging."
Fros asks, "how do you pick someone randomly from a room?"
Exxy says, "But if you didnt, yes it'd just be blank."
Exxy says, "There's a command to do that. Our scripting resource document is being updated. Look for information there sometime tomorrow evening, when we're finished."
Exxy says, "There's 193 commands -- gonna try to do them all tomorrow"
Exxy grins.
Niomar chuckles at Exxy.
Niomar says, "I understand it now."
Exxy says, "http://staff.zinious.com/EaxiaSEL"
Fros nods.
Exxy smiles.
Exxy smiles.
Exxy sighs.

Exxy asks, "Okay, ready?"
Exxy grins.
Fros nods.
Niomar nods.
Exxy says, "Object scripts."
>nodYou nod.
Exxy says, "Pop open 1080."
Exxy says, "Let's ignore this whole first part first"
Exxy chuckles.
Exxy says, "Scroll down"
Exxy says, "Get to the "TAP" section"
Exxy says, "From TAP until the rest of the script you'll notice is EXACTLY the same as a room script would look"
Exxy says, "These are all the verbs that the object has."
Exxy says, "Notice each one returns a 1 because the object script overrides the default TAP, SCRATCH, PULL, etc."
>"Oh!You exclaim, "Oh!"
>nodYou nod.
Fros asks, "didn't need to use the if/else in the last one right?"
Exxy asks, "... eh?"
Exxy peers curiously at Fros.
Fros says, "at grin"
Exxy says, "Technically we could have used \$ch:player:sexarticle, yes."
Fros nods.
Exxy says, "Anyway, back up to the top"
Fros blushes.
Exxy says, "\$parameter0 is ALWAYS "HANDLE-TIMER-SCRIPT" for the timer event"
Exxy says, "And you must always check for it first."
Niomar nods.
Exxy says, "Notice that there's a RANDOM 1 48 here."
>nod
Exxy says, "And a comment above that that says "statistically once every four minutes"."
>You nod.
Exxy says, "The object scripts are called every 5 seconds (on average -- it's not exactly 5 seconds)."
Exxy says, "Sometimes it's 4 seconds, sometimes 6.. it's kind of random."
Exxy says, "Anyway, once every 48 occurrences at 5 seconds per occurrence = 1 occurrence every 240 seconds"
Exxy says, "240 seconds = 4 minutes"
Exxy says, "So an action will happen once every 4 minutes"
Exxy says, "RANDOM 1 48 means roll a 1d48 (a 48-sided die)"
Exxy says, "In reality, it picks a number between 1 and 48."
Exxy says, "And puts that number in \$returned"
Exxy says, "Since all of the random messaging requires \$ch in this script, we check \$ch first."
Exxy says, "If no one's in \$ch, the script just ends."
>raise handYou raise your hand.
Exxy asks, "Yes, Liss?"
Exxy smiles.
>"So, for a random thing you want to happen in a room -- but don't want people to get sick of it.... RANDOM 1 x? How high can we go on that?You ask, "So, for a random thing you want to happen in a room -- but don't want people to get sick of it.... RANDOM 1 x? How high can we go on that?"
Exxy says, "As high as you like."
>nodYou nod.
Exxy says, "If you wanted something to happen once an hour, you apply it to the following formula:"
>"Okies, thanks -- most random stuff makes me dizzy so I want them slow.You say, "Okies, thanks -- most random stuff makes me dizzy so I want them slow."
Exxy says, "1 occurrence every 3600 seconds."
Exxy says, "1 occurrence happens every 5 seconds, so we'll label this an "interval" time."

Exxy says, "1 occurrence every 3600 seconds = 1 occurrence every 720 intervals."
Exxy says, "So RANDOM 1 720"
Exxy says, "Would be about once an hour"
>nodYou nod.
>raise handYou raise your hand.
Exxy smiles at you.
Exxy nods.
>"Is there a way to have it happen on the room being entered and THEN have it happen once every so often?You ask, "Is there a way to have it happen on the room being entered and THEN have it happen once every so often?"
Exxy ponders.
Exxy says, "No."
>"K.You say, "K."
Niomar nods.
Exxy says, "Alright so moving ahead"
Exxy says, "The rest of it just branches out another RANDOM check"
Exxy says, "1-5"
Exxy says, "Each one does a different random action"
Exxy says, "That's it"
Exxy says, "No big mystery."
Exxy smiles.
Exxy says, "Just a couple of rules to remember."
Fros nods.
>raise handYou raise your hand.
>"Next part says random return 1 5 -- but there are only 4. What happened to 5, please?You ask, "Next part says random return 1 5 -- but there are only 4. What happened to 5, please?"
Exxy says, "Open script 232."
Exxy says, "Let me check"
Fros says, "there's an else"
>"Is it just the last ELSE by default?You ask, "Is it just the last ELSE by default?"
Fros nods.
>nodYou nod.
>"Okies.You say, "Okies."
Exxy says, "The last one is handled by ELSE"
Exxy nods.
Exxy says, "Everything else"
Exxy says, "A grand way of saying "and 5, too"."
Exxy grins.
>nodYou nod.
Fros raises his hand.
Exxy says, "Sure"
Exxy smiles at Fros.
Fros says, "in the second random..."
Fros says, "it says random 1 60"
Exxy grumbles.
Fros says, "and then it checks for \$returned to be 61"
Exxy says, "Delete your copy"
Fros nods.
Exxy says, "Refresh from the server."
Exxy says, "Ignore what you saw."
Exxy grins.
Exxy says, "It was something I tested a long while ago."
Fros grins.
Exxy asks, "Everyone have 232 open?"
>nodYou nod.
Niomar nods.
Fros nods.
Fros says, "it's a lot shorter"
Exxy says, "Nice and simple here, an object script that stays in a room, has no verbs, and only one action."
Exxy says, "Every 5 minutes it bubbles with a strange watter."

Exxy says, "*Water"
Fros nods.
Exxy says, "Notice MSGOR."
Exxy says, "Instead of MSGR for room."
Exxy says, "MSGOR is used for objects."
Exxy says, "The full list of commands is currently available up at that site I gave earlier."
Fros nods.
Exxy says, "But the definitions of these commands won't be complete until sometime tomorrow night or the following morning."
Exxy asks, "Any other questions on object scripts?"
Fros shakes his head.
Niomar shakes his head.
>shake headYou shake your head.
Exxy grins.
>"Thanks for the lesson."
Exxy says, "Then that takes us up to the 4 hour mark and covers half of the script types we have."
>You say, "Thanks for the lesson."Exxy grins.
(Script bundles assigned)
Exxy says, "Fros: 600-619"
Exxy says, "Niomar: 620-639"
Exxy says, "Liss: 640-659"
Exxy says, "20 each."