Freedom Call V1.14 documentation Cristian Robert Gallas

	COLLABORATORS				
	<i>TITLE</i> : Freedom Call V1.14 (Robert Gallas	documentation Cristian			
ACTION	NAME	DATE	SIGNATURE		
WRITTEN BY		August 10, 2022			

REVISION HISTORY				
NUMBER	DATE	DESCRIPTION	NAME	

Contents

1	Free	dom Call V1.14 documentation Cristian Robert Gallas	1
	1.1	Freedom Call Guide 1.14 by Cristian Robert Gallas (SuRRouND)	1
	1.2	Important	1
	1.3	I wonder how it works	2
	1.4	What it needs?	3
	1.5	What it can do?	3
	1.6	How to use it?	4
	1.7	Menu Options	4
	1.8	Things that you need to know about FreeEventMiami	6
	1.9	To do next time	7
	1.10	Who am I?	7
	1.11	Program's history	8
	1.12	Explorer Call history	8
	1.13	FreeEventMiami history	8
	1.14	Freedom Call Main history	8
	1.15	Gratitude	11
	1.16	Installation	12
	1.17	Features	13
	1.18	Configuration	14

Chapter 1

Freedom Call V1.14 documentation Cristian Robert Gallas

1.1 Freedom Call Guide 1.14 by Cristian Robert Gallas (SuRRouND)

Freedom Call V1.14 -----. | Internet's Connections Manager 1 _____/ Important How it works? Requirements Installation Features Usage FreeEventMiami History Menu Options Windows Stats Configuration Future Thanx Credits ® 1998-00 Cristian Robert Gallas ® 1998-00 Lithium Software

1.2 Important

You really don't know?

Warning! Leave enabled Miami's log option. Freedom Call will read it when importing data. Never close one Miami's connection through "close the window" boot! Use always "offline" option, that avoids lack of information in Miami's log.

* This version only supports integration with Miami;

Freedom Call requers assign to it's directory.

Please read installation help This program is tested with Miami 2x, 3x, deluxe.

1.3 I wonder how it works...

How it works?

This program was created to provide statistics for a perfect time and charges control on using Internet. It works on Workbench with GUI (Graphical User Interface), allowing easy data manipulation in all options.

At starting this program, you must import Miami log's file data.

This importation will generate all files on Freedom Call's work database directory, which will have your connection's data since the beginning of log's use until the present day.

Files generated:

Example:

Freedom.01.1999	>	Regular	and	Irregular	Calls,	for	month	01.1999;
Freedom.02.1999	>	Regular	and	Irregular	Calls,	for	month	02.1999;
Freedom.03.1999	>	Regular	and	Irregular	Calls,	for	month	03.1999;
Freedom.04.1999	>	Regular	and	Irregular	Calls,	for	month	04.1999;
Freedom.Input	>	Calls of	mar	nual inputa	ation;			
Freedom.Out	>	ShutDown	Onl	line Calls;	;			

After you import database until the present day, you may run more forms of Freedom's database atualization. It's possible to use generation option day by day, or to use

FreeEventMiami
, a program

developed for automatic atualization of Freedom's database. It's real time, native. With FreeEventMiami you consult all informations without any data generation, because this program atualizes and controls Freedom Call's database.

> Please read installation help for install FreeEventMiami Note: Verify your configuration to optimize this option.

Programs

Freedom Call -> Main program, generates all statistics here; Explore Call -> Little program, only for stats of actual call; FreeEventMiami -> Program that integrates realtime Freedom and Miami;

1.4 What it needs?

Requirements

- * An Amiga AGA or ECS;
- * Workbench 2.0+;
- * MUI 3.X installed;
- * Miami 2x, 3x, deluxe + with log's option enabled;
- * 2 Megabytes memory (we recommend more);

1.5 What it can do?

Features

This program offers the following options, supported on general, daily, monthly or anual refers, defined by the user:

- * Realtime integration with Miami 2x, 3x, Deluxe dialup;
- * How many Internet's calls you made;
- * The wholeness of time on line;
- * Time on line average;
- * Cost of any call;
- * Cost average;
- * How many disconnections you made;
- * How many times the line fell off;
- * How many times your computer was reseted during a connection;
- * Phone, date and duration time of larger connection;
- * Phone, date and duration time of smaller connection;
- * Monthly control of connection's time limit;
- * First and last call in the selected consultation;
- * First and last date in the selected consultation;
- * Control of remaining time in the present month.
- * Visualization of exceeded conecction's time, based on your limit of hours;
- * Calls, time online and percentage by week's day;
- * It allows to visualize its last five Web's connections (shortcut window);
- * It allows to visualize all Web's connections;
- * It allows to consult about one period of time;
- * Set your free hours;
- * Set your day of initial month;
- * Set number to ignore in statistics;
- * Select limits of your telephone company;
- * Possibility to visualize your telephone costs in current money of other country;
- * Provider bill;
- * Provider extra hours cost;

* Total costs for month;

- * Time, Date, Cost, Online, Speed Connection, protocols of actual call;
- * Possibility of visualize your rates on all your connections;
- * Generate all statistics in html format;
- * Support generation in html format to intranets;

Menu Options

Windows Features

Configuration

1.6 How to use it?

Usage

CHECK COSTS	: This option allows your currency month information about costs;
THIS MONTH	: It allows data's consultations on the average month;
OTHER MONTH	: It selects other day, month or year to statistics consultation;
GLOBAL	: It selects general statistics for all connections;
ANUAL	: It allows data's consutaions for year;
LAST CALLS	: This option allows you to consult its last five Web's connections, with date, hour of connection, time online and number of telephone.
PREFS	: Activates configuration's screen;
ABOUT	: Shows program's informations;
	Menu Options
	Windows Features Configuration

1.7 Menu Options

Project
'-->
 ABOUT : Shows program's informations;

5/16

	ABOUT MUI	:	Shows your MUI informations;
	ICONIFIED	:	Iconified the program, facilitates the application visualization without closing Freedom;
	EXIT	:	Exit of Freedom Call;
Pro	gram		
		:	That option allows you to consult its last five Web's connections, with date, hour of connection, time online and number of telephone.
	THIS MONTH	:	It allows data's consultations on the average month;
	OTHER MONTH	:	It selects other day, month or year for statistics consultation;
	GLOBAL	:	It selects general statistics for all connections;
	DATE PERIOD	:	It allows data's consultations on a selected period of time
	ANUAL STATS	:	It allows data's consultations for year;
	CHECK COSTS	:	It allows information about current month costs;
	CHECK OTHER	:	It allows information about other month costs;
	MANUAL CALL	:	<pre>Input connections done from another local, as your work's place or a friend's house;</pre>
Gen	eration		
	FIRST GENERA	AT	ION (MIAMI) : This option creates Freedom Call's database after read Miami's log. Other informations are generated by FreeEventMiami. If you use FreeEventMiami, use this option only for the first generation, or for repair your database.
	PREFS	:	Activates configuration's screen;
Hel	-		
	MAIN	:	To visualize HELP. Opens it on main screen;
	USAGE	:	To visualize HELP on the screen that you're using Freedom Call;
	HISTORY	:	It visualize directly HELP information on program's history;

1.8 Things that you need to know about FreeEventMiami

FreeEventMiami tool

This program was developed to allow a total integration with Miami, allowing an exportation off all connections and occurrences in real time to Freedom's bases.

FreeEventMiami was developed in C, a program to be used by command line, or inside a former shell, ex:

FreeEventMiami -online (or) FreeEventMiami -offline

He works in the following way:

Event Online:

* When Miami connects in Web, it creates a file named "S:Freedom.Miami.Temp" with 40 bytes at most. It will contain informations about this connection.

Event Active ou Passive Offline:

* It will read the file "S:Freedom.Miami.Temp" and removes it, and generates in Freedom Call's data base informations about the current connection.

That allows to you a real integration of Miami with Freedom Call.

You can increase the option -remove in the execution of FreeEventMiami. It will removes Miami's log after add informations in data base.

FreeEventMiami -offline -remove (Option only function in -offline)

Obs: If this option was used, you cannot use data's generation of Freedom Call anymore, because that would clear its base. The generation don't adds, but creates a new data base.

* In case of lack of light in the middle of a connection, the file "S:Freedom.Miami.Temp" only will be atualized at the next connection, generating informations for "Shutdown Online" field.

(Warning)

Even using FreeEventMiami, Miami's log should be enabled, because the base will be updated with it's informations. "Remove" option of FreeEventMiami is used to eliminates the redundancy of informations.

IMPORTANT

If you like don't delete your miami log file, don't use remove option! I recommend don't use -remove, but you decide! :)

1.9 To do next time

Future plans

* Who know! :)

1.10 Who am I?

```
[My Information]
Aqe
             : 25 years old
NickName
            : SuRRouND
E-Mail
             : surround@iname.com
SuRRouND URL : http://members.tripod.com/surround_br/
[Languages that I develop on]
Amiga : SAS C 6.58, VBCC, Storm C 2.0, Amos Professional 2.0;
   : Delphi 5.0, PPL, VFoxPro, C++ Builder;
РC
Other : Unix shell, SQL, and more;
[My Amiga's works]
* More than 20 doors for MAXS BBS;
* LT-Unix, Operating System Multiuser;
* Lottery, Lottery System;
* Sublime, Plug-in for Dopus 4.12, 5+;
* Freedom Call, Internet's Connections Manager;
* Surround.h, Cool include of C, more 60 new commands
* BoAmiga, ICQSpoofing, ICQPager
* NetBus Client comming soon
[About Freedom Call]
Project
         : SuRRouND
Analyze
         : SuRRouND
Developing : SuRRouND
Manual
         : SuRRouND
          : SAS C 6.58 with MUI librarys
Language
Machine
          : Developed on Amiga A4000
             CyberStorm PPC/233 060/50 114mb
             CyberVision PPC 8mb/Picasso IV 4mb
             Concierto Modulo
             Ariagne II
             Power Flyer ATA
             2x LG 15p monitors
             Emplant Deluxe, 2x 3.2g WD HD
             Yamaha 8x4x2x CDRW SCSI, NEC 24x CDRom SCSI
             USR 56k v90 modem
```

1.11 Program's history

The program's history Freedom Call Main FreeEventMiami Explorer Call Select program for see history...

1.12 Explorer Call history

The Explorer Call history v1.00 (26.12.97) - First public beta release; v1.01 (26.01.98) - Bugfix on cost calculation; - Added new button, iconified on main window; - First FINAL release;

1.13 FreeEventMiami history

The FreeEventMiami history

```
v1.00 (11.07.97) - First public beta release;
v1.01 (17.07.97)
                 - Bugfix on connections before login 24:00
                    and logout after 24:00 new day;
v1.02 (26.07.97)
                  - Cosmetic bugs;
v1.03 (09.08.97)
                 - FreeEventMiami modified to supports separated
                    database, V1.03;
v1.04 (26.12.97)
                 - News integrations with base;
v1.05 (15.01.97)
                 - Added internal version;
                  - Bugfix on Reconnects calls;
                  - First FINAL release;
v1.06 (21.05.99) - BugFix on reconnect;
v1.07 (28.05.99)
                 - Added support of Miami Deluxe;
```

1.14 Freedom Call Main history

The Freedom Call history

v1.00	(25.06.97)	- Internal beta release;
v1.01	(02.07.97)	– First public beta release;
v1.02	(07.07.97)	- Now Global Statistics is other button;
		- Added first and last Call in statistics windows;
		- Added date period in top label of statistics

	windows;
	- Added help guide on menu;
	- Added "About MUI" on menu;
	- Internal calculation Bugfix;
	- Corrected Irregular and Regular inverted! Bugfix;
	- Added window for calls and percentage by
	day of the week;
v1.03 (11.07.97)	- Bugfix on second consult "Week Window";
	- Generation was not supporting lines Reconnect Bugfix;
Ence	- Created EEventMiami
	or use in Miami's fields,
, 10	it controlls events "Online", "Passive", "Active";
	- Added period date in top of "Week" Window;
	- Now Date and Percentage of "Week" Window is bold;
	- Key's calculation was changed;
v1.04 (17.07.97)	- Added Time Online in "Week Window";
	- Now Freedom testing if exists for "Freedom:" Assign;
	- Now Generation button its on Menu;
	- Added new window "Last Calls", that display last
	five calls;
	 Bugfix in FreeEventMiami. Connection before login 24:00 and logout after 24:00, new day;
	- Added new window "Manual Call Inputation", for
	input connections done from another local, as
	work's local or a friends'house, allowing a real;
	control of its supplier;
v1.04a (26.07.97)	- Now Freedom supports Catalogs, multi-language;
	- FreeEventMiami modified, v1.02;
	- Bugfix: Manual Call Inputation Window;
	- Added new window "All Calls";
v1.05 (29.07.97)	- Bugfix: Week Window, problem only of 1.04a,
	compiling wrong (FFP), now compiled (STANDARD);
	- Bugfix: Manual Call Inputation; - Added "Date Period" Window;
	- Added option for set your initial day month;
	- Added option for set one period for FREE calculation;
	- Added message about "Wait Consultion Database";
v1.06 (09.08.97)	- Bugfix on Generation option, problems
	with blank space in the middle of telephone numbers;
	- Bugfix in Free Hours calculation, after 23:00:00;
	- Added test of date's format on "Date Period" window;
	- Added [*] in phone number of free periods calculation;
	- NOW Freedom Call works on database directory. Freedom
	database is separate for month. First Generation is more slow, but other options more MORE FAST;
	- All consulting options where modified for supporting
	separate database files. Even if you have many
	years on your database, Freedom always runs all
	consults FASTLY;
	- FreeEventMiami modified to supports separated
	database, V1.03;
	- Added database folder in Freedom configuration, to
	set the path of your database;
	- Added gauge bar in "Global Statistics";
v1.06a (11.08.97)	 Added test if exists database on First Generation; Bugfix on Generation option;
vi.uua (11.uo.97)	BUYIIA ON GENELALION OPLION,

v1.07 (22.08.97)	 Now Global windows is the same of This Month window; Added percentage bar in Statistic Windows; Added days online in Statistic Windows; Bugfix in locale support; Time exceeded now is calculated in periods too; BugFix in locale support; Recompiled on SAS C 6.58; Added label Logouts for separate statistics in Statistics Window; Now all buttons in Freedom Call maybe GADGETUP;
v1.07a (29.08.97)	 Internal bugfix in free hours routine; Rewrite internal routine about configuration; Added Status Call in Last Five Calls window; Added multi menu interface, with graphical option; Added support to select phones to ignore; All Calls Status alined;
vl.08 (21.09.97)	 Added two folders in prefs, Program and Filters; Register input information aligned when used other catalog; Added "Anual Statistics" window; Now Freedom only report error on final of first generation with message total errors; Bugfix on msg register in ignores phone; Bugfix on help main; Bugfix on anual statistics, inverted regular and irregular calls; Removed white colors in back of "Last five calls" and "Statistics" windows;
v1.08a (30.09.97)	 Added all support of telephone cost calls; Added new folder "Cost" in configuration; Rewrite load configuration routine, more fastly; Bugfix on Cryptography routine; Added new requests in Register Request; Added fields Cost in all statistics windows; Added new option "return month" for "This Month"; Now "All Calls" statistics is more fastly and resizable; Anual Statistics is resizable; Bugfix on "Set as Default", now read limits; Statistics Windows only display after loading stats; Otimizer internal arrays for use low memory;
v1.08c (07.10.97)	 Bugfix on calculations calls less one minute; Added support for configure precision calculations; Otimizer internal arrays for use low memory; Rewrite internal cryptographys routines; Bugfix on menu of select day, month, year; Added day description in graphics status bar;
v1.09 (12.11.97)	 Added new informations on locale support; Now Ignore Phones option is liberated for UNREGISTERS; Now "Generation" and "Query" windows is resizable; Modified REAL REGISTRATION internal codes; Added Anual and Check Cost on main menus; Added new window "Check Costs" and "Check Other Costs"; Added two fields in prefs, Extra Hour, Provider Bill; Bugfix on testing registers;

		Added day of week in "All Calls" window;
v1.09a	(26.12.97)	- Re-write cost calculation routine, now 100%
		more FASTLY;
		- Added Unit Discount option, for discount on final
		internet provider cost;
		- Added new option in last calls windows, for see the
		actual status connection on the web;
		- Added option for insert modem status in Freedom base;
		-
		- FreeEventMiami 1.04, news integrations with base;
		- Bugfix on first generation for separate telephones;
		- Added new external module (Explorer Call);
		- Removed names of button images of graphics menu;
v1.10	(06.02.98)	- Bugfix on load configuration at first time,
		only in updates;
		- Added new windows Rates;
		- Bugfix on miami first generation wend Reconnect;
		- More localizations;
		- Bugfix Other Month that use initial day different of 1;
		- Added two buttons on Select Other Month window,
		prev and next button for select month;
		- Added Phone on Longest and Shortest Call;
.	(21.05.99)	- Freedom development is start again :)
VI·II	(21.03.99)	
		- Now program is freeware with source free :)
		- Bug fixed on reconnect lines on import;
		- Bugfix on time online when online before 00:00 and
		offline after 00:00;
		- Added Time online limited on configuration;
		- Added date limited on configuration to filter
		wrong clock sets;
		- Added feature to generate reports in html format,
		now is possible to see your stats inside of your prefer
		internet browser;
		- Added support to generate html reports in a select
		directory to use on intranet or other net;
		- Bugfix when phone numbers with "," caracters;
		- Release 060 version;
		- Added installer script;
		- Other cosmetics changes;
w1 12	(28.05.99)	- Added support of Miami Deluxe;
V I • I Z	(20.03.))	- Bugfix to open help files using freedom menus;
		- Added new cps rates, 46666, 48000;
1 1 2	(10 07 00)	- Cps rates windows is re-designed;
VI.13	(13.07.99)	- Bugfix on time remain, time exceded on htmls;
		- New images are added on Freedom Call;
		- Other cosmetics changes;
vl.14	(05.11.00)	- Fixed Y2K bug;
		- A lot of memory problem fixed, very more robust!
		- Some internal fixes;

1.15 Gratitude

Here they are! These people turned possible this program's development:

* Xavier Billault for the support on MuiBuilder (GenCod developer)

```
* Stefan Stuntz (MUI developer)
* Eric Totel
               (MuiBuilder developer)
  and SAS C authors developers...
Catalog translators:
                --> Kimme Utsi (ATO Member)
Norsk
Portugues-Brasil --> Cristian Robert Gallas (SuRRouND)
                --> Lloren Grau
Catalan
Deutsch
                --> Andreas Mayer-Gurr
Italian
                --> Paolo Baruffini
French
                --> Patrice Tremblay
                --> Sergio Martin (ATO Member)
Spanish
Freedom Icons:
Main program
                --> Paolo Carminati
Explore Call
                --> SCiZO
Freedom Images:
               --> Zikmund Tomá$^1$
Main program
Freedom Installer:
Iceman - http://www.iceman.nu
and all Freedom Call users :)
```

1.16 Installation

Freedom Call doesn't request complicated installation methods. Freedom Call's install method * Create a "Freedom Call" directory and place all extracted files inside it; * Make Freedom assign, ex: Assign Freedom: DH0:Internet/Freedom "It's only and example" Insert in startup-sequence or user-startup. * Run the program; * Enters into "Prefs" option and complete the path of Miami's log file; * Turn on base's data importation on "Generation" Option; FreeEventMiami install method * Select Shell in event Online on Miami Write on field : Freedom:FreeEventMiami -online * Select Shell in event Active Offline on Miami Write on field : Freedom:FreeEventMiami -offline

* Select Shell in event Passive Offline on Miami Write on field online : Freedom:FreeEventMiami -offline
Obs: FreeEventMiami is not a shell, it's C program. Most Miami support C programs in this field, so you doesn't need create shell script.
* ... and that's it! You can use the program without problems;

1.17 Features

Information on the fields offered by Freedom Call "All the information was defined among the selected period"

Total Calls	: Total of connections;
Total Online	: Total time of connections;
Cost Online	: Shows all telephonic account costs on selected period, in currency money;
Average Cost	: Shows average of telephonic account costs on selected period, in currency money;
Average Online	: It measured time connected;
First Call	: First connection;
Last Call	: Last connection;
Longest Call	: Reports the longest connection;
Longest Date	: Reports the date that you made the longest connection;
Shortest Call	: Reports the shortest connection;
Shortest Date	: Reports the date that you made the shortest connection;
Regular Logouts	: Number of times that you disconnected;
Irregular Logouts	: Number of times that the line fell;
Shutdown Online	: Number of times that your personal computer turned off in the middle of a connection, by example reset, lacks of light and others
Time Exceeded	: Time online that you exceeded in relation to the available monthly time for its provider.
Time Remaining	: Time online that still remains for you in relation to the available monthly time for its provider.
Days	: Days online, being taken in consideration that you had ties the selected period a direct conections

it will be shown days online.

1.18 Configuration

```
PROGRAM
'--> This paste stores information about interface of Freedom Call.
   Freedom Call interface settings
   '--> This option allows the choice of visual apperance of main
       menu. The user can select Standart or Graphics option.
   Freedom calculations settings
   '--> Precision Calculation
        '--> This option set numbers of digits Freedom display
             in all calculated fields. (Default 2)
        Unit Discount
        '--> Price of discount in total cost of internet connections
LOGS
'--> This paste stores referring information about supported
     logs and some referring options of the first importation.
   Miami Log Path
   '--> Miami's log file should be informed. It will
        import your connection's informations to Freedom Call's
        database. The other daily information will be fed through
       FreeEventMiami.
   Generation message display
   '--> It enables the visualization of a request at the end of
       generation.
   Generation on startup
                         generation is always
   '--> It allows that
                                                  executed
                                                            when
        initializing Freedom Call. This option should stay off
        if FreeEventMiami will be used.
DATABASE
'--> This paste counts information regarding database used by
    Freedom Call to store all statistics informations.
   Database directory
   '--> Contain database's directory location.
   Exceptions on generation
   '--> This option is for remove bad entries to database, wrong
        clock, or other think
   Freedom Call Html Reports Information
   Check
   '--> This check is set to enable generate html reports
   Reports directory
   '--> Directory of html reports generate by Freedom
   Save Reports
   '--> Option set to copy reports to html directory
```

Generate Global '--> Set to generate html to global statistics, because are big Select your default internet browser '--> Browser program to open html statistics PROVIDER '--> This paste contains specific informations about your porvider, that will establish certain particularities in your statistics. Free hours (initial and final) '--> All connections realized between this hours, that you will specify, will be consider as free and not contabilized in statistics calculation. (Default 00:00:00) Day initial '--> Initial day of mensal statistics, based on the date that your provider send your bill. (Default 1) Return current month on This Month window? '--> This option force that "This Month" window returned one month for statistics, example: Currency month is :09/1997, Day initial is :10 Your statistics display [10/08/1997] for [10/09/1997] LIMITS '--> This paste shows how many hours of connection you still have, based on the time that you contracted with your provider except the hours you already used. Limit Time (Hours) '--> Here hey certain how many hours you have a month, based on that field that will be calculated if you it exceeded or not its limit of hours with its supplier. Extra Hour (Price) '--> Set here you price of extra hour in your provider; Provider Bill (Price) '--> Set your month bill that pay for your provider service; FILTERS '--> This paste allows to user creates filters on statistics. Phones to ignore on Statistics '--> This option allows to add phone numbers that will be ignored on statistics. There is no limits of number inputations, that has to be separated with a coma. Example: 0800128001,0800128002,0800128003 COSTS '--> This paste will contain informations about telephones company limits. Select here or insert your limits and costs. CATEGORIES '--> This paste will contain informations about all categories inside your categories directory. Here you select your default categorie, that will be used in all statistics to calculate cost.

Set as Default '--> Select your categorie for calculations on statistics. Delete '--> Deleted selected categorie. This option delete on disk. Categorie Directory '--> Select a directory to store categories. Default Cost '--> Price used when your calls have not specified limits. If your telephone company don't have different limits for calls, only specified the cost of minute. You don't need to use categories. If you want, create one new categorie with only one limit. Example: Initial 00:00:01, Final 23:59:59, Price 0.XX Obs: For editing categories, double click on your choice categories list. That will be loaded on in maintenance folder. LIMITS '--> This paste will contain information about selected categories in CATEGORIES Folder, here you insert or alterated all categories. This folder is for maintenance. REGISTER '--> This paste will contain your personal informations, that will be necessary to liberate program's registration. Name '--> Inform your complete name here. (Obligatory field) Organization '--> Inform the name of your organization. E-mail '--> Inform your email here. (Obligatory field) Country '--> Inform your Country here. (Obligatory field) City '--> Inform your city here. (Obligatory field) Request Register '--> Based on the information above will be generated a registration request that should be send for the internet to the email surround@iname.com. You will receive other email with a liberation key, that should have been imported in the program using Import Register option. Import Register '--> This option allows the import of liberation's key in the system, that will liberate new options of the program. Two registration categories exists.