



















]HackingTeam[

# **RCS Console User Manual Ver. 7.3**

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## General concepts

### *Activity, Target and Backdoor*

**RCS Console** is the GUI to manage and browse data collected on the RCSDB. Data is gathered on the Collection Node (ASP) that is captured by several backdoors configured to synchronize to that Collection Node.

A **backdoor instance** is the software that is installed on a target device to collect several kind of information in order to conduct an investigation.

Backdoor can be configured to collect different kind of information, i.e. it has different agents enabled. Each **agent** is responsible of collecting a single kind of information or performing a single task.

A **backdoor class** is an abstraction of the backdoor instances. It contains only the configuration the instances will get the first time they synchronize with the collection node.

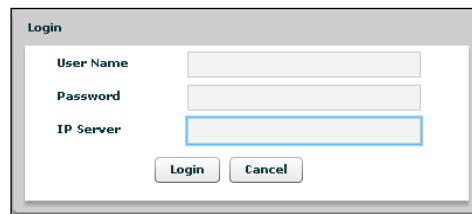
A **target** is a physical person that can have a personal computer, a laptop, a mobile phone or whatever other device that is supported by RCS. Several backdoors can then be related to the same target of investigation (one for each device owned by the target).

Targets in turn can be grouped in "Activities".

A single **activity** represents an "investigation". It contains one or more targets and is associated with a group of investigators that will have the permission to see the content of the activity.

## Getting started

When RCSConsole starts the initial login screen is displayed:



The image shows a 'Login' dialog box with three input fields: 'User Name', 'Password', and 'IP Server'. Below the fields are two buttons: 'Login' and 'Cancel'.

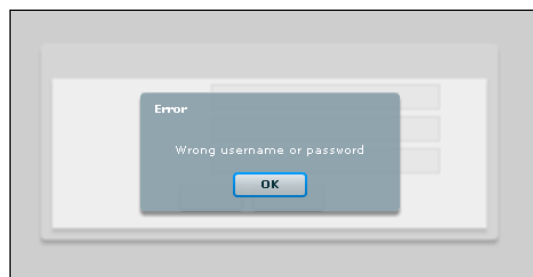
You need to logon to an RCSDDB in order to have access to any data and to the rest of the application.

To logon you need to specify the following information:

- Your username
- Your password

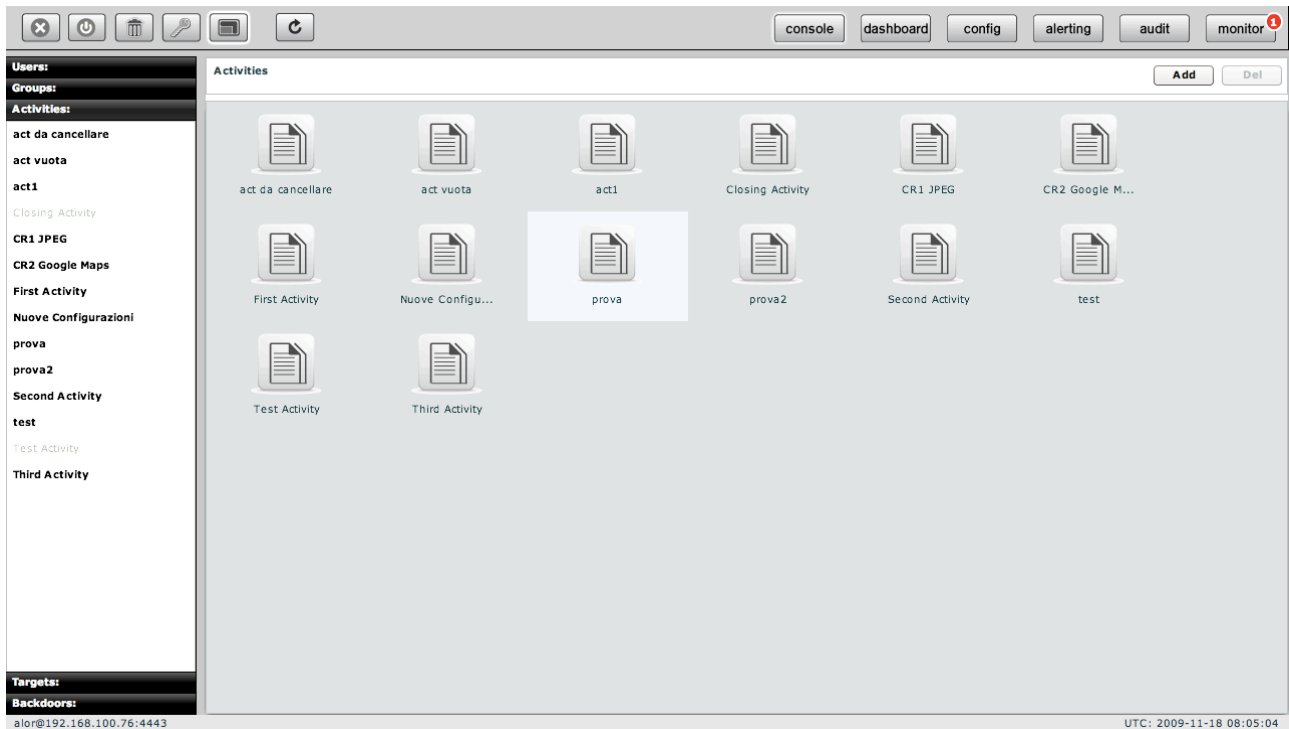
On the first login the only user configured is 'admin' and the password is the one entered during the installation of RCSDDB.

If you fail to logon the application shows an error message:



Press "OK" button to close this window and return to initial login screen.

After login successfully the application shows this windows:



At the top on the right you see the current version, build number, and buttons to change the current section: **console**, **dashboard**, **build**, **network**, **alerting**, **audit** and **monitor**; the default section is **console**.



Selected button has a white border.

In the bottom status bar you will see on the left the current loggedin user and the server connected to. On the right you will see an UTC clock. This is useful because all the logs dates are in UTC.

At the top on the left you can see five buttons:



1. Logout: to close the application;
2. Clear cache: to wipe local log cache;
3. Change the current user password;
4. Full screen: to switch between full screen and resized window;
5. Refresh: to manually refresh the data you are viewing. Dashboard, alerting and monitor refresh themselves automatically every 30 seconds.

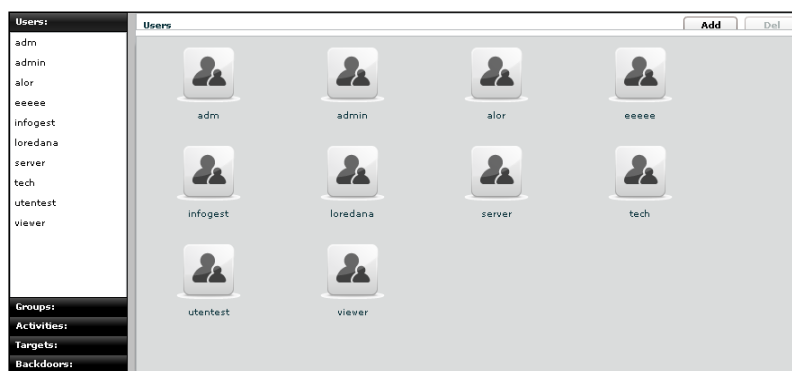
A white border appears around the selected button.

## THE CONSOLE SECTION

The console view let you browse through any object that your profile has access to and to manage and edit them.

### Users

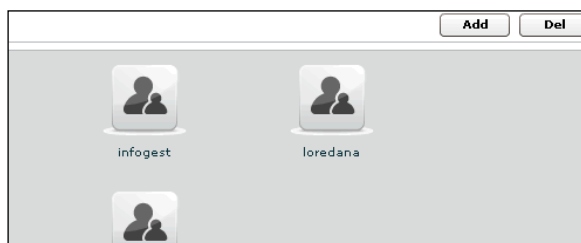
Users Menu is available only for users with *Admn* privileges.



You can view a list of all users on the left under the tab “Users” and also on the right pane when you click on the Users tab title.

At this point you can:


- Add new user: click “Add” button on the right at the top of the icons-list:



Then fill all the fields and assign privileges:

- ADMN is the admin: can manage users, group activity and target
- TECH is the technician: can create and configure backdoors
- VIEW is the viewer: can see the backdoors log and perform queries on them

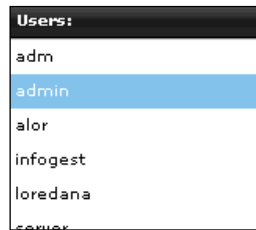
The “contact” field should be the email address of the users. This address is used to send email from the monitor alerting or the alerting system for the query match against logs (see alerting section)

	<b>Name:</b> alor	<b>Description:</b> demorcs
	<b>Contact:</b> a.ornaghi@hackingteam.it	
	<b>Password:</b>	<b>Confirm:</b>
	<b>Privileges:</b> <input checked="" type="checkbox"/> Admn <input checked="" type="checkbox"/> Tech <input checked="" type="checkbox"/> View	<b>Disabled:</b> <input type="checkbox"/>
<b>Save</b>		

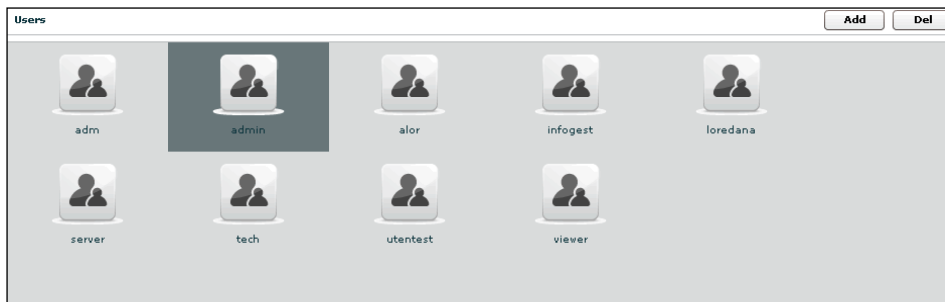
click “Save” button to save data.



- Select an user, either by:
  1. Clicking on the user in menu-list:



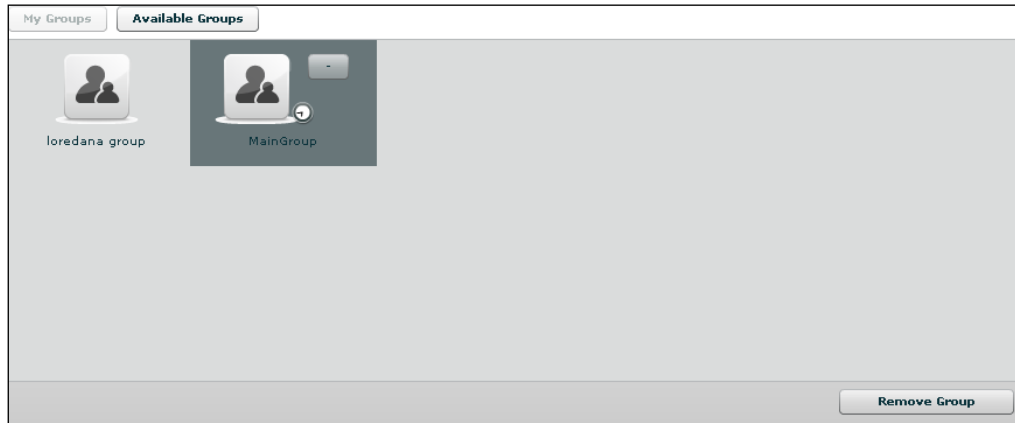
2. Or double clicking on user's icon in icons-list:



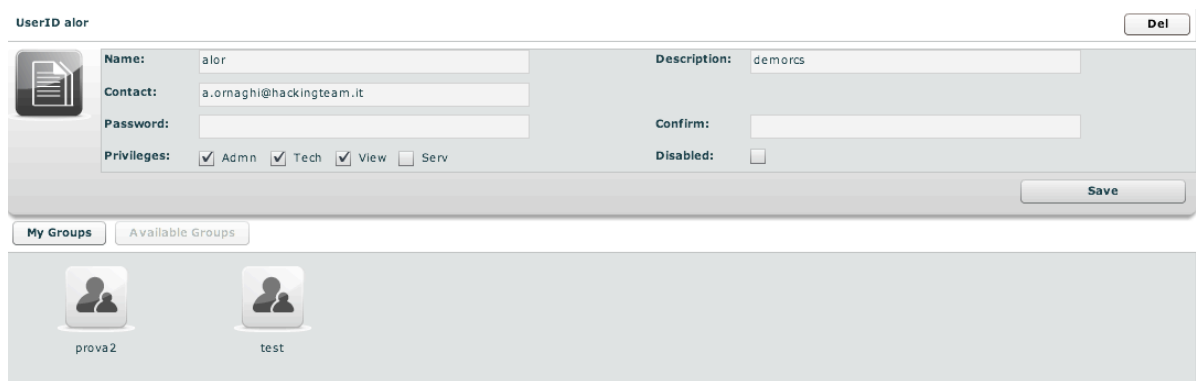
- Edit a user: after selecting a user at the top of the window you can edit fields and save them clicking "Save" button.  
At the bottom, you can view all groups the selected user belongs to:

You can see group's details by double clicking group's icon.

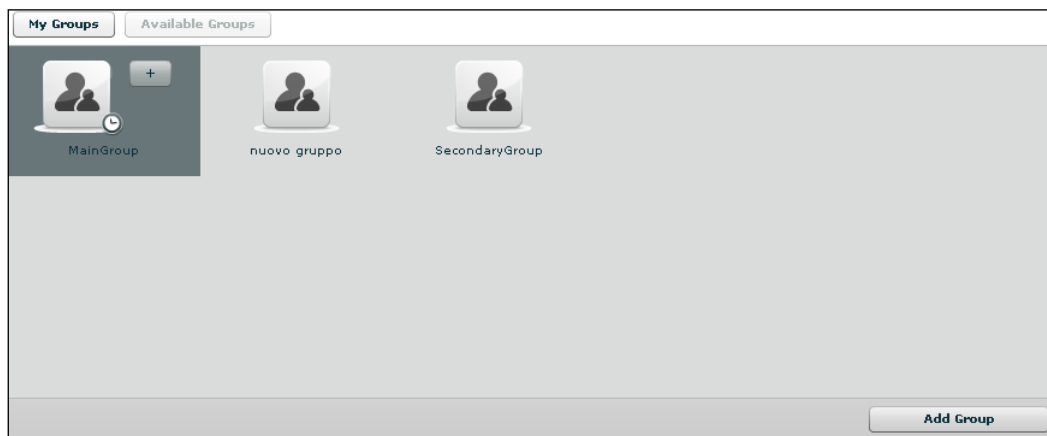
You can remove a group from selected user: select the group to remove and then click on the "-" button or click on the "Remove Group" button below.



Clicking on “Available Groups” button you can view all groups available to be added to the selected user:



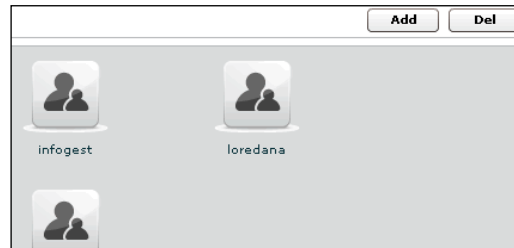
You can see group’s details by double clicking group’s icon.  
To add a group to the selected user, select a group with a single click:



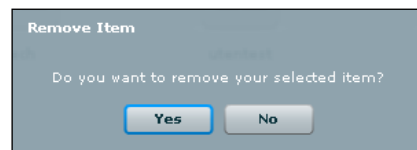
Then either by:

1. Click “Add Group” button on the left at the bottom of the window;
2. Click “+” button next the group’s icon.

- Delete an user: after selecting an user, “Del” button on the top of list of icons is enabled, press the button to delete the user:




You must confirm the action to proceed:



Click “Yes” to confirm or “No” to exit.

## CHANGING USER PASSWORD

Each user can change its own password by using the “change password” button in

the button bar. 

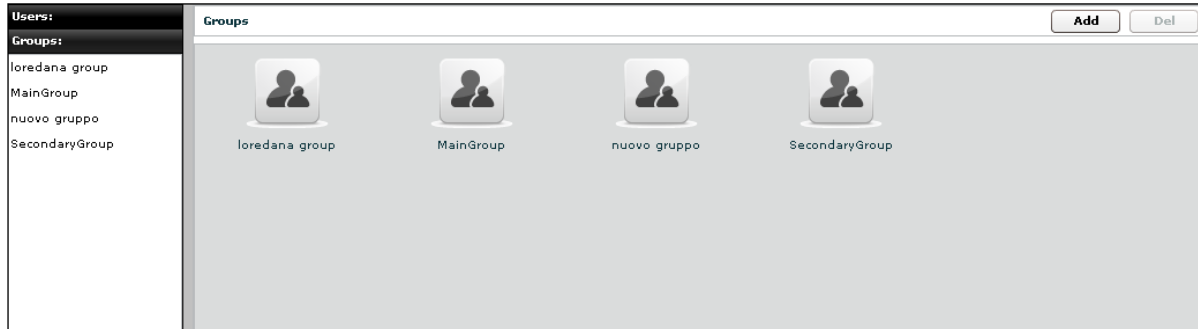
## CHANGING USER CONTACT

Only the admin can change a user contact. This is by design for security reasons. Since sensitive information are sent via email regarding the log query matching the email is controlled only by the admin and each user cannot set an arbitrary email address on its own.

## Privileges

- **Admin:** this is the super user. It is the only one that can create users, groups, activity and targets;
- **Tech:** this role can create, modify and reconfigure backdoors associated with a target, however the target can only be modified and created by ADMIN;
- **View:** this role is assigned to users that can only view the logs. It cannot modify backdoors, targets or activity. It can create and modify notes and blotters.

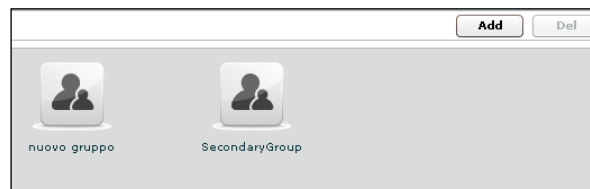
## Groups



You can view a list of all groups on the left under the tab “Groups” and also on the right pane when you click on the Groups tab title.

At this point you can:

- Add new group: click “Add” button on the right at the top of the icons-list:



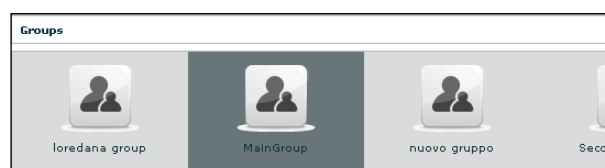
then fill fields:

Click “Save” button to save data.

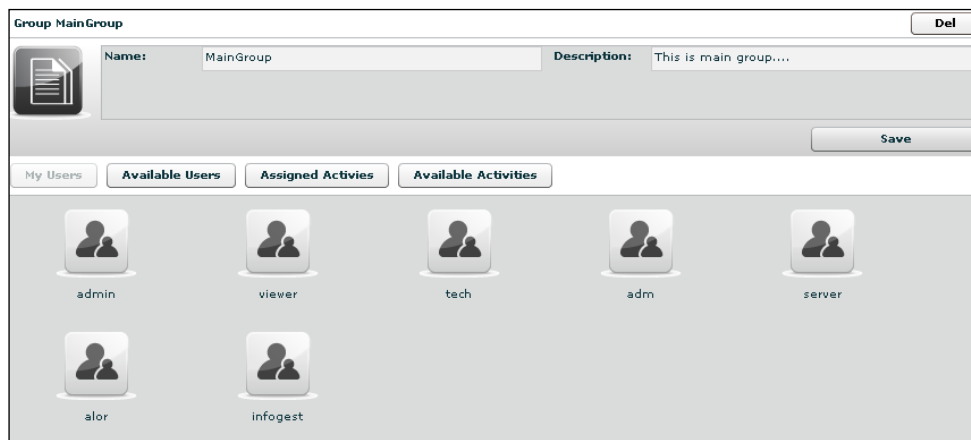
- Select a group: either by:
  1. Clicking on the group in menu-list:



2. or double clicking on group's icon in icons-list:

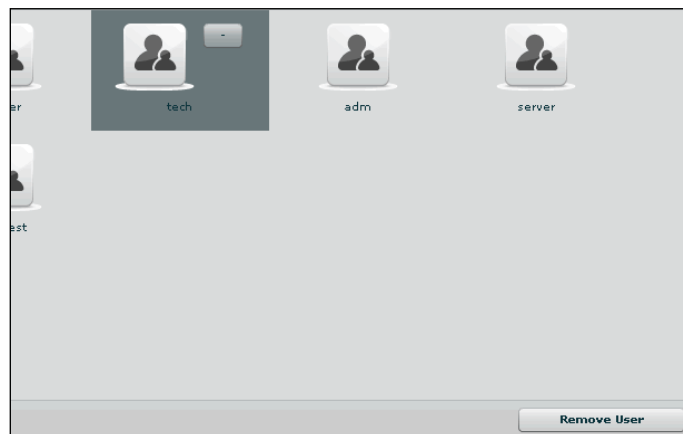


- Edit a group: after selecting a group: at the top of the window you can edit fields and save them clicking “Save” button.  
At the bottom, you can view all users the selected group belongs to:

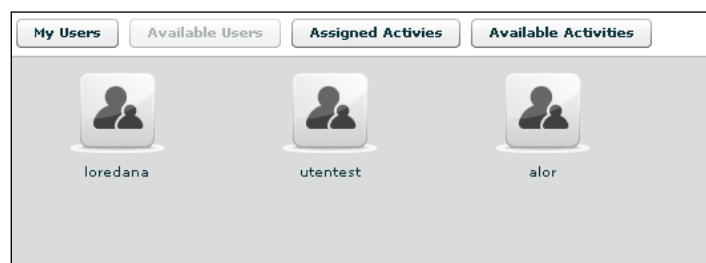


You can see user’s details by double clicking user’s icon.

You can remove a user from selected group: select the user to remove and then click on the “-“ button or click on the “Remove User” button below.

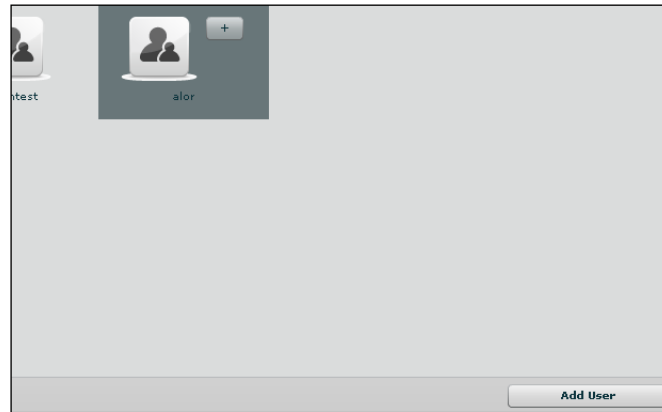


Clicking on “Available Users” button you can view all users available to be added to the selected group:



You can see user’s details by double clicking user’s icon.

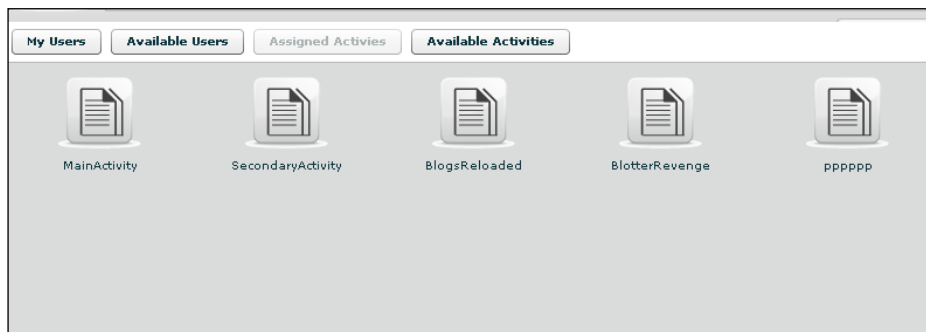
To add a user to the selected group, select a user with a single click:



Then either by:

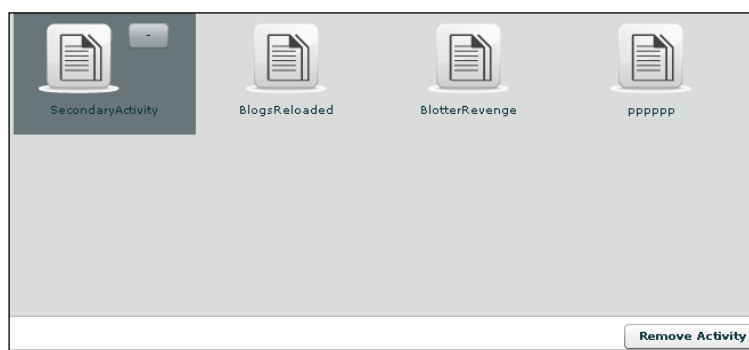
1. Click “Add User” button on the left at the bottom of the window;
2. Click “+” button next the user’s icon.

Clicking on “Assigned Activities” button you can view all assigned activities to the selected group:



You can see activity’s details by double clicking activity’s icon.

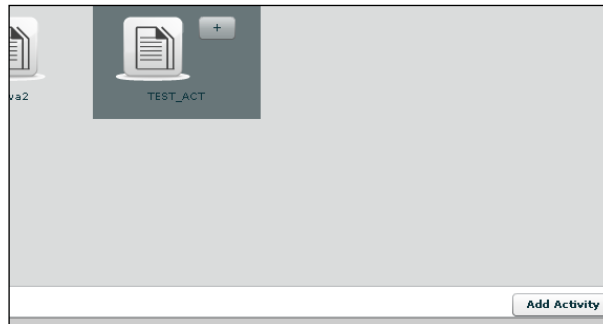
You can remove an activity from the selected group: select the activity to remove and click on the “-” button or click on the “Remove Activity” button below.



Clicking on “Available Activity” bottom you can view all activities available to be added to the selected group:

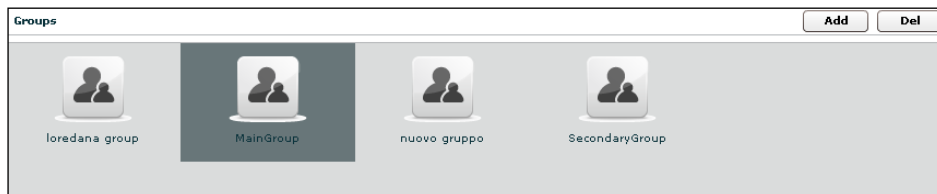


You can see activity's details by double clicking activity's icon.  
To add an activity to the selected group, select an activity with a single click:

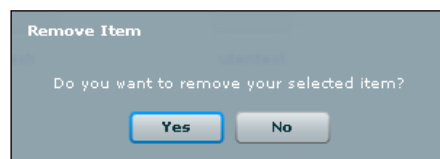


Then either by:

1. Click "Add Activity" button on the left at the bottom of the window;
  2. Click "+" button next the icon's activity.
- Delete a group: after selecting a group, "Del" button on the top of list of icons is enabled, press the button to delete the group:



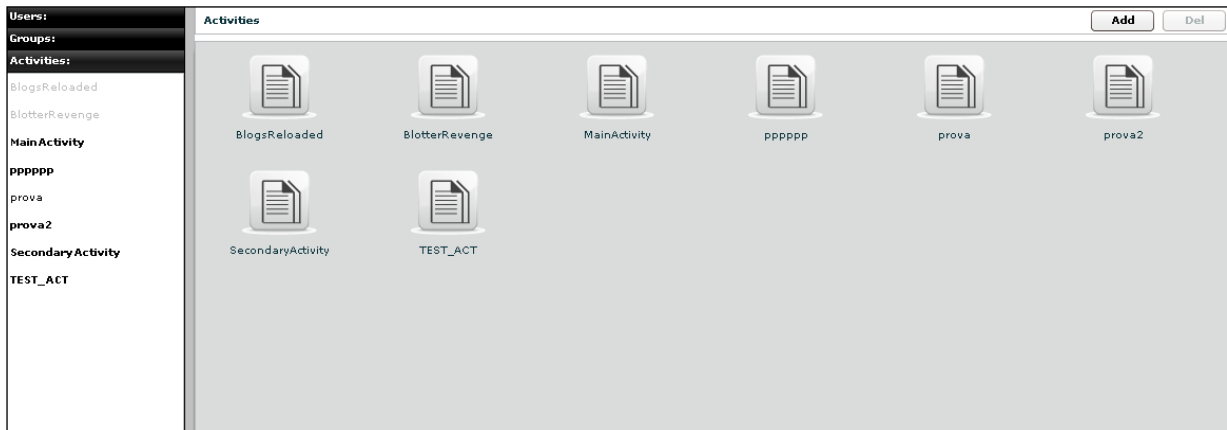
You must confirm the action to proceed:



Click "Yes" to confirm or "No" to exit.



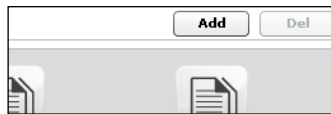
## Activities



You can view a list of all activities on the left under the tab “Activities” and also on the right pane when you click on the Activities tab title.

At this point you can:

- Add new activity: click “Add” button on the right at the top of the icons-list:



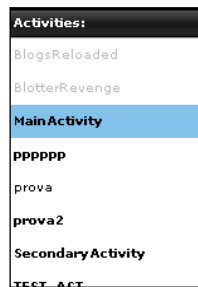
Then fill fields and select “Status” OPEN:

	Name:	<input type="text"/>	Description:	<input type="text"/>
	Contact:	<input type="text"/>	Status:	OPEN <input type="text"/>
				<input type="button" value="Save"/>

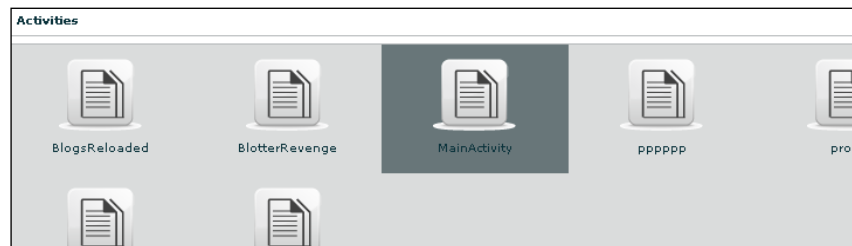
Click “Save” button to save data.

- Select an activity, either by:

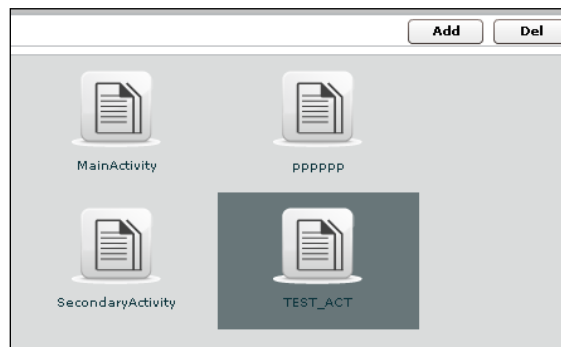
1. Click on the activity in menu-list:



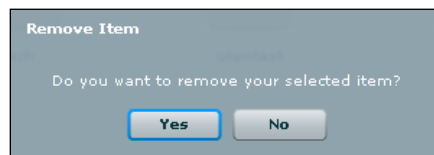
2. Or double clicking on activity's icon in icons-list:



- Delete an activity: after selecting an activity, “Del” button on the top of list of icons is enabled, press the button to delete the activity:



You must confirm the action to proceed:



Click “Yes” to confirm or “No” to exit.

**NOTE:** Deleting an Activity, will delete recursively all of its targets, backdoors and logs.

- Close an activity: Select Status CLOSE and press the SAVE button. Closing an activity is an irreversible operation that should only be used in the appropriate case. All the backdoors related to a closed activity will be automatically uninstalled upon the next synchronization.

- **Edit an activity:** after selecting an activity at the top of the window you can edit fields and save them clicking “Save” button.

At the bottom, you can view all targets the selected activity belongs to:

The screenshot shows the 'Activity: MainActivity' window. At the top right is a 'Del' button. Below it are input fields for 'Name: MainActivity', 'Description: Attivita' di default', 'Contact: xxxxx', and 'Status: OPEN'. A 'Save' button is at the bottom right. Below the form are four buttons: 'My Groups', 'Available Groups', 'Targets', and 'Blotter'. On the right side, there is an 'Add Target' button. At the bottom, there is a single target icon labeled 'MainTarget'.

You can see target's details by double clicking target's icon.

To add a new target to the selected activity, click “Add Target” button on the right:

The screenshot shows the 'Targets' window. At the top right is a 'Del' button. Below it are input fields for 'Name:' and 'Description:'. A 'Save' button is at the bottom right.

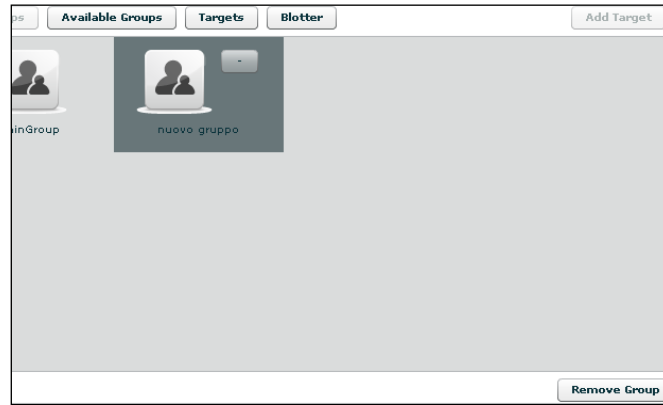
Then fill fields and click “Save” button to save data.

Clicking on “My Groups” button you can view all groups the selected activity belongs to:

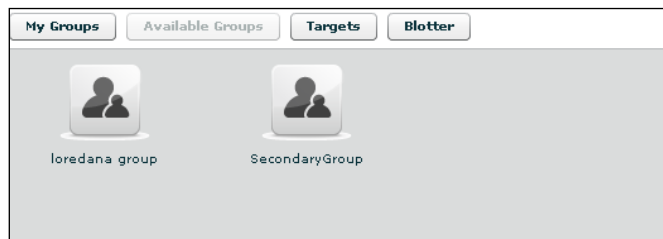
The screenshot shows the 'Activity: MainActivity' window. At the top right is a 'Del' button. Below it are input fields for 'Name: MainActivity', 'Description: Attivita' di default', 'Contact: xxxxx', and 'Status: OPEN'. A 'Save' button is at the bottom right. Below the form are four buttons: 'My Groups', 'Available Groups', 'Targets', and 'Blotter'. On the right side, there is an 'Add Target' button. At the bottom, there are two group icons labeled 'MainGroup' and 'nuovo gruppo'.

You can see group's details by double clicking group's icon.

You can remove a group from selected activity: select the group to remove and then click on the “-“ button or click on the “Remove Group” button below.



Clicking on “Available Groups” button you can view all groups available to be added to the selected activity:



You can see group’s details by double clicking group’s icon.  
To add a group to the selected activity, select a group with a single click:




Then either by:




1. Click “Add Group” button on the left at the bottom of the window;
2. Click “+” button next the group’s icon

Clicking “Blotter” button you can view a list of blotter.

## Blotter

The blotter is a report of the investigation that includes only relevant logs. Logs can be added to the blotter with the appropriate button (  ) from the log visualization.




Blotter shows a list of preferential logs as a table:

My Groups		Available Groups		Targets		Blotter		Add Target	
Id	Tag	Date	User	Ip	Host	Type	Backdoor	Note	
1890		28/08/2008 10:35:	user	97.61.150.69	host	VOIP	RCS_136161		
662		17/07/2008 11:47:	user	103.16.78.13	host	VOIP	RCS_136161		
647		17/07/2008 11:46:	user	110.247.191.217	host	VOIP	RCS_136161		

Remove Item    Cleanup Blotter    Download Blotter

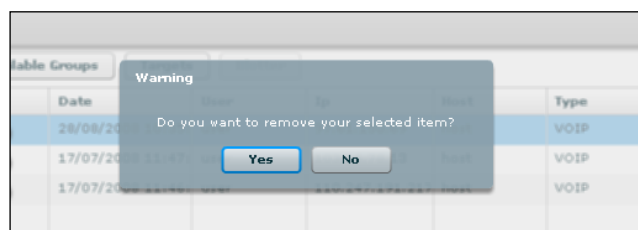
Double click on detail's row to view log's detail. You will be redirected to the logs visualization with a filter for the selected log.

If you want to remove a row, select it with a single click:

My Groups		Available Groups		Targets		Blotter		Add Target	
Id	Tag	Date	User	Ip	Host	Type	Backdoor	Note	
1890		28/08/2008 10:35:	user	97.61.150.69	host	VOIP	RCS_136161		
662		17/07/2008 11:47:	user	103.16.78.13	host	VOIP	RCS_136161		
647		17/07/2008 11:46:	user	110.247.191.217	host	VOIP	RCS_136161		

Remove Item    Cleanup Blotter    Download Blotter

Then click "Remove Item" button:

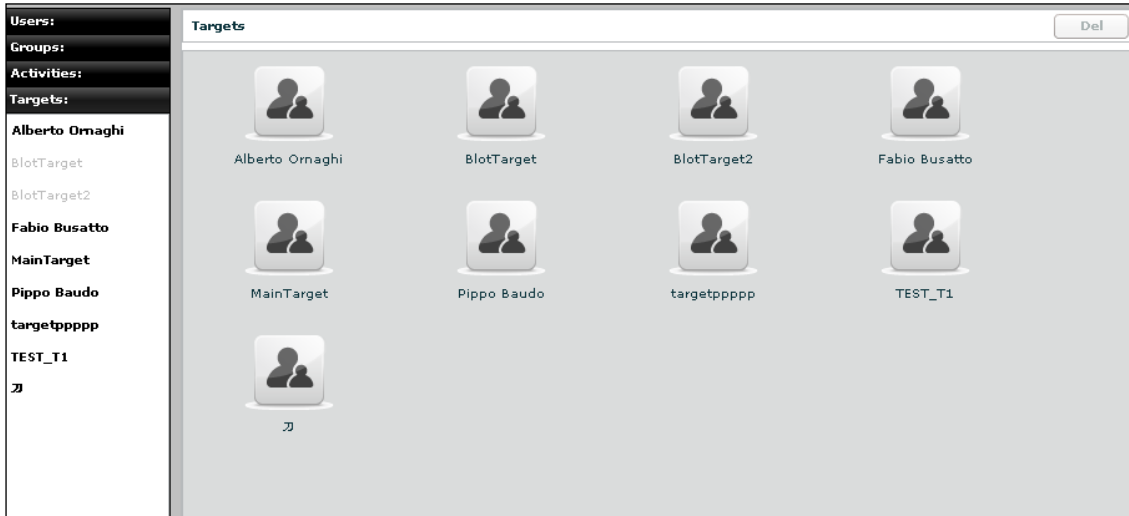


Click "Yes" to confirm or "No" to exit.

Click "Cleanup Blotter" button to clear blotter.

Click "Download Blotter" button to download a blotter report as a compressed file (.zip).

## Target



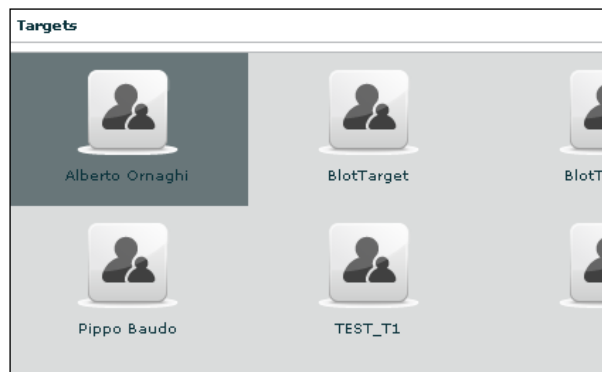
You can view a list of all targets on the left under the tab “Targets” and also on the right pane when you click on the Targets tab title.

At this point you can:

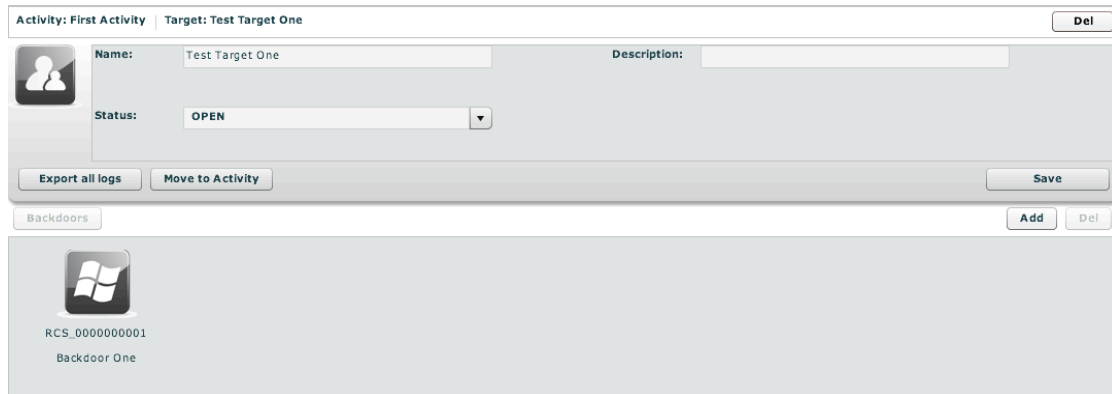
- Select a target, either by:
  1. Clicking on the target in menu-list:



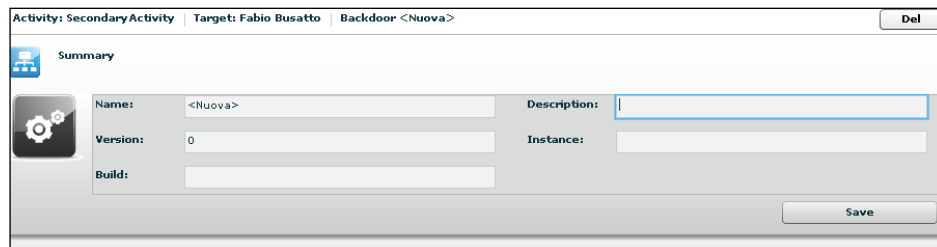
2. Or double clicking on target's icon in icons-list:



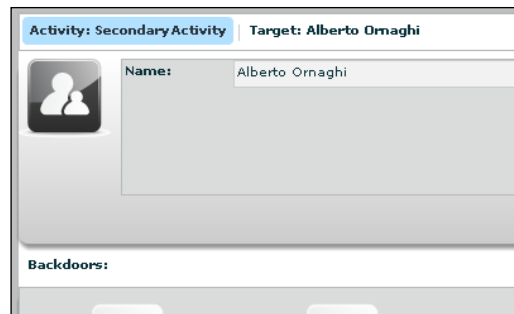
- Edit a target: after selecting a target at the top of the window you can edit fields and save them clicking “Save” button.  
At the bottom, you can view all backdoors the selected target belongs to:



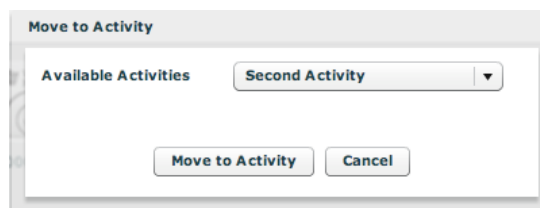
You can see backdoor's details by double clicking backdoor's icon.  
To add a new backdoor to the selected target clicking "Add" button on the right:



Fill field "Description" and click "Save" button to save data.  
You can view the activity's target clicking on the link upper details of selected target:

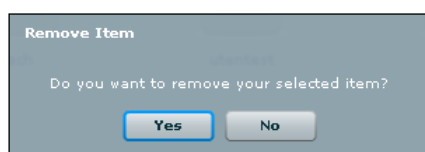


- Close a Target: Select Status CLOSE and press the SAVE button. Closing a target is an irreversible operation that should only be used in the appropriate case. All the backdoors related to a closed target will be automatically uninstalled upon the next synchronization.
- Move a target; you can move a target from one activity to another. This can be useful if you open a new investigation and the target has to be into that investigation. Instead of closing the target and reinstall a new backdoor, you can keep the backdoor installed and move it to the new investigation. When a target is moved the original one will remain in place and will be closed (no new logs will arrive). The moved target will receive all the new logs as if it was there already from the beginning.



You can only move a target to an open activity.

- Remove a target: after selecting a target, press “Del” button on the top of details of the selected target, you must confirm the action to proceed:

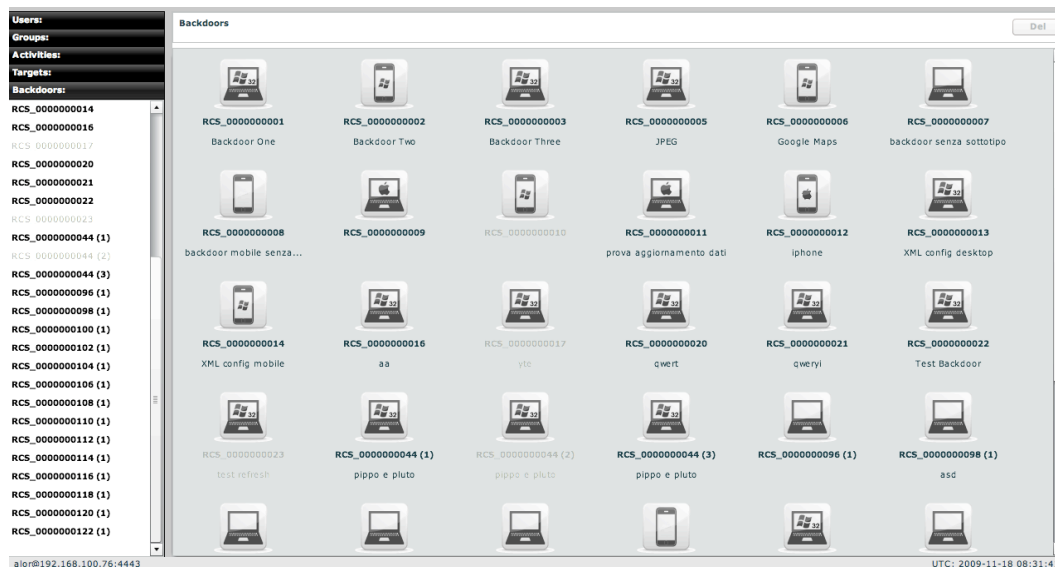


Click “Yes” to confirm or “No” to exit.

**NOTE:** Deleting a Target will recursively delete all of its backdoors and logs.



## Backdoors



You can view a list of all backdoors on the left under the tab “Backdoors” and also on the right pane when you click on the Backdoors tab title.

Here you can see all the backdoor created within targets and all of their instances.

You can find different types of backdoors identified by different icons. Each operating system has its own icon.

### NOTE:

Backdoor installed on different systems (or users) will create different instances. Each instance stands for an installation. First installation will be the instance number 1. Further instances will have the same name followed by an incremental number between parentheses. Each instance can be configured separately.

Actually, when you create a new backdoor the system creates a backdoor class and the first instance of it. The backdoor class can be configured in the “build” section; the instance can be configured (after the first sync) in the configuration part of the backdoor summary. Read the CONFIGURATION chapter for further information.

Instances can be moved under other targets if needed. Let’s say you install a backdoor on a system with 5 users. Every user will generate a different instance of the backdoor. Then you can create targets and move the instances under the correct target.

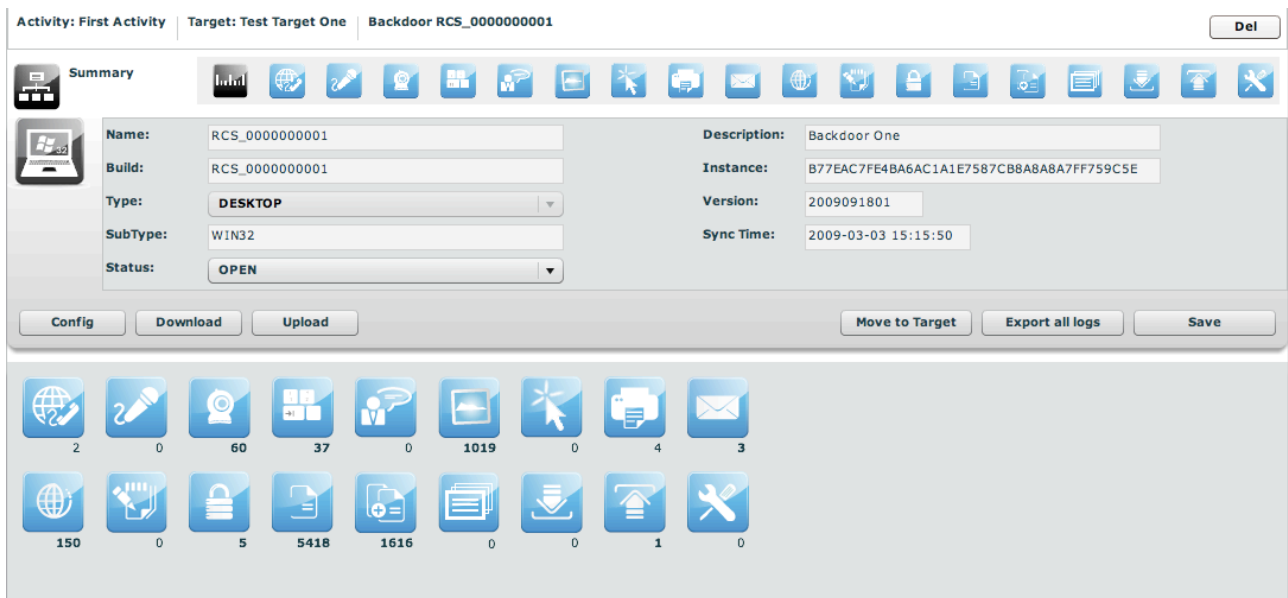
At this point you can:

- Select a backdoor, either by:
  1. Clicking on the backdoor in menu-list:

```
(1) RCS_0000000000_2C8
(5) RCS_0000000000_2C8
(5) RCS_0000000000_2C8
(1) RCS_0000000000_2C8
(1) RCS_0000000000_2C8
(1) RCS_0000000000_2C8
(1) RCS_0000000000_2C8
(1) RCS_0000000000_2C8
(1) RCS_0000000000_2C8
(1) RCS_0000000000_2C8
(1) RCS_0000000000_2C8
(1) RCS_0000000000_2C8
(1) RCS_0000000000_2C8
(1) RCS_0000000000_2C8
(1) RCS_0000000000_2C8
(1) RCS_0000000000_2C8
(1) RCS_0000000000_2C8
(1) RCS_0000000000_2C8
```

2. Or double clicking on backdoor's icon in icons-list

- Edit a backdoor, after selecting a backdoor, this is backdoor's view with details summary icons:




At the top, the link to open activity of selected backdoor:



And near the link to open target of selected backdoor:





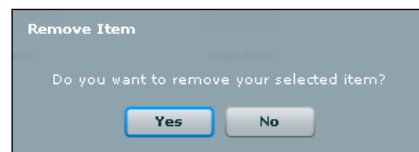
Under the links: on the left the summary icon and on the right a list of log's detail's icons.

You can edit "Description" field and the "status", all the other fields are read only and filled automatically by the database. Click  (save) to save changes.

To open a type of log click its detail icon, then summary icon and selected icon's log are replaced mutually:




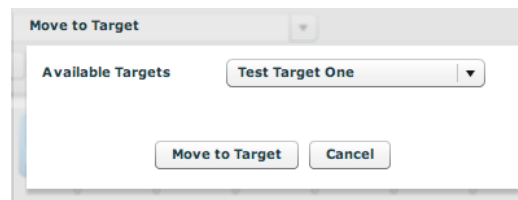
- Close a Backdoor: Select Status CLOSED and press the  (Save) button. Closing a backdoor is an irreversible operation that should only be used in the appropriate case. A closed backdoor will be uninstalled upon the next synchronization.
- Delete a backdoor, after selecting a backdoor, press  (Del) at the top of details of the selected target, you must confirm the action to proceed:



Click "Yes" to confirm or "No" to exit.

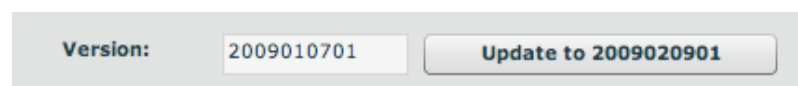
**NOTE:** Deleting a Backdoor will recursively delete all of its logs. Deleted backdoors will be automatically uninstalled from the target machine upon next synchronization.

- Move a backdoor, by clicking  (Move to target) you can move a backdoor from one target to another in order to reorganize you instances. When a backdoor is moved the original one will remain in place and will be closed (no new logs will arrive). The moved backdoor will receive all the new logs as if it was there already from the beginning.




You can only move a backdoor to an open target.

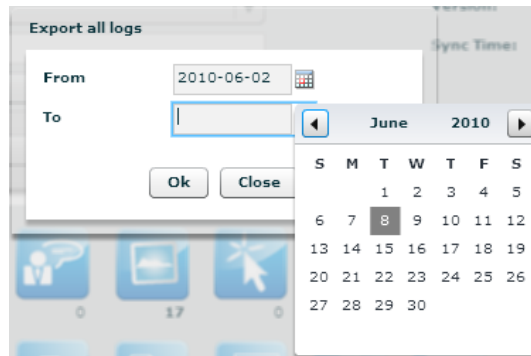
- Update a backdoor, if a backdoor was installed previously on a target and you updated the database with a new version, a button will be displayed:



If you press the button the backdoor will be automatically upgraded to the latest version the next time it synchronize with the server.

**NOTE:** the backdoor will download the update and update itself the next time the user logs in into the system

- Export all logs from a backdoor: by pressing  (Export all logs) and selecting a time frame, you can export all logs from the selected backdoor within that time frame.



**NOTE:** All log files will be exported as a single zip archive.



- Configure a backdoor: by pressing the  button you can access the configuration section of a backdoor:

Configurations:			
Sent Date	Saved Date	Description	User
	2009-11-11 09:55:09	alor test	alor
2009-10-14 00:00:00	2009-10-12 10:24:11	alor	alor

In this section you can see the configuration history of a backdoor. All the previous configurations can be reviewed by selecting them and pressing “edit” or double-clicking them.

If a configuration has an empty “sent date” it means that this configuration was not sent to the backdoor. Only the first configuration in the list (the most recent) can have an empty “sent date”.

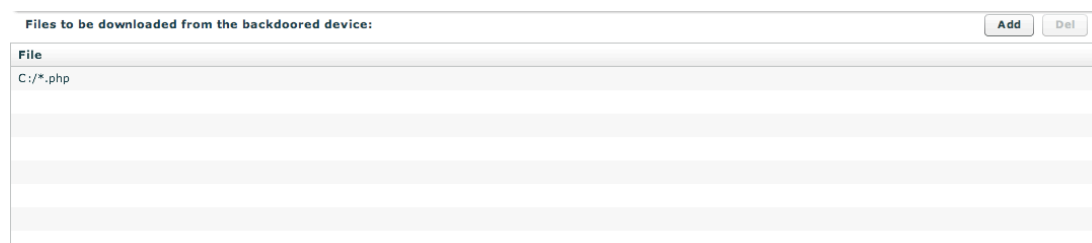
For further information on how to configure a backdoor, please refer to the configuration section of this manual.

- Send and receive files from a backdoor: the two buttons  and  will open the lists of file to be uploaded to the backdoor or downloaded from the target machine. These files will be moved during following synchronizations.

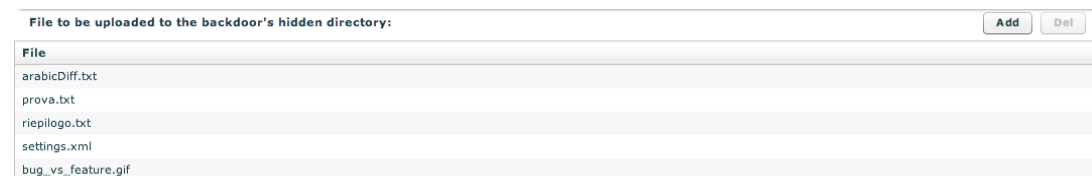
Downloading a file from the target PC requires the operator to input a filename (of a file located on the target PC) with absolute pathname. It is possible to specify multiple files using *wildcards* like, for instance: "c:\Dir\Files\\*.doc". Besides to standard environment variable, it is possible to use the virtual variable "\$dir\$" that points to the repository hidden on the target device. On Mobile devices the root directory is "\", so "c:\Dir\Files\\*.doc" becomes "\Dir\Files\\*.doc".


**NOTE:** Downloaded files can be viewed in the "Downloaded Files" log section

**NOTE:** Files can also be added to the download queue from the  tab.




The files in the Upload queue are transferred on the target PC at the first synchronization and are stored in the hidden repository of the RCS agent (they can be accessed using the virtual variable "\$dir\$").




- View backdoor informations: by pressing the  button you can browse information logs coming from the backdoor. These logs include: Backdoor start time, information about infection of other users or mobile devices, crisis situations among others


Log INFO from the backdoor:

Date	Info
2010-05-19 10:52:18	[Core Module]: Backdoor started
2010-05-19 09:39:24	[Core Module]: Backdoor started
2010-05-19 09:18:13	[Core Module]: Backdoor started
2010-05-19 08:50:06	[Core Module]: Backdoor started
2010-05-18 15:05:38	[Infection Agent]: Spread to StandardUser
2010-05-18 15:05:38	[Core Module]: Backdoor started
2010-05-18 14:58:13	[Crisis]: Network activity restarted
2010-05-18 14:57:51	[Crisis]: Network activity inhibited

- Browse target's file system: by pressing the  button you can browse files and directories on the target machine



If you want to see the file content, you can add a file to the download queue (see “Send and receive files from a backdoor”) by selecting that file and pressing the  button.

**NOTE:** File system browsing is performed in an asynchronous way: if you want to update the directory content, or browse new/not scanned directories, you have to schedule the directory scanning on the next synchronization. First time the backdoor starts, only some key directories are scanned (eg: root directory, user's home, etc.). If a directory is shown in blue it means that the content of that directory has not been scanned yet. If you are interested in that content, select the directory and press the  button. Next time the backdoor synchronizes, the directory's content will be retrieved. It is also possible to specify a scan depth (each subfolder in the tree counts as one level).

If a directory is shown in red it means that its content has been already scheduled for scanning but not retrieved yet.



## Summary

Summary shows all icons to view all type of logs and a summary of all related statistics:



For each log there is a counter:

- In bold: new logs have arrived and still to be reviewed;
- In normal: all the logs have been reviewed.

You can select more than one backdoor at a time. In this case the counters will show cumulative values.

To open a log type, click its detail icon.

At the left top of detail's log's table there are some buttons:



To show unread or all logs;



To manage note of selected log: create a new note or modify or delete an existing note.

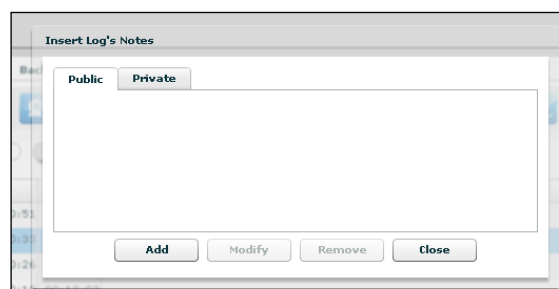


Add selected log to blotter,



Download, this button is enabled after selected one or more item;

Note can be public and private:



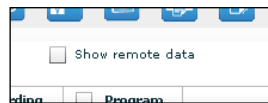
The Tag Bar (priority) let you change priority of selected logs and is visible only when one or more rows are selected.

Id	Tag	Notes	Date	Resource	Service
1934		0	29/08/2008 09:12:24	c4903be410c8d:	service
864		1	04/08/2008 15:48:56	b5d3ad899f700:	service
837		0	04/08/2008 15:48:31	f89c3e51ae1975	service
630		0	17/07/2008 11:46:14	08c48adc90c852	service

Tags in the Tag Bar are displayed in different colors from lower priority (*white*) to higher (*red*). Selected tags are displayed without a drop shadow.

You can change tag of selected row or rows just by clicking on new tag.

Right to the Tag Bar, there is a checkbox that let you show or hide remote data:



If you check it, remote data columns appear in the table; by default remote data are hidden.

It's possible to filter table's content: flag one or more checkbox in table's header and specify your filter in the popup:

Id	<input checked="" type="checkbox"/> Tag	Notes	<input type="checkbox"/> Date	<input checked="" type="checkbox"/> Process	<input type="checkbox"/> Window	<input type="checkbox"/> Text
----	---	-------	-------------------------------	---	---------------------------------	-------------------------------

To remove filter, remove flag from its checkbox. To edit a filter click on the title text of the column.

Under the table, you can change the number of displayed logs per page, the default is 20:

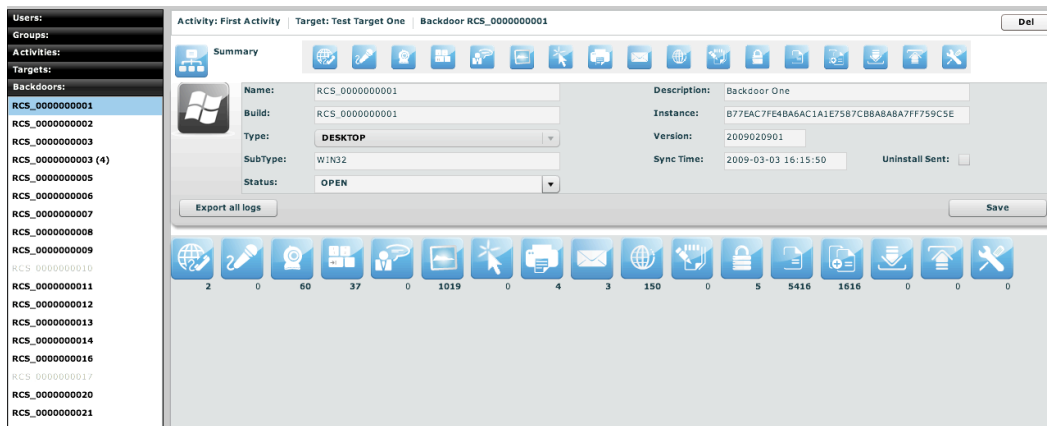
Change number of logs per page:	<input type="text" value="20"/>	<input type="button" value="Ok"/>	<input type="button" value=""/> <<	Pag. 1 of 1	<input 644="" 667="" 685"="" 90="" data-label="Text" type="button" value="&gt;&gt;&lt;/input&gt;&lt;/td&gt; &lt;/tr&gt; &lt;/table&gt; &lt;/div&gt; &lt;div data-bbox="/> <p>You can navigate the result pages with “&lt;&lt;” and “&gt;&gt;” buttons.</p>
---------------------------------	---------------------------------	-----------------------------------	------------------------------------	-------------	--

You can select more than one backdoor at a time. In this case the counters will show cumulative values and the agents log view will show log detail originating from any of the selected backdoor.

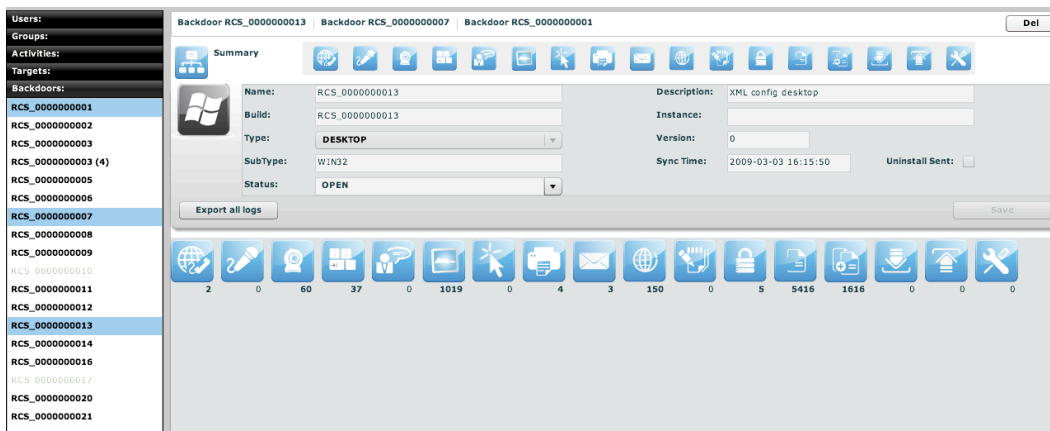
To select more backdoors, in left pane under tab “Backdoors”, first select one backdoor, then press and hold the “Ctrl” button while selecting another backdoor and do the same for all backdoors you want to select.

One backdoor selected:





With more backdoors selected the counters show cumulative values for any type of log:



If you want to select consecutive backdoors, select first backdoor then press and hold "Shift" button while selecting the last backdoor.



## Timeline

The timeline visualization shows the logs in a temporal order disregarding the type of log. All the logs are mixed together and displayed in a single table.

This is very useful during an investigation to see exactly what a target has performed and when. This view presents you the actions of the target in a chronological order rather than focusing on the type of data you are interested (as the other views).

If you double-click an entry, you will be redirected to the correct visualization of that specific log.

Activity: act1 | Target: trg1 | Backdoor RCS\_000000007

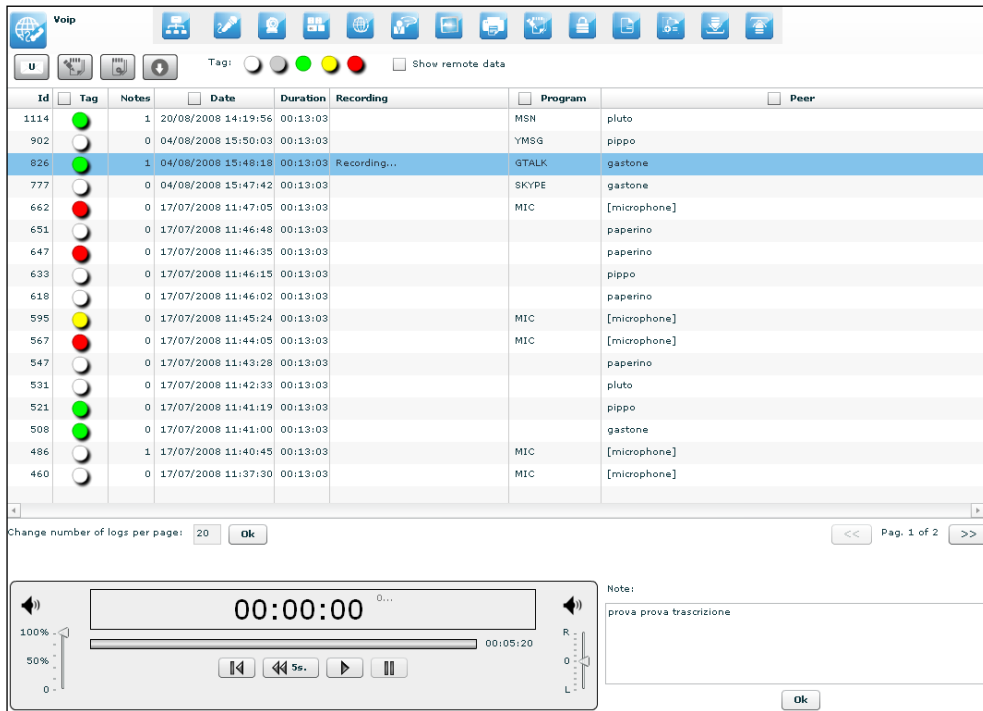
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Id	Tag	Date	Type	Info	
12212	<input type="radio"/>	2009-10-14 13:17:01	MOUSE		
12211	<input type="radio"/>	2009-10-14 13:17:01	MOUSE		
12214	<input type="radio"/>	2009-10-14 13:16:57	CHAT	[MSN] [] Punto elenco bu gu	
12213	<input type="radio"/>	2009-10-14 13:16:55	CHAT	[MSN] [] alor@libero.it scrive: Punto elenco funziona !	
12215	<input type="radio"/>	2009-10-14 13:16:48	PASSWORD	[Windows Live Messenger] [testhth@hotmail.com] []	
12210	<input type="radio"/>	2009-10-14 13:16:48	DEVICE		
12201	<input type="radio"/>	2009-10-14 13:16:44	MOUSE		
12209	<input type="radio"/>	2009-10-14 13:16:42	CHAT	[MSN] [] Test scrive: Punto elenco ciao chat	
12199	<input type="radio"/>	2009-10-14 13:16:39	KEYLOG	[msnmsgr.exe] ciao chat↵	
12205	<input type="radio"/>	2009-10-14 13:16:38	MOUSE		
12208	<input type="radio"/>	2009-10-14 13:16:37	CHAT	[MSN] [] separatore	
12206	<input type="radio"/>	2009-10-14 13:16:35	MOUSE		
12197	<input type="radio"/>	2009-10-14 13:16:31	FILECAP	C:\Documents and Settings\IMs\Local Settings\Temporary Internet Files\Content.IE5\2RKN6NC3\footer_bg[1].jpg	
12194	<input type="radio"/>	2009-10-14 13:16:31	FILEOPEN	C:\Documents and Settings\IMs\Local Settings\Temporary Internet Files\Content.IE5\2RKN6NC3\footer_bg[1].jpg	

Change number of logs per page: 20

<< Pag. 1 of 9 >>

 **Call, Mic**

Select this agent view to show a list of all recordings of kind “call list”, “call” or “mic”.



The screenshot displays the 'Voip' console interface. At the top, there is a toolbar with various icons and a 'Tag' selection area with colored circles (grey, green, yellow, red) and a 'Show remote data' checkbox. Below this is a table of recordings with the following columns: Id, Tag, Notes, Date, Duration, Recording, Program, and Peer. The table contains 20 rows of data, with the row for Id 826 highlighted in blue. Below the table, there is a 'Change number of logs per page' section with a dropdown set to '20' and an 'Ok' button. To the right of this section are navigation arrows and 'Pag. 1 of 2'. At the bottom of the interface is a playback control panel with a volume slider on the left, a central time display showing '00:00:00', a progress bar, and playback buttons (play, stop, previous, next). On the right side of the playback panel is a 'Note' field containing the text 'prova prova trascrizione' and an 'Ok' button.

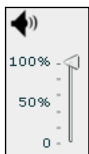
Id	Tag	Notes	Date	Duration	Recording	Program	Peer
1114		1	20/08/2008 14:19:56	00:13:03		MSN	pluto
902		0	04/08/2008 15:50:03	00:13:03		YMSG	pippo
826		1	04/08/2008 15:48:18	00:13:03	Recording...	GTALK	gastone
777		0	04/08/2008 15:47:42	00:13:03		SKYPE	gastone
662		0	17/07/2008 11:47:05	00:13:03		MIC	[microphone]
651		0	17/07/2008 11:46:48	00:13:03			paperino
647		0	17/07/2008 11:46:35	00:13:03			paperino
633		0	17/07/2008 11:46:15	00:13:03			pippo
618		0	17/07/2008 11:46:02	00:13:03			paperino
595		0	17/07/2008 11:45:24	00:13:03		MIC	[microphone]
567		0	17/07/2008 11:44:05	00:13:03		MIC	[microphone]
547		0	17/07/2008 11:43:28	00:13:03			paperino
531		0	17/07/2008 11:42:33	00:13:03			pluto
521		0	17/07/2008 11:41:19	00:13:03			pippo
508		0	17/07/2008 11:41:00	00:13:03			gastone
486		1	17/07/2008 11:40:45	00:13:03		MIC	[microphone]
460		0	17/07/2008 11:37:30	00:13:03		MIC	[microphone]

Double-clicking on a row a simple audio player is shown on the lower part of the view. A public note editor is also shown at the right of the player.

Modify the note and press “Ok” button to save the changes.

These can be used to easily record any notes related to the listening recording.

The first time a row is selected or if the recording is still in place, the audio file needs to be downloaded, a progress bar shown until finished:



This control let you change the volume.



Move this arrow to change the balance, zero is default.

Left channel (L means Local) will contain the target’s “voice”, right channel (R means Remote) will contain the peer’s “voice”.

There are four buttons to interact with the audio player:



to start player from begin;



to go back five seconds;

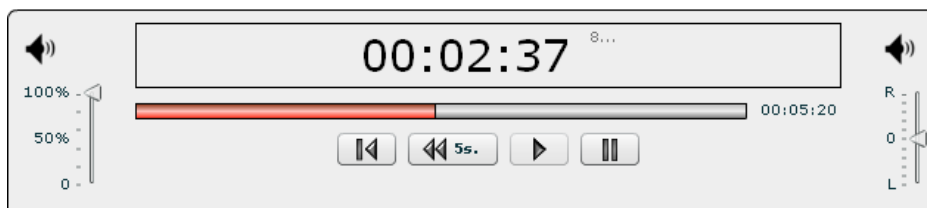



to play audio;



to pause audio.

The bar shows in red the portion of the audio already played:



 Webcam, Snapshot, Mouse Click


Select this agent view to show a list of all captured images from webcam, snapshot or mouse clicks. Mouse clicks are very useful to capture random pin pad authentication on the web.

Activity: Prove URL | Target: Prove URL | Backdoor RCS\_000000094 (98)

Snapshot

Show remote data

<input type="checkbox"/> Id	<input type="checkbox"/> Tag	<input type="checkbox"/> Notes	<input type="checkbox"/> Date	<input type="checkbox"/> Process	<input type="checkbox"/> Window	<input type="checkbox"/> Size	<input type="checkbox"/> OCR
89716	<input type="radio"/>	0	2009-05-26 08:48:57	notepad.exe	Untitled - Notepad	98 Kb	
89715	<input type="radio"/>	0	2009-05-26 08:48:36	rundll32.exe	RCS Status Log	43 Kb	
89685	<input type="radio"/>	0	2009-05-26 08:25:32	mspaint.exe	untitled - Paint	151 Kb	
89678	<input type="radio"/>	0	2009-05-26 08:25:16	mspaint.exe	untitled - Paint	151 Kb	
89677	<input type="radio"/>	0	2009-05-26 08:25:03	wordpad.exe	Document - WordPad	97 Kb	
89676	<input type="radio"/>	0	2009-05-26 08:24:49	wordpad.exe	Document - WordPad	97 Kb	
89675	<input type="radio"/>	0	2009-05-26 08:24:42	explorer.exe	UNKNOWN	140 Kb	
89674	<input type="radio"/>	0	2009-05-26 08:21:39	rundll32.exe	RCS Status Log	137 Kb	

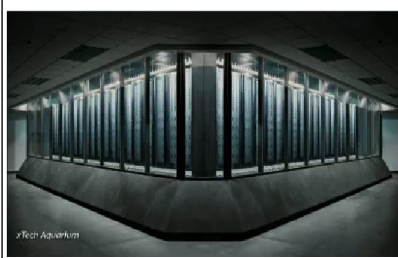


Change number of logs per page:   Pag. 1 of 1

Under the table, there are frames of all webcam or snapshot's logs. Double click on a frame to see more details:

Webcam

Tag:        Show remote data



Zoom:

Id: 805

Size: 358230

Date: 04/08/2008 17:48:07

OCR Text:

At the right of the page you can change zoom factor with four buttons:  
 "Fit" button to fit the image with the current view,  
 "1:1" button to see the image at the original size,  
 "+" button to increment zoom,

“-“ button to decrement zoom;

At the bottom of the page:

“<<” button to see previous frame,

“>>” button to see next frame,

“Close” button to return to the list of webcam or snapshot’s logs.





This agent viewer let you browse through logs of kind "url". It will show you all the visited URLs. The URL is recorded only once and it doesn't report the automatically loaded sub-URLs. Only the URLs actually visited by the target will be displayed.

If the capture option was configured you can also have a snapshot of the page in the list and it will be displayed as the snapshot visualization.

Activity: alor | Target: alor | Backdoor RCS\_000000169

Url

Show remote data

<input type="checkbox"/> Id	<input type="checkbox"/> Tag	<input type="checkbox"/> Notes	<input type="checkbox"/> Date	<input type="checkbox"/> Browser	<input type="checkbox"/> Url	<input type="checkbox"/> Window	<input type="checkbox"/> Size	<input type="checkbox"/> Keywords	<input type="checkbox"/> OCR
172040		0	2009-07-13 07:26:39	IE Explorer	http://mail.google.com/mail/?shva=1	Gmail - Inbox (39) - testtht			
172039		0	2009-07-13 07:26:30	IE Explorer	http://mail.google.com/mail/?shva=1	Gmail - New Guide: Underst			
172042		0	2009-07-13 07:26:25	IE Explorer	http://mail.google.com/mail/?shva=1	Gmail - Inbox (39) - testtht	137 Kb		
172038		0	2009-07-13 07:26:25	IE Explorer	http://mail.google.com/mail/?shva=1	Gmail - Inbox (39) - testtht			
172037		0	2009-07-13 07:26:20	IE Explorer	http://mail.google.com/mail/?shva=1	Gmail - Windows Internet Ex			
172036		0	2009-07-13 07:26:19	IE Explorer	https://www.google.com/accounts/Sc	Reindirizzamento - Windows			
172041		0	2009-07-13 07:26:10	IE Explorer	https://www.google.com/accounts/Sc	Gmail: l'email di Google - W	93 Kb		
172035		0	2009-07-13 07:26:10	IE Explorer	https://www.google.com/accounts/Sc	Gmail: l'email di Google - W			
172034		0	2009-07-13 07:26:01	Mozilla Firefox	http://www.youtube.com/	YouTube - Broadcast Yourse			
172033		0	2009-07-13 07:25:47	Mozilla Firefox	http://www.facebook.com/	Welcome to Facebook!   Fac			
171972		0	2009-07-13 07:25:28	Opera	http://europe.wsj.com/home-page	Corriere della Sera - Opera			
171971		0	2009-07-13 07:24:59	Opera	http://www.corriere.it/	Liberio - Opera			
171970		0	2009-07-13 07:24:50	Opera	http://www.libero.it/	Opera Web Browser   Faster			
171969		0	2009-07-13 07:24:43	Opera	http://www.opera.com/browser/	Opera			
171968		0	2009-07-13 07:24:31	Mozilla Firefox	http://www.microsoft.com/events/se	Digital Blackbelt Series: Def			
171967		0	2009-07-13 07:24:22	Mozilla Firefox	http://msdn.microsoft.com/en-us/sec	Security Developer Center -			
171966		0	2009-07-13 07:24:01	Mozilla Firefox	http://www.microsoft.com/en/us/defi	Microsoft Corporation - Mozi			
171961		0	2009-07-13 07:23:37	IE Explorer	http://www.ibm.com/us/en/	IBM - United States - Windo	55 Kb		

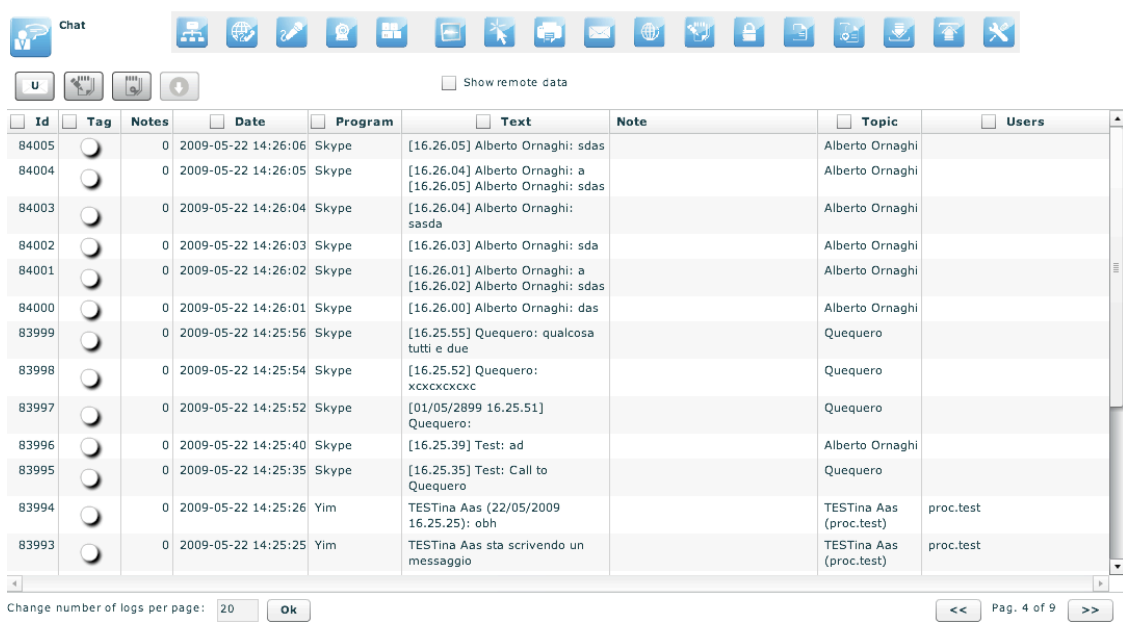
Change number of logs per page: 20

Pag. 1 of 2



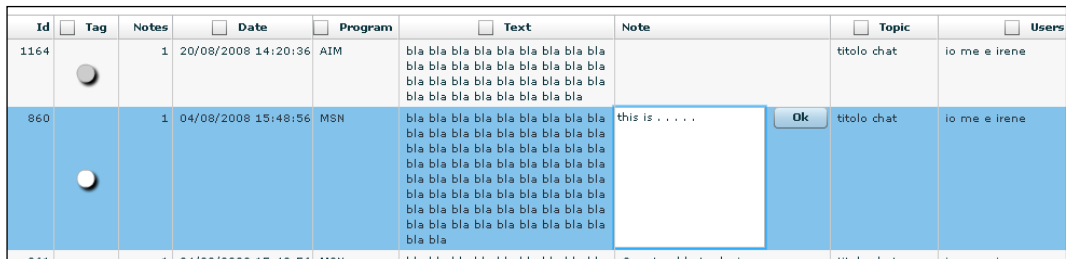
 Chat

This agent viewer let you browse through logs of kind “chat”.



<input type="checkbox"/> Id	<input type="checkbox"/> Tag	<input type="checkbox"/> Notes	<input type="checkbox"/> Date	<input type="checkbox"/> Program	<input type="checkbox"/> Text	<input type="checkbox"/> Note	<input type="checkbox"/> Topic	<input type="checkbox"/> Users
84005	<input type="radio"/>	0	2009-05-22 14:26:06	Skype	[16.26.05] Alberto Ornaghi: sdas		Alberto Ornaghi	
84004	<input type="radio"/>	0	2009-05-22 14:26:05	Skype	[16.26.04] Alberto Ornaghi: a [16.26.05] Alberto Ornaghi: sdas		Alberto Ornaghi	
84003	<input type="radio"/>	0	2009-05-22 14:26:04	Skype	[16.26.04] Alberto Ornaghi: sasda		Alberto Ornaghi	
84002	<input type="radio"/>	0	2009-05-22 14:26:03	Skype	[16.26.03] Alberto Ornaghi: sda		Alberto Ornaghi	
84001	<input type="radio"/>	0	2009-05-22 14:26:02	Skype	[16.26.01] Alberto Ornaghi: a [16.26.02] Alberto Ornaghi: sdas		Alberto Ornaghi	
84000	<input type="radio"/>	0	2009-05-22 14:26:01	Skype	[16.26.00] Alberto Ornaghi: das		Alberto Ornaghi	
83999	<input type="radio"/>	0	2009-05-22 14:25:56	Skype	[16.25.55] Quequero: qualcosa tutti e due		Quequero	
83998	<input type="radio"/>	0	2009-05-22 14:25:54	Skype	[16.25.52] Quequero: xcxcxcxcxc		Quequero	
83997	<input type="radio"/>	0	2009-05-22 14:25:52	Skype	[01/05/2899 16.25.51] Quequero:		Quequero	
83996	<input type="radio"/>	0	2009-05-22 14:25:40	Skype	[16.25.39] Test: ad		Alberto Ornaghi	
83995	<input type="radio"/>	0	2009-05-22 14:25:35	Skype	[16.25.35] Test: Call to Quequero		Quequero	
83994	<input type="radio"/>	0	2009-05-22 14:25:26	Yim	TESTina Aas (22/05/2009 16.25.25): obh		TESTina Aas (proc.test)	proc.test
83993	<input type="radio"/>	0	2009-05-22 14:25:25	Yim	TESTina Aas sta scrivendo un messaggio		TESTina Aas (proc.test)	proc.test

It is possible to write note also directly from the table: double click on the note field of the selected row:



<input type="checkbox"/> Id	<input type="checkbox"/> Tag	<input type="checkbox"/> Notes	<input type="checkbox"/> Date	<input type="checkbox"/> Program	<input type="checkbox"/> Text	<input type="checkbox"/> Note	<input type="checkbox"/> Topic	<input type="checkbox"/> Users
1164	<input type="radio"/>	1	20/08/2008 14:20:36	AIM	bla bla		titolo chat	io me e irene
860	<input type="radio"/>	1	04/08/2008 15:48:56	MSN	bla bla	this is . . . . .	titolo chat	io me e irene

Click “Ok” button to persist the changes on the server.



### Print

This agent viewer let you browse through logs of kind “print”. It will show you all the printed documents by the target.

The screenshot shows the 'Print' agent viewer interface. At the top, it displays 'Activity: Main Activity', 'Target: MainTarget', and 'Backdoor RCS\_136161'. Below this is a toolbar with various icons and a 'Print' button. A table lists log entries with columns for 'Id', 'Tag', 'Date', 'Spool', and 'Size'. Two log entries are visible: ID 1926 and ID 1912, both dated 29/08/2008 and 28/08/2008 respectively, with a size of 1.73 Mb. To the right of the table, there is a preview of the log content, showing a series of characters and some recognizable words like 'file', 'size', 'server', and 'content'. Below the table is a grid of 10 document thumbnails, each with a small preview of the document's content. At the bottom, there are navigation controls including 'Change number of logs per page: 20', 'Ok', and 'Page 1 of 1'.

Under the table, there are previews of documents. Double click preview to see details:

This screenshot shows a detailed view of a log entry. The main area contains a block of code, likely a shell script or a series of commands, with line numbers from 53 to 77. The code includes variables for 'data', 'data\_enc', and 'spool', and uses 'puts' and 'server.call' functions. On the right side, there is a metadata panel with fields for 'Id: 1912', 'Size: 1616030', and 'Date: 28/08/2008 12:36:46'. Below the metadata, there is a 'Zoom:' section with buttons for 'Fit', '1:1', and zoom in/out arrows. The 'OCR Text:' section shows a preview of the document's content, which is a series of characters and some recognizable words like 'file', 'size', 'server', and 'content'. At the bottom right, there are navigation buttons: '<<', '>>', and 'Close'.

At the right of the page you can change zoom factor with four button:

- “Fit” button to fit the image with the current view,
- “1:1” button to see the image at the original size,
- “+” button to increment zoom,
- “-” button to decrement zoom;

At the bottom of the page:

- “<<” button to see previous frame,
- “>>” button to see next frame,
- “Close” button to return to the list of print’s logs.



## Clipboard

This agent viewer let you browse through logs of kind “clipboard”.

Activity: MainActivity Target: MainTarget Backdoor RCS\_136161

Clipboard

Show remote data

<input type="checkbox"/> Id	<input type="checkbox"/> Tag	<input type="checkbox"/> Notes	<input type="checkbox"/> Date	<input type="checkbox"/> Process	<input type="checkbox"/> Window	<input type="checkbox"/> Text
1994		0	10/09/2008 12:37:54	notepad.exe	204250	Prova di testo copiato, il log e' diverso in base alla window
1992		0	10/09/2008 12:37:28	notepad.exe	282102	Prova di testo copiato, il log e' diverso in base alla window
1990		0	10/09/2008 12:33:13	notepad.exe	31069	Prova di testo copiato, il log e' diverso in base alla window
1988		0	10/09/2008 12:31:33	notepad.exe	356287	Prova di testo copiato, il log e' diverso in base alla window
1986		0	10/09/2008 12:31:31	notepad.exe	509102	Prova di testo copiato, il log e' diverso in base alla window
1984		0	10/09/2008 12:31:04	notepad.exe	241388	Prova di testo copiato, il log e' diverso in base alla window
1982		0	10/09/2008 12:29:23	notepad.exe	699366	Prova di testo copiato, il log e' diverso in base alla window
1979		0	10/09/2008 12:15:44	notepad.exe	713138	Prova di testo copiato, il log e' diverso in base alla window
1976		0	09/09/2008 07:58:43	notepad.exe	650750	Prova di testo copiato, il log e' diverso in base alla window
1973		0	09/09/2008 07:41:22	notepad.exe	314201	Prova di testo copiato, il log e' diverso in base alla window
1972		0	09/09/2008 07:39:39	notepad.exe	622108	Prova di testo copiato, il log e' diverso in base alla window
1971		0	09/09/2008 07:34:45	notepad.exe	725786	Prova di testo copiato, il log e' diverso in base alla window
1956		0	08/09/2008 15:18:14	notepad.exe	632451	Prova di testo copiato, il log e' diverso in base alla window
1957		0	08/09/2008 15:18:14	notepad.exe	281965	Prova di testo copiato, il log e' diverso in base alla window
1955		0	08/09/2008 15:18:13	notepad.exe	162841	Prova di testo copiato, il log e' diverso in base alla window
1954		0	08/09/2008 15:17:45	notepad.exe	678625	Prova di testo copiato, il log e' diverso in base alla window
1953		0	08/09/2008 15:17:44	notepad.exe	226024	Prova di testo copiato, il log e' diverso in base alla window
1952		0	08/09/2008 15:17:43	notepad.exe	847023	Prova di testo copiato, il log e' diverso in base alla window
1951		0	08/09/2008 15:17:41	notepad.exe	139164	Prova di testo copiato, il log e' diverso in base alla window
1950		0	08/09/2008 15:17:17	notepad.exe	640819	Prova di testo copiato, il log e' diverso in base alla window

Change number of logs per page: 20

No other specialized functions are available in this view other than those commons to any agent viewer (download, add to blotter, etc.).



## Password

This agent viewer let you browse through logs of kind "password".

Show remote data

<input type="checkbox"/> Id	<input type="checkbox"/> Tag	<input type="checkbox"/> Notes	<input type="checkbox"/> Date	<input type="checkbox"/> Resource	<input type="checkbox"/> Service	<input type="checkbox"/> UserId	<input type="checkbox"/> Password
105231		0	2009-05-28 09:16:08	Trillian	yahoo	testth@yahoo.it	
105230		0	2009-05-28 09:16:08	Trillian	msn	testth@hotmail.com	
105229		0	2009-05-28 09:16:08	Trillian	aim	419764929	ht...
105228		0	2009-05-28 09:16:08	Trillian	aim	aol	1...
105227		0	2009-05-28 09:16:08	Google Talk	GTALK	default.talk.google.com	
105226		0	2009-05-28 09:16:08	Windows Live M	imap.gmail.com	testth	ht...
105225		0	2009-05-28 09:16:08	Outlook Express	imap.gmail.com	testth	ht1...
105224		0	2009-05-28 09:16:08	Thunderbird	mailbox://proc.test@pop.mail	proc.test	ht...
105223		0	2009-05-28 09:16:08	Thunderbird	mailbox://%B7%CE%D3@pop	%B7%CE%D3	ciac...
105222		0	2009-05-28 09:16:08	Thunderbird	imap://testth@imap.gmail.co	testth	ht1...
105221		0	2009-05-28 09:16:08	Opera	https://login.libero.it	testシノビ	shir...
105220		0	2009-05-28 09:16:08	Opera	https://www.google.com	testシノビ	shir...
105219		0	2009-05-28 09:16:08	Opera	https://www.google.com	testth	ht1...
105218		0	2009-05-28 09:16:08	IE Explorer	https://login.libero.it/	testしのび	shir...
105217		0	2009-05-28 09:16:08	IE Explorer	https://www.google.com/acco	シノビ	shir...
105216		0	2009-05-28 09:16:08	IE Explorer	https://www.google.com/acco	testth	ht1...
105215		0	2009-05-28 09:16:08	IE Explorer HTTP	192.168.100.100:4443/phpMy	root	ro...
105214		0	2009-05-28 09:16:08	Firefox	https://www.google.com	testシノビ	shir...

Change number of logs per page:  

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These are the main fields available in this view:

- Resource: The type of password (or browser auto complete)
- Service: The url or the server address where the account belongs
- UserId: The username of the account (or the name of the form field for browser auto complete)
- Password: The password for the account (or a comma separated list of all possible form field's values)

No other specialized function are available in this view other than those commons to any agent viewer (download, add to blotter, etc.).

## Application

The application agent retrieves the name of the applications executed on the target system and records the starting and stopping time of it.

Show remote data

<input type="checkbox"/> Id	<input type="checkbox"/> Tag	<input type="checkbox"/> Notes	<input type="checkbox"/> Date	<input type="checkbox"/> Application	<input type="checkbox"/> Action	<input type="checkbox"/> Info
791	<input type="radio"/>	0	2009-10-26 16:08:03	notepad.exe	START	Blocco note
789	<input type="radio"/>	0	2009-10-26 16:07:31	TrustedInstaller.exe	START	
788	<input type="radio"/>	0	2009-10-26 16:07:29	wuauclt.exe	START	
786	<input type="radio"/>	0	2009-10-26 16:07:12	WmiPrvSE.exe	START	
784	<input type="radio"/>	0	2009-10-26 16:06:54	SearchFilterHost.exe	STOP	Microsoft Windows Search Filter Host
783	<input type="radio"/>	0	2009-10-26 16:06:54	SearchProtocolHost.exe	STOP	
781	<input type="radio"/>	0	2009-10-26 16:05:51	iexplore.exe	STOP	
778	<input type="radio"/>	0	2009-10-26 16:05:41	iexplore.exe	START	
777	<input type="radio"/>	0	2009-10-26 16:05:39	SearchFilterHost.exe	START	Microsoft Windows Search Filter Host
776	<input type="radio"/>	0	2009-10-26 16:05:39	SearchProtocolHost.exe	START	
775	<input type="radio"/>	0	2009-10-26 16:05:29	sargui.exe	START	Sysinternals Process Explorer
774	<input type="radio"/>	0	2009-10-26 16:05:24	Dbgview.exe	STOP	
773	<input type="radio"/>	0	2009-10-26 16:05:22	procexp.exe	STOP	Sysinternals Process Explorer
772	<input type="radio"/>	0	2009-10-26 16:05:15	Dbgview.exe	START	
771	<input type="radio"/>	0	2009-10-26 16:05:10	procexp.exe	START	Sysinternals Process Explorer

Change number of logs per page:   << Pag. 2 of 2 >>

### FileOpen

This agent viewer let you browse through logs of kind “fileopen”. This is the list of opened files. If you want the real file you have to capture it or download it with the download command.

Activity: MainActivity | Target: Test Alor | Backdoor RCS\_000000005

Opened Files

Show remote data

<input type="checkbox"/> Id	<input type="checkbox"/> Tag	<input type="checkbox"/> Notes	<input type="checkbox"/> Date	<input type="checkbox"/> Process	<input type="checkbox"/> Size	<input type="checkbox"/> Mode	<input type="checkbox"/> File
22755		0	2009-01-16 08:25:06	ieexplore.exe	0 B	---D	C:\Documents and Settings\Admin\Cookies\admin@msn[1].txt
22754		0	2009-01-16 08:25:06	ieexplore.exe	997 B	-W--	C:\Documents and Settings\Admin\Cookies\admin@msn[2].txt
22753		0	2009-01-16 08:25:06	ieexplore.exe	997 B	-W--	C:\Documents and Settings\Admin\Cookies\admin@msn[2].txt
22752		0	2009-01-16 08:25:06	ieexplore.exe	997 B	---D	C:\Documents and Settings\Admin\Cookies\admin@msn[2].txt
22751		0	2009-01-16 08:25:06	ieexplore.exe	0 B	-W--	C:\Documents and Settings\Admin\Cookies\admin@msn[1].txt
22750		0	2009-01-16 08:25:06	ieexplore.exe	0 B	-W--	C:\Documents and Settings\Admin\Cookies\admin@msn[1].txt
22749		0	2009-01-16 08:25:06	ieexplore.exe	104 B	-W--	C:\Documents and Settings\Admin\Cookies\admin@p.live[1].txt
22748		0	2009-01-16 08:25:06	ieexplore.exe	104 B	-W--	C:\Documents and Settings\Admin\Cookies\admin@p.live[1].txt
22747		0	2009-01-16 08:25:04	ieexplore.exe	0 B	---D	C:\Documents and Settings\Admin\Cookies\admin@live[1].txt
22746		0	2009-01-16 08:25:04	ieexplore.exe	2 Kb	-W--	C:\Documents and Settings\Admin\Cookies\admin@live[2].txt
22745		0	2009-01-16 08:25:04	ieexplore.exe	2 Kb	-W--	C:\Documents and Settings\Admin\Cookies\admin@live[2].txt
22744		0	2009-01-16 08:25:04	ieexplore.exe	281 B	R---	C:\Documents and Settings\Admin\Cookies\admin@www.live[1].txt
22743		0	2009-01-16 08:25:01	ieexplore.exe	0 B	---D	C:\Documents and Settings\Admin\Cookies\admin@live[2].txt
22742		0	2009-01-16 08:25:01	ieexplore.exe	2 Kb	-W--	C:\Documents and Settings\Admin\Cookies\admin@live[1].txt
22741		0	2009-01-16 08:25:01	ieexplore.exe	2 Kb	-W--	C:\Documents and Settings\Admin\Cookies\admin@live[1].txt
22740		0	2009-01-16 08:25:01	ieexplore.exe	2 Kb	---D	C:\Documents and Settings\Admin\Cookies\admin@live[1].txt
22739		0	2009-01-16 08:25:01	ieexplore.exe	0 B	-W--	C:\Documents and Settings\Admin\Cookies\admin@live[2].txt
22738		0	2009-01-16 08:25:01	ieexplore.exe	0 B	-W--	C:\Documents and Settings\Admin\Cookies\admin@live[2].txt

Change number of logs per page: 20

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No other specialized functions are available in this view other than those commons to any agent viewer (download, add to blotter, etc.).

### FileCap

This agent viewer let you browse through logs of kind “filecap”. This is the list of captured file that can be downloaded locally for further analysis. To download the file, select it and press the download button.

Activity: MainActivity | Target: Test Alor | Backdoor RCS\_000000005

Captured Files

Show remote data

<input type="checkbox"/> Id	<input type="checkbox"/> Tag	<input type="checkbox"/> Notes	<input type="checkbox"/> Date	<input type="checkbox"/> Size	<input type="checkbox"/> File
22772		0	2009-01-16 08:25:06	104 B	C:\Documents and Settings\Admin\Cookies\admin@p.live[1].txt
22770		0	2009-01-16 08:25:04	281 B	C:\Documents and Settings\Admin\Cookies\admin@www.live[1].txt
22773		0	2009-01-16 08:24:23	262 B	C:\Documents and Settings\Admin\Cookies\admin@windowsmarketplace[2].txt
22778		0	2009-01-16 08:24:22	997 B	C:\Documents and Settings\Admin\Cookies\admin@msn[2].txt
22776		0	2009-01-16 08:24:22	104 B	C:\Documents and Settings\Admin\Cookies\admin@zune[1].txt
22775		0	2009-01-16 08:24:22	234 B	C:\Documents and Settings\Admin\Cookies\admin@zune[2].txt
22769		0	2009-01-16 08:24:22	118 B	C:\Documents and Settings\Admin\Cookies\admin@windowsmarketplace[1].txt
22768		0	2009-01-16 08:24:22	905 B	C:\Documents and Settings\Admin\Cookies\admin@login.live[2].txt
22780		0	2009-01-16 08:24:09	170 B	C:\Documents and Settings\Admin\Cookies\admin@get.live[1].txt
22777		0	2009-01-16 08:23:54	2 Kb	C:\Documents and Settings\Admin\Cookies\admin@live[1].txt
22781		0	2009-01-16 08:23:53	809 B	C:\Documents and Settings\Admin\Cookies\admin@login.live[1].txt
22774		0	2009-01-16 08:23:40	2 Kb	C:\Documents and Settings\Admin\Cookies\admin@live[2].txt
22771		0	2009-01-16 08:23:36	83 B	C:\Documents and Settings\Admin\Cookies\admin@doubleclick[1].txt
22782		0	2009-01-16 08:23:35	280 B	C:\Documents and Settings\Admin\Cookies\admin@apple[1].txt
22779		0	2009-01-16 08:23:35	174 B	C:\Documents and Settings\Admin\Cookies\admin@apple[2].txt
22767		0	2009-01-16 08:23:07	105 B	C:\Documents and Settings\Admin\Cookies\admin@mail.google[1].txt
22305		0	2009-01-15 13:12:32	296 B	C:\Documents and Settings\Admin\Cookies\admin@yahoo[2].txt
22308		0	2009-01-15 09:17:11	2 Kb	C:\DOCUME~1\Admin\LOCALS~1\Temp\dd.NET Framework30_Setup1CE0.txt

Change number of logs per page: 20

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## Download, Upload

This agent viewer let you browse through logs of kind “download” or “upload”.

Downloaded file will show you the files that were downloaded from the backdoor with the download command. It will not show you files downloaded by the target from the Internet.

The same rule applies for uploaded file.

In order to capture downloaded or uploaded file by the target you have to use the file capture agent.

Activity: alor | Target: test | Backdoor RCS\_000000023

Downloaded Files

Show remote data

<input type="checkbox"/> Id	<input type="checkbox"/> Tag	Notes	<input type="checkbox"/> Date	Size	<input type="checkbox"/> File
27438		0	2009-02-06 14:09:46	6 B	c:\New Text Document.txt
27437		0	2009-02-06 14:09:46	4 B	c:\Copy of New Text Document.txt
27436		0	2009-02-06 14:09:45	3 B	c:\Copy (3) of New Text Document.txt
27435		0	2009-02-06 14:09:44	5 B	c:\Copy (2) of New Text Document.txt
27434		0	2009-02-06 14:09:37	507 B	c:\windows\win.ini
27433		0	2009-02-06 14:09:36	37 B	c:\windows\vbaddin.ini
27432		0	2009-02-06 14:09:36	36 B	c:\windows\vb.ini
27431		0	2009-02-06 14:09:35	231 B	c:\windows\system.ini
27430		0	2009-02-06 14:09:34	466 B	c:\windows\PGPfone.INI
27429		0	2009-02-06 14:09:34	4 Kb	c:\windows\ODBCINST.INI
27428		0	2009-02-06 14:09:33	1 Kb	c:\windows\msdfmap.ini
27427		0	2009-02-06 14:09:32	2 B	c:\windows\desktop.ini
27426		0	2009-02-06 14:09:23	6 B	c:\New Text Document.txt
27425		0	2009-02-06 14:09:22	4 B	c:\Copy of New Text Document.txt
27424		0	2009-02-06 14:09:21	3 B	c:\Copy (3) of New Text Document.txt
27423		0	2009-02-06 14:09:21	5 B	c:\Copy (2) of New Text Document.txt
27419		0	2009-02-06 14:08:12	6 B	c:\New Text Document.txt
27418		0	2009-02-06 14:08:11	4 B	c:\Copy of New Text Document.txt

Change number of logs per page: 20







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No other specialized functions are available in this view other than those commons to any agent viewer (download, add to blotter, etc.).

## Addressbook

This agent viewer let you browse through logs of kind “addressbook”.

Activity: MainActivity | Target: Target | Backdoor RCS\_000000033

Addressbook      

Show remote data

<input type="checkbox"/> Id	<input type="checkbox"/> Tag	<input type="checkbox"/> Notes	<input type="checkbox"/> Date	<input type="checkbox"/> Contact	<input type="checkbox"/> Info	<input type="checkbox"/> Extended Info
3963	<input type="checkbox"/>	0	29/12/2008 15:51:30	P750, Asus	3355865863	Company Name: HT S.r.l. Business TelephoneNumber: 3355865863
3964	<input type="checkbox"/>	0	29/12/2008 15:51:30	Zeus, Carver	+39 0123654987	Company Name: HT S.r.l. Email 1 Address: zeus.carver@hackingteam.it Mobile Telephone Number: +39 0123654987 Business TelephoneNumber: +39 123456789 WebPage: www.ZeusCarver.hackingteam.it Suffix: Sr. Business Address Street: Moscova 13 Business Address City: Milano Business Address State: Mi Business Address PostalCode: 21121 Business Address Country: Italia
3965	<input type="checkbox"/>	0	29/12/2008 15:51:30	Bob, Smith	+39 321654987	Company Name: HT S.r.l. Email 1 Address: bob.smith@hackingteam.it Mobile Telephone Number: +39 321654987 Business TelephoneNumber: +39 123456789 WebPage: www.bobsmith.hackingteam.it Suffix: Jr. Business Address Street: Moscova Street Business Address City: Milano Business Address PostalCode: 21121 Business Address Country: Italia
3966	<input type="checkbox"/>	0	29/12/2008 15:51:30	Amy, Winehouse	+39 0192837465	Company Name: HT S.r.l. Email 1 Address: amy.winehouse@hackingteam.it Mobile Telephone Number: +39 0192837465 Business TelephoneNumber: +39 021234569870

Change number of logs per page:

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These are the main fields available in this view:

- Date: date and time.
- Contact: name and surname, e-mail address, or user id (depending on the source).
- Info: whether this field is filled it contains a mobile phone number or a home phone number.
- Extended Info: whether this field is filled it contains some information like address, company name, address, and webpage of the contact.

No other specialized functions are available in this view other than those commons to any agent viewer (download, add to blotter, etc.).










**Calendar**

This agent viewer let you browse through logs of kind “calendar”.

Activity: MainActivity | Target: Target | Backdoor RCS\_000000033

Calendar

Tag:       Show remote data

<input type="checkbox"/> Id	<input type="checkbox"/> Tag	<input type="checkbox"/> Notes	<input type="checkbox"/> Date	<input type="checkbox"/> Event	<input type="checkbox"/> Type	<input type="checkbox"/> Start	<input type="checkbox"/> Finish	<input type="checkbox"/> Extended Info
3972		0	29/12/2008 15:51:30	Reverse Training			13/01/2009 22:00:00	NOTE:Reverse Training @ Cracking University (Knowledge must be free)
3967		0	29/12/2008 15:51:29	New Year's Eve Party	Freetime	31/12/2008 18:00:00	01/01/2009 00:30:00	LOC: Moscova Street, 17 21121 Milano (MI) NOTE: To bring: 1 bottle of wine, red underwear.
3968		0	29/12/2008 15:51:29	Lunch with relatives	Freetime	01/01/2009 11:00:00	01/01/2009 14:30:00	LOC: Moscova Street, 17 21121 Milano (MI) NOTE: Lunch with my parents, my broche Bob and my nephew Alice.
3969		0	29/12/2008 15:51:29	Skiing	Sport	02/01/2009 08:00:00	05/01/2009 15:00:00	LOC: Jiminy Peak, MA NOTE: Go skiing. Remember large gloves
3970		0	29/12/2008 15:51:29	Stability tests	Work	06/01/2009 22:00:00	09/01/2009 22:00:00	LOC: Office NOTE: TODO: stability test of software
3971		0	29/12/2008 15:51:29	Release new Mobile versio	Work, Lavoro	11/01/2009 22:00:00	12/01/2009 22:00:00	LOC: Office NOTE: Release the second version of RCS Mobile.

Change number of logs per page:

<< Pag. 1 of 1 >>

Every row of logs describes an appointment, event, meeting or task.

These are the main fields available in this view:

- Date: date and time;
- Event: object of the appointment;
- Type: type of the appointment (if specified);
- Start: date and time since appointment starts (some types of appointment doesn't have a start time but only a Finish time);
- Stop: this field describes the date and time when the appointment finishes;
- Extended Info: in this field there may be
  - LOC: location where the appointment will take place;
  - NOTE: some notes about the appointment;
  - REC: recipients that take part in the meeting.



## Messages

This agent viewer let you browse through logs of kind "mail", "sms" or "mms".

Activity: alor | Target: test | Backdoor RCS\_000000163

Messages

Show remote data

<input type="checkbox"/> Id	<input type="checkbox"/> Tag	Notes	<input type="checkbox"/> Date	<input type="checkbox"/> Type	<input type="checkbox"/> From	<input type="checkbox"/> To	<input type="checkbox"/> Subject	Size	<input type="checkbox"/> Body
171048	<input type="radio"/>	0	2009-07-09 12:51:38	MAIL	"events" <events@eeye.com>	testthth@gmail.com	Blink Personal 4.0 Beta Program	8 Kb	Retrieved
171047	<input type="radio"/>	0	2009-07-09 12:51:38	MAIL	"TestHT TestHT" <testthth@g	thomas@hackingteam.it	Conf BACKUP	755 B	Retrieved
171046	<input type="radio"/>	0	2009-07-09 12:51:38	MAIL	"TestHT TestHT" <testthth@g	cod@hackingteam.it, luca.fili	Fwd: Informazioni importanti su GFI	6 Kb	Retrieved
171045	<input type="radio"/>	0	2009-07-09 12:51:38	MAIL	GFI Divisione Italia <sales@	testthth@gmail.com	Informazioni importanti su GFI LANGu	8 Kb	Retrieved
171044	<input type="radio"/>	0	2009-07-09 12:51:38	MAIL	GFI Divisione Italia <sales@	testthth@gmail.com	Informazioni importanti su GFI LANGu	8 Kb	Retrieved
171043	<input type="radio"/>	0	2009-07-09 12:51:38	MAIL	F-Secure valutazione <ec-te	Tieig Pippis <testthth@gmail	F-Secure: Non dimenticarlo F-Secure	7 Kb	Retrieved
171042	<input type="radio"/>	0	2009-07-09 12:51:38	MAIL	"TestHT TestHT" <testthth@g	thomas@hackingteam.it	NSIS	75 Kb	
171041	<input type="radio"/>	0	2009-07-09 12:51:38	MAIL	"TestHT TestHT" <testthth@g	thomas@hackingteam.it	configuratore script	141 Kb	
171040	<input type="radio"/>	0	2009-07-09 12:51:38	MAIL	"Skype" <noreply@welcome	testthth@gmail.com	Funzioni avanzate Skype per principi	12 Kb	Retrieved
171039	<input type="radio"/>	0	2009-07-09 12:51:38	MAIL	"a-squared Control Center"	"Tieig" <testthth@gmail.com>	Your newsletter subscription	7 Kb	Retrieved
171038	<input type="radio"/>	0	2009-07-09 12:51:38	MAIL	"a-squared Control Center"	"Tieig" <testthth@gmail.com>	Your user account information	7 Kb	Retrieved
171037	<input type="radio"/>	0	2009-07-09 12:51:38	MAIL	vrtsupport@symantec.com	testthth@gmail.com	Your account access information	4 Kb	Retrieved
171036	<input type="radio"/>	0	2009-07-09 12:51:38	MAIL	noreply@watchfire.com	testthth@gmail.com	AppScan Evaluation Information.	5 Kb	Retrieved
171035	<input type="radio"/>	0	2009-07-09 12:51:38	MAIL	"ClubSymantec" <clubsyma	testthth@gmail.com	ClubSymantec: Guarda Avanti. Tu ha	64 Kb	
171034	<input type="radio"/>	0	2009-07-09 12:51:38	MAIL	AladdinWebMailer@Aladdin.c	testthth@gmail.com	Your HASP SRM Developer Kit Reque	5 Kb	Retrieved
171033	<input type="radio"/>	0	2009-07-09 12:51:38	MAIL	F-Secure valutazione <ec-te	Tieig Pippis <testthth@gmail	F-Secure: Ottenga una protezione co	7 Kb	Retrieved
171032	<input type="radio"/>	0	2009-07-09 12:51:38	MAIL	<service@microsoft.com>	<testthth@gmail.com>	Microsoft Order in Process -- Order N	4 Kb	Retrieved
171031	<input type="radio"/>	0	2009-07-09 12:51:38	MAIL	Microsoft <cnfrmp@micro	testthth@gmail.com	Verification E-Mail	4 Kb	Retrieved
171030	<input type="radio"/>	0	2009-07-09 12:51:38	MAIL	<no-reply@bullguard.com>	"testthth@gmail.com" <testh	Welcome to BullGuard	7 Kb	Retrieved

Change number of logs per page:

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These are the main fields available in this view:

- Date: date and time;
- From: sender of the message;
- To: receiver of the message;
- Type: type of the message, MAIL, SMS, MMS;
- Subject: part of the message body.
- Size: size of the entire message
- Body: can be used to search a keyword. The column indicates if the body was retrieved or not

Double-clicking on a row will appears on the lower part of the view, the complete message body of the mail, MMS or SMS.



## Location

This agent viewer let you browse through logs of kind: gps, gsm, cdma, wifi or ip. You will be able to know the geographic position of the target.

<input type="checkbox"/> Id	<input type="checkbox"/> Tag	Notes	<input type="checkbox"/> Date	<input type="checkbox"/> Type	<input type="checkbox"/> Location	Note
17923	<input type="radio"/>	5	2010-08-31 07:06:08	GSM	CC:222 NC:31 AC:25784 CID:6753 dBm:-54 ADV:1 AGE:0	45.476369 9.192336 (510) Via della Moscova, 22 20121 Milan, Lombardy, Italy (IT)
17922	<input type="radio"/>	5	2010-08-31 06:59:13	GPS	45.47668 9.19148	45.47668 9.19148 (20) Via della Moscova, 24-28 20121 Milan, Lombardy, Italy (IT)
15693	<input type="radio"/>	4	2010-08-27 10:19:51	WiFi	00:17:3F:7E:C2:30 [-58] belkin54g 00:23:F8:30:A3:BC [-34] RSSM 00:25:53:07:44:BC [-75] Alice-53203257 00:A0:A2:43:74:72 [-B3] Wireless_FC 38:22:9D:F7:84:F4 [-67] FASTWEB-1-38229DF784F4 00:18:F8:32:B6:AB [-84] prsp 00:16:E6:31:4F:0D [-10] IPA 00:22:B0:F6:25:9A [-40] DI524UP D8:30:62:32:7C:09 [-37] hi-lo 38:22:9D:F7:CB:90 [-68] FASTWEB-1-38229DF7CB90 00:18:F8:7A:CA:C5 [-86] prsp	45.47667 9.1912481 (31) Via della Moscova, 24-28 20121 Milan, Lombardy, Italy (IT)
15674	<input type="radio"/>	1	2010-08-27 10:19:20	IPv4	93.62.139.46	Milan, Italy
15652	<input type="radio"/>	1	2010-08-27 10:17:21	IPv4	62.101.97.90	Genoa, Italy
15649	<input type="radio"/>	0	2010-08-27 10:09:54	IPv4	192.168.1.139	
15608	<input type="radio"/>	0	2010-08-27 10:06:22	IPv4	192.168.1.139	
15590	<input type="radio"/>	0	2010-08-27 10:05:41	IPv4	192.168.1.139	

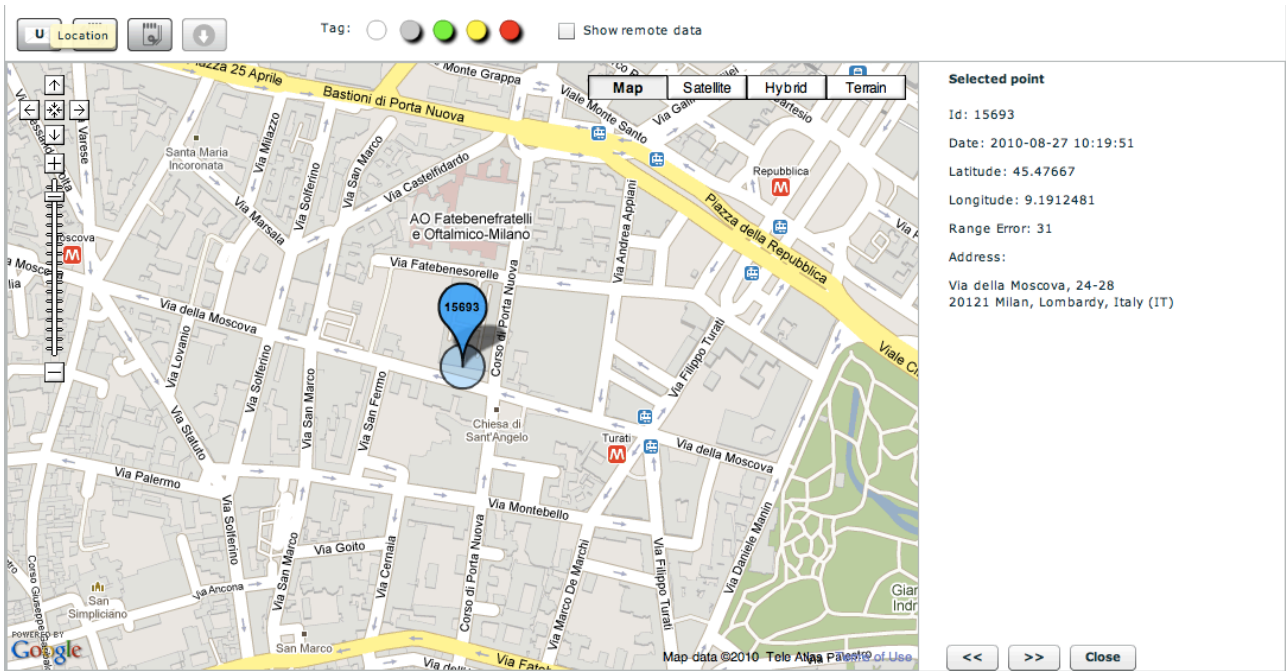
Change number of logs per page:

<< Pag. 1 of 1 >>

These are the main fields available in this view:

- Date: date and time
- Type: the kind of information retrieved
- Location: the location of the target;
- Note: if the note is empty, it will be automatically filled with the address of the location once the location is inspected (drawn on the map);

Double-clicking on a row will appear on the lower part of the view a map that shows the geographic location that the log describes.



You can perform some operations on the map:



Move over all the map with the direction cross;



Change the log view in the map moving right and left with arrows;



Zoom in and zoom out on the map image.

If you select more than one log you will see all the logs on the same map indicating the path of the target. Select them with the “shift” key and then press “enter”.


**Device**

This agent captures all the system information of the target. It is also possible to capture the list of installed programs on the target machine. It is useful to monitor the disk and RAM usage to know if some agents have to be shut down to save disk space or system resources

Activity: Prove URL | Target: Prove URL | Backdoor RCS\_000000094 (98)

Device

Show remote data

<input type="checkbox"/> Id	<input type="checkbox"/> Tag	<input type="checkbox"/> Notes	<input type="checkbox"/> Date	<input type="checkbox"/> Extended Info
89711		0	2009-05-26 08:48:32	Processor: 1 x Intel(R) Core(TM)2 Duo CPU T7300 @ 2.00GHz Memory: 277MB free / 511MB total (45% used) Disk: 11812MB free / 16370MB total  OS Version: Microsoft Windows XP (Service Pack 3) Registered to: Debug (x86) {76487-641-0143373-23143} Locale settings: it_IT (UTC +02:00)  User: user1 {ADMIN} SID: S-1-5-21-790525478-602609370-725345543-1003  Application List: DiamondCS ProcessGuard v3.500 (3.500) Windows Internet Explorer 7 (20070813.185237) Windows Genuine Advantage Validation Tool (KB892130) Windows XP Service Pack 3 (20080414.031525) WinRAR archiver VMware Tools (3.1.0000) Skype™ 3.8 (3.8.188)
89621		0	2009-05-26 08:12:22	Processor: 1 x Intel(R) Core(TM)2 Duo CPU T7300 @ 2.00GHz Memory: 279MB free / 511MB total (45% used) Disk: 11800MB free / 16370MB total  OS Version: Microsoft Windows XP (Service Pack 3) Registered to: Debug (x86) {76487-641-0143373-23143} Locale settings: it_IT (UTC +02:00)  User: user1 {ADMIN} SID: S-1-5-21-790525478-602609370-725345543-1003  Application List: DiamondCS ProcessGuard v3.500 (3.500)

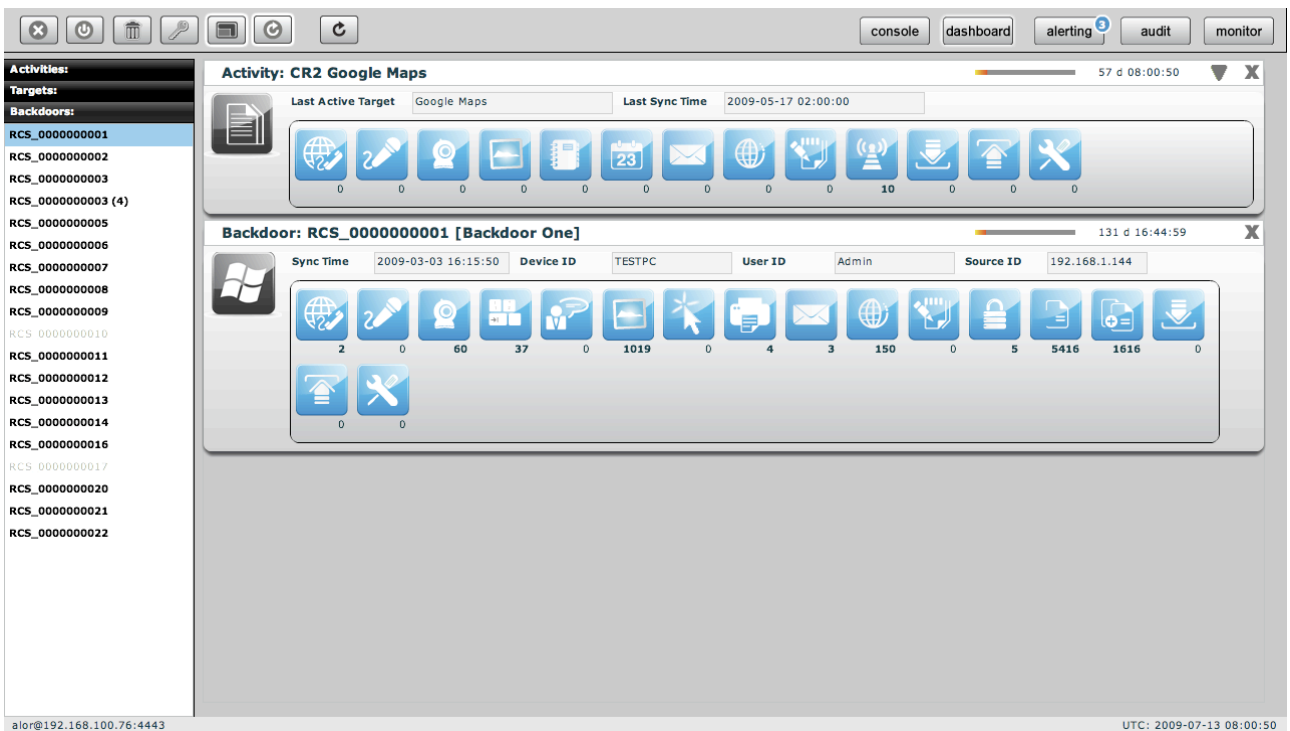
You can also retrieve the list of the applications installed on the target system.

## THE DASHBOARD SECTION

The dashboard let you highlight those activities or targets or backdoors to be monitored carefully. Each user can add to the dashboard its own “hot” targets to have a quick view of the investigation.



Just double click on an item in left menu or drag it to the centre of the screen and put it under observation: a corresponding “balloon” will appear on the dashboard.



Selected items will be monitored continuously (if automatic refresh is enabled) and newer (hottest) one will be placed on the top of the screen.

For all type of item: activities, targets, backdoors, there is a progress bar and a timer both showing the time elapsed from last received update:



1

▼ To expand a balloon, only for activities, to see its targets, and for targets to see its backdoors;

▲ To compress an expanded balloon;

✕ to remove a balloon from the dashboard.

A balloon shows an icon for each kind of log. When new data arrives the corresponding icon will be highlighted in red until logs are viewed.

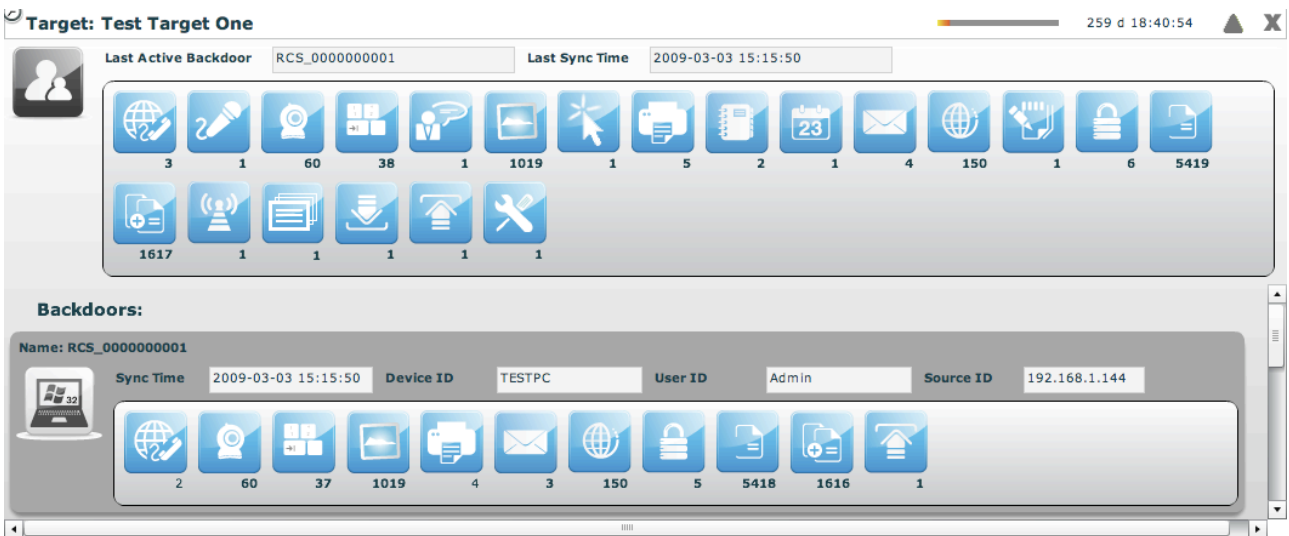
To view the logs just click on its detail icon, then you will switch to the console view.

## Activities balloon

Icon	Count
Icon 1	3
Icon 2	1
Icon 3	60
Icon 4	38
Icon 5	1
Icon 6	1019
Icon 7	1
Icon 8	5
Icon 9	2
Icon 10	1
Icon 11	4
Icon 12	150
Icon 13	1
Icon 14	6
Icon 15	5419
Icon 16	1617
Icon 17	1
Icon 18	1
Icon 19	1
Icon 20	1
Icon 21	3

Double click on target's panel to see its details. The id of the last seen target and last sync time is showed. In expanded form last sync time, and seen backdoor for each target are also displayed.

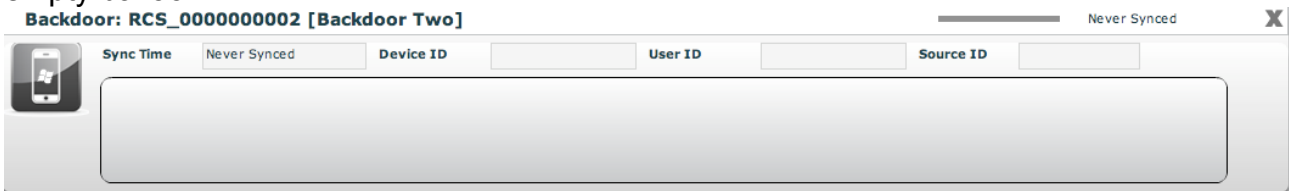
### Targets balloon



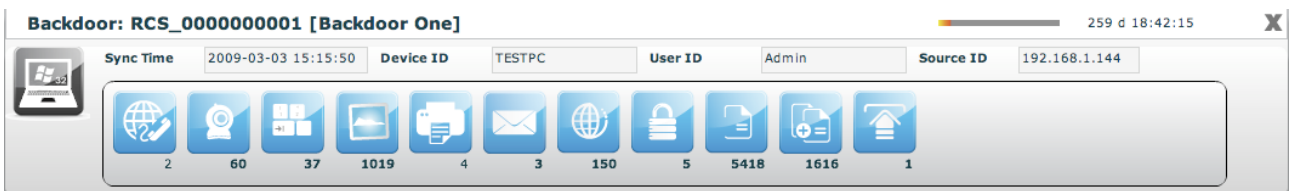
Double click on one of backdoor's panel to see its details. The id of the last seen backdoor and last sync time is showed. In expanded form last sync time, last remote host and user and last IP for each backdoor are also displayed.

### Backdoors balloon

All the balloons are dynamic. When the backdoor has not sent any logs you will see an empty balloon:



Once the logs arrive the balloon is filled with the icons of the logs that were sent. New logs will have a red background in the balloon.





## THE AUDIT SECTION

Every time a user performs a sensitive operation, such as creation of backdoors or targets, an audit log is generated. Those logs can be browsed by RCS Administrators (with ADMIN privilege) using the RCS Console under the tab “audit”.

Once activated the interface will show the audit log in this format:

<input type="checkbox"/> Date	<input type="checkbox"/> Actor	<input type="checkbox"/> Action	<input type="checkbox"/> User	<input type="checkbox"/> Group	<input type="checkbox"/> Activity	<input type="checkbox"/> Target	<input type="checkbox"/> Backdoor	<input type="checkbox"/> Description
14/01/2009 10:41:28	admin	group.add		MainGroup				array ( 'group' => 'MainGroup', 'desc' => '', )
14/01/2009 10:41:33	admin	member.add	admin	MainGroup				NULL
14/01/2009 10:41:34	admin	member.add	alor	MainGroup				NULL
14/01/2009 10:41:35	admin	member.add	que	MainGroup				NULL
14/01/2009 10:41:36	admin	member.add	tech	MainGroup				NULL
14/01/2009 10:41:37	admin	member.add	viewer	MainGroup				NULL
14/01/2009 10:41:49	admin	activity.add			MainActivity			array ( 'activity' => 'MainActivity', 'desc' => '', 'contact' => '', )
14/01/2009 10:41:51	admin	assign.add		MainGroup	MainActivity			array ( 'activity_id' => 1, 'group_id' => 1, )
14/01/2009 10:42:04	admin	target.add			MainActivity	TestTarget		array ( 'target' => 'TestTarget', 'desc' => '', 'activity_id' => 1, )
14/01/2009 10:42:06	admin	auth.logout	admin					
14/01/2009 10:42:32	alor	backdoor.add			MainActivity	TestTarget	RCS_0000000001	array ( 'desc' => 'Asus', 'type' => 'WINMOBILE', 'target_id' => 1, )

Change number of logs per page:

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### Audit Log filter

The admin can perform queries on the log using the specific filter for each column. The filters are applied as for the logs clicking on the checkbox of the column to filter.

<input type="checkbox"/> Date	<input type="checkbox"/> Actor	<input type="checkbox"/> Action	<input type="checkbox"/> User	<input type="checkbox"/> Group	<input type="checkbox"/> Activity	<input type="checkbox"/> Target	<input type="checkbox"/> Backdoor	<input type="checkbox"/> Description
-------------------------------	--------------------------------	---------------------------------	-------------------------------	--------------------------------	-----------------------------------	---------------------------------	-----------------------------------	--------------------------------------

- **Date:** Specifying the start and/or the end date the program will show only logs generated in that particular time interval<sup>1</sup>.
- **Actor:** Specify the user that has performed the action
- **Action:** Specify a particular action.

Then we have the object manipulated by the action:

- **User:** the user modified by the action
- **Group:** the group modified by the action
- **Activity:** the activity modified by the action
- **Target:** the target modified by the action
- **Backdoor:** the backdoor modified by the action

<sup>1</sup>

The time refers to UTC.

- **Description:** the description of the actual parameters of the action. Here you can find other information useful to track exactly what the user has done.

**NOTE:** If the user specify more than one filter, logic “AND” paradigm will be used.

The search criteria can be reset at any time pressing the button:



As a shortcut the sidebar on the left can be used to perform queries on particular object manipulated by the action.

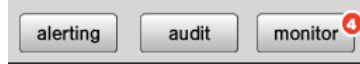
So if you select a user in the sidebar, the filter will be applied on the “user” column and not on the “actor” one.

A query on the audit logs can be exported locally by clicking on the “download audit logs” button. Only the currently displayed logs will be exported.



## THE MONITOR SECTION

The monitor lets you keep your system under control, checking the health status of each component. It also shows useful information about license limits enforced by the system. If any of the components fails you will see an alert on the button bar:



The red number indicates the number of failed components.

The monitor section is as follow:

**Monitor Summary**

Monitored components: 4  
 CRITICAL component(s): 0  
 WARNING component(s): 0  
 OK component(s): 4

**License**

Start Date: Unlimited  
 End Date: Unlimited  
 Serial: off  
 Users: Unlimited  
 Admn: Unlimited  
 Tech: Unlimited  
 View: Unlimited  
 Backdoor: 19 / Unlimited  
 Desktop: 13 / Unlimited  
 Mobile: 6 / Unlimited  
 Alerting: true

**Version**

Database: -1  
 Console: -1  
 Core WIN32: 2009020901  
 Core WINMOBILE: 2009020901

**Monitor List:**

- Monitor: ASP::RLD 127.0.0.1** (00 d 00:00:37) - CPU: 0%, Total: 0%, Disk free: 96%, Description: Idle...
- Monitor: ASP::RSS 127.0.0.1** (00 d 00:00:35) - CPU: 0%, Total: 0%, Disk free: 96%, Description: Idle...
- Monitor: ASP::RSSM 127.0.0.1** (00 d 00:00:28) - CPU: 0%, Total: 7%, Disk free: 96%, Description: Idle...
- Monitor: DB localhost** (00 d 00:00:27) - CPU: 2%, Total: 2%, Disk free: 96%, Description: Running queries: 0

### Components balloon

Each balloon represents a single component in the system. The list has at least one element (the database balloon), and other balloons (one for each instance of RCSASP connecting to the database). You can have multiple instances of the same component (one for each ip address it connects from).

The balloon contains basic information about component health (green check means the component is properly running, a red alert indicates a component failure). Additional information are shown for each component, such as CPU usage and free disk space left on the partition where the component is installed.

The description field is used to show which is the action that the component is currently performing (in case of failure, it contains the last information received). A counter keeps track of time from the previous message sent by the component: if the system doesn't receive messages for a defined period of time, the component is automatically marked as failed and a red alert is shown.

For every component but the database, you can delete the entry: it should be used only when a component is no longer connected to the system (e.g.: it changes the address). You can safely remove entries, because they will be automatically created if the component contacts the system again.

### ***Components summary***

On the left side there is a summary that shows how many components are monitored, how many are running properly and how many failed and need attention.

### ***License description***

License limits are enforced server-side: they limit number of backdoors, users that can be created and time intervals when the system can be used.

When limits are reached, the system raises an error message that tells the user that the license doesn't allow a specific operation. If the license file is corrupted, the system becomes unusable and the issue must be fixed before functionalities are restored.

### ***Alerting via email***

If you want to receive an email each time a component fails, you can select a group of user with the “set alert group” button.

A rectangular button with rounded corners and a thin border. The text "Set Alert Group" is centered on the button in a blue, sans-serif font.

Users in that group will receive an email based on the address specified in the “contact” field of each user (see user management).

## THE BUILD SECTION

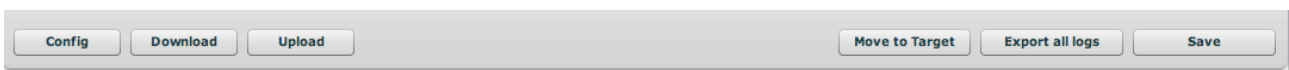
There are three kind of configuration you can manage.

1. Templates
2. Backdoor classes
3. Backdoor instances

Templates and Classes can be configured by accessing the “build” section in the main menu:

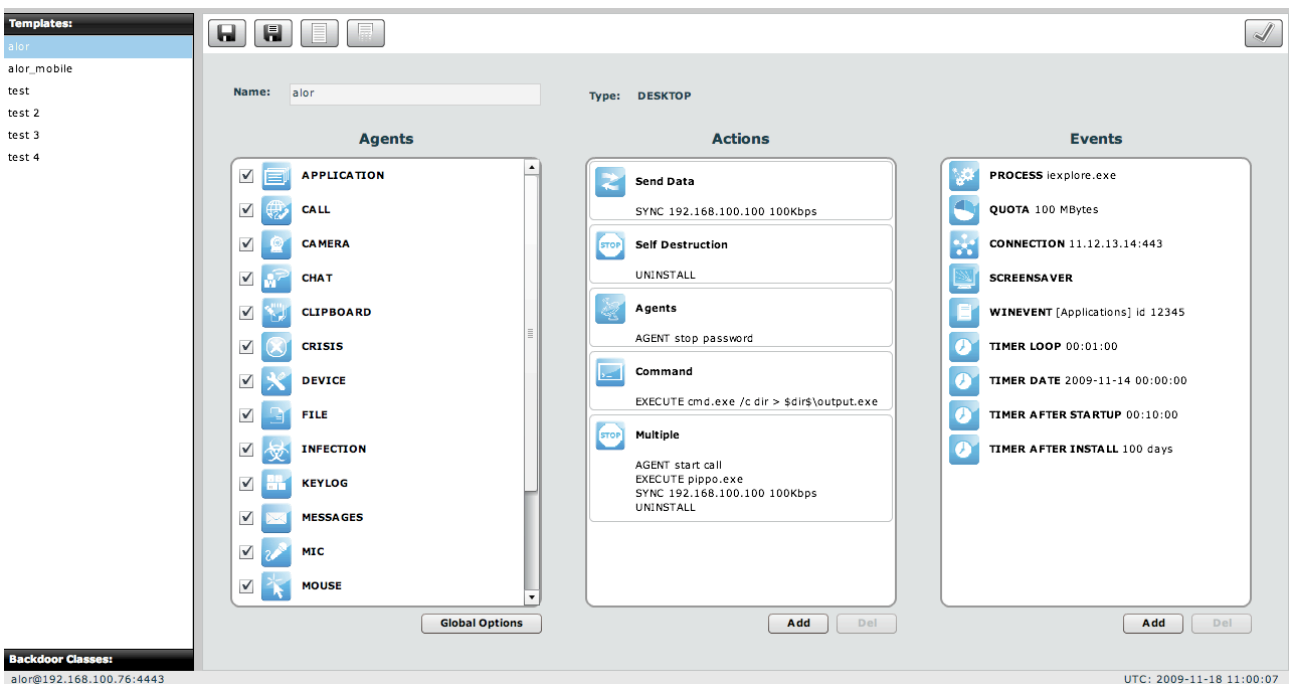


The Instances configuration can be accessed from the backdoor objects in the console:




### Templates

Templates are named configuration not applied to any backdoor. You can use them to create a configuration and apply it to a specific backdoor or distribute it to an entire activity. You can save a backdoor configuration to a template and then load a configuration from that template to another backdoor.



Templates can be cloned one from another by pushing the “save as” button: 

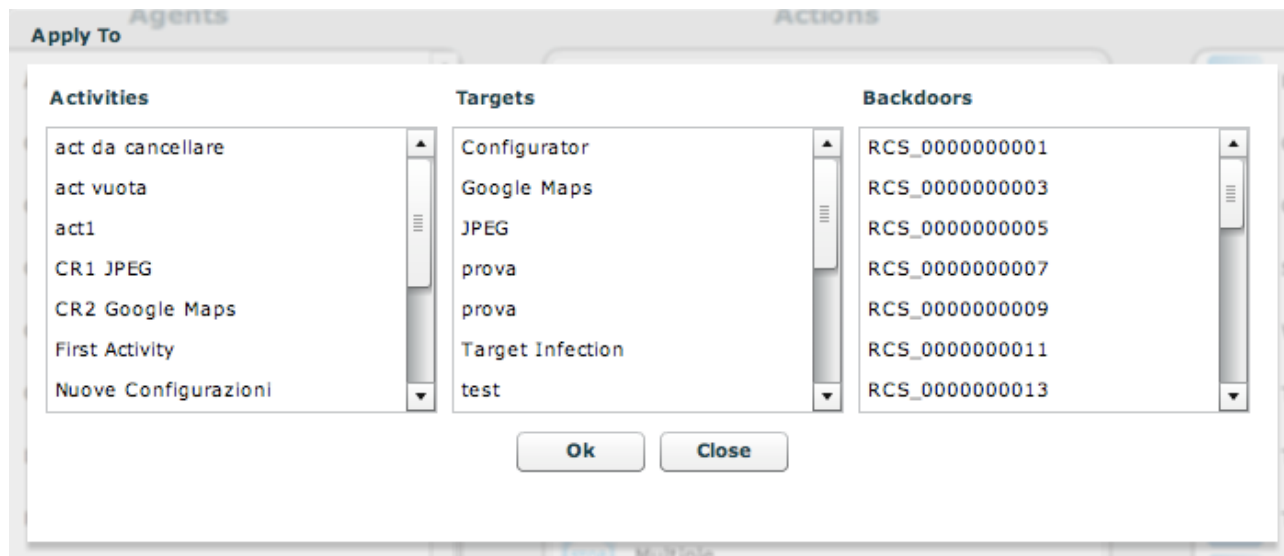
New templates can be created by pushing the “new” button: 

Once you modify a template you have to press the “save” button: 

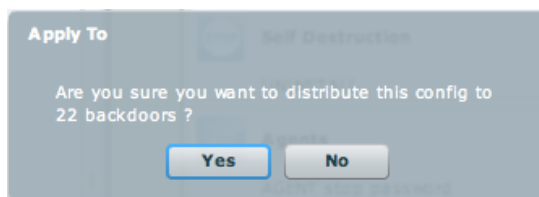
The template can be deployed to multiple backdoors at a time using the “apply to” button:



a window will pop up and ask where you want to deploy it:



You can use multiple selections and press “OK” to deploy it. A confirmation dialog will appear asking if you are sure that you want to mass deploy it.



## Classes

The configuration of a backdoor class is the configuration that will be installed on new backdoor instances as they sync for the first time to the collection node.

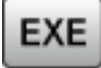
You can only build an infection vector from a backdoor class choosing from the menu:

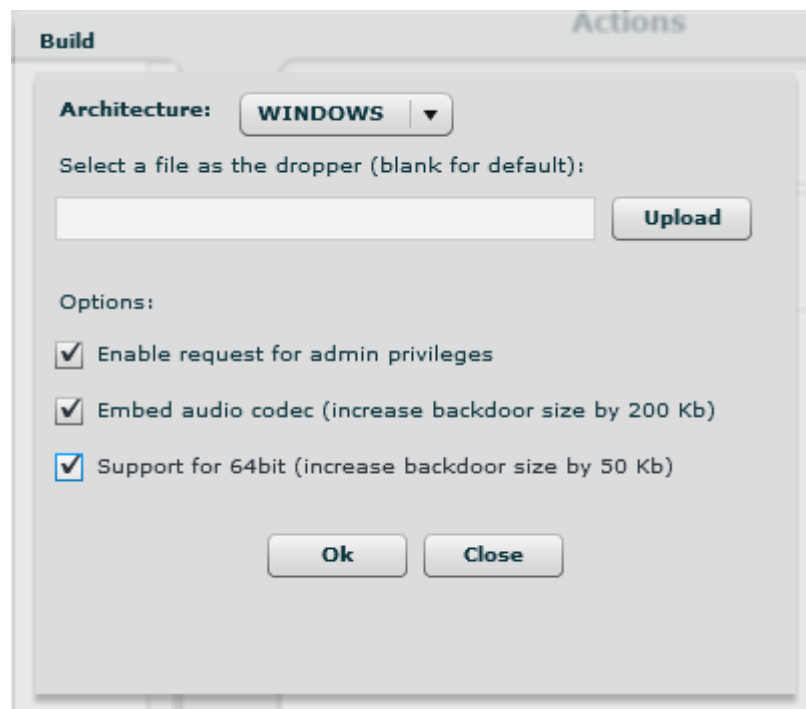
- Backdoor is desktop:
- Backdoor is mobile:

Backdoor instances represent a backdoor that is already installed, so it is meaningless to build from a backdoor that is already installed somewhere.

When you create a new backdoor system automatically creates the class of that backdoor and the first instance of it (with the number 1 between parentheses). The first time that backdoor will sync with the collection node the first instance will get populated with logs. If you installed the same build on different systems or users, you will see different instances popping up in the list with new incremental numbers.

## Building an infection vector for desktop

-  The procedure (called 'melting') enables you to create an executable starting from whichever executable files you want. The melting tool transforms the original file adding the functionalities of the backdoor. The resulting file maintains the original functionality of the starting file. The new executable, once launched on the target PC, silently installs the RCS agent and then executes the original file. This way the user is not aware of what is actually happening. The components of the RCS agent are encrypted by a polymorphic engine, which introduces anti-reversing and anti-debugging feature to the RCS core.




You can specify the architecture you want to use:

- WIN32:** You can upload an executable to melt RCS with. If you don't specify any executable, the default one will be used. The default executable is a program that does nothing, so when executed the user will not see anything. This is useful if you exploit the machine and want to execute something silently. The "*enable request for admin privileges*" flag is used to modify the host program's *manifest* in order to request, upon running, the highest user privileges allowed. This flag has to be checked if the program is going to be run on Windows Vista operating system, and the target user is a member of the Administrators group. In every other case the flag doesn't need to be checked (even though it doesn't compromise program's functionalities). The "*embed audio codec*" option is used to include the audio codec used for compression by the mic and call agent. If you don't plan to use them you can exclude it from the build process. This will shrink the backdoor size by 200 Kbytes. In any case, upon the first synchronization the backdoor will automatically download the codec needed for the audio agents. So, it is safe to uncheck the option.


The backdoor can run both on 32 and 64 bit platforms, but most agents needs extended functionalities to work on 64bit PC. The "Support for 64bit" flag extends the backdoor with such functionalities.


- **MACOS:** You can upload a zipped *.app* MacOs application (or leave the field blank in order to melt with a blank app). If an *.app* is uploaded, the console will give back an infected zipped application. Before uploading the application you have to compress it (since it is actually a directory) with the 'zip' command from the Terminal.app console. Don't use the default "compress" context menu from Finder. On the other hand, if the blank app is used, you have to modify the resulting file permissions by `chmod`.

The "enable request for admin privileges" flag tells the backdoor to ask for the root password, upon running on the target system, by spoofing the authentication dialog. If the flag is left unchecked, some agents will not work at all (call, chat, keylog, mouse, file capture, etc).

-  The procedure enables you to create a bootable CD-ROM to be used during the offline installation. This button will generate an ISO file that you have to burn to a blank CD-ROM.

To install the backdoor you need physical access to the target machine. Once the machine is bootstrapped from the CD a wizard will appear and will guide you thru the installation on different users of the target machine.

-  This procedure is actually the same as the bootable CD, but it creates a bootable USB key. Before saving the files to the USB key you need to prepare it to be bootable. The procedure to prepare it is platform dependent.

-  The exploit creation involves the use of the HT Exploit Portal. This service requires a specific license that you must enable in order to use the portal. The building process will not be local. The console will connect to the portal and will show you the list of available exploits.

The list is updated continuously by HT and provides you the latest exploits available on the market. The subscription to the exploit portal is divided into category: social, public, private and zeroday. The higher is your subscription the higher is you access to more powerful exploits.

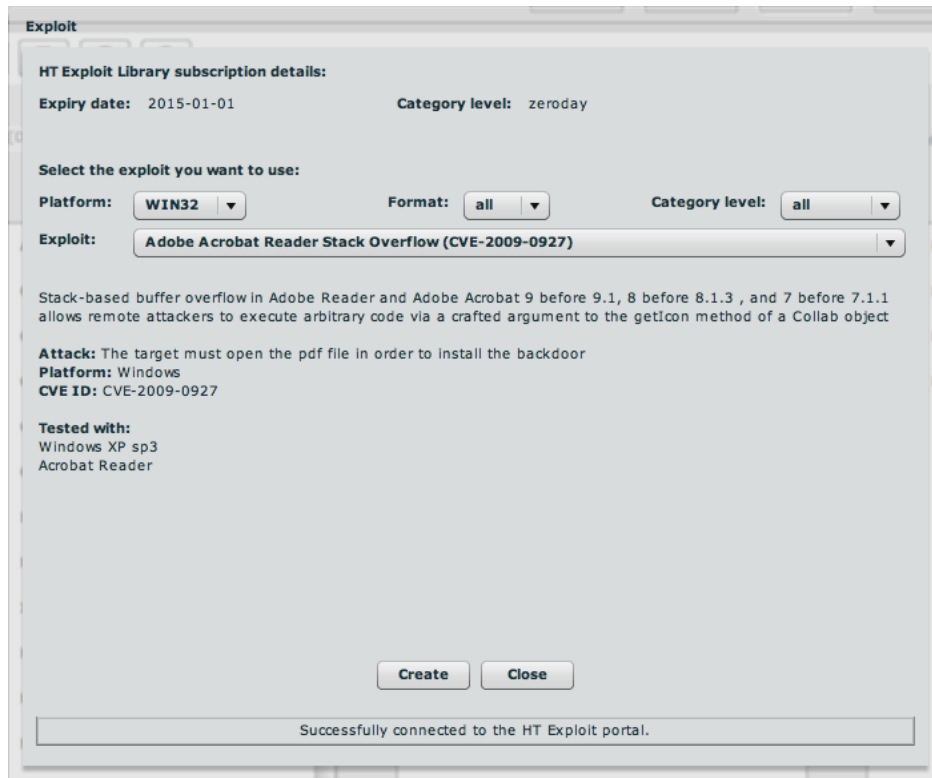
The building process is fully integrated into the console. The console will create the backdoor based on the configuration you have provided and will download the required files from the portal to create the exploit.

If you create exploits that require a webserver to serve the html page to a browser, you can put the html files in the EXPREPO directory on the ASP server, it can be used as a webserver behind the anonymizing network in order to attach your targets.

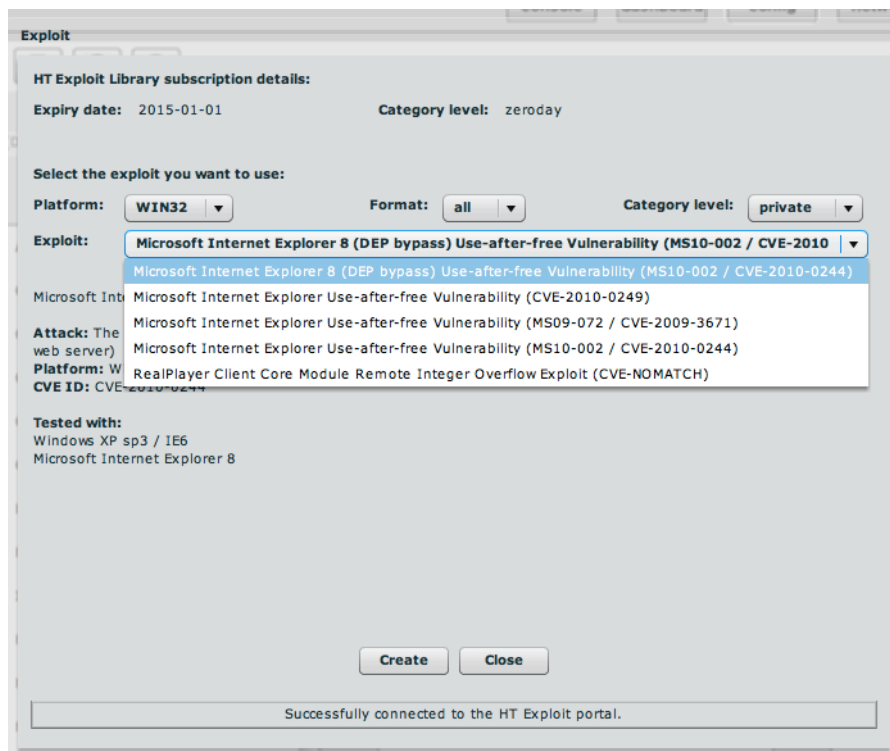
In order to use the portal, the computer running the console must be able to connect to the Internet to reach the HT Exploit Portal into the HT premises.



Once you open the exploit creation dialog, the console tries to establish a connection and the result is as follow:



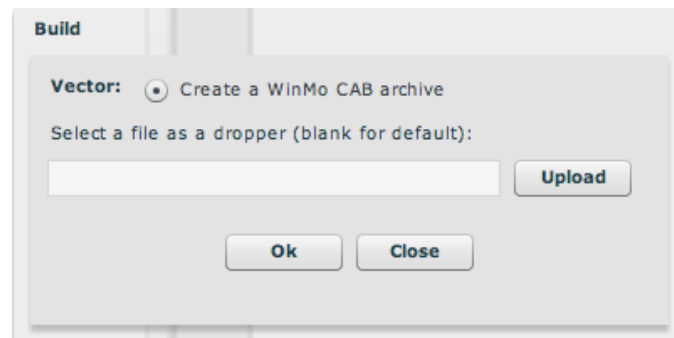
You can choose the platform you want to attack, the format of the file to be used and the category level with the three combo box on the first line. The list of the exploits will change accordingly to your filtering criteria.



Once you have selected the exploit, just press “create” and wait for the exploit to be saved.

### Building an infection vector for mobile

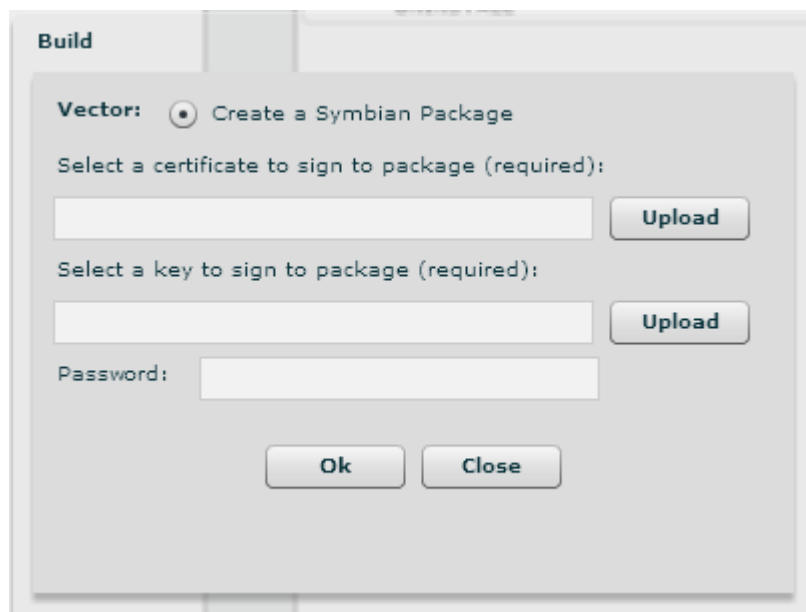
- **SD** This procedure will copy the autorun files onto an SD card. When the card is inserted into a Windows Mobile phone the content will be automatically executed and the backdoor is installed. This works even if the phone is turned off, the backdoor will be executed as soon as the phone is switched on. You have to select the SD card drive as destination of the download.
- **CAB** This infection vector creates a CAB installer to be used on a Windows Mobile phone. You can specify an already existing CAB installer and the system will add the backdoor to that installer. Once the installer is executed the user will not notice the silent installation of the backdoor together with the real installer. If you don't specify a CAB the system will use a default CAB that does not install anything.



- **APP** This will create an iPhone application that has to be installed on a jailbroken device. After the “jailbreak”, copy the folder created at the end of the building phase on the target iPhone, and run `install.sh` **inside** the copied folder. This is a sample command sequence to perform the task:

```
mymac>scp -r ./RCS_IPHONE root@myiphone.local.net:/tmp
mymac>ssh root@myiphone.local.net
myiphone> cd /tmp/RCS_IPHONE
myiphone>sh install.sh
```

- **SIS** This will create a Symbian package that has to be installed on a Symbian device after being signed with a valid developer certificate, key file and certificate's password. The resulting `.sisx` package should be copied on the phone memory (by any means: URL download, MMS, direct copy on SD, USB cable from a PC) and then manually run from the phone. For additional information on how to obtain a valid certificate please refer to: How to obtain a Symbian Certificate in Appendix A.



- **COD** This button creates the BlackBerry application to be installed locally or remotely.
  - **Local:** A prerequisite for this kind of installation is a windows machine with the *BlackBerry Desktop Manager* installed, that can be downloaded from the BlackBerry website. The console will produce a file `.zip` that contains all the files needed to infect a BlackBerry by wire. Uncompress the `.zip` file on a windows machine with the *BlackBerry Desktop Manager* already installed, connect the physical device to that pc via USB and execute the `run.bat`. If the BlackBerry is protected by a PIN you have to provide it to the installation program.

- **Remote:** In order to do that you need to put these files on a web server, reachable by the device. Note that the web server must identify the MIME types for .jad and .cod files, `text/vnd.sun.j2me.app-descriptor` and `application/vnd.rim.cod` respectively. Alternatively you can use the ASP EXPREPO server, which is already configured to be used for this purpose. The steps to do on the device are the following:

1. Give the application a file name (default will be `net_rim_bb_lib`) and modify all the other descriptive fields on purpose.
2. Copy all the files inside resulting .zip into the EXPREPO directory on the frontend server.
3. Download the application from the browser of the Blackberry you want to infect heading to: <http://{your-public-ip-address}/{given-file-name}.jad>
4. You see a panel with the following data:

*Name: net\_rim\_bb*

*Version : 4.5.0.252*

*Size : 149.8 KB (this size could vary, depending on configuration)*

*Description:*

Don't check the "Set application Permissions" and press Download.

5. When the downloading is finished you'll see the following page:

*The application was successfully installed.*

Press Run

6. When the application starts you see the panel:

*Application Permissions*

*Would you like to grant net\_rim\_bb\_lib Trusted Application status?*


Press YES

7. The next panel contains:

*net\_rim\_bb is requesting changes to its application control permissions.*



Press the Rim button  to access the menu and select the `save`

-  This infection vector creates an APK installer to be used on Android phones. Once the installer is executed on the device you'll be asked to accept permissions required by the backdoor to acquire data.



- WAP Push is a remote infection vector for mobile platforms (Windows Mobile, Symbian and BlackBerry, but not iPhone). To send a WAP message some parameters are required:
  - **Number:** target's phone number including international prefix
  - **Link:** a link to an accessible website where the backdoor is stored (if a valid certificate is available, an *https* link instead of a normal *http* link is suggested). The special directory *EXPREPO* on the frontend server can be used as the web repository and connections can be performed through the anonymizing chain. If the target mobile OS is not known, place all the possible backdoors for the various operating system in the *EXPREPO* directory with the name backdoor.\* (leave untouched the correct extension for each backdoor); in this case the link should point to [http://<front\\_end\\_address>/os.html](http://<front_end_address>/os.html). This page will identify the target's user agent and will send the correct backdoor for the specific operating system (the page content can be edited to modify the backdoor name).
  - **Type:** type of message to send
    - **Service Loading:** target phone will be automatically redirected to the resource pointed by the *Link* option, depending on the phone's security settings, the application can be automatically installed or a message can popup to ask the user how to proceed.
    - **Service Indication:** a popup, with specific text, will appear asking the user how to proceed.
  - **Level:** the level of alerting required
    - **High:** in case of "*Service Loading*" whatever the user is doing, the message will automatically redirect the web browser to the specified URL. In case of "*Service Information*" whatever the user is doing, the message popup will appear.
    - **Low:** message won't redirect the user if there's activity on the phone and will be presented into the phone's inbox.
  - **Description:** available only for "*Service Information*" type. This box specifies the text that will be shown to the user.

*Service Loading* building window:

The screenshot shows a dialog box titled "Build" with a sub-header "Send a WAP PUSH message:". It contains four input fields: "Number:" (empty), "Link:" (containing "http://"), "Type:" (a dropdown menu with "Service Loading" selected), and "Level:" (a dropdown menu with "High" selected). At the bottom, there are two buttons: "Ok" and "Close".

*Service Indication* building window:

The screenshot shows a dialog box titled "Build" with a sub-header "Send a WAP PUSH message:". It contains five input fields: "Number:" (empty), "Link:" (containing "http://"), "Type:" (a dropdown menu with "Service Indication" selected), "Level:" (a dropdown menu with "High" selected), and "Description:" (a large empty text area). At the bottom, there are two buttons: "Ok" and "Close".

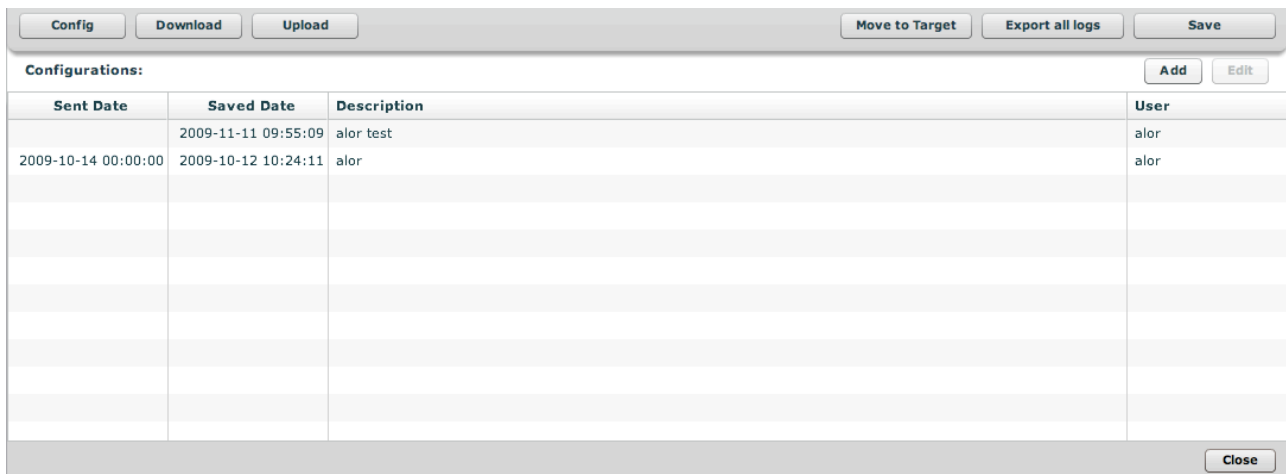
## Instances

A backdoor instance is a backdoor linked to a specific machine and user account. The same backdoor class installed on different users on the same machine will generate different instances (the same apply on different machines).

Every backdoor instance can be configured independently from its class. The class configuration is copied over the instance only the first time it synchronizes with the collection node. Then you can change the configuration and see the past configurations.

You cannot edit a configuration that was already sent to the backdoor. If you pick up such a configuration and save it, it will be put in the upload queue and will be sent the next time the backdoor syncs.

The first time you try to add a configuration to an instance that has not synchronized yet, you will be redirected to the configuration of the backdoor class since this is the configuration it will get upon the first sync.



Sent Date	Saved Date	Description	User
	2009-11-11 09:55:09	alor test	alor
2009-10-14 00:00:00	2009-10-12 10:24:11	alor	alor

Editing the configuration of an instance will allow you to change the behavior of the backdoor.

The functionality of a backdoor is based on an “*event/action*” paradigm. This logic is based on the backdoor’s ability to constantly monitor the target system: as soon as one of the preset “events” occurs, the backdoor will take all the actions it was configured to take.



Name:  Type: **DESKTOP**

### Agents

- APPLICATION
- CALL
- CAMERA
- CHAT
- CLIPBOARD
- CRISIS
- DEVICE
- FILE
- INFECTION
- KEYLOG
- MESSAGES
- MIC

Global Options

### Actions

- Send Data**  
SYNC 192.168.100.100 100Kbps
- Self Destruction**  
UNINSTALL
- Agents**  
AGENT stop password
- Command**  
EXECUTE cmd.exe /c dir > %dir%\output.exe
- Multiple**  
AGENT start call  
EXECUTE pippo.exe  
SYNC 192.168.100.100 100Kbps  
UNINSTALL

Add Del

### Events

- PROCESS** iexplore.exe
- QUOTA** 100 MBytes
- CONNECTION** 11.12.13.14:443
- SCRENSAVER**
- WINEVENT** [Applications] id 12345
- TIMER LOOP** 00:01:00
- TIMER DATE** 2009-11-14 00:00:00
- TIMER AFTER STARTUP** 00:10:00
- TIMER AFTER INSTALL** 100 days

Add Del

Close



## Configuration of a backdoor

### AGENTS

An agent can be enabled or disabled by default. Agents that are enabled via the checkbox are started as soon as the backdoor starts (i.e. when the user logs in).

An agent can be started or stopped by an “agent” action, so you can configure an event that will start an agent.

Each agent has its own configuration parameters that are accessed by clicking on the blue icon:



A popup will appear (if needed) with the parameters to be configured.



### Application

The application agent will record the name and the information of a process when it is executed on the target machine and when it is closed. The logs will show you all the applications used by the target in a chronological order.

#### Platforms

desktop: Windows, MacOSX  
mobile: WinMobile, BlackBerry, Symbian, iPhone, Android

Parameters: none



### Call

The call agent will capture the audio of all the calls made by the target. If the agent is running on a desktop it will intercept all the VoIP conversation (e.g. Skype, Msn Messenger, Yahoo Messenger). If the agent is running on a mobile device it will record all the phone calls of the target.

#### Platforms

desktop: Windows, MacOSX  
mobile: WinMobile

#### Parameters:

- Buffer size: size in Byte of the capture buffer used for audio chunks
- Quality: audio quality (1=maximum compression, 10=best quality).



## Call List

The call list agent records the list of all the phone calls of the mobile device. It does not record the audio, it just logs the time of the call.

*Platforms:*

mobile: WinMobile, BlackBerry, Android, iPhone

*Parameters:* none



## Camera

The camera agent captures a picture from the integrated camera of the device. Be careful to enable this agent on desktop because the hardware led of the camera will blink every taken picture.

*Platforms:*

desktop: Windows, MacOSX

mobile: WinMobile

*Parameters:*

- Seconds: the time between two shots
- Iteration: the number of shots to take before stopping the agent



## Chat

The chat agent records all the chat sessions the target will perform on its machine. Every single message will be captured as a different log.

*Platforms:*

desktop: Windows, MacOSX

mobile: Blackberry

*Parameters:* none

NB: Blackberry supports BBM.



## Clipboard

The clipboard agent copies the content of the clipboard and records it. Only text clipboard will be captured.

### Platforms:

desktop: Windows, MacOSX  
mobile: WinMobile, Android

Parameters:none



## Conference

The conference call agent will create a conference call every time a new phone call is performed. The receiving number will be able to listen to the conversation in real time. This agent is dependent on the Telco operator features. The user can spot that the call is a conference if the operator put some delay sounds while the conference is instantiated.

### Platforms:

mobile: WinMobile

### Parameters:

- Number: the phone number to be used as the receiver



## Crisis

The crisis agent recognizes dangerous situations on the target machine (eg: a network sniffer has been executed) and automatically blocks, if needed, some of the functions of the backdoor, like Synchronization and Command execution. This agent also improves stealthiness against some protection software.

On *desktop* devices, it can be enabled by default and the agent automatically detects dangerous situations.

On *mobile* devices it has to be manually started by a specific action (eg: start the crisis agent when battery is too low) and stopped when the anomalous situation is ended.

This module can disable functionalities like: Bluetooth, WiFi, GPRS, UMTS, EDGE, 3G synchronization, microphone recording, call recording and GPS data position retrieving.

### Platforms:

desktop: Windows, MacOSX  
mobile: WinMobile, iPhone, BlackBerry, Android

### Parameters:

- The desktop version should be left configured as the default (unless suggested by HT technicians).
- The mobile version *must* be configured to specify the functionalities that have to be stopped when the agent is active.

**Device**

The device agent will record the information about the system (processor type, memory usage, installed operating system, etcetc). It can be useful to monitor the disk usage of the target machine and to retrieve the list of installed application.

*Platforms:*

desktop: Windows, MacOSX

mobile: WinMobile, BlackBerry, iPhone, Symbian, Android

*Parameters:*

- Application list: will also retrieve the list of installed software

**File**

The file agent records all the files accessed on the target machine. It can also be used to capture the file when it is accessed.

**Platforms:**

desktop: Windows, MacOSX

**Parameters:**

- Include filters: the list of pattern to match against a file that has to be recorded. You can specify a process before the name of the file to filter by process accessing that file.  
The syntax is: <process>|<file\_pattern> (e.g. skype.exe|\*.\*)
- Exclude filters: the list of pattern that you don't want to record. Useful to exclude file that are not interesting to you.
- Capture: if this flag is enabled the file will be copied and captured upon access
  - o Min size: minimum size for the file to be captured
  - o Max size: maximum size for the file to be captured
  - o Date: minimum date of creation for the file to be captured

**Infection**

The infection agent is used to spread the backdoor on other devices/users:

- To infect a mobile device from an infected desktop that connects to the device (eg: via USB).
- To infect other users of the same machine, if you have infected at list one user.
- To infect USB thumb drives. Once infected, the USB drive will spread the backdoor on other PCs that open it by the Autoplay function. It should work only on older/unpatched machines.

**Platforms:**

desktop: Windows

**Parameters:**

- Mobile backdoor: the mobile backdoor to be used to infect devices connected via ActiveSync
- Infect other users: will copy the backdoor to other users of the same machine
- Infect USB thumb drive: will spread the backdoor to any USB thumb drive plugged into the infected PC.



## Keylog

The keylog agent records all the keystrokes of the target. All unicode languages are supported via IME.

### Platforms:

desktop: Windows, MacOSX  
mobile: iPhone

Parameters: none



## Messages

The messages agent will record all the messages the target receives or send. The agent captures emails, sms and mms.

### Platforms:

desktop: Windows  
mobile: WinMobile, iPhone, BlackBerry, Symbian, Android

### Parameters:

- From: the message date must be greater than this value
  - To: the message date must be lower than this value
  - Size: the maximum size for the message to be captured
- N.B. No parameter is configurable on the Symbian version



## Microphone

The microphone agent will activate the microphone of the device and records the surrounding.

### Platforms:

desktop: Windows, MacOSX  
mobile: WinMobile, iPhone, BlackBerry, Symbian, Android

### Parameters (For Desktop version):

- Autosense: If this flag is checked, the agent will try to modify audio mixer settings (mute/unmute, line selection and volume) in order to optimize audio capture, avoiding low volumes or clipped recordings.
- Voice Recognition: The Microphone agent tries to record only human voices, avoiding background noise. Voice analysis functions produce an output value: if the value is in the accepted range, the captured chunk is recorded.

Suggested range is 0.2-0.28. Higher values will adapt better to female voices but will record more background noise as well.

- Silence Timing: This value represents the maximum amount of seconds of silence that the agent will record. If the agent captures only silence for “silence time” seconds, the recording is interrupted. There can be moments of silence in any conversation: if this value is too low, only the “active” part of the conversation will be recorded, suppressing all silence. On the other hand, if the slider is set to the highest value, silence will not be suppressed at all and the audio capture will result in a single continuous recording.

*Parameters (For Mobile version):*

- Voice Activity Detection: If activated, the V.A.D. tries to record only human voices (a simplified version of the “Voice Recognition” available on the desktop version). Higher values for this parameter let the backdoor record more audio as human voices. Blackberry doesn’t support this feature.



**Microphone Live**

The microphone live agent will accept a call coming from a configured number and it will answer the call in a covert way allowing the caller to listen to any conversation going on:

*Platforms:*

mobile: WinMobile

*Parameters :*

- Number: Phone number that will be used to make covert calls to the device, this number must be complete of country code, i.e.: +341234567890. Be careful not to hide the caller ID and stay silent while listening to the conversation.

**WARNING:** This agent is provided as is and could be dangerous to use. Every device behaves differently and a thorough test is strongly advised before using it on the field. At the moment we don’t provide support for it, use at your own risk.

**Mouse**

The mouse agent will capture a small snapshot of the screen around the mouse pointer when a click is detected. This is useful to intercept onscreen keyboard for keylog avoidance.

*Platforms:*

desktop: Windows, MacOSX

*Parameters:*

- Width: the dimension of the snapshot
- Height: the dimension of the snapshot

**Organizer**

The organizer agent records all the information found in the address book, task/todo list and calendar of the target device. The desktop version retrieves contacts from Outlook, Skype and other sources.

*Platforms:*

desktop: Windows, MacOSX

mobile: WinMobile, iPhone, Symbian, BlackBerry, Android

*Parameters:* none

**Password**

The password agent records all the saved account information in the target system. Saved passwords from browsers, instant messengers, email clients will be recorded.

*Platforms:*

desktop: Windows

*Parameters:* none





## Position

The position agent retrieves the device position by GPS localization, GSM cell or WIFI information.

### Platforms:

desktop: (only wifi) Windows, MacOSX  
mobile: WinMobile, BlackBerry, Symbian, Android

### Parameters:

- Seconds: the interval between two recording
- Gps: take the position by using the gps information
- Cell: take the position by using the gsm or cdma cell information
- Wifi: take the position by using the BSSID of the wifi stations

NB: Mobile IP localization represents the gateway of the cellular network, not the real position of the phone.



## Print

The print agent will record all the printed document of the target. An image of the document will be captured.

### Platforms:

desktop: Windows

### Parameters:

- Compression: sets the final quality of the image generated when capturing a printed document. The *slide bar* allows you to set the compression ratio and the quality of the generated images: sliding the cursor to the right end will apply a high level of compression, while sliding the cursor to the left will apply less compression, while generating higher-quality images.  
**N.B.** Using the default value is advised.



## Snapshot

The snapshot agent takes a snapshot of the target screen. You can see what the target sees on its monitor.

### *Platforms:*

desktop: Windows, MacOSX  
mobile: WinMobile, iPhone, BlackBerry, Symbian

### *Parameters:*

- Seconds: the time between two shots
- New window: takes a screenshot when a new window is created
- Only window: takes the screenshot only of the foreground window instead of the whole screen



## Url

The url agent records all the visited pages by target's browser.

### *Platforms:*

desktop: Windows, MacOSX  
mobile: WinMobile, iPhone, BlackBerry

### *Parameters:*

- Capture: capture a snapshot of the page if possible. This option works only on certain browser versions.

## ACTIONS



### Synchronize

The synchronize action will perform synchronization between the backdoor and the ASP server. The synchronization process is composed of the following steps:

- Mutual identification between the backdoor and the ASP server.
- Time synchronization between the backdoor and the ASP server.
- Update of the backdoor configuration.
- Upload of all the files in the “upload” queue
- Download of all the files in the “download” queue
- Upload of all logs gathered by the backdoor
- Safe removal of the uploaded logs

#### *Platforms:*

desktop: Windows, MacOSX  
mobile: WinMobile, iPhone, BlackBerry, Symbian, Android

#### *Parameters:*

- Internet: this will synchronize the backdoor over an internet connection (any available media).
  - Hostname: the hostname to contact for the sync. The combo box will suggest you the public address of your collector nodes you configured in the network section (see the Network section of this document)
  - Max bandwidth: the maximum bandwidth to use during the sync
  - Min delay: the minimum delay in seconds to wait between the sending of two logs
  - Max delay: the maximum delay in seconds to wait between the sending of two logs
  - Gprs: force a GPRS/UMTS/3G data connection to the provider before starting the sync through this link
  - Wifi: force a WIFI data connection with any open or preconfigured wifi network nearby the phone before starting the sync through this link
  -
- Bluetooth: this method is used by Windows Mobile devices to synchronize with a mobile mediation node (RSSM)
- APN: this option is used to specify an Access Point Name (APN) to be used by the phone to perform the data connection. It is useful to not bill the target for the data connections if the telco provider allows the connection to a specific APN for the interception. This method is supported only on BlackBerry.



## Agent

The agent action can be used to start or stop an agent. This is useful if you want to start an agent on a particular event instead of enabling it by default.

### Platforms:

desktop: Windows, MacOSX  
mobile: WinMobile, iPhone, BlackBerry, Symbian, Android

### Parameters:

- Agent: the agent to be started or stopped



## Execute Command

The command execution action is used to execute an arbitrary command on the target machine. You can specify the executable (the use of absolute path names is advised) with the relative parameters, if any. The program will run with the user's privilege level. Besides the standard ambient variables, it is possible to use a "virtual" ambient variable *\$dir\$* that point to the agent's own (hidden) installation folder: it is possible to use this special variable when executing commands like the one in the example:

```
%systemroot%\system32\cmd.exe /c dir> $dir$\result.txt.
```

This string executes the shell command "dir" and redirects the output on a file inside the hidden log repository in the target machine. The files created with this process can then be downloaded (see the paragraph about the File Manager for further details). It is important to be particularly careful when performing this action because, even though all commands are executed using the backdoor's hiding system and are therefore undetectable, any resulting modification to the file system (e.g., files created on the desktop, etc.) will be visible by the user. Programs that require user's interaction or open graphical interfaces should be avoided. Command line applications and batch files are the best choice since their process (and the corresponding command line window) will be hidden by the backdoor.

### Platforms:

desktop: Windows, MacOSX  
mobile: WinMobile, Blackberry

### Parameters:

- Command: the command to be executed

**Sms**

The sms action can be used to send a covert sms from the target device.

*Platforms:*

mobile: WinMobile, BlackBerry, Symbian, Android

*Parameters:*

- Number: the phone number that will receive the sms
- Type: the type of sms to send
  - o Location: will send the position of the target GPS or GSM cell
  - o Sim: will send information about the SIM in the phone
  - o Text: a text to send

**Uninstall**

The uninstall action will totally remove the backdoor from the system. All the files are will be wiped.

*Platforms:*

desktop: Windows, MacOSX

mobile: WinMobile, iPhone, BlackBerry, Symbian, Android

*Parameters:* none

NB: On BlackBerry the removal is completed after the first reboot.

**Log**

The Log action will create an “Info Log” with a custom message.

Custom Info Logs, and other logs coming from a backdoor, are shown in the “Info” section of the backdoor panel (see “View backdoor informations” from the chapter “Backdoors” in “The Console Section”).

*Platforms:*

desktop: Windows, MacOSX

mobile: WinMobile, BlackBerry, Symbian, Android

*Parameters:*

- Log: the custom message that will be shown in console.

## EVENTS

An event is used to trigger an action. Some events can have even an “end action” that is triggered when the event ends. You have to specify the name of the action you want to trigger or “none” if no action has to be performed.



### AC power

The ac power event is triggered when the AC connection is plugged to the phone.

*Platforms:*

mobile: WinMobile, BlackBerry, Symbian, Android

*Parameters:* none



### Battery

The battery event is triggered when the battery level of the device is outside the specified range.

*Platforms:*

mobile: WinMobile, iPhone, Symbian, Android

*Parameters:*

- Low: sets the lower bound battery value
- High: sets the upper bound battery value



### Call

The call event is triggered when a new call is performed or received by the mobile phone.

*Platforms:*

mobile: WinMobile, Symbian, BlackBerry, Android

*Parameters:*

- Number: the phone number (or any part of it) from which the call is performed. Leave blank to match any number.



## Connection

The connection event is triggered when a network connection is detected by the backdoor. For the desktop backdoor you can specify the peer of the communication, for the mobile one the event will be triggered as soon as the device has a valid ip address on any of its network interfaces (wifi, activesync, GPRS/.../3G+). Mobile version can also execute an "End Action" when there is no more available connectivity.

### Platforms:

desktop: Windows, MacOSX  
mobile: WinMobile, Symbian, Blackberry, Android

### Parameters:

- IP address: the destination ip address of the connection (use 0.0.0.0 for any)
  - Netmask: the netmask applied to the ip address
  - Port: the port used to identify the connection
- N.B.** Connections to local addresses in the same subnet as the target are not taken into account.



## Location

The location event is triggered when the target enters or leaves the specified location. The location can be a gps position plus a radius or a gsm cell id.

### Platforms:

mobile: WinMobile, Symbian, BlackBerry, Android

### Parameters:

- Type: the type of the location to be used (gps or gsm cell)
- Coordinates: the coordinates of the point



## Process

The process event is triggered when a specified executable is executed on the target device.

### Platforms:

desktop: Windows, MacOSX  
mobile: WinMobile, iPhone, BlackBerry, Symbian, Android

### Parameters:

- Type: if the parameter is the name of the process or the name of the window
- On focus event: if checked, the event is triggered only when the selected process (or window) gets focus. (only for desktop)
- Name: the name of the program or the text of the window title. Wildcards can be used to match the parameter only if the parameter is a window title.

**Quota**

The quota event is triggered when the amount of disk space used by the backdoor logs reaches a specified value. The “End Action” is triggered when the amount of disk space returns under the threshold (eg: after a synchronization).

*Platforms:*

desktop: Windows

*Parameters:*

- Size: the size in Mbytes of the logs

**SIM Change**

The sim change event is triggered when the SIM inside the phone is changed.

*Platforms:*

mobile: WinMobile, iPhone, Symbian, Blackberry, Android

*Parameters:* none

**Sms**

The sms event is triggered when an SMS message coming from a specified number and with a specified text is received. The incoming message won't be shown on the target device.

*Platforms:*

mobile: WinMobile, Symbian, BlackBerry, Android

*Parameters:*

- Number: Phone number of the sender of the SMS. Any SMS coming from this number will be hidden. Partial numbers can be used (eg: “+39” will match any Italian phone number).
- Text: If an SMS, coming from <Number>, contains the text specified here, the event is triggered. The string matching is case insensitive.

NB: BlackBerry don't delete the incoming message.





### Screensaver (Standby)

The screensaver event is triggered when the screensaver starts or stops on the target machine. For smartphones, screensaver is intended as the standby mode (back light off).

*Platforms:*

desktop: Windows, MacOSX  
mobile: WinMobile, BlackBerry, Symbian, Android

*Parameters:* none



### Timer

The timer event is triggered on a specific time.

*Platforms:*

desktop: Windows, MacOSX  
mobile: WinMobile, iPhone, BlackBerry, Symbian, Android

*Parameters:*

- Date: a specified date and time to trigger the event
- Loop: trigger the event every specified amount of time
- Single: trigger the event only once after that amount of time
- Daily: trigger the event when entering (and/or leaving) a given time frame, every day



### Windows Event

The windows event is triggered when a windows event is logged into the system. This works only on windows machines.

*Platforms:*

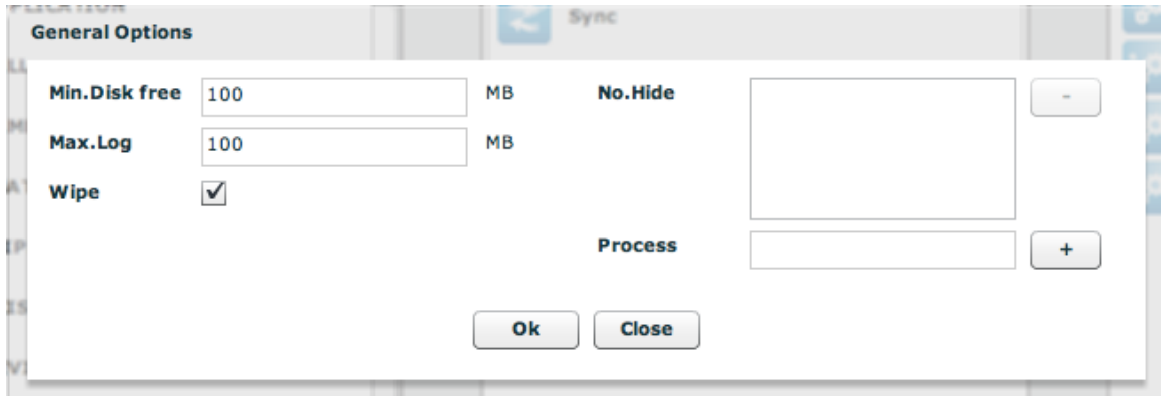
desktop: Windows

*Parameters:*

- Event id: the id of the windows event
- Source: the source of the windows event (e.g.: System, Application, etc.).

## GLOBAL OPTIONS

The global options are used by the backdoor to determine the behavior of all the agents and other internal components.



- *Min Disk free*: is the minimum free disk space the backdoor will leave on the target HD. If that threshold is reached the backdoor will stop logging any information (4GB is the maximum threshold)
- *Max Log*: is the maximum size of the log directory of the backdoor. When this threshold is reached, the backdoor will stop logging any information (4GB is the maximum threshold)
- *Wipe*: upon uninstallation will securely wipe the files before deletion

The *No.Hide* list should be left blank. Only HT technicians will give you information about it.

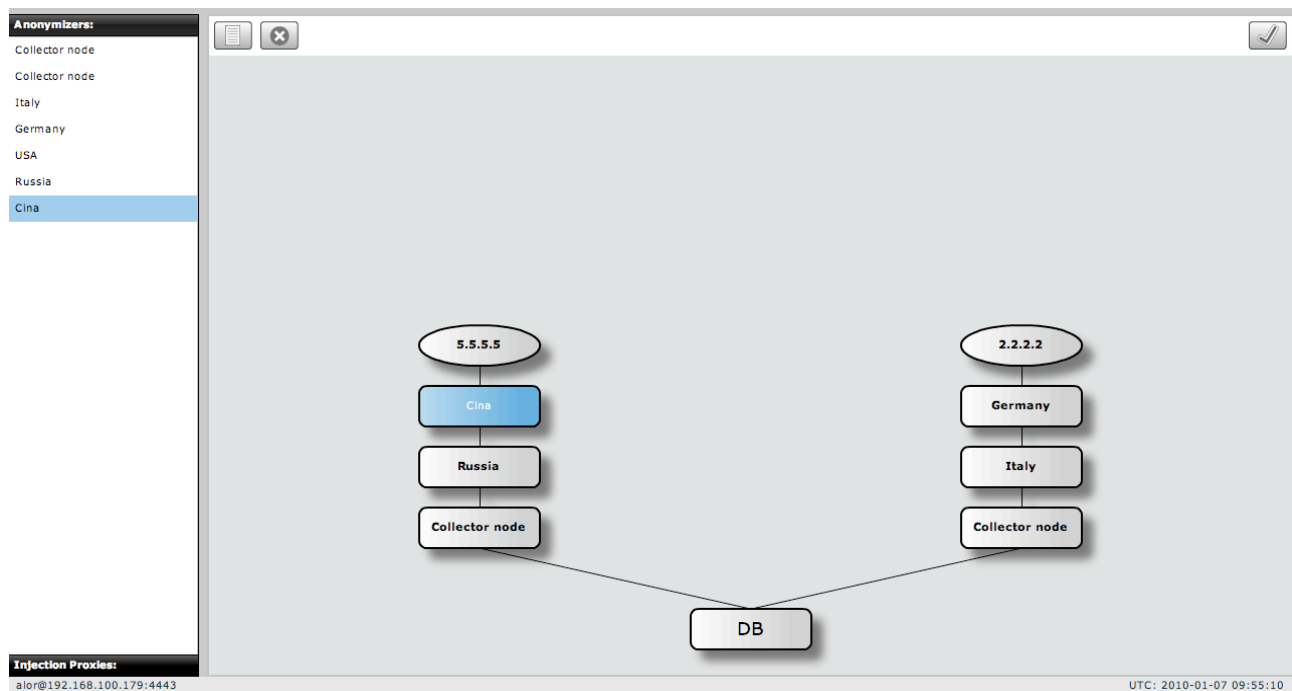
## THE NETWORK SECTION

The network section is used to configure the network element of the RCS solution. In this section you can configure the Anonymizers chains and the Injection Proxy Appliance.

### Anonymizers

The anonymizers are network forwarders that you can use to hide the public ip address of the Collector Node (ASP server). You can create a chain of anonymizers that forwards the connections from the backdoor to each other and finally to the collector node. Keep in mind that you have to configure the backdoor to synchronize with the topmost address of the chain. The backdoor configurator will suggest you those addresses (or hostnames) as long as you have configured them correctly.

The chains of the anonymizers are shown in the map:



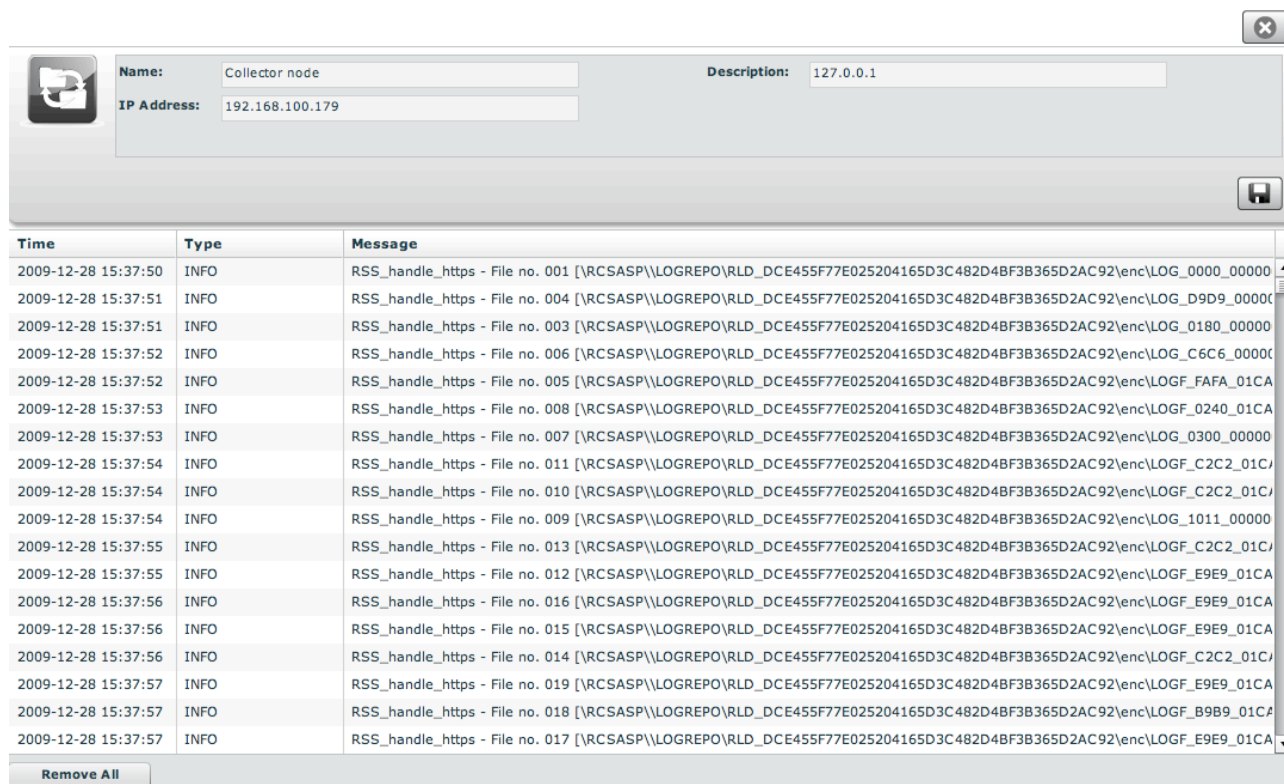
The collector nodes will automatically appear in the map when they connect to the database. Since the database will see the collector's internal ip address, **the external address must be configured manually**. To do so, double click on the collector node and edit its information.

In the summary you can change the name of the object, the description and the external ip address (or hostname).

#### NOTE:

The external address is a crucial parameter. If it is incorrect or if the hostname cannot be resolved by backdoors or other network elements the entire chain will not work. Please be very careful when configuring network objects. Only the Admin can perform this kind of changes.

In the lower panel you can see the logs of the collector node. Only the last 500 entries are displayed. If you want to see earlier logs you have to inspect the logfile on the server.



The screenshot shows a window titled 'Collector node' with the following configuration:

- Name: Collector node
- Description: 127.0.0.1
- IP Address: 192.168.100.179

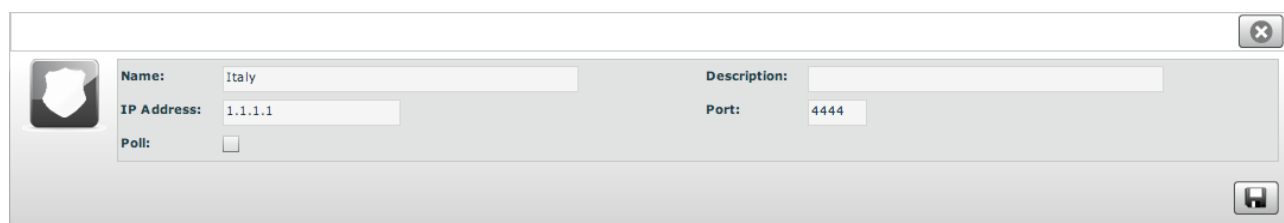
Below the configuration is a log viewer table with the following columns: Time, Type, and Message.

Time	Type	Message
2009-12-28 15:37:50	INFO	RSS_handle_https - File no. 001 [\RCSASP\LOGREPO\RLD_DCE455F77E025204165D3C482D4BF3B365D2AC92\enc\LOG_0000_00000
2009-12-28 15:37:51	INFO	RSS_handle_https - File no. 004 [\RCSASP\LOGREPO\RLD_DCE455F77E025204165D3C482D4BF3B365D2AC92\enc\LOG_D9D9_00000
2009-12-28 15:37:51	INFO	RSS_handle_https - File no. 003 [\RCSASP\LOGREPO\RLD_DCE455F77E025204165D3C482D4BF3B365D2AC92\enc\LOG_0180_00000
2009-12-28 15:37:52	INFO	RSS_handle_https - File no. 006 [\RCSASP\LOGREPO\RLD_DCE455F77E025204165D3C482D4BF3B365D2AC92\enc\LOG_C6C6_00000
2009-12-28 15:37:52	INFO	RSS_handle_https - File no. 005 [\RCSASP\LOGREPO\RLD_DCE455F77E025204165D3C482D4BF3B365D2AC92\enc\LOGF_FAFA_01CA
2009-12-28 15:37:53	INFO	RSS_handle_https - File no. 008 [\RCSASP\LOGREPO\RLD_DCE455F77E025204165D3C482D4BF3B365D2AC92\enc\LOGF_0240_01CA
2009-12-28 15:37:53	INFO	RSS_handle_https - File no. 007 [\RCSASP\LOGREPO\RLD_DCE455F77E025204165D3C482D4BF3B365D2AC92\enc\LOG_0300_00000
2009-12-28 15:37:54	INFO	RSS_handle_https - File no. 011 [\RCSASP\LOGREPO\RLD_DCE455F77E025204165D3C482D4BF3B365D2AC92\enc\LOGF_C2C2_01C/
2009-12-28 15:37:54	INFO	RSS_handle_https - File no. 010 [\RCSASP\LOGREPO\RLD_DCE455F77E025204165D3C482D4BF3B365D2AC92\enc\LOGF_C2C2_01C/
2009-12-28 15:37:54	INFO	RSS_handle_https - File no. 009 [\RCSASP\LOGREPO\RLD_DCE455F77E025204165D3C482D4BF3B365D2AC92\enc\LOG_1011_00000
2009-12-28 15:37:55	INFO	RSS_handle_https - File no. 013 [\RCSASP\LOGREPO\RLD_DCE455F77E025204165D3C482D4BF3B365D2AC92\enc\LOGF_C2C2_01C/
2009-12-28 15:37:55	INFO	RSS_handle_https - File no. 012 [\RCSASP\LOGREPO\RLD_DCE455F77E025204165D3C482D4BF3B365D2AC92\enc\LOGF_E9E9_01CA
2009-12-28 15:37:56	INFO	RSS_handle_https - File no. 016 [\RCSASP\LOGREPO\RLD_DCE455F77E025204165D3C482D4BF3B365D2AC92\enc\LOGF_E9E9_01CA
2009-12-28 15:37:56	INFO	RSS_handle_https - File no. 015 [\RCSASP\LOGREPO\RLD_DCE455F77E025204165D3C482D4BF3B365D2AC92\enc\LOGF_E9E9_01CA
2009-12-28 15:37:56	INFO	RSS_handle_https - File no. 014 [\RCSASP\LOGREPO\RLD_DCE455F77E025204165D3C482D4BF3B365D2AC92\enc\LOGF_C2C2_01C/
2009-12-28 15:37:57	INFO	RSS_handle_https - File no. 019 [\RCSASP\LOGREPO\RLD_DCE455F77E025204165D3C482D4BF3B365D2AC92\enc\LOGF_E9E9_01CA
2009-12-28 15:37:57	INFO	RSS_handle_https - File no. 018 [\RCSASP\LOGREPO\RLD_DCE455F77E025204165D3C482D4BF3B365D2AC92\enc\LOGF_B9B9_01CA
2009-12-28 15:37:57	INFO	RSS_handle_https - File no. 017 [\RCSASP\LOGREPO\RLD_DCE455F77E025204165D3C482D4BF3B365D2AC92\enc\LOGF_E9E9_01CA

A 'Remove All' button is located at the bottom left of the log viewer.

Collector nodes cannot be added manually they automatically register themselves when they connect to the database. You can delete them if you have changed the ip address and the collector node is registering itself from another server.

Anonymizers can be added manually and dragged & dropped in the map to create a chain. When you add an anonymizer you have to choose a name, a description, its public address and the port for the communication with RNC (default is 4444).



The screenshot shows a window titled 'Italy' with the following configuration:

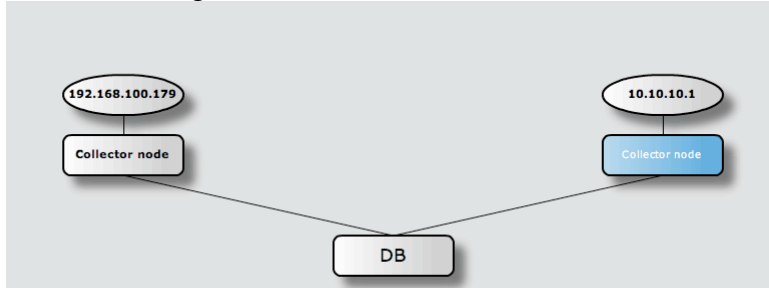
- Name: Italy
- Description:
- IP Address: 1.1.1.1
- Port: 4444
- Poll:

Since the machine of the anonymizer can be in an untrusted network, you can choose to avoid a connection from RNC to the component to avoid the detection of the connection if the machine is compromised. To do this, you have to uncheck the 'poll' option.

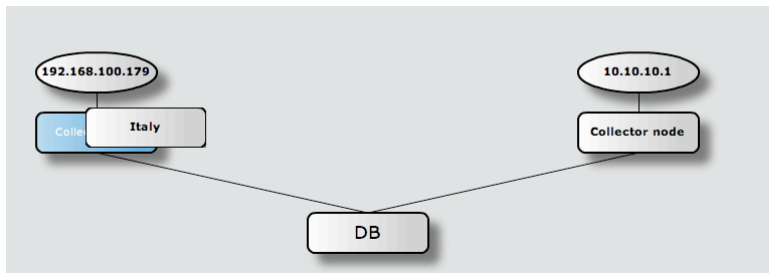
NOTE: if you uncheck the poll option, the component will NOT be reconfigured automatically when you change the chain.

### The network map

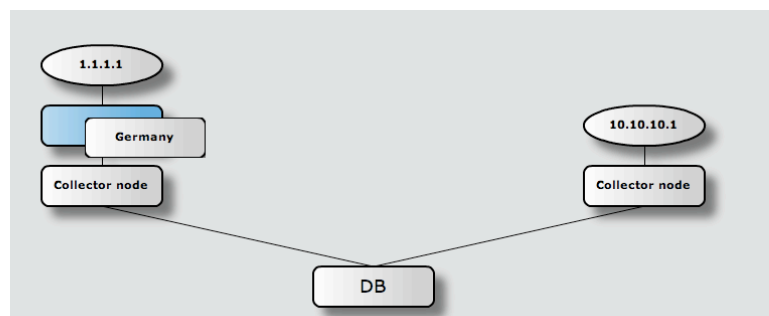
The anonymizer chain can be reorganized on the fly by drag & drop the elements you have configured. The first step is to check that each collector node is in place and the correct address has been configured.



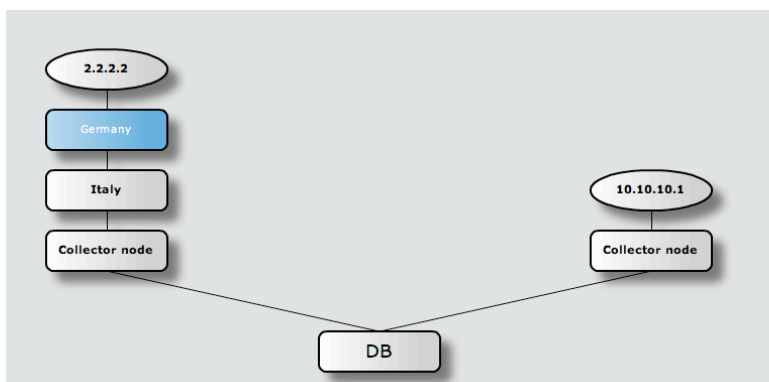
in order to put an anonymizer in front of a collector node you have to drag & drop it onto of the collector node you want to hide:





if you want to add an anonymizer to the chain you can drag & drop it onto an existing anonymizer:

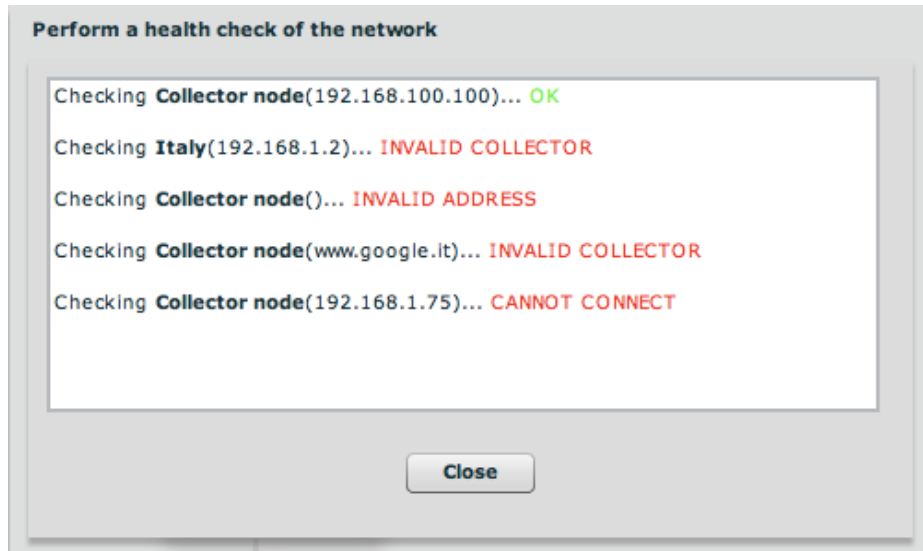


the result is an anonymizing chain:



Once you have configured the chain you have to press the “apply”  button in the upper right corner to let the RNC daemon reconfigure the entire network.

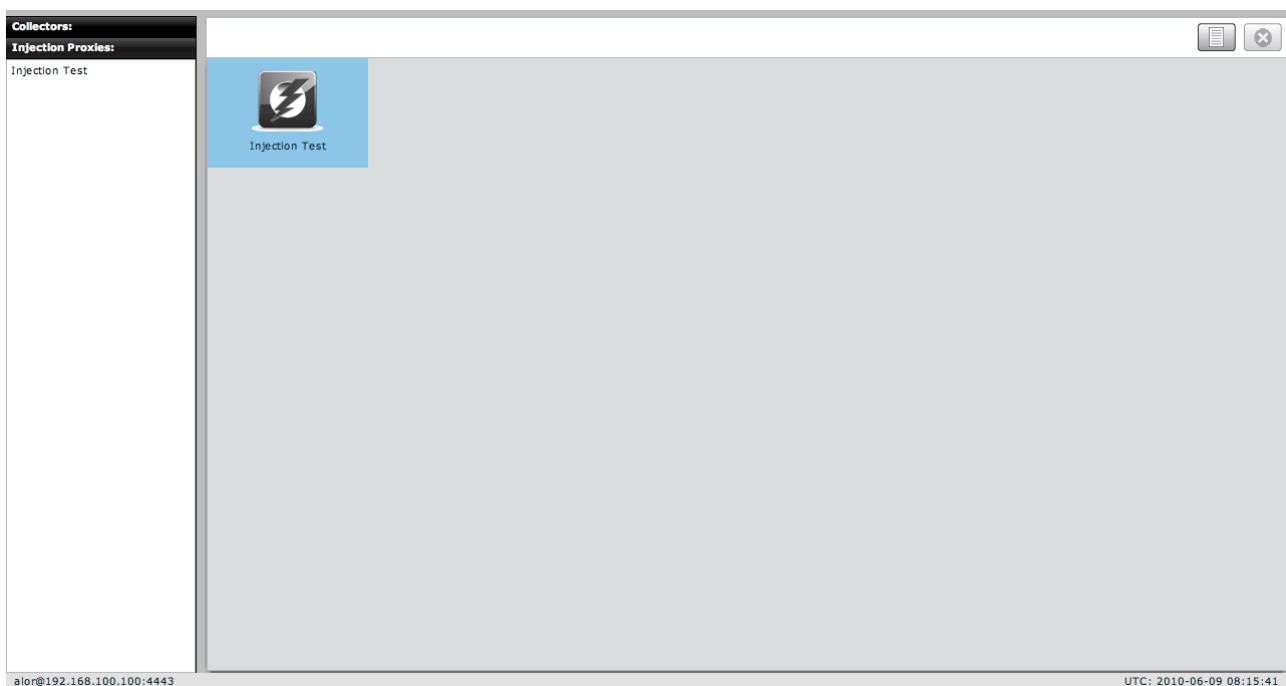
To check if every chain is working properly you can use the “health monitor”  button. A popup will appear with the results of the check.




## Injection Proxies

This section allows you to manage the Injection Proxies. You will be able to configure them and deploy the rules for the target infection.

You can manage the software version or the hardware appliance (IPA) they will be configured the same way in the console.



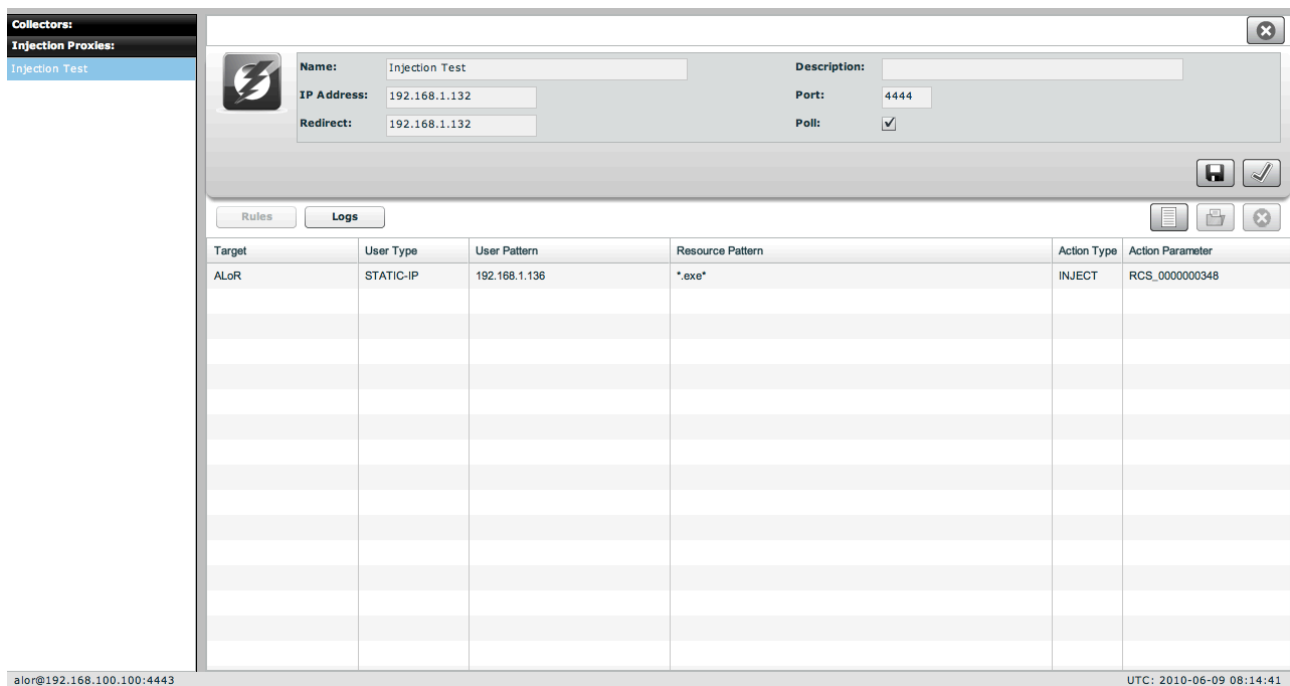
In order to install the Injection Proxy, please refer to the Injection Proxy Manual. Once the Injection Proxy is installed and running, you can add it to the console to start managing it.

By pressing the “new”  button you will be able to connect a new Injection Proxy to the console.

You have to specify the IP address of the proxy, the port for the communication (default is 4444) and the “redirect” ip address. Usually the redirect ip address is the same as the IP address used to manage the proxy (refer to the Injection Proxy Manual for further details on distributed configurations).

If you want to constantly monitor the injection proxy from the console you have to enable the “poll” flag. If the injection proxy is not reachable by the RNC service (on the collector node) you can deselect the “poll” flag.

NOTE: if you uncheck the poll flag, the component will NOT be reconfigured automatically when you change the rules.



The screenshot shows the RCS Console interface. On the left, there is a sidebar with 'Collectors:' and 'Injection Proxies:' sections. Under 'Injection Proxies:', 'Injection Test' is selected. The main area displays the configuration for 'Injection Test' with the following fields:

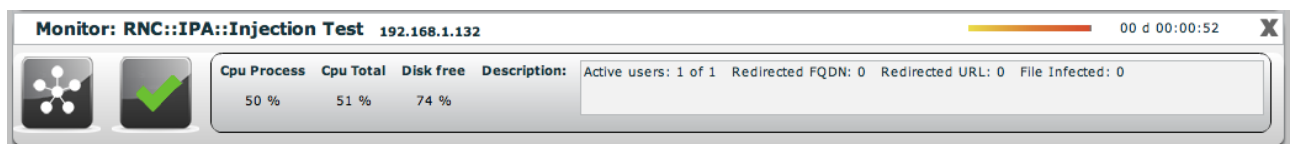
- Name: Injection Test
- Description: (empty)
- IP Address: 192.168.1.132
- Port: 4444
- Redirect: 192.168.1.132
- Poll:

Below the configuration fields, there are 'Rules' and 'Logs' tabs. The 'Rules' tab is active, showing a table with the following data:

Target	User Type	User Pattern	Resource Pattern	Action Type	Action Parameter
ALoR	STATIC-IP	192.168.1.136	*.exe*	INJECT	RCS_0000000348

At the bottom of the window, the status bar shows 'alor@192.168.100.100:4443' on the left and 'UTC: 2010-06-09 08:14:41' on the right.

Once the injection proxy is connected correctly, you should start seeing its entry in the monitor section:



The screenshot shows the Monitor section for the 'Injection Test' proxy. The title bar reads 'Monitor: RNC::IPA::Injection Test 192.168.1.132' and includes a progress indicator and a close button. The main area displays the following information:

- Cpu Process: 50 %
- Cpu Total: 51 %
- Disk free: 74 %
- Description: Active users: 1 of 1 Redirected FQDN: 0 Redirected URL: 0 File Infected: 0

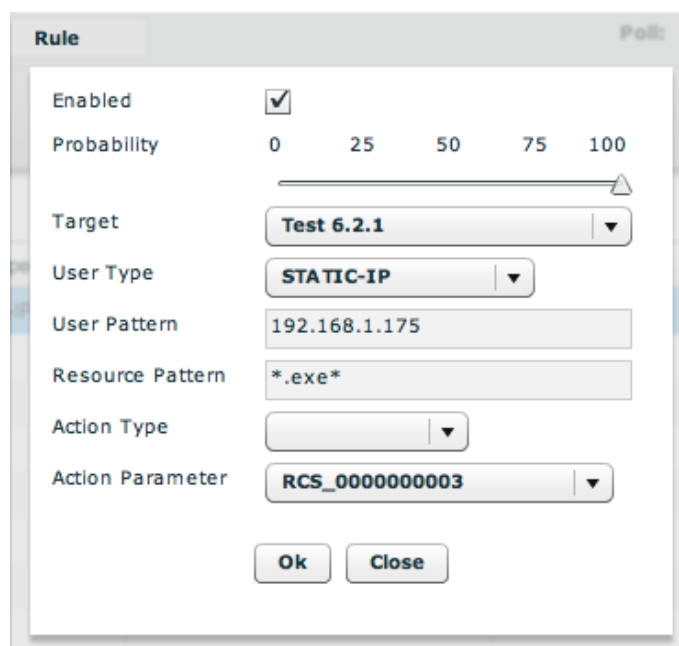
## Injection Proxies Rules

The injection proxy can be used to infect the target on the fly. In order to do this, you have to create some rules.

A rule is composed of three parts:

- identification of the target
- resource to be modified
- action to be performed on the resource

To create a new rule, simply press the “new” button in the rule section. A popup will appear:



You have to choose:

- If you want the rule to be enabled or not
- The probability of infection after the first attempt
- Which target you want to infect (target)
- Which method to use to identify the target (user type)
- The pattern used by the identification method (user patter)
- The resource to be modified while the target download it (resource pattern)
- The action to be performed on the resource (action type)
- The parameter of the action (action parameter)

NOTE: the injection proxy will always match a rule the first time it is seen. After the first match the probability is applied. If you choose 100, the proxy will infect the resource every time, otherwise a probability of infection is calculated and the proxy decides if the resource has to be infected or not.

This is useful if you replace documents with exploits, the first one will be replaced and the target will not see any document opening it (but the backdoor will be installed). After the first download you can choose 0 as probability and the injection proxy will never attempt again to replace it (so the target will get the correct document).



## Identification phase

To identify the target you can use different methods. Every method takes a parameter as for the following table:

User Type	User Pattern
STATIC-IP	Static IP assigned to target
STATIC-MAC	Static MAC address of the target (eth or wifi)
DHCP	MAC address of the target network interface
RADIUS-LOGIN	User-Name (Radius 802.1x)
RADIUS-CALLID	Calling-Station-Id (Radius 802.1x)
RADIUS-SESSID	Acct-Session-Id (Radius 802.1x)
RADIUS-TECHKEY	NAS-IP-Address:Acct-Session-Id (Radius 802.1x)
STRING-CLIENT	string matching (string goes from client to server)
STRING-SERVER	string matching (string goes from server to client)

Once the target has been identified between all the different streams the proxy sniffs, you can attack it and choose what to do.

## Attack phase

You have to specify which http resource has to be modified. You have to specify an URL for this parameter. Wildcards can be used.

Examples:

\*setup\*.exe


[www.facebook.com/](http://www.facebook.com/)

www.hp.com/\*/UserManual.pdf

then you have to specify which kind of action the proxy should perform on the resource.

INJECT-EXE	The downloaded exe file will be melted on the fly with the selected backdoor. The target will be infected as soon as the exe is executed.
INJECT-HTML	The html page will be modified to include a java control which will install the selected backdoor. The target must agree on the execution of java code.
REPLACE	The specified resource will be replaced with the provided file. Useful in conjunction with the exploit portal. You create an exploit for a fileformat on the portal and then replace a downloaded file with a rule.

### Deploying rules

Once you have created your rules for all the targets you want to infect, you have to deploy them to the injection proxy. To do so, press the “apply”  button. The rules will be deployed to the injection proxy the next time RNC contacts the appliance (usually within a minute).

Rules		Logs					
	P	Target	User Type	User Pattern	Resource Pattern	Action Type	Action Parameter
<input type="checkbox"/>	100	Test Timeline	STATIC-IP	192.168.1.131	www.facebook.com/	INJECT-HTML	RCS_0000000001
<input type="checkbox"/>	100	Demo Target	STATIC-IP	192.168.1.131	*Vuze*.exe*	INJECT-EXE	RCS_0000000056
<input type="checkbox"/>	100	Test Timeline	STATIC-IP	192.168.1.131	www.google.it/	INJECT-HTML	RCS_0000000001
<input type="checkbox"/>	100	Test Timeline	STATIC-IP	192.168.1.131	alor.antifork.org/	INJECT-HTML	RCS_0000000001
<input type="checkbox"/>	100	Test Timeline	STATIC-MAC	00:1D:BA:67:26:4A	www.google.it/	INJECT-HTML	RCS_0000000001
<input type="checkbox"/>	100	Test Timeline	STATIC-MAC	00:1D:BA:67:26:4A	*.org/	INJECT-HTML	RCS_0000000001
<input type="checkbox"/>	100	Test Timeline	STATIC-MAC	00:1D:BA:67:26:4A	sourceforge.net/	INJECT-HTML	RCS_0000000001
<input type="checkbox"/>	100	Test Timeline	STRING-CLIENT	alor	www.google.it/	INJECT-HTML	RCS_0000000001
<input type="checkbox"/>	100	Demo Target	STATIC-MAC	00:1D:BA:67:26:4A	www.bing.com/	INJECT-HTML	RCS_0000000056
<input checked="" type="checkbox"/>	100	Test Timeline	STATIC-IP	192.168.1.131	*eMule*.exe*	INJECT-EXE	RCS_0000000001

## THE ALERTING SECTION

The alerting system let you specify queries that, if matched, will warn you via email or via console.

If new alerting logs arrive, you will be see a blue number on the button bar indicating the number of alerting logs you received:



The alerting section is as follow:

**Alerting Summary**

Open Activities: 10  
 Open Targets: 11  
 Open Backdoors: 17  
 Alert Queries: 4  
 Triggered Alerts: 3  
 Matching Logs: 3

**Alert Queries:**

Activity	Target	Backdoor	Type	Alert Type	Supp	Keywords
First Activity	Test Target One	RCS_0000000001	CALL	LOG	0	123414
CR2 Google Maps act1	Google Maps *	*	LOCATION *	LOG	0	23 ciao
Third Activity	Test Target Three	RCS_0000000003	DEVICE	LOG	0	1934

**Triggered Alerts:**

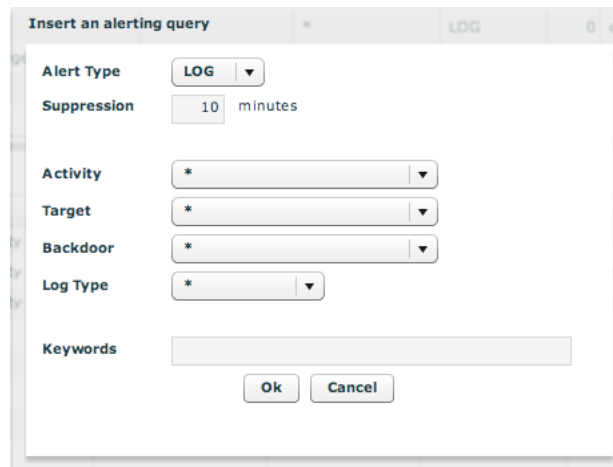
Date	Activity	Target	Backdoor	Type	Keywords	Logs
2009-07-07 10:15:00	First Activity	Test Target One	RCS_0000000001	MAIL	subject	12038
2009-07-02 15:38:00	First Activity	Test Target One	RCS_0000000001	URL	corriere.it	9186
2009-07-02 15:37:41	First Activity	Test Target One	RCS_0000000001	SNAPSHOT	corriere.it	9407

The page is divided in two sections:

- The upper part: where you specify the queries
- The bottom part: where you find the logs that matched a query

## Setting up an alert

To create a new query, simply press on the “add” button of the upper section.



You can specify the type of the alert: MAIL or LOG. MAIL will use the “contact” field of the user description and LOG will only log the alert in the database. Mailed alert will also be logged in the database for later review.

The suppression time is the time frame in which you will not be warned again for the same query. Useful if you don’t want to receive multiple emails for the same matching criteria.

Keywords will be searched in all the possible fields of the log; you don’t have to worry about the name. You can also use wildcard: the percentage symbol (%) is used to match any word.

## Reviewing matching logs

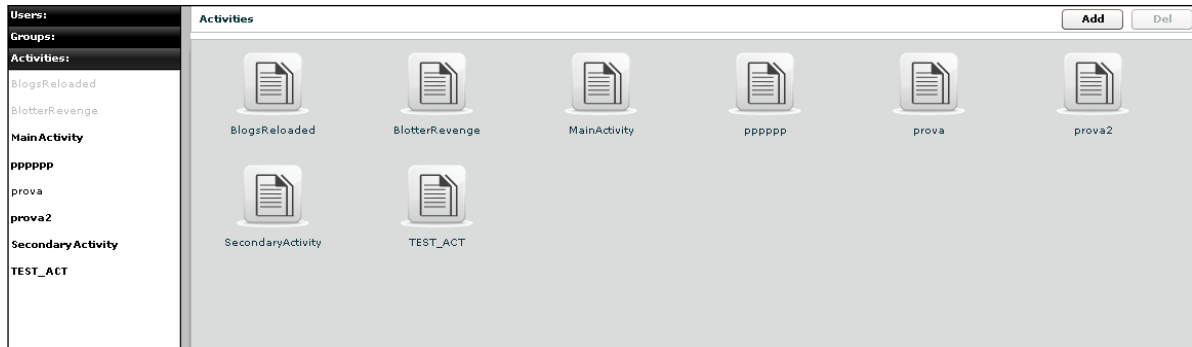
In the bottom part you have the list of logs that matched a query. Multiple logs are collapsed into the same alert log within the suppression time. So you can have multiple *log\_id* separated by commas in the “Logs” field. Double clicking on an entry will forward you to the logs with a preset filter to let you review only those logs.

Once an alert log has been reviewed it is suggested to delete it to decrement the alert log count on the button bar.

## HOWTO

### Create an activity

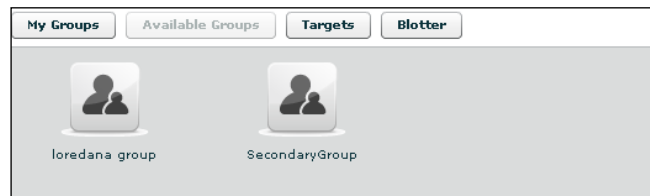
You need to be logged with Admin profile. Start application and after successfully login, click “Add” button on left menu:



Fill fields and select “Status” OPEN:

Click “Save” button to save data.

Then “Available Groups” button is enabled, click it to choice one or more groups for this activity:



You can see group’s details by double clicking group’s icon.

An activity will only be available to users belonging to groups assigned to it. Thus, in order to give access to the newly created activity, its targets and its backdoors you need to assign groups to it.

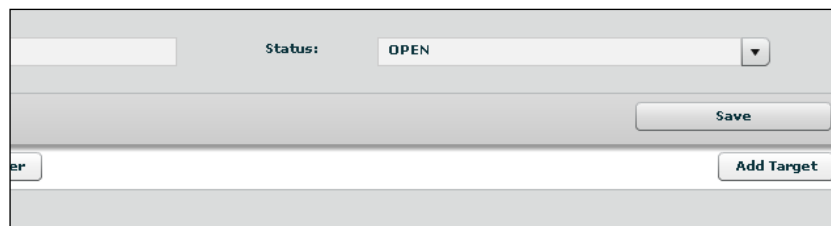
Select group with a single click:



Then either by:

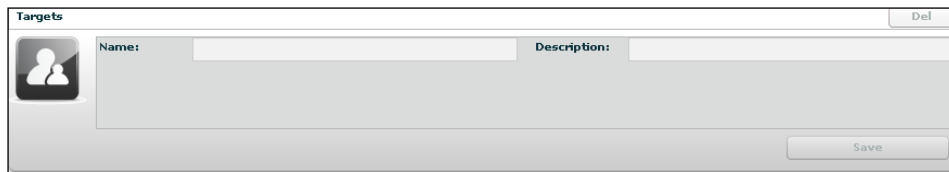
1. Click “Add Group” button on the left at the bottom of the window;
2. Click “+” button next the group’s icon.

At this point you can add a new target clicking “Add Target” button on the right of the screen:



A screenshot of a web form. At the top, there is a text input field on the left and a dropdown menu labeled "Status:" with "OPEN" selected. Below these is a "Save" button. At the bottom, there is a text input field on the left and an "Add Target" button on the right.

Fill fields and click “Save” button to save data.



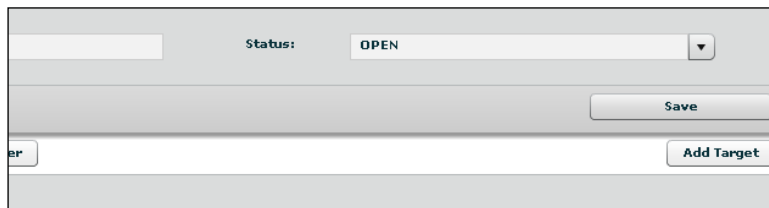
A screenshot of a window titled "Targets". It features a "Del" button in the top right corner. On the left side, there is a small icon of two people. The main area contains two input fields: "Name:" and "Description:". A "Save" button is located at the bottom right of the form.

### Create a target

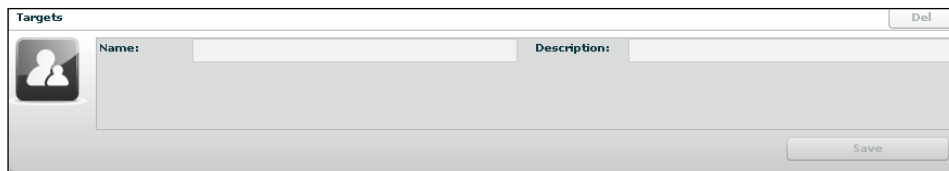
You need to be logged with Admin profile. Start application and after successfully login, click tab “Activities” on left menu:



Select an activity or create a new activity, then click “Add Target” button on the right of the screen to create a target:



Fill fields and click “Save” button to save data.



### Create a backdoor

You need to be logged with Tech profile. Start application and after successfully login, click tab "Targets" on left menu:



Select a target then click "Add" button on the right to create a backdoor:



Fill field "Description" and click "Save" button to save data:

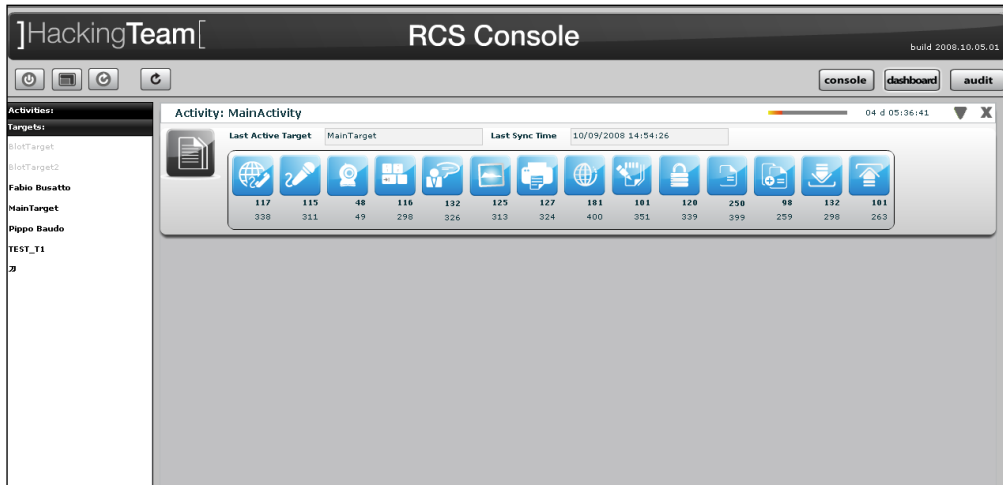




## View and search log

You need to be logged with Viewer profile. Start application and after successfully login you can either:

- The logs browsing throw targets/backdoors/activities in console view, or
- Click “Dashboard” button to change modality and select and it from previously highlighted resource in the dashboard:

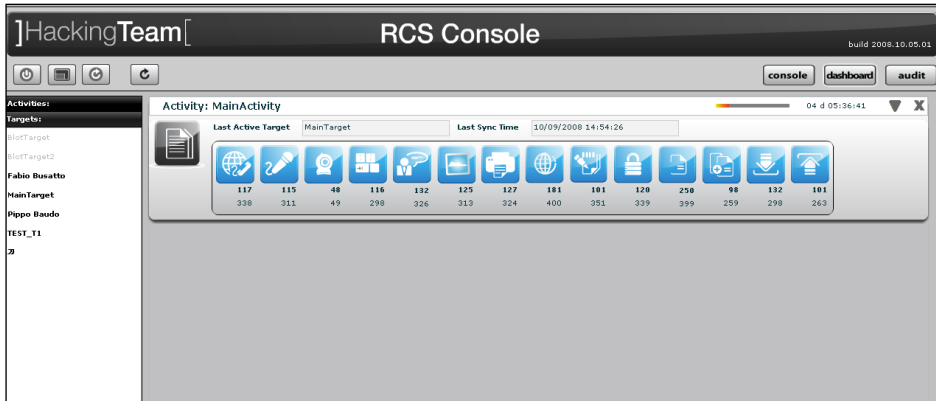


Then click log's icon to see log's details.

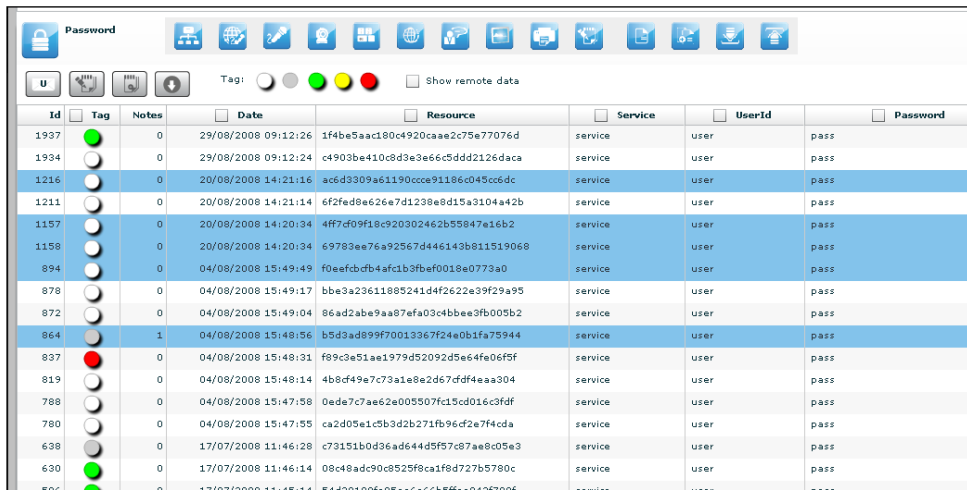
In either way you will access the log details viewer where you can search and filter logs just by clicking on the column header. For example clicking on the date column header will let you specify time ranges for logs item.

### Export log

You need to be logged with Viewer profile. Start application and after successfully login locate the logs you need to export either by browsing on the console view by selecting a log item in the dashboard view:



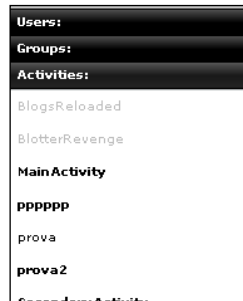
Then select one or more log's rows:



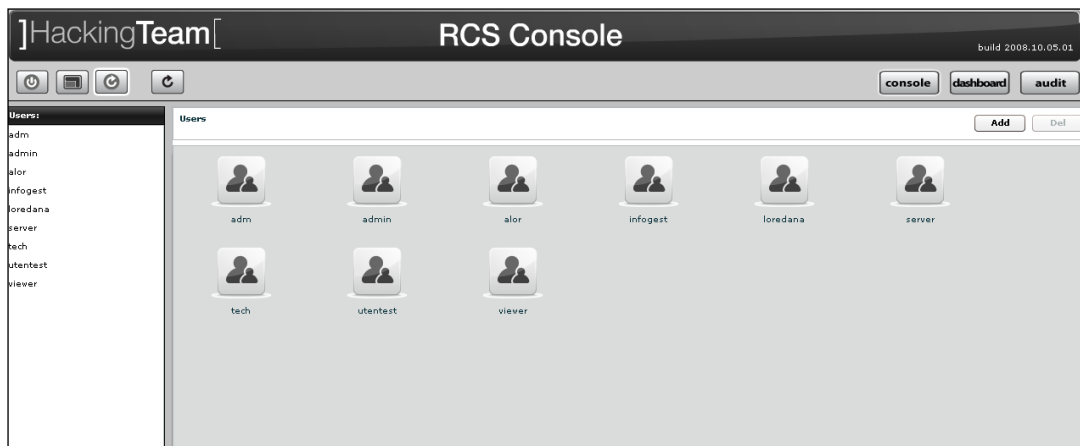
“Download” button is now enabled, click it to download selected logs.

## Create an user

You need to be logged with Admin profile. Start application and after successfully login, click tab “Users” on left menu:



Then click “Add” button on the right at the top of the icons-list:



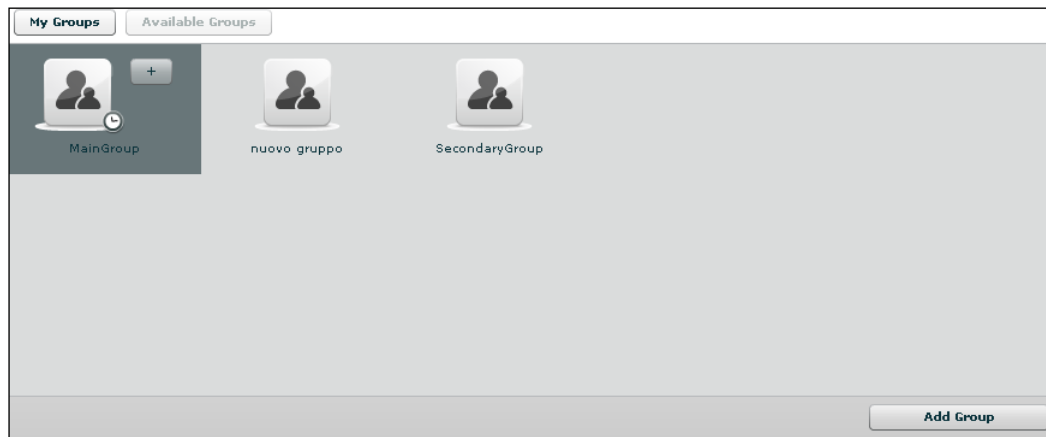
Fill fields and assign privileges:

Click “Save” button to save data.

At this point “Available Groups” button is enabled, click it to choice a group for this user:

You can see group’s details by double clicking group’s icon.

Select group with a single click:

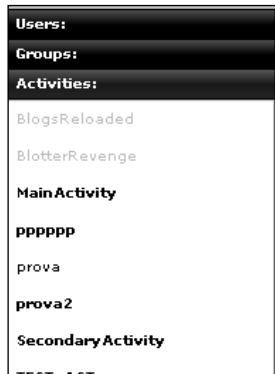


Then either by:

1. Click "Add Group" button on the left at the bottom of the window;
2. Click "+" button next the group's icon.

### Create a group

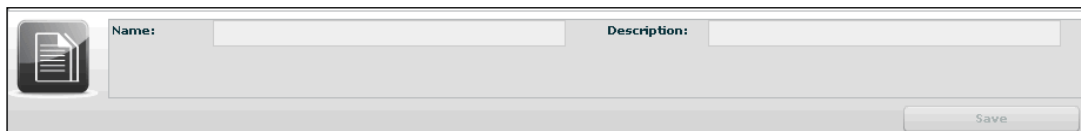
You need to be logged with Admin profile. Start Application and after successfully login, click tab “Groups” on left menu:



Click “Add” button on the right at the top of the icons-list:

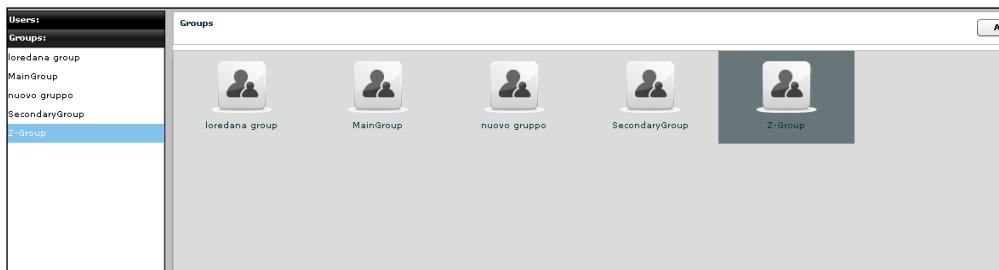


Fill fields:

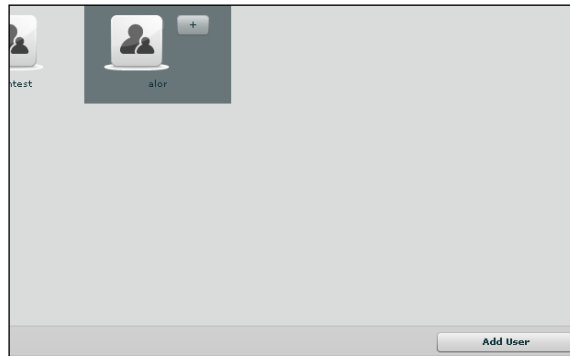


Click “Save” button to save data.

Open new group:



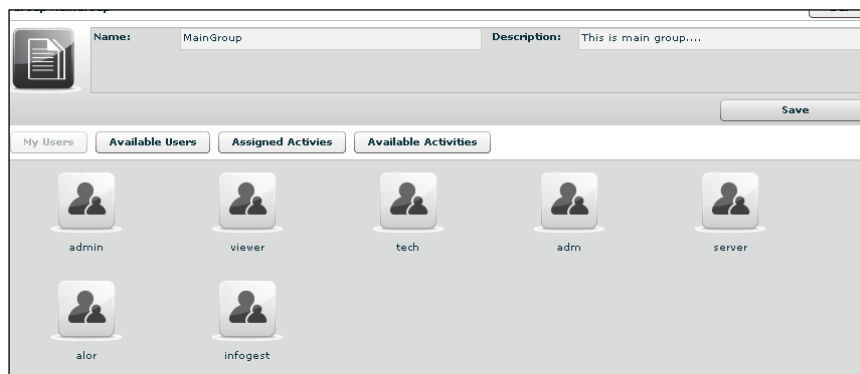
And to add a user to the new group, select user with a single click:



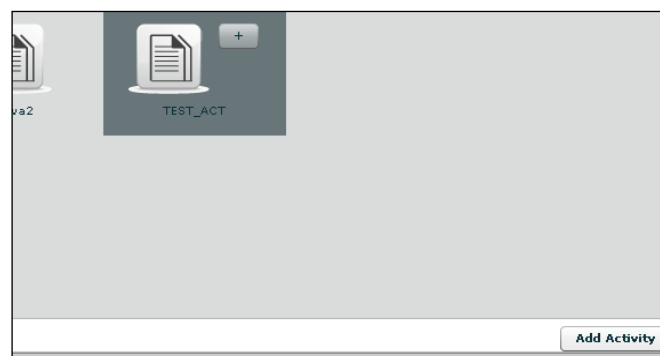
Then either by:

1. Click “Add User” button on the left at the bottom of the window;
2. Click “+” button next the user’s icon.

Click “Available Activities” button to add activities



Select activity with a single click:

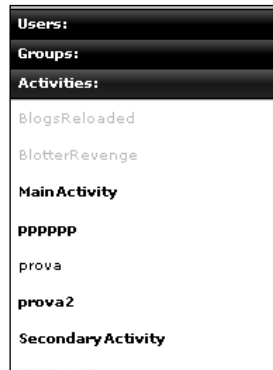


Then either by:

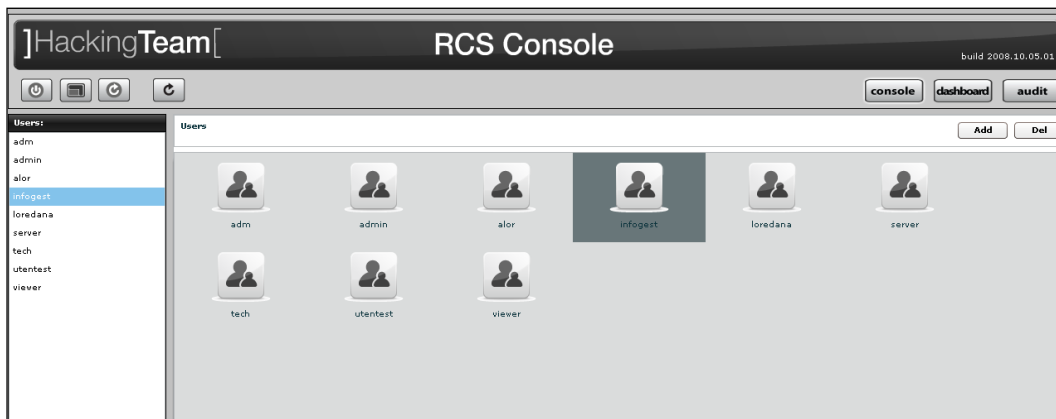
1. Click “Add Activity” button on the left at the bottom of the window;
2. Click “+” button next the icon’s activity.

## Assign privileges to users

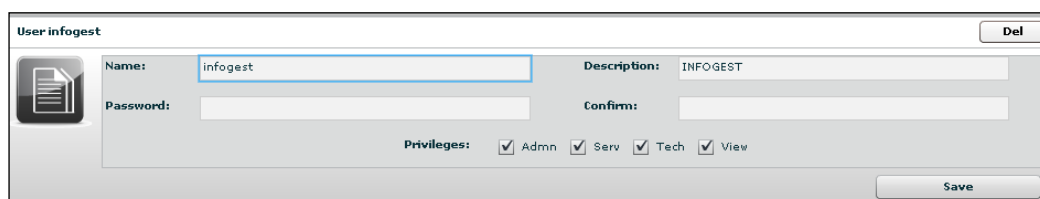
You need to be logged with Viewer profile. Start application and after successfully login, click tab "Users" on left menu:



And select a user:



then select the checkbox of privilege you want to assign to selected user or uncheck it if you want to remove from the selected user:



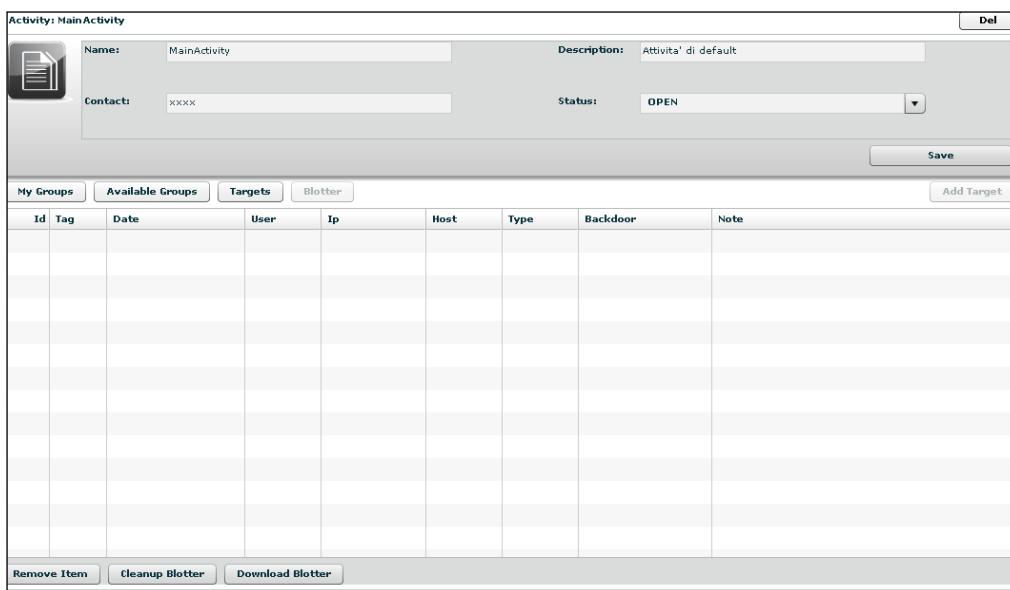
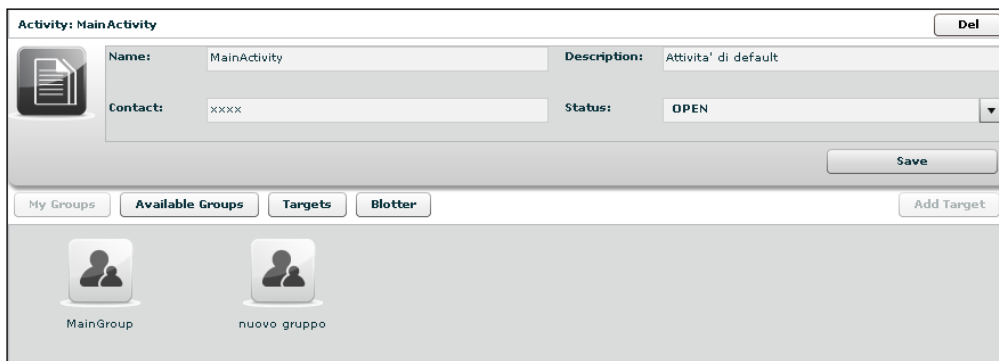
- **Admn**: this is the super user. It is the only one that can create users, groups, activity and targets;
- **Tech**: this role can create, modify and reconfigure backdoors associated with a target, however the target can only be modified and created by ADMIN;
- **View**: this role is assigned to users that can only view the logs. It cannot modify backdoors, targets or activity. It can create and modify notes and blotters.

### Create and manage blotter

You need to be logged with Viewer profile. Start application and after successfully login, select an activity:



Then click "Blotter" button:





To add log to blotter, first browse and locate the log items to be added, then select one or more log's rows:

Id	Tag	Notes	Date	Resource	Service	UserId	Password
1937	●		29/08/2008 09:12:26	f4be5aac180c4	service	user	pass
1934	○		29/08/2008 09:12:24	c4903be410c8d1	service	user	pass
1216	○		20/08/2008 14:21:16	ac6d3309a6119	service	user	pass
1211	○		20/08/2008 14:21:14	6f2fd8e62e67d	service	user	pass
1157	○		20/08/2008 14:20:34	4ff7d09f18c920	service	user	pass
1158	○		20/08/2008 14:20:34	69783ee76a925	service	user	pass
894	○		04/08/2008 15:49:49	f0eefcbf4afcl1	service	user	pass
878	○		04/08/2008 15:49:17	bbe3a23611885	service	user	pass
872	○		04/08/2008 15:49:04	86ad2abe9aa87	service	user	pass
864	○	1	04/08/2008 15:48:56	b5d0ad899f700	service	user	pass
837	●		04/08/2008 15:48:31	f89c3e51ae1975	service	user	pass
819	○		04/08/2008 15:48:14	4b8df49e7c73a1	service	user	pass
788	○		04/08/2008 15:47:58	0eda7c7ae62e0	service	user	pass



Finally click this button to add selected logs to blotter.

Note: logs can be added only when logs from a single activity are currently displayed.

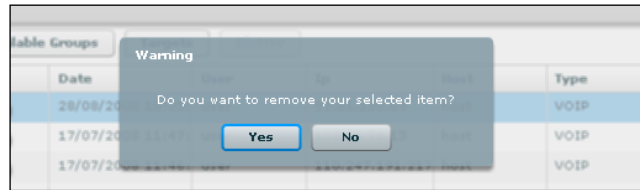
Return to activity to view blotter:

Id	Tag	Date	User	Ip	Host	Type	Backdoor	Note
1992	○	10/09/2008 12:37:28	user	1.1.1.1	host	CLIPBOARD	RCS_136161	
1937	●	29/08/2008 09:12:26	user	201.61.41.240	host	PASSWORD	RCS_168921	
1157	○	20/08/2008 14:20:34	user	166.89.165.171	host	PASSWORD	RCS_168921	
904	○	04/08/2008 15:50:04	user	227.50.46.182	host	MIC	RCS_136161	904 note
890	○	04/08/2008 15:49:26	user	40.94.41.240	host	MIC	RCS_168921	
837	●	04/08/2008 15:48:31	user	78.216.197.155	host	PASSWORD	RCS_136161	
818	○	04/08/2008 15:48:11	user	160.113.198.14	host	MIC	RCS_168921	

Double click mouse on detail's row to view log's detail  
If you want to remove a row, select it with a single click:

Id	Tag	Date	User	Ip	Host	Type	Backdoor	Note
1890	●	28/08/2008 10:35:1	user	97.61.150.69	host	VOIP	RCS_136161	
662	●	17/07/2008 11:47:0	user	103.16.78.13	host	VOIP	RCS_136161	
647	●	17/07/2008 11:46:0	user	110.247.191.217	host	VOIP	RCS_136161	

Then click "Remove Item" button:

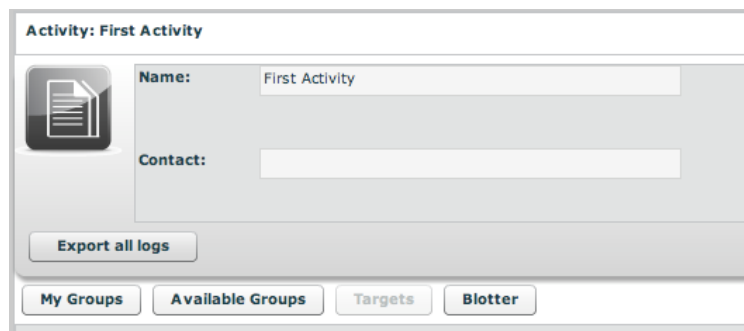


Click "Yes" to confirm or "No" to exit.

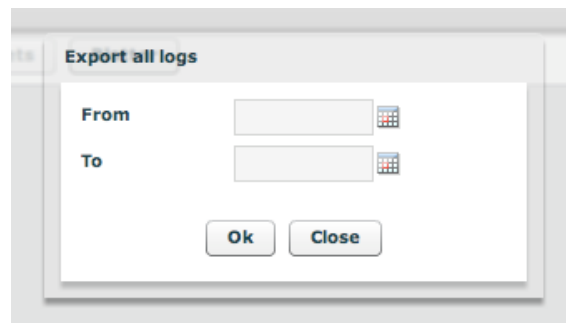
Click "Cleanup Blotter" button to clear blotter.

Click "Download Blotter" button to download a blotter as a compressed file (.zip)

You can also download ALL the logs associated with an activity, target or backdoor by clicking on the "export all" button in the relative details view:



If you press this button a time filter will popup, asking for a time range of the logs:



After that a special blotter with ALL the logs in that time frame will be generated.

## Appendix A

### **How to obtain a Symbian Certificate**

A *Symbian Developer Certificate* is required to install and run RCS on Symbian devices; this is due to the highly restricted nature of Symbian platforms and to the lack of a simple, and generic, jailbreak exploit. Unsigned applications haven't been allowed to run in any way starting from *Symbian OS 9.1*.

### **Getting a Publisher ID**

It is necessary to buy a certificate on *TrustCenter* ([https://www.trustcenter.de/en/products/tc\\_publisher\\_id\\_for\\_symbian.htm](https://www.trustcenter.de/en/products/tc_publisher_id_for_symbian.htm)). Certificate type must be "*Developer Certificate*" and not "*Test House Certificate*". After buying the certificate, valid for one year, the CA will request documentation about the developer and the company that's asking the certificate:

1. A copy of the current business registration, or equivalent, document showing the existence and registered office of the company.
2. A written request confirmation signed by an authorized signatory.
3. A signed copy of an official Photo ID or Passport including photo and signature of the applicant.

### **Creating Certificate's Public and Private Keys**

After a few days (generally 1 to 4), *TrustCenter* will send a notification email containing a link to the certificate, that must be installed into your browser, and your *Publisher ID*. At this point the certificate should be saved to your disk and the public and private keys exported using the *TC-Converter* tool (a copy can be obtained here: <http://wiki.forum.nokia.com/index.php/File:TC-ConvertP12.zip>). The procedure is simple and fast: [http://wiki.forum.nokia.com/index.php/Publisher\\_ID\\_%28Symbian\\_Signed%29](http://wiki.forum.nokia.com/index.php/Publisher_ID_%28Symbian_Signed%29). Basically it's just:

1. Download and unpack *TC-Converter.zip* from [developer.symbian.org](http://developer.symbian.org).
2. Copy *YourDeveloperCert.p12* into TC-Converter folder.
3. Create *.key* and *.cer* files running: `tcp12p8 YourDeveloperCert.p12 YourPasswordtc.keytc.cer`

*Tc.cer* and *Tc.key* will be used to request the Developer Certificate ([http://wiki.forum.nokia.com/index.php/Developer\\_Certificate\\_%28Symbian\\_Signed%29](http://wiki.forum.nokia.com/index.php/Developer_Certificate_%28Symbian_Signed%29)) needed to sign RCS using the Open Signed Offline procedure described in the next paragraph.

### ***Certificate Signing***

After obtaining the Publisher ID and creating the various keys, it is necessary to create a *.csr* containing the IMEI code of any phone that will be infected. This process can be performed from time to time; it is therefore possible to add all IMEIs now, or to add a new IMEI when needed. For additional help refer to this link: [http://wiki.forum.nokia.com/index.php/Open\\_Signed\\_Offline\\_%28Symbian\\_Signed%29](http://wiki.forum.nokia.com/index.php/Open_Signed_Offline_%28Symbian_Signed%29)

Create an account on [www.symbiansigned.com](http://www.symbiansigned.com) (it's free), and login.

1. Download and install *DevCertRequest.zip* from the above link.
2. Get the phone's IMEI (dial **\*#06#** or read the code from phone's battery bay).
3. Open the *OpenSigned* link from your SymbianSigned account.
4. Upload your *.csr* file.
5. The portal will generate a *.cer* file, download it.

You can now use this newly generated *.cer* file and the previous obtained *Tc.key* file into RCS Console to sign the backdoor's *.sisx* file.