

**Remote Control System**

Delivery Acceptance Procedure

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| --- | --- | --- |
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# Objectives

This document details the Delivery Acceptance Procedure required for assessing the functional compliance of Remote Control System (RCS) installation.

The proposed test cases are to be performed during solution’s delivery at Client’s premises, carried out by Hacking Team Representatives and with the presence of Client Representatives.

All tests will be performed during or after Remote Control System (RCS) installation and - according to RCS license file acquired by the Client - some tests may be indicated as not applicable (N/A).

On completion of the Delivery Acceptance Procedure the Client shall sign the Delivery Certificate.

The signature date will be considered as the acceptance date for any future use or reference.

## Functional Tests

The purpose of the proposed tests is to verify Remote Control System (RCS) functionalities within Client’s specific installation, to ensure operational readiness.

Each test comes with an objective, a procedure and the expected results. Hacking Team and Client Representatives shall follow the procedure and accordingly report the results. Tests cases must be carried out in the presented order, to guarantee all pre-requisites are met.

The Client should consider these activities as a complete setup of Remote Control System (RCS) by Hacking Team Representatives, in accordance to the company best practices, to ensure that the system is operational and ready for use.

1. Users, Groups, Operations, Targets and Agents created during the functional tests may be deleted after the Delivery Acceptance Procedure, leaving the Client with a clean RCS installation.

# Frontend

This test case verifies that each Collector and Anonymizer is reachable from the Internet and responds correctly when interrogated.

## Procedure

The activities required for this unit may be performed on any system connected to the Internet.

For each Collector and Anonymizer, please follow the steps listed below:

1. Open a web browser or open a new tab;
2. Connect the browser to the URL http://*<IP\_Address>*/, where *<IP\_Address>* is the IP address of the system to be tested;
3. Verify that the browser replies with the default web page (Error 404 Not Found).

## Results

Please fill the table below indicating the result of the test with respect to the expected outcome.

|  |  |
| --- | --- |
|  | Verified? |
| Each Anonymizer and Collector replies with default web page. | **N/A OK Error:** |

# User Creation

The scope of this test is to create and verify a complete set of Users, as required to use the system.

Upon completion of this test, the Client shall have one (1) User with *Administrator* role, one (1) with *System Administrator* role, one (1) with *Technician* role and one (1) with *Evidence* *Analyst* role.

## Procedure

Steps for this test case are performed on the Console, as listed below:

1. Logon using the *Administrator* (admin) User created during installation.
2. Create a User with only *System Administrator* role.
3. Create a User with only*Technician* role.
4. Create a User with only *Evidence* *Analyst* role.
5. Verify that each User can login, using the Console.

## Results

Please fill the table below indicating the result of the test with respect to the expected outcome.

|  |  |
| --- | --- |
|  |  |
| Login with *Administrator* User | **N/A OK Error:** |
| Login with *System Administrator* User | **N/A OK Error:** |
| Login with *Technician* User | **N/A OK Error:** |
| Login with *Evidence* *Analyst* User | **N/A OK Error:** |

# Group, Operation & Target creation

The scope of this test is to create a Group, Operation and Target needed for the subsequent tests.  
Upon completion of this test the Client shall have one (1) Group, one (1) Operation and one (1) Target.

## Procedure

Steps for this test case are performed on the Console, as listed below:

1. Logon using the *Administrator* User.
2. From the Operations panel, create a new Operation with name ‘Test Operation’.
3. From the Accounting->Groups panel, create a new Group with name ‘Test Group’.
4. Click on the Available Users (+) and add all the Users present.
5. Click on the Available Operations (+) and add ‘Test Operation’.
6. From Operations->’Test Operation’, create a new Target with name ‘Test Target’.
7. Verify Operation, Group and Target creation using the Audit panel.

## Results

Please fill the table below indicating the result of the test with respect to the expected outcome.

|  |  |
| --- | --- |
|  |  |
| Test Operation created | **N/A OK Error:** |
| Test Group created | **N/A OK Error:** |
| Operation and Users associated to Group | **N/A OK Error:** |
| Target created | **N/A OK Error:** |
| Audit log entries are present | **N/A OK Error:** |

# Factory Creation & Configuration

The scope of this test is to create and verify Factories and configurations needed for subsequent tests.  
Upon completion of this test the Client shall have one (1) Desktop Factory and one (1) Mobile Factory.

## Procedure

Steps for this test case are performed on the Console, as listed below:

1. Logon using the *Technician* User.
2. Move to *Operations*-> *Test Operation* -> *Test Target*;
3. Create a new factory of type DESKTOP with name *Test Desktop*.
4. Create a new factory of type MOBILE with name *Test Mobile*.
5. Open the *Test Desktop* factory, switch to Advanced Configuration, then press the Template button and load *DAP Desktop*.
6. Check Synchronization interval (every 60 seconds) and Host address (Frontend), then press the Save button.
7. Open the *Test Mobile* factory Advanced Configuration panel, press the Template button and load *DAP Mobile*.
8. Check Synchronization interval (every 60 seconds) and Host address (Frontend), then press the Save button.

## Results

Please fill the table below indicating the result of the test with respect to the expected outcome.

|  |  |
| --- | --- |
|  |  |
| Desktop Factory created and configured | **N/A OK Error:** |
| Mobile Factory created and configured | **N/A OK Error:** |

# Remote Mobile Infector

The scope of this test is to ensure that the Remote Mobile Infector (RMI) is able to craft and send an SMS with the link to an infection package.

## Procedure

Steps for this test case are performed on the Backend server and on the Console, as listed below:

1. Ensure that a valid SIM card is inserted in the RMI modem and the modem is connected to a USB port of the RCS DB.
2. On the Backend server, run the AirCard Watcher application and ensure that the SIM card is correctly connected to a local mobile provider with at least 2 bars of signal strength.
3. Logon on the Console using the *Technician* User.
4. Open the *Test Mobile* factory Advanced Configuration panel and press the Build button.
5. Choose *Wap Push Message* and select *Multiplatform*.
6. Enter information in the following fields and click on create.
   1. **Phone Number**: A valid mobile phone number including international area code *(e.g.* ***+39*** *02 29060603).*
   2. **Service Type**: SMS
   3. **Text**: DAP test
7. The mobile phone number (6a) should receive the text message (6c) with a URL to the infection package.

## Results

Please fill the table below indicating the result of the test with respect to the expected outcome.

|  |  |
| --- | --- |
|  |  |
| AirCard Watcher shows that the SIM card is connected to a local mobile provider | **N/A OK Error:** |
| The Console indicates that the SMS has been successfully delivered. | **N/A OK Error:** |
| The mobile phone number received the SMS with text and link to the infection package | **N/A OK Error:** |

# Tactical Network Injector

The scope of this test is to ensure that the Tactical Network Injector (TNI) is able to sniff and change the Target’s network traffic, applying the infection.

## Procedure

Steps for this test case are performed on the Tactical Network Injector (TNI) laptop and on the Console, as listed below:

1. On the Tactical Network Injector (TNI) laptop, ensure that the Backend server and the Target computer are on the same network (wired or wireless) and reachable.
2. On the Tactical Network Injector (TNI) laptop, ensure that the Target’s network traffic is visible.
3. Logon on the Console using the *System Administrator* User.
4. From the *System* -> *Network Injectors* panel, create a new injector with name *Test Injector* and specify the right IP address.
5. Logoff the *System Administrator* User from the Console.
6. Logon again on the Console using the *Technician* User.
7. From the *System* -> *Network Injectors* panel, select the *Test* *Injector* injector and press the *Add a new rule* button.
   1. **Target**: Test Target
   2. **Ident**: TACTICAL
   3. **Resource pattern**: *\*.exe*
   4. **Action**: INJECT-EXE
   5. **Factory**: Test Desktop
8. Start the Tactical Network Injector (TNI), run the Tactical Control Center application and click on *Config*.
9. On the Console, press the *Apply rules* button and ensure that the new configuration is correctly received by the Tactical Network Injector (TNI) laptop and successfully applied.
10. On the Tactical Control Center application, click on *Start* and then on *Reauth all* button to get the IP address of the Target. Ensure the *Last website* column of the Target is shown. Select the Target and click on *Infect*.
11. Using a Target Windows Desktop, download Skype application from http://www.skype.com.
12. Run the downloaded Skype.
13. On the Console, verify that a new Agent is created for the Target computer.

## Results

Please fill the table below indicating the result of the test with respect to the expected outcome.

|  |  |
| --- | --- |
|  |  |
| New Injector created | **N/A OK Error:** |
| New rule created and deployed | **N/A OK Error:** |
| Injector correctly displayed Target’s IP address | **N/A OK Error:** |
| Injector correctly displayed Target’s last website | **N/A OK Error:** |
| Target successfully infected by the Injector | **N/A OK Error:** |

# Agent Creation & Lifecycle

The scope of this test is to create and verify Agents.

Upon completion of this test the Client shall have one (1) Desktop Agent and one (1) Mobile Agent.

1. The result of this test case is a pre-requisite to subsequent test cases. Do not delete the output files until all the test cases are completed.   
   **Modify the name of each output file to avoid accidental overwriting.**
2. Agents should be built only for platforms included in the Client’s license.

## Procedure

Steps for this test case are performed on the Console, as listed below:

1. Logon using the *Technician* User.
2. Open the *Test Desktop* factory Advanced Configuration panel and press the Build button.
3. Choose the Silent Installer Agent and select a client’s available platform to infect.
4. Open the *Test Mobile* factory Advanced Configuration panel and press the Build button.
5. Choose the Installation Package Agent and select a client’s available platform to infect.

## Results

Please fill the table below indicating the result of the test with respect to the expected outcome.

|  |  |
| --- | --- |
|  |  |
| Silent Installer Agent created | **N/A OK Error:** |
| Installation Package Agent created | **N/A OK Error:** |

# Target Lifecycle

The scope of this test is to ensure that:

1. An Agent is installed on desktop and/or mobile target platform(s).
2. The Agent is able to collect evidences and synchronize with the Collector.
3. Evidence collected by the Agent is visible on the Console.
4. When requested, the Agent is removed from the target system.

The tests included in this section will be performed on the following platforms:

**Desktop**

|  |  |  |  |
| --- | --- | --- | --- |
| Platform | Vendor | Model | OS Version |
|  |  |  |  |
|  |  |  |  |

**Mobile**

|  |  |  |  |
| --- | --- | --- | --- |
| Platform | Vendor | Model | OS Version |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

## Procedure

Steps for this test case are mainly performed on the Console, as listed below:

1. Logon using the *Evidence* *Analyst* User.
2. Install the Agent using a vector suitable to the target platform.
3. On Android platform, enable the option *Unknown sources* in *Settings* -> *Application* menu before the installation. Reboot the device once the Agent is installed.
4. On mobile, after the Agent installation, wait for the device to go in standby mode to allow the synchronization.
5. From the *Operations* -> *Test Operation* -> *Test Target* panel, verify that a new icon is created for each infected device, select it and click *Add to Dashboard*.
6. On desktop Windows, synchronization may take as long as 5 minutes. Some interaction with the keyboard or mouse may be required.
7. On desktop Windows, once the Scout icon is present upgrade the Agent.
8. From the Dashboard panel, verify that evidences are correctly displayed.
9. From the *Operations* -> *Test Operation* -> *Test Target* panel, for each newly infected device click *Close*.
10. Wait for the next synchronization and check that the *Uninstall* flag is set.

## Results

Please fill the table below indicating the result of the test with respect to the expected outcome.

**Desktop**

|  |  |
| --- | --- |
|  |  |
| Synchronization performed | **N/A OK Error:** |
| Agent update to Elite (Windows only) | **N/A OK Error:** |
| Data received and displayed | **N/A OK Error:** |
| Agent closed | **N/A OK Error:** |

**Mobile**

|  |  |
| --- | --- |
|  |  |
| Synchronization performed | **N/A OK Error:** |
| Data received and displayed | **N/A OK Error:** |
| Agent closed | **N/A OK Error:** |

# Backup

The scope of this test is to ensure that the Backup feature is operating correctly.

## Procedure

Steps for this test case are mainly performed on the Console, as listed below:

1. Logon using the *System Administrator* User.
2. From the *System* -> *Backup* panel, create a *New Backup Job*.
   1. **Enabled**: *CHECKED*
   2. **What**: metadata
   3. **When**: Time 0:0 UTC Every 1 of the month
   4. **Name**: Test Backup
3. Select the newly created backup job and click *Run Now*.
4. Verify that the backup job is completed successfully and that files are found in the designated location (C:\RCS\DB\backup).

## Results

Please fill the table below indicating the result of the test with respect to the expected outcome.

|  |  |
| --- | --- |
|  |  |
| New backup job created | **N/A OK Error:** |
| Backup job successfully executed | **N/A OK Error:** |
| Backup files are correctly created | **N/A OK Error:** |

# Connector

The scope of this test is to ensure that the Connector feature is operating correctly.

## Procedure

Steps for this test case are listed below:

1. Logon using the *System Administrator* User.
2. From the *System* -> *Connectors* panel, create a *New Connector*.
   1. **Enabled**: *CHECKED*
   2. **Name**: Test Connector
   3. **Path**: Test Desktop
   4. **Type**: JSON
   5. **Keep the evidence**: *CHECKED*
   6. **Destination:** C:\
3. Wait for new evidences to be synchronized and verify that the Connector outputs JSON and accessory files to the designated location.

## Results

Please fill the table below indicating the result of the test with respect to the expected outcome.

|  |  |
| --- | --- |
|  |  |
| New Connector created | **N/A OK Error:** |
| Connector exported evidences successfully | **N/A OK Error:** |















**Delivery Certificate**

**Issued by the Client to Hacking Team**

The following items (being either the Licensed Software or part of the Licensed Software) have been accepted for the purpose of this Agreement.

|  |  |  |  |
| --- | --- | --- | --- |
| Item | Value | Item | Value |
| Users |  | **Agents** |  |
| Desktop platforms |  | **Mobile platforms** |  |
| Backend servers |  | **Frontend servers** |  |
| Anonymizers |  | **Network Injectors** |  |
| Remote Mobile Installer |  | **Alerting** |  |
| Intelligence |  | **Connectors** |  |
| OCR |  | **Translation** |  |

LNX = Linux, OSX= OS X, WIN = Windows, AND = Android, BKB = BlackBerry, IOS = iOS, WPH = Win Phone

Other conditions attached to the Delivery Certificate.

*(specify here if there are any conditions attached to the Certificate of Acceptance)*

|  |
| --- |
|  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Client** |  | **Hacking Team** |  |
|  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Full name |  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Full name |  |
|  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Title |  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Title |  |
|  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Signature |  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Signature |  |
|  |  |  |  |  |
|  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Date | | |  |