InkWelle WatchDog PRO Monitor v.1.1
Part of the InkWelle Security Product Line

* An Important Part of Your SL Business Security System *

The InkWelle WatchDog PRO Monitor scans a spherical area up to 96 meters and notifies the owner when it detects new people. Designed for business use, it features highly configurable logging, special traffic reporting, and visitor greeting and gifting. While WatchDog PRO has many configurable features, it is very easy to use - the default settings should be fine for most uses.

For more information about Security products by InkWelle, including a FAQ, please visit www.inkwelle.com/security

Other SL Security products are also available. For more information please IM Katie Welles. For technical support, please IM Don Jano.

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1.1 Intended Uses

WatchDog PRO will notify you of people in the vicinity of your business, home, or skybox. It will keep a record of people that visit while you are away, and track visits by the hour for traffic analysis. It will also give an automated greeting and a landmark or other item to visitors.

1.2 Features

- Can be controlled by the owner or by group members
- Configured via chat, notecard, and menu
- Will use Whisper, Say or IM to notify you
- Set logging on or off, with optional timestamp
- Configure whether to record only unique visits (within a certain interval), or each visit per person
- Ignore lists for specific people or for the group
- Optionally will play a sound when new people are detected
- Automatic IM then clearing of logs to the owner

1.3   General Usage Notes:

- Touch the object and it will open a menu
- Note that only a touch from the owner or a group member will trigger this response.
- Keep in mind that anyone with permission to modify the object can change the configuration.
- All commands and arguments (other than avatar names) are NOT case-sensitive.
- By default, the WatchDog PRO does not operate on chat unless you set a chat channel in the notecard.

1.4 Example Use Scenarios

#1) You have a store and want to maintain a list of everyone who visits along with the time that they visited. Set up WatchDog PRO to collect your logs and have them IMed

to you., then copy and paste your logs into a spreadsheet or other program for storage.

#2) You would like to determine the effectiveness of a new ad for your store. Use WatchDog PRO to monitor the traffic for a few days before the ad, then monitor for a few days afterward and compare the results.

#3) You would like to determine the optimum time of day to have a hired greeter in your store. Use WatchDog PRO's "Traffic" report to show the tally of visitors in your store broken down by hour to reveal the busiest time in your store.

*Note - Business users typically copy their daily logs into Excel or other RL tools for analysis of log data.

#4) You have a very nice parcel of land, and you welcome visitors. Set WatchDog PRO to give them a greeting and also a notecard with any rules or information they should have.

1.5 Known Limitations

- No SL security object can protect your privacy if someone is using a spybot or other spying tool. For (theoretically total) private chatting, IM is recommended.

- There are ways to move an avatar's "camera" very long distances, so this device is no guarantee against visual observation! (If you are getting the feeling that true 100% privacy is very hard to come by in SL, you are correct!)

- If more than 20 people are within the scanning radius, some will not be noticed due to limitations inherent in the Second Life scanning objects. This can be overcome by using multiple scanners, but this product is intended for use in situations where large groups are not present: It is useful for homes and stores, but not as useful for busy dance halls or info-hubs.

1.6   Reporting

An important benefit of WatchDog PRO is its reporting feature: Traffic Report. The Traffic Report lists allows you to see at a glance how many people are visiting your business and at what times of day. Import Traffic Reports into RL tools such as a spreadsheet or database to analyze or chart your data to spot trends. See the "Traffic" command in "3.3 Command Reference" for more information about Traffic Reports.

2.1 Initial Setup

The default settings for WatchDog PRO were carefully chosen to be appropriate for most users, so little is needed to set it up. A full description of the configuration commands is given in section 3.2 later in this notecard. All commands are sent to the WatchDog PROon chat, via menu, or by editing the configuration notecard in the object. By default the WatchDog PRO will not listen for chat commands unless you specify a chat channel in the configuration notecard.

Following are simple instructions to set the WatchDog PRO to start watching your business or home:

1. Set the WatchDog PRO object on your property. The placement of the WatchDog PRO depends on what you want to guard. In many cases the best position is near the center of the store or home that you want to watch. It will automatically be "On" when you place it.

2. If your land is group owned, make sure that the WatchDog PRO object's group is set properly. Do *not* deed the object to the group, merely set its group!

3. Set the scan radius for the WatchDog PRO. Touch the object to get a menu, click on the "Radius >>" button, then select the appropriate range. (If your desired radius is not listed on the menu, you can fine-tune this in the configuration notecard.) WatchDog PRO will scan a radius up to 96 meters.

4. Tell the WatchDog PRO how you want it to communicate with you. By default the WatchDog PRO is set to use IM to notify the owner of visitors. Touch the object to get a menu, click on the "Notify >>" button, then select the appropriate method.

5. By default, the WatchDog PRO is set so that all members of your group are "ignored" -- are not included in the log or Traffic report. The default is also set that anybody in your group is able to change the configurations.

This is the minimum that you should do to set up your WatchDog PRO and begin scanning. There are many other features that you can set as well. Please see the Command Reference in section 3.3 of this notecard for details.

2.2 WatchDog PRO's Lists

The WatchDog PRO maintains three separate lists: the remembered list, the ignore list, and the log.

- The Remembered List is the list of people who the WatchDog has seen but not yet "forgotten" based on the interval set with the "forget" command. The purpose of this list is to prevent an avatar who is at the edge of your scan radius to be logged multiple times.

- The Ignore List is the list of avatars you give WatchDog PRO to tell it who to ignore and not log or announce in any way.

- The Log is the list of all visitors detected by WatchDog PRO's scans. This list is cleared or entries in the list are deleted if the script is reset, when the length of the list reaches its set maximum, when the log is sent to the owner, or the log is cleared by command.

3.1 How to Command the WatchDog PRO

There are three ways to send commands to the WatchDog PRO: in chat, by modifying then saving the WatchDog PRO's configuration notecard, or by menu. Some commands such as Notify and Radius are available on the menu as well as in the configuration notecard. Note that the setting you make *last* is the one that will be in effect. For example, if you use the Menu to set Radius to 20, then go into the Configuration Notecard and set Radius to 30, the setting of 30 is the one that will be in effect.

3.1.1 Using Chat Commands

By default the WatchDog PRO does NOT listen for commands on chat unless you specify a chat channel in the configuration notecard.

To issue a command in chat, begin the command with a slash ("/") and the channel number. For example, to set the radius to 35 meters using chat channel 1, you would enter: /1 radius 35

3.1.2 Using the Configuration Notecard

The configuration notecard is called "Watchdog Pro Configuration" and is stored in the contents folder of the WatchDog PRO object. The changes you make to the configuration notecard are detected automatically when the notecard is saved. To issue a command using the configuration notecard, just put the command in the notecard with no slash. For example: radius 35

If the first character on a line in the configuration notecard is a '#', then that line is considered to be a comment and will not be processed.

Please refer to the Sample Configuration Notecard that came with the WatchDog PRO for examples of using the configuration notecard.

3.1.3 Using WatchDog PRO's Menu

The most commonly used WatchDog PRO commands are available via a menu. Touch the WatchDog PRO object to access the menu. Following is a list of the menu buttons and the result of clicking them:

- **Off**: Deactivates the WatchDog PRO (When the WatchDog PRO is Off, this button is changed to 'On')
- **Reset**: Resets all the settings and lists (but does NOT clear your logs or Traffic Report)
- **Radius** >>: Brings up a menu from which you select the radius for WatchDog PRO to scan for avatars
- **Notify** >>: Specify the method you want WatchDog PRO to use to tell you about a detected avatar. Select IM, OwnerSay, Off, Whisper, or Say (Please see "Notify" in the command reference for more information)
- **Scan Now**: Runs an immediate scan and reports any avatars detected.
- **Status**: Reports a listing of WatchDog PRO's current status and settings
- **Traffic**>>: Lists the tally of visitors broken down by hour (Please see "4.4 About Time" at the end of this notecard)
- **Help**: Opens this notecard
- **Log**: Lists the times and names of the entire log of detected avatars
- **Clear Log**: Clears the Log

3.2 Configuration Commands: Overview

Following is a quick reference of what can be configured and what command to use. Please see "3.3 Command Reference" later in this notecard for details of each command, sorted alphabetically.

3.2.1 Notecard Commands

These commands are listed in the same order they appear in the notecard.

- **Channel**: Sets the channel that the WatchDog PRO will use for chat commands from you.

- **Radius**: Sets the size of the spherical area to be scanned.

- **Scan**: Sets how often the WatchDog PRO scans.

- **Forget**: Sets the interval between visits in order for the WatchDog to log the next visit by a person. (This feature prevents logging a visitor repeatedly as they move in and out of the scan area.)

- **GroupControl**: Sets whether other group members can configure or access WatchDog PRO.

- **IgnoreGroup**: Enables and disables notifying of group members.

- **Ignore**: Add someone to the list of people who will not be logged.

- **Notify**: Sets whether the WatchDog PRO notifies the owner each time a visitor is detected and controls the notification method (IM, Chat whisper, or Normal chat)

- **Volume**: Sets whether the WatchDog PRO should make a sound when sending notifications and sets the sound volume.

- **SayCurrent**: Sets how frequently WatchDog PRO will say the list of who is present in scan range

- **SetGreeting**: Sets an optional greeting that will be delivered via IM to visitors.

- **GiftFolder**: Specifies the name of the folder created in your visitors' inventories to hold the freebies that WatchDog gives them.

- **Log** (multiple commands): Configure the log, including adding and configuring timestamp, setting the maximum number of entries, and setting how WatchDog sends you the log

- **Traffic** (multiple commands): sets the Traffic Report, including how to format it and how often to send it to you.

3.2.2 Chat Commands

- ClearLog: Clears the log.

- ClearTraffic: Clears the data for the Traffic Reports.

- Log: Lists the contents of the log.

- On: Tells the WatchDog PRO to begin scanning.

- Off: Tells the WatchDog PRO to stop scanning.

- Reset: Resets and restarts the scanner.

- Status: Displays current status and settings.

- ScanNow: Immediately scans and whispers results.

- Traffic: Lists the current Traffic Report in "table" format

- TrafficCSV: Lists the current Traffic Report in "csv" format

- TrafficAll: Lists the full 7-day Traffic Report in "table" format

- TrafficAllCSV: Lists the full 7-day Traffic Report in "csv" format

3.3 Command Reference

Following is an alphabetic list of all WatchDog PRO commands. At the end of each description, the command method is shown in parentheses: Notecard, Chart, or Menu)

Note that within the command descriptions, vertical lines are put between possible arguments within the brackets. When you enter a command, do NOT include the brackets or the vertical lines.

channel <n>

'n' is a channel number from 1 to 2,147,483,647.

This sets the chat channel on which the WatchDog PRO listens for commands. By default, WatchDog PRO does not listen for chat unless you set a channel.

(Notecard)

-----//-----

clearLog

This clears the visitor log.

(Chat | Menu)

-----//-----

clearTraffic

This clears the Traffic data, current and historical.

(Chat | Menu)

-----//-----

forget <n>

'n' is the value in seconds for how often the "remembered" list of people is cleared. (Note that this does not clear the log.)

The "remembered" list is used to prevent noticing the same person over and over in a short period of time. When this amount of time has passed since the person was last within scanning range, they will be removed from the "remembered" list.

This Forget command will cause them to again be announced and/or logged when they next enter the scanned radius after the set number of seconds. Default is 300 seconds (i.e. 5 minutes).

(Notecard)

 -----//-----

giftFolder <string>

'string' is the name of the folder that is created in your visitors' inventory to hold the free items given to them by WatchDog PRO when they enter the radius. If this is left blank, then the items will go into the "root" of the visitor's Objects folder. To enable this feature, simply place the items you want to give into the Contents folder of the WatchDog PRO object. You can give away landmarks, notecards, objects, or textures. When the item is given, next-owner permissions will apply.

The gift and greeting features were designed to prevent the appearance of "spamming" by withholding additional gifts and greetings until 30 additional avatars are detected. In other words, if the avatar re-enters your radius multiple times during the day, it is not until at least 30 other avatars have been detected that a second gift and greeting will be given.

** Note that when a gift is given, it uses the SL standard of stating the name of the object that is giving the gift. For that reason, you may want to rename the WatchDog PRO object to match your store name.

IMPORTANT: WatchDog PRO knows that any items that you add to its contents (other than sounds) are to be given away. For this reason, do NOT rename any of these files.

(Notecard)

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groupControl <on | off>

This controls whether or not all group members can configure and interact with the device. This has no effect if the WatchDog PRO's group is not set.

If set to 'on', then any group member can control the WatchDog PRO.
If set to 'off' then only the Owner can.
Default is 'on' (Owner and Group can control the device)

(Notecard)

-----//-----

ignore <avatar name>

This places the named avatar on an "ignore" list. They will not be announced or logged when they enter the scanned radius. They will stay on this list until the device is reset. Limited to 20 names.

Note that the avatar's name must be entered *exactly*, including letter case. For example, "joe smith" is not the same as "Joe Smith"!

(Notecard)

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ignoreGroup <on | off>

If set to 'on', all people who are members of the same group as the WatchDog PRO's owner will be ignored (i.e. they will not be announced or logged).

If set to 'off', then group members will be detected.
Default is 'on' (ignores group members).

(Notecard)

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log

Log is the most complex of the commands pertaining to the log. The log is your record of the visitors to your store or home. There are five separate variants of the Log command, described below. (Also see the "Clear Log" command earlier in this section and "Traffic" later in this section.)

  * **Log**: (Chat | Menu)
   Issue the Log command alone to list the current log

  * **LogLimit** <n>: (Notecard)
    n is the number of log entries before the log is considered full. Note that the log size limit is also limited by the amount of memory that Second Life allots to a script. Setting a very high limit may result in the log becoming full before you expect it. The default logLimit is 100. The maximum depends on many factors about how you configure your log, but is about 200.

  * **LogTimeStamp** <off | tiny | short | long | iso>: (Notecard)
   The log can be set to include a timestamp with the avatar names. This command controls the format of log entries, as follows:

       - LogTimeStamp off - removes timestamp from the log

       - LogTimeStamp tiny - log will record "short" timestamp with NO avatar name

       - LogTimeStamp short - sets timestamp format: 08-27 00:56

       - LogTimeStamp long - sets timestamp format: 2004-08-27 00:56:21

       - LogTimeStamp iso - sets timestamp format: 2004-08-27T00:56:21.785886Z

  * **LogFullIM** <on | off>: (Notecard)
    If set on, this will cause an IM of the log to be sent to the owner whenever the log becomes full. The log is cleared when this is done. Default is 'off'.

  * **LogTimedIM** <n,n>: (Notecard)
   n is the hour at which you want the log to be IMed to the owner. To have it sent multiple times during the day, separate the hours with commas. NOTE that when the log is IMed, it then CLEARS the log.

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notify <'off', 'whisper', 'say', 'im', or 'ownersay'>

This controls the method that the device employs to announce people that enter the scanned radius. Default is 'whisper'
  * off - No announce. (This mode only makes sense if logging is enabled)
  * whisper – Whisper on chat channel 0
  * say - Say on chat channel 0
  * im - IM the Owner (there will be a 2-second delay to prevent spamming)
  * ownersay - Owner Say.

Owner Say is similar to IM with the following exceptions:

a) Sends an IM to the owner only if the owner is in the same sim as the WatchDog PRO at the time of the announcement.

b) No 2-second delay.

c) Will only send to the owner, cannot be used to send to anyone else, including group members.

d) Won't queue up or be delivered via email if the owner is offline.

(Notecard | Menu)

-----//-----

off

Turns the device off. No scanning, announcing, or logging is performed.The WatchDog will still respond to all commands in this state.

(Chat | Menu)

-----//-----

on

Turns the device on. The WatchDog PRO will begin scanning for people and announcing and/or logging their presence as it has been configured. This is the default state after the device is reset or when rezzed for the first time.

(Chat | Menu)

-----//-----

radius <n>

'n' is an integer from 2 to 96.
This allows setting the spherical radius (in meters) that the device scans for the presence of other avatars. Default is 20 meters.

(Notecard | Menu)

-----//-----

reset

Resets the device. This will reset all the features to their defaults, but will NOT clear the lists, log, or traffic data. To clear the lists, All configuration options are set to the defaults and the configuration notecard is re-read.

(Chat | Menu)

-----//-----

sayCurrent <n>

'n' is an integer from 0 to 3600.
Sets how frequently (in seconds) that WatchDog PRO will say the list of who is present in scan range. Default is 0 (off).

(Chat)

-----//-----

scan <n>

'n' is an integer from 5 to 300.
This is the interval between scans in seconds.
To help prevent server lag, this interval should be as large as it can be and still give you the notification or logging that you need. For logging visitors that tend to stay for minutes, this interval could be 60 or 90. Default is 5 seconds.

(Notecard | Menu)

-----//-----

scanNow

The device will immediately run a scan and will report the names of all avatars that are in range. It will report this via the method set by the Notify command.

(Chat | Menu)

-----//-----

SetGreeting <string>

Sets the custom message that will be given to all visitors who come within range. No message given if left blank.

Example: setGreeting Welcome to XYZ Store!

The gift and greeting features were designed to prevent the appearance of "spamming" by withholding additional gifts and greetings until 30 additional avatars are detected. In other words, if the avatar re-enters your radius multiple times during

the day, it is not until at least 30 other avatars have been detected that a second gift and greeting will be given.

** Note that when a message is given, it uses the SL standard of stating the name of the object that is sending the message. For that reason, you may want to rename the WatchDog PRO object to match your store name.

(Notecard)

-----//-----

status

The device will whisper the current configuration settings as well as the contents of the "ignore" list.

(Chat | Menu)

-----//-----

traffic

The Traffic commands control the Traffic Report feature. Before describing the commands, we must first talk a little about the traffic data and how it is formatted. At midnight GMT, the current data about the number of visitors (traffic) is stored as history, and the traffic data is cleared to accept new data for the new day. There are two ways to see the traffic data — *Table* and *CSV*:

Traffic Table: This presents the traffic data formatted in multiple lines, with one hour per line. It lists the hour, followed by the number of visitors in that hour. For example:

> Traffic Report:
>> 0:00 2
>>
>> 1:00 0
>>
>> 2:00 4
>>
>> 3:00 7
>>
>> Etc.

Traffic CSV: This presents the traffic data with all the information in one line, with commas separating the values (this is called a "comma-delimited" list). This format is especially useful for importing into database applications or spreadsheets in RL. Note that in this format, the number of visitors is listed but the hour number is not. For example: "Traffic Report: 2,0,4,7,…"

There are three ways to access traffic data, using commands described below:

3.3.1 Menu Traffic Command

Traffic: (Menu)

The Traffic button on the menu will list the current Traffic Report. Choose the report in Table or CSV format (described below). Also choose whether to see the Traffic Report for today, testerday, or all (which is the previous 7 days).

3.3.2 Notecard Traffic Commands

TrafficTimedIM <n,n>: (Notecard)

n is the number of the hour that the Traffic Report is IMed to the owner. To receive it at midnight (and thus see the report of the full day), set this to 0. To receive it multiple times during the day, enter additional hour numbers separated by commas. To turn automatic IMing off, put a # in front of the command in the configuration notecard. ** IMing the Traffic Report does NOT clear the data **

TrafficIMFormat <table | csv>: (Notecard)

Sets the format of the Traffic Reports that are IMed to the owner.

3.3.3 Chat Traffic Commands

Traffic <n>: (Chat)

'n' is the number of days to go back (1 - 7). This will send a Traffic Report in table format starting the number of days back specified, up through the current data. Issue the command with no number to just see the report of today.

TrafficCSV <n>: (Chat)

Same as "Traffic" but report is delivered in CSV format.

TrafficAll: (Chat)

This will send a Traffic Report in table format starting for the last 7 days.

TrafficAllCSV: (Chat)

This will send a Traffic Report in CSV format starting for the last 7 days.

(Also see the "ClearTraffic" and "Log" commands earlier in this section.)
-----//-----

volume <n>

'n' is a floating-point number from 0.0 to 1.0.
The allows setting the volume at which the announcement sound is played.
0.0 is completely muted, and 1.0 is full volume. Default value is 1.0
(Notecard | Menu)
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4.1 Watchdog PRO Sounds:

The WatchDog PRO will play an alert sound each time a new avatar is detected if the "volume" setting is set to anything above zero. You can have the WatchDog PRO play any sound. To load a new sound, simply copy the sound file into the object's content folder. To turn off the sound feature, simply set the volume to zero (0).

NOTE If there is more than one sound file in the folder, WatchDog PRO will play the first one in the list as it appears alphabetically.

4.2 Changing the WatchDog PRO Object

It is easy to select a different look for the WatchDog PRO by moving the contents of WatchDog PRO into the contents of another object. Follow these steps:

1. Right click on the WatchDog PRO object and choose "Open," then click the "Copy to Inventory" button. It will give you a message saying that some items are not transferable and will be moved. Select OK. This will create a folder in the root level of your inventory that will have "WatchDog PRO" in its name.

2. Rez the new object. Go into edit mode then open the Contents tab. Copy ALL the items from the new WatchDog PRO folder in your inventory into this new object.

3. Be sure to name the product something other than "Object" so you will be able to find it in your Inventory!

The new object is now your WatchDog PRO object.

4.3 About Time

Please note that all times and dates used in the logs and traffic reports are in GMT – Greenwich Mean Time. It is also sometimes called UTC or Zulu Time. This is the standard time used around the world.

For more about GMT, please see http://en.wikipedia.org/wiki/Greenwich_Mean_Time

Unless you live in the same time zone as GMT (in Greenwich, England), you may want to add or subtract hours to normalize it to your time zone. For example, to normalize GMT to match the timezone in SL, you subtract 7 hours (this all depends on the time of year, of course, due to Daylight Savings Time).

For a converter to see how many hours to add or delete to convert GMT to your particular time zone, try http://wwp.greenwichmeantime.com/gmt-converter2.htm .