



# LUCY WHITEPAPER



## WHAT IS LUCY?

### Test, train and engage your employees

Lucy enables organization to take on the role of an attacker and uncover existing weaknesses in both technical infrastructure and staff knowledge and eliminate them through a comprehensive program.



#### EMPLOYEE TESTING

Attack Simulations (e.g., phishing)



#### INFRASTRUCTURE TEST

Malware Simulation & Scanner



#### EMPLOYEE TRAINING

Integrated LMS



#### PROGRESS MEASUREMENT

Risk and Learning Analysis



#### EMPLOYEE INTEGRATION

Reporting System (e.g., Mail Phish Button)





# LUCY WHITEPAPER



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### TEST INFRASTRUCTURE

- Malware Testing Toolkit
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### TECHNICAL TESTING

- Reputation-Based e-Learning
- End user Training Portal
- Awareness Education Diploma
- e-Learning Authoring Toolkit
- Rich Media Awareness Training
- Training Library
- Static Training Support
- Offline Training Support
- Microlearning Modules
- Video Customization
- Mobile-Responsive Format
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- Dynamic Training Hints

### ENGAGE EMPLOYEES

- Report E-mails with a single click
- Positive Behavior Reinforcement
- Deep Inspection Request
- Automatic Incident Analysis
- Incident Auto Feedback
- Threat Mitigation
- Custom rule-based analysis
- Plugin customization options
- Third party integration
- Identify attacks with common patterns
- Incident user reputation profiles
- Integration with attack simulations
- Easy Installation

# GENERAL FEATURES

- Reminders:** Reminder templates can be used to automatically resend messages to users who have not clicked on an attack link or a training course after a custom period of time.

### REMINDER SETTINGS

User Settings

Custom Fields

Reminders

- Remind users who did not click a scenario link  days after message is sent
- Remind users who did not start a training  days after message is sent
- Remind users who did not finish a training  days after training is started

Save

### REMINDER ATTACK TEMPLATE (SCENARIO 2)

Source | [Icons]

[Rich Text Editor Icons]

Styles | Normal | Arial | Size | [Font Size Icons]

Insert Var | Upload File or Image

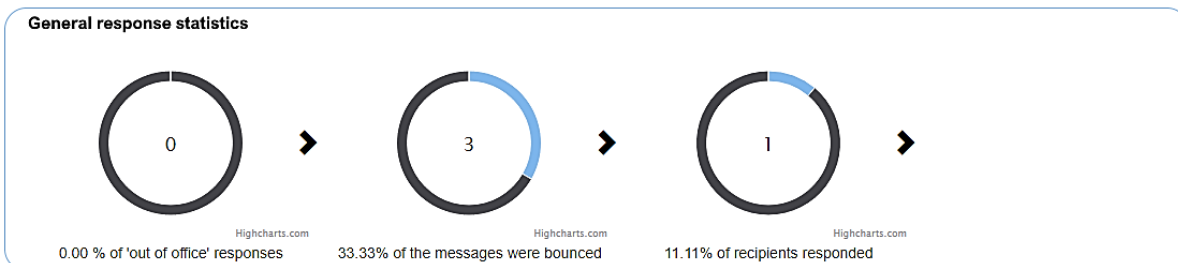
Dear %name%,

You have received an [encrypted document](#) which is accessible via the secure corporate cloud repository a while ago ( %time("Y/m/d H:i:s", "-86000")% ). We noticed you did not open it yet.

body p span

[Preview](#)

- Response detection:** The automatic response detection makes it possible to define and analyse automatic e-mail responses (e.g., out of office) as well as mail delivery errors (e.g., user unknown) within the campaign.



#### User specific response statistics

No test

<b>Name</b>	No
<b>E-mail</b>	doesntexist@doesntreallyexist.net
<b>Phone</b>	-
<a href="#">User History</a>	
<b>Lure Sent</b>	-
<b>Message Sent</b>	-
<b>Training Sent</b>	-
<b>Reported</b>	-
<hr/>	
<b>Success Rate</b>	0.00%
<b>Click Rate</b>	0.00%
<b>Clicks</b>	-
<b>Successful Attack</b>	-
<b>Trained</b>	-
<b>Out Of Office</b>	-
<b>Bounced</b>	✓
<b>Responded</b>	-

#### Configuration

Home / Automated Response Detection

### Automated Response Detection

**Timeout**

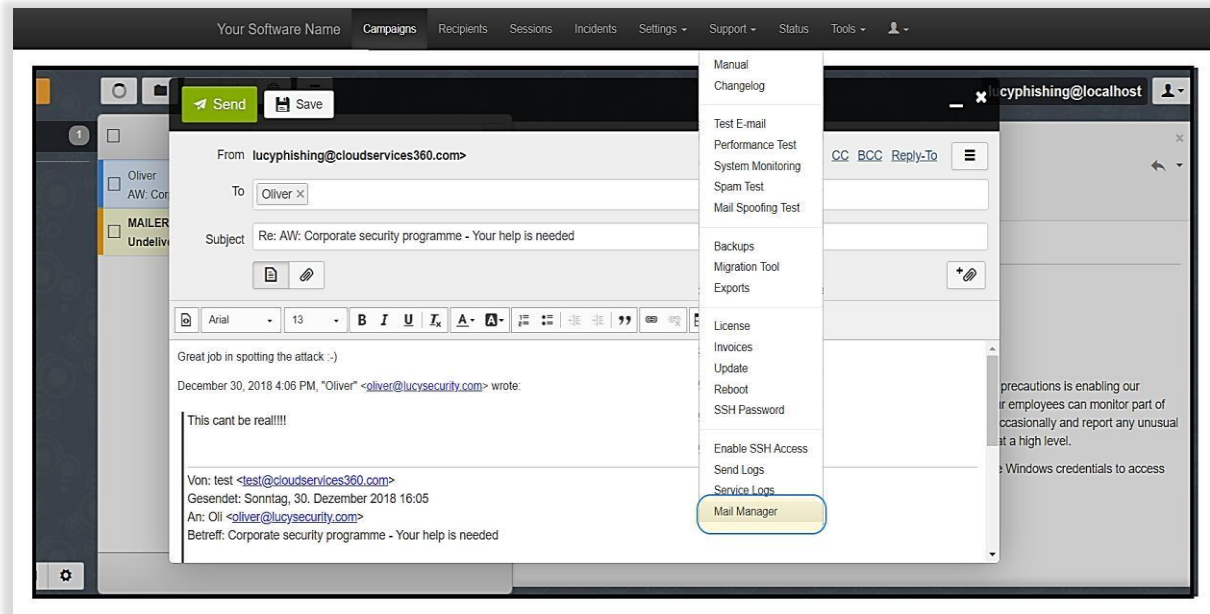
**Out Of Office Delay**

**Out Of Office Pattern**

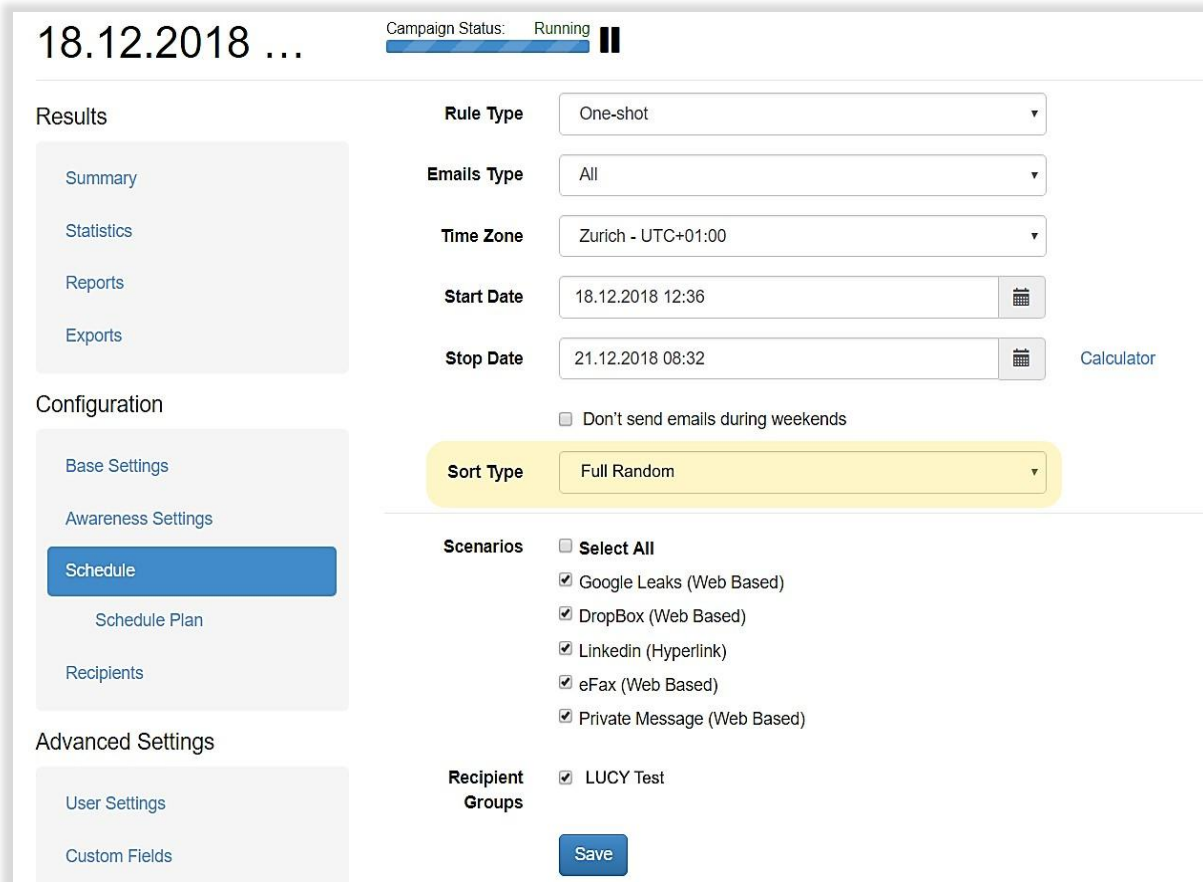
**Bounced Pattern**

[Save](#)

- Full mail communication client:** A built-in messaging platform allows the LUCY admin to communicate interactively with the recipients inside or outside the LUCY campaigns. All e-mails are archived and can be evaluated.



- Scheduler Randomization:** Raising employee awareness at random is the key factor for effective and sustainable awareness within the organization. Randomly sending many concurrent campaigns is one of the best means of training employees.



- Performance tools:** LUCY smart routines adapt the server installation to the given resources. Applications Server, DBMS Sizing, Memory and CPU usages are calculated during installation or during operations. You can scale a single, cloud-based LUCY installation for 400,000+ users.

### System Monitoring

Interval: 1 day

Current Resources Usage: CPU: 0.00%, RAM: 44.00%

Response Time

### Performance Test

Recipient Number:

Planned number of recipients for the attack.

Attack Duration: 1 hour

Planned duration of the attack.

Hits	Visitors	Recipients	Response Time (sec.)
1	10.00	100	0.24
2	20.00	200	0.24
4	40.00	400	0.3
8	80.00	800	1.2
16	160.00	1600	1.43
32	320.00	3200	2.65
64	640.00	6400	5.28
128	1280.00	12800	11.37

Disk Usage: Used 34.84 Gb, Available 243.78 Gb (13%)

Folders:

- attachment-templates: 85M Clear
- awareness-templates: 22G Clear
- scenario-templates: 2.2G Clear
- db-backups: 3.7G Clear

Database:

- Deleted Campaigns: Count: 149 Clear
- Deleted Recipients: Count: 14 Clear

Clear Database

- Multilingual admin interface:** The LUCY admin interface is available in different languages and can be translated into other languages on request.

Your Software Name
Login

# [your logo here]

Language

English

English

Deutsch

Español

Français

Italiano

Nederlands

Português

Türkçe

### Login

E-mail:

Password:  [Forgot?](#)

gileegi

Security Code:

Login

(c) 2018 Your Company Name

- Certificate (SSL):** Allows the automatic creation of official and trusted certificates for the admin, backend as well as for the campaigns. LUCY will automatically use the domain configured in the system to generate the certificate. If you decide to use SSL for the campaign, you can generate a custom certificate or a CSR (Certificate Signing Request). You can also import official trusted certificates.

- Role-based access controls:** LUCY offers a role-based access control (RBAC) that restricts system access to authorized users only. The permissions to perform certain operations are assigned to specific roles within the user settings. Members or staff (or other system users) are assigned particular roles through which to acquire the necessary computer permissions to perform particular LUCY functions.

Name	Role	All Campaigns Access
Limited User	User	✓
View	View	-
Supervisor	Supervisor	✓

- Multi-layered user groups:** Quickly upload users in bulk via a CSV, LDAP, or text file. Create different groups, organized by department, division, title, etc. Update users in a running campaign. Build dynamic user groups based on the phishing campaign results.

- Multi-client compatible:** "Clients" can refer to different companies, departments, or groups that have an associated campaign in LUCY. These clients can be used, for example, to allow campaign-specific access or to create customer-specific analysis.

- Campaign templates:** In case you want to reuse similar campaigns, you can save a complete campaign with attack templates and eLearning content as a campaign template. This feature allows you to evade having to repeat similar configurations over and over again.

The screenshot shows the Lucy interface for a campaign named 'Max1'. The campaign status is 'Not Started', and it has a running time of '4 days, 4 hours'. A 'Save as Template' button is highlighted with a blue circle. A dialog box is open, showing the 'New Campaign' configuration. The dialog includes fields for 'Name' (Standard Test & Train Campaign Template), 'Client' (Lucy Test), 'Setup Mode' (Start with Default Campaign Template), and 'Template' (Max1). A 'Save' button is also visible in the dialog. The background shows a dashboard with various charts and statistics, including a donut chart and a bar chart.

- Setup wizard with risk-based guidance:** LUCY offers several Setup Tools. Create a complete campaign in less than 3 minutes using the predefined campaign templates or let the Setup Wizard guide you through the configuration. Optionally, a risk-based setup mode is available, which makes specific suggestions for the selection of attack and awareness templates based on the company's size and industry.

The screenshot shows the 'Campaign Wizard: Type' interface. It presents a list of campaign types for selection. The options are:

- Data Entry Attack:** User clicks on a link, that leads to a landing page with the login form.
- Hyperlink Attack:** User clicks on a link and gets redirected to an external URL specified in settings.
- File Attack:** User is asked to execute a file from a mail message or a downloaded from a web page.
- Portable Media Attack:** Test users by distributing USB sticks or any other portable media that contain a malware simulation. If the user executes the malware simulation, that will be reflected in Lucy campaign statistics.
- Training:** Training only campaign, without the attack part.
- Technical Malware Test:** Perform security checks without involving employees outside your IT department. Determine your malware-related vulnerabilities on the network, system and application levels.
- Mail & Web Filter Test:** See what type of files can be accessed within the company network through mail or web.

The interface includes a 'Close' button and a 'Next' button.



- Campaign checks:** Preliminary checks before starting a LUCY campaign: E-Mail Delivery Check, MX Record Check, Schedule Check, Spam Check, and others.

Home / Campaigns / Login & Malware Simulation / Checks

Campaign Status: Not Started ▶ Skip Checks

Please wait, the system is checking your campaign settings.

**Check**

E-mail Delivery Check	✓
IP Check	✓
Accessibility Check	✓
Sender E-mail Check	✓
Spam Check	✗
Language Check	✓
Settings Check	✓
Schedule Check	✓
Mail Server Check	✓
MX Record Check	✓
Track Responses Check	↻

**Spam Check** ✕

This check analyses email and lure templates using spam filters and checks if remote mail servers may treat messages from Lucy as spam.

- Scenario test: there is no DKIM signature in email message. Please note, that it's just a notification. More than likely, your emails won't be blocked and you don't have to change anything.

Help Close

- Approval Workflow:** A given campaign can be submitted to a supervisor in LUCY for approval.

Results Completed — Campaign Status: Waiting ▶

**Summary**

- Summary
- Statistics
- Reports
- Exports

**Configuration**

- Base Settings
- Awareness Settings
- Schedule
- Recipients

**Advanced Settings**

- User Settings
- Custom Fields
- Reminders

**Logs**

- Supervision Log

**Submission Date** 18.12.2018 19:02:28

**Expiration Date** 23.12.2018 19:02:28

**Supervision Date** N/A

**Supervisor Name** Supervisor

**Submitter Name** Limited User

**Follow-Up End Date** 27.12.2018 19:05 📅

**Severity**

- Minor Recommendations
- Serious Recommendations
- Heavy Recommendations

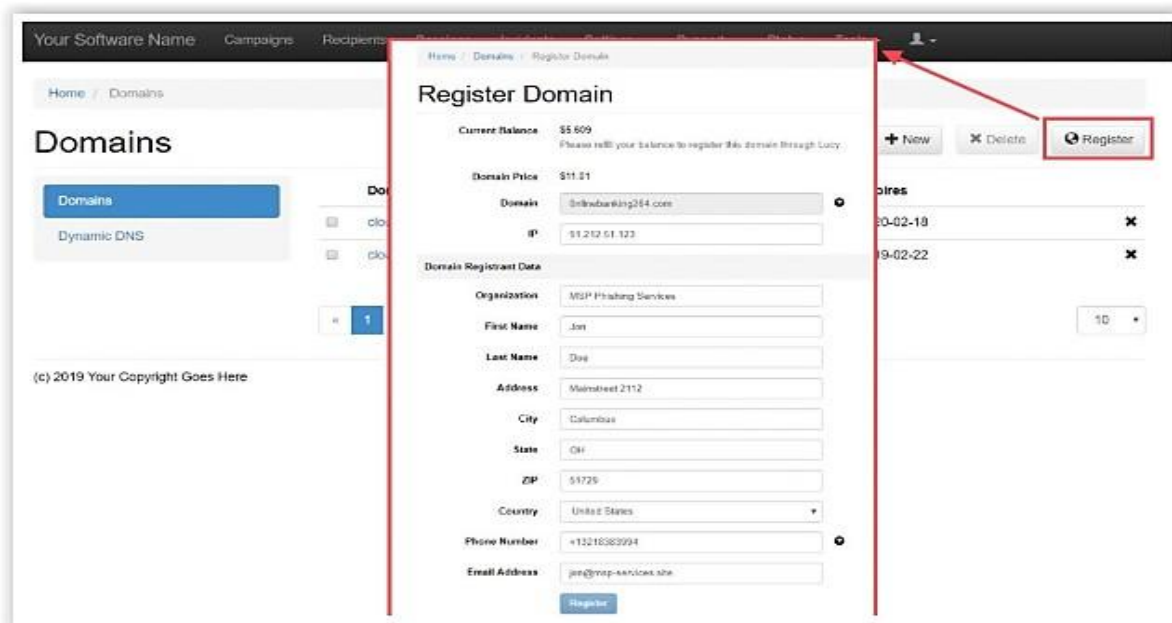
**Comments**

1) Please use a hyperlink scenario instead of a login  
 2) The scenario "SAP Login": make sure it does not save passwords  
 3) Add a subdomain to the awareness page called "le-learning"

Reject

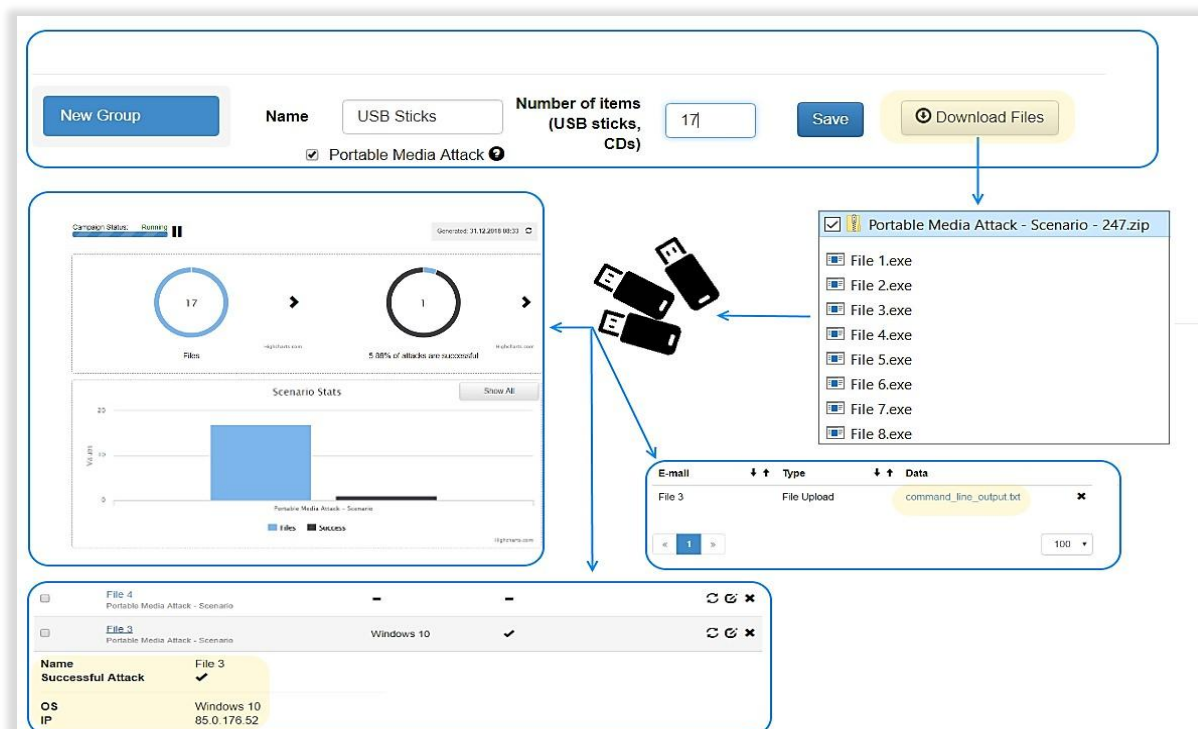
Name	Role	All Campaigns Access
Limited User	User	✓
View	View	—
Supervisor	Supervisor	✓

- DNS API:** The DNS API allows the administrator to create any domain on LUCY within seconds. Since attackers very often use similar spellings of a customer's domain (called Typosquatting), this risk can also be represented in LUCY. If the customer's original domain is, for example, "onlinebanking.com", the DNS wizard could be used to reserve domains such as "Onlinebanking.com", "onl1nebanking.com" or "onlinebanking.services" and assign it to a campaign later. LUCY then automatically creates the corresponding DNS entries (MX, SPF, Whois Protection etc) for the IP where LUCY is installed. Of course, the admin can also use his provider's own domains in LUCY.



## ATTACK SIMULATION

- Portable media attacks:** Hackers can use portable media drives to gain access to sensitive information stored on a computer or network. LUCY offers the option to perform portable media attacks where a file template (e.g., executable, archive, office document with macros, etc.) can be stored on a portable media device such as USB, SD card, or CD. The activation (execution) of these individual files can be tracked in LUCY.



- SMiShing:** Smishing is, in a sense, "SMS phishing." When cybercriminals "phish," they send fraudulent e-mails that seek to trick the recipient into opening a malware-laden attachment or clicking on a malicious link. Smishing simply uses text messages instead of e-mail.

**Message Type** Sms

Current workstation balance is 17.920 USD.  
Make sure you have enough funds to send all text messages before starting the campaign.

**Language** English

**Sender Name** 004550566166

**Text** Check out this link here: %link%  
56/140

**Template** Access to online surveillance portal / English  
Change/Select Template

**Name** SMS

**Landing Domain** cloudspace365.solutions

**Subdomain** sms

**Languages** English  
+ Add

**Url Shortener** goo.gl

**Login Regexp** \w.\*\w

**Password Regexp**

Save

**Quick Tips**

- SMS Message Variables

Check out this link here: goo.gl/KuraFG

- Data entry attacks:** Data entry attacks can include one or more web pages that intercept the input of sensitive information. The available web pages can be easily customized with a LUCY web editor. Additional editing tools allow you to quickly set up functions such as log-in forms, download areas, etc. without HTML knowledge.

**Language** English

**File** index.html

Upload Webpage Copy Webpage Restore Defaults

**Content**

Source

Insert Login Form Upload File or Image Insert Redirect Insert Layer Insert Trackable PDF Insert Password Redirect Close Handler Insert Var Trojan Download

**Quick Tips**

- Form Login Parameters
- Track Downloads
- Landing Page Variables

\*%static%  
 \*%link%  
 \*%name%  
 \*%email%  
 \*%message%  
 \*%link-awareness%  
 \*%division%  
 \*%location%  
 \*%staff-type%  
 \*%comment%  
 \*%gender%  
 \*%time(FORMAT, OFFSET, ZONE)%

**Insert Login Form**

Login Form #3

Login Password >>

OK Cancel

Office366

Welcome to your new "Microsoft 366 Account"

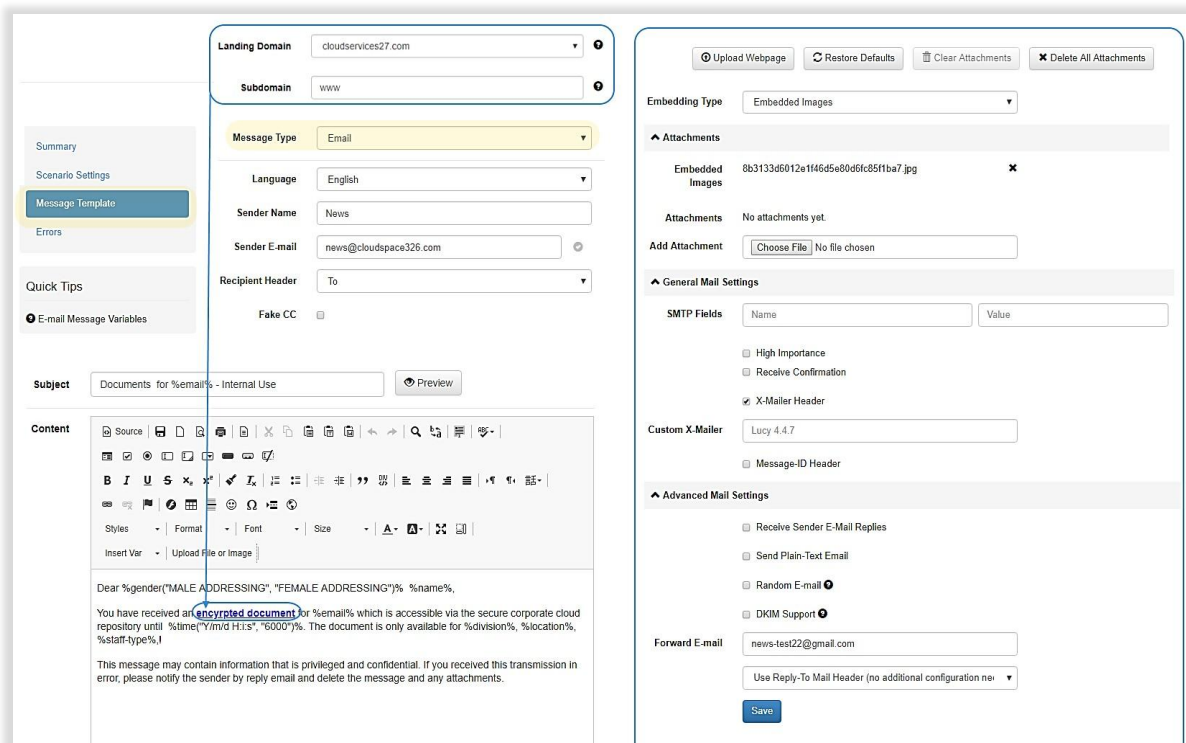
Email or phone

Password

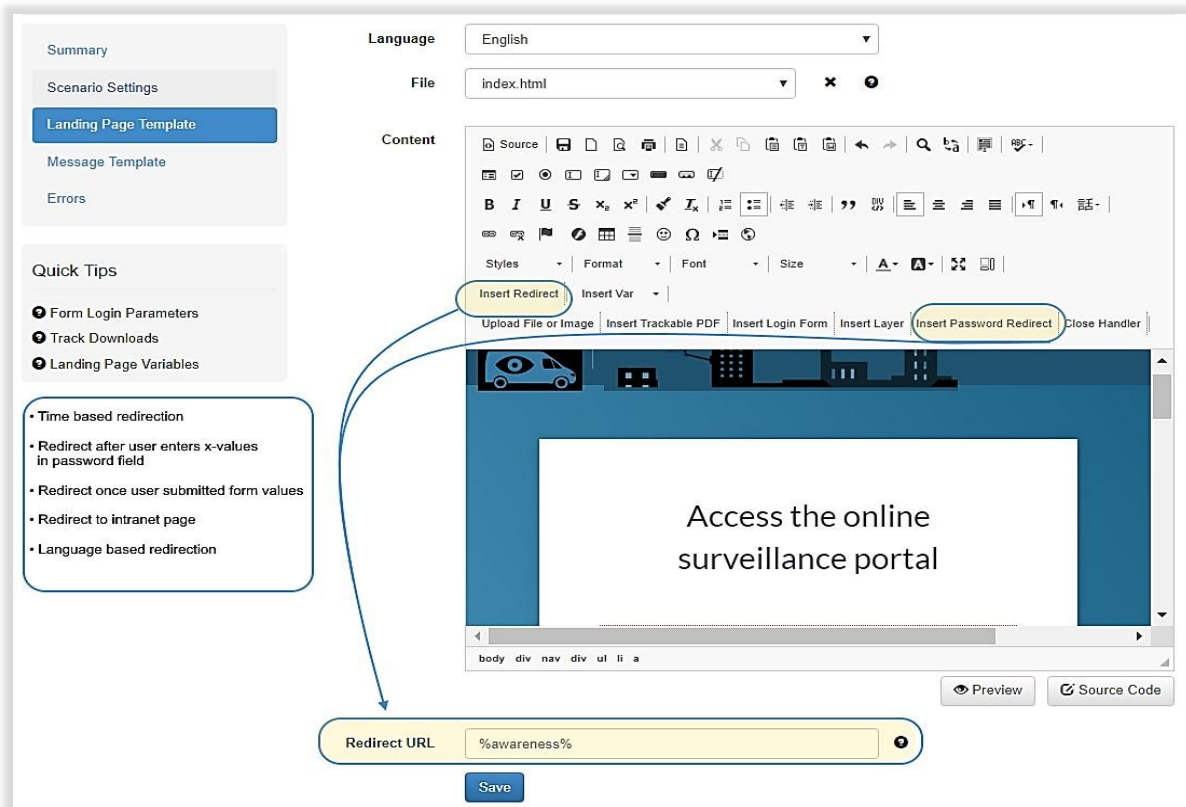
Keep me signed in

Preview Source Code

- Hyperlink attacks:** A hyperlink-based campaign will send users an e-mail that contains a randomized tracking URL.



- Powerful URL redirection toolkit:** LUCY's flexible redirection functions allow the user to be guided, at the right moment, to the desired areas of attack simulation or training. For example, after entering the first 3 characters of a password in a phishing simulation, the user can be redirected to a special training page about password protection.



- **Mixed attacks:** Mixed attacks allow a combination of multiple scenario types (file-based, data entry, etc.) in the same campaign.

The image illustrates a mixed attack scenario through three sequential screenshots:

- Office 365 Registration Page:** A legitimate-looking Microsoft Office 365 registration page. It features a header with the Office 365 logo and a welcome message: "Hello John Dee! Welcome to our Office 365 Registration Page. Please use your Windows credentials to register for the online access." Below this are input fields for "Username" and "Password", a "Keep me signed in" checkbox, and a "Sign in" button. A link for "Can't access your account?" is also present. The footer includes "© 2018 Microsoft" and the Microsoft logo.
- Installation Error Dialog Box:** A simulated error window titled "Installation Error - something went wrong". The message reads: "We couldn't start your program. We kindly ask you to download and execute our system configuration tool below to prepare your access." A prominent orange "DOWNLOAD" button is centered in the dialog, with a "Close" button in the bottom right corner.
- Malware Simulation Configuration:** A configuration interface for a malware simulation. It includes:
  - Template:** A dropdown menu set to "Console Post".
  - Description:** "Get output from one or multiple console programs. Display GUI option may have a value of 0 to 4. 0 - no GUI, 1 - Progress Bar, 2 - Decryptor Window, 3 or 4 - Error Message Window."
  - Variables:** Three input fields:
    - Commands:** "ipconfig,whoami"
    - Display GUI (0-4):** "1"
    - Text Message:** "Installation Error - please try again later"
  - Save:** A blue button at the bottom.

Blue arrows indicate the flow of the attack: from the registration page to the error dialog, and from the error dialog to the simulation configuration.

- File-based attacks:** File-based attacks allow the LUCY administrator to integrate different file types (office documents with macros, PDFs, executables, MP3s, etc.) into mail attachments or websites generated on LUCY and to measure their download or execution rate.

The screenshot displays the LUCY web editor interface. At the top, there is a browser window showing a message with the text: "Hi %name%, you got aMessage, waiting for you from Peter." Below this, it says "Message Date: . This is a free online messaging service supported by ... supported by WhatsApp, Facebook, Skype & Trentmills". A "DOWNLOAD" button is visible on the message. The "Insert Trojan Simulation" dialog is open, showing "Select Trojan Type" set to "Console Interactive" and "Select Design" set to "Button #1". The dialog also features a large circular icon with a downward arrow. Below the dialog, a list of simulation templates is shown, with "Console Post" selected. The "TROJAN SIMULATION: SETTINGS" panel is also visible, showing the following configuration:

- Template:** Console Post
- Description:** Get output from one or multiple console programs.
- Variables:**
  - Commands: ipconfig,whoami
  - Display Error:
  - Error Message: VPN Client Error X1201
- Buttons:** Save

- Double barrel attacks:** This feature makes it possible to send multiple phishing e-mails in each campaign, with the first benign e-mail (the bait) containing nothing malicious and not demanding a reply from the recipient.

The screenshot shows the LUCY configuration interface for an email campaign. On the left, a sidebar contains navigation options: Summary, Scenario Settings, Landing Page Template, Message Template, Lure Template (highlighted), Errors, Quick Tips, and E-mail Message Variables. The main area is titled 'Message Type' and contains the following fields:

- Message Type:** Email
- Language:** English
- Sender Name:** Security
- Sender E-mail:** Security@example.com
- Random E-mail
- Subject:** Corporate security programm will be launched soon!
- Content:** A rich text editor containing the following text:
 

Dear colleagues,

For an effective security programme, our IT team has taken some precautions. One of these precautions is enabling our employees to access our online surveillance system. We created an online portal in which our employees can monitor part of our webcams in our corporation. The portal will go live next week. We keep you updated!

Thank you,

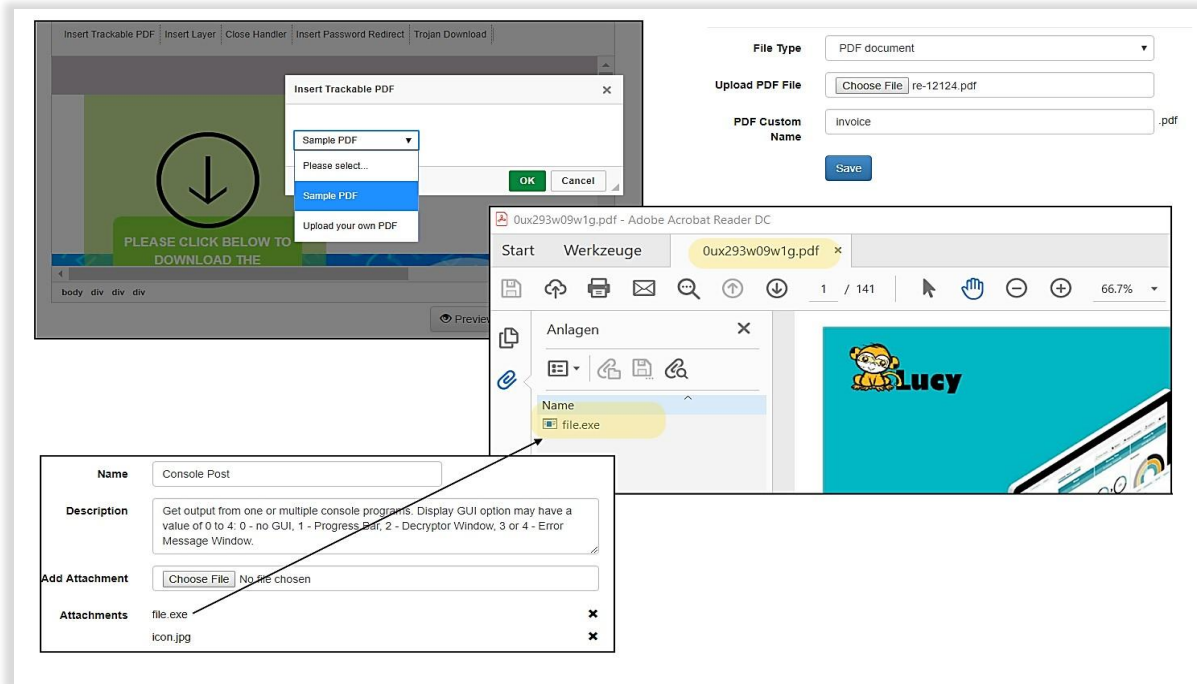
IT-Department
- Success Action:** Data Submit
- Collect Data:** Partial
- Double Barrel Attack (highlighted in yellow)
- Lure Delay:** 3600
- Url Shortener:** bit.ly
- Login Regexp:** lw.\*lw
- Password Regexp:** (empty)
- Save** button

- Java-based attacks:** Java-based attacks allow the LUCY administrator to integrate a trusted applet within the file-based or mixed attack templates provided in LUCY and to measure their execution by the user.

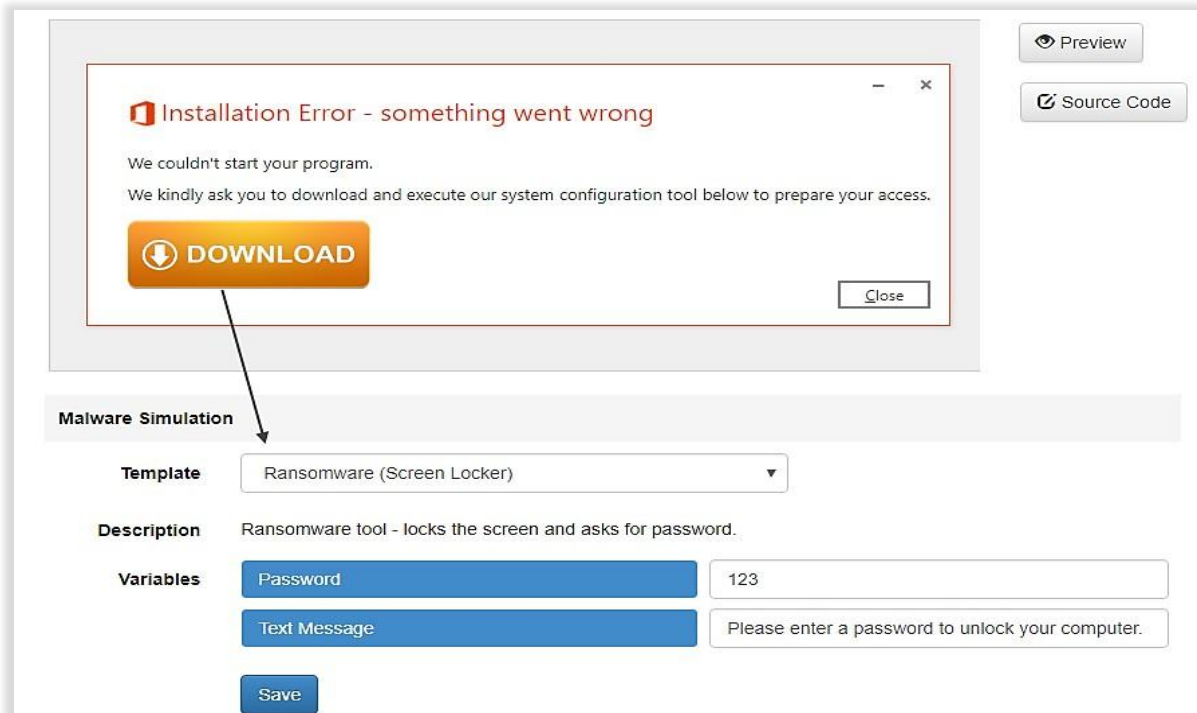
The screenshot displays three configuration panels in the LUCY interface:

- File Type (Java Applet):**
  - File Type: Java Applet
  - Use a signed applet to execute a set of commands.
  - Checkboxes: System Details, Logged Users, Screen Capture, Network Details, System Hosts, App List (all checked)
  - Save** button
- File Type (Tunnel Executable):**
  - File Type: Tunnel Executable
  - Use a signed applet to download and run an executable malware simulation.
  - Download Path: %TEMP%
  - Save** button
- Malware Simulation (Screen Recorder):**
  - Template: Screen Recorder
  - Description: Capture screenshots or video from the desktop and shoot photos or videos using a webcam. Display GUI option may have a value of 0 to 4: 0 - no GUI, 1 - Progress Bar, 2 - Decryptor Window, 3 or 4 - Error Message Window.
  - Variables:
    - Desktop Video:
    - Capture Webcam:
    - Webcam Video:
    - Video Length (seconds): 0
    - Number of Snapshots: 1
    - Interval Between Snapshots: 5
    - Display GUI (0-4): 1
    - Text Message: VPN Client Error X1201
  - Save** button

- PDF-based attacks:** PDF-based phishing attacks can be simulated with this module. LUCY allows "hiding" executable files as PDF attachments and measuring their execution. Furthermore, dynamic phishing links can be also generated within PDFs.

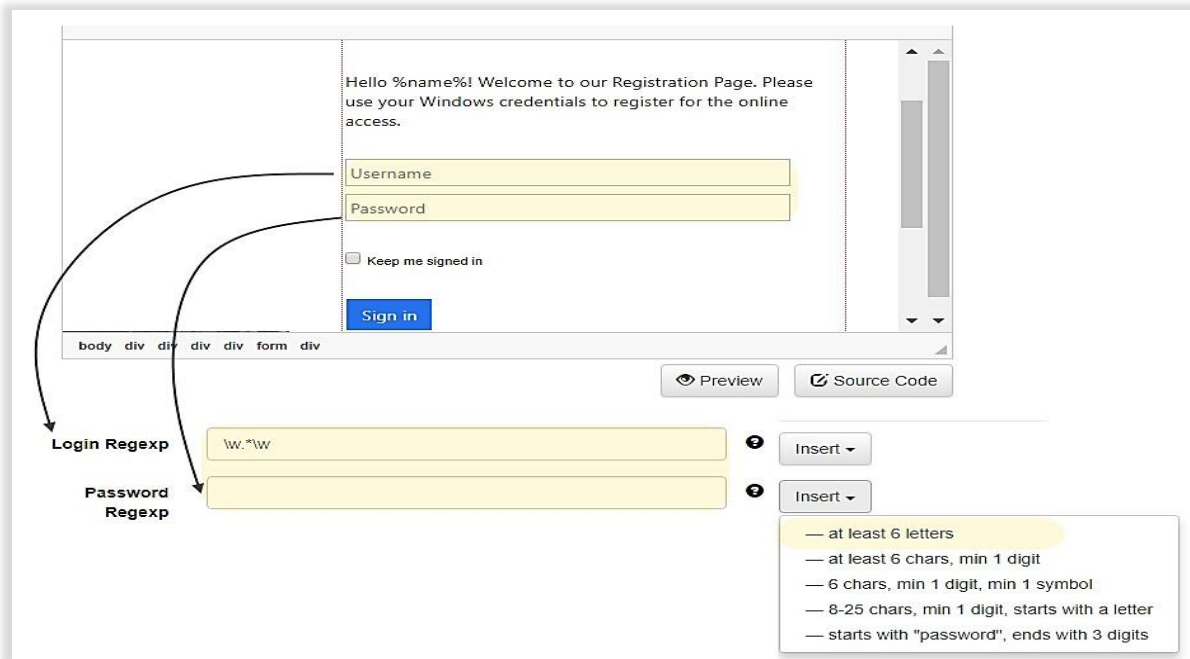


- Ransomware simulation attacks:** LUCY has two different ransomware simulations, one of which tests the staff, and the other, the infrastructure.

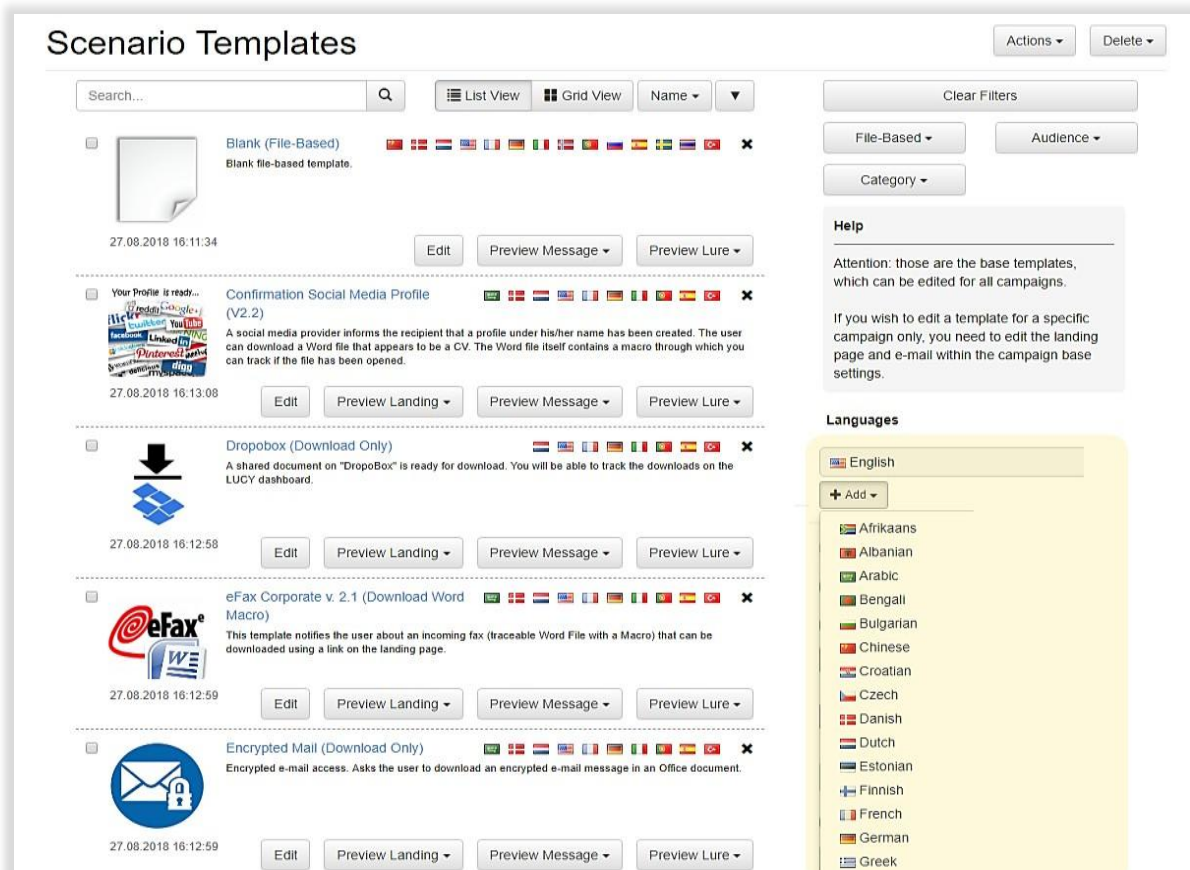




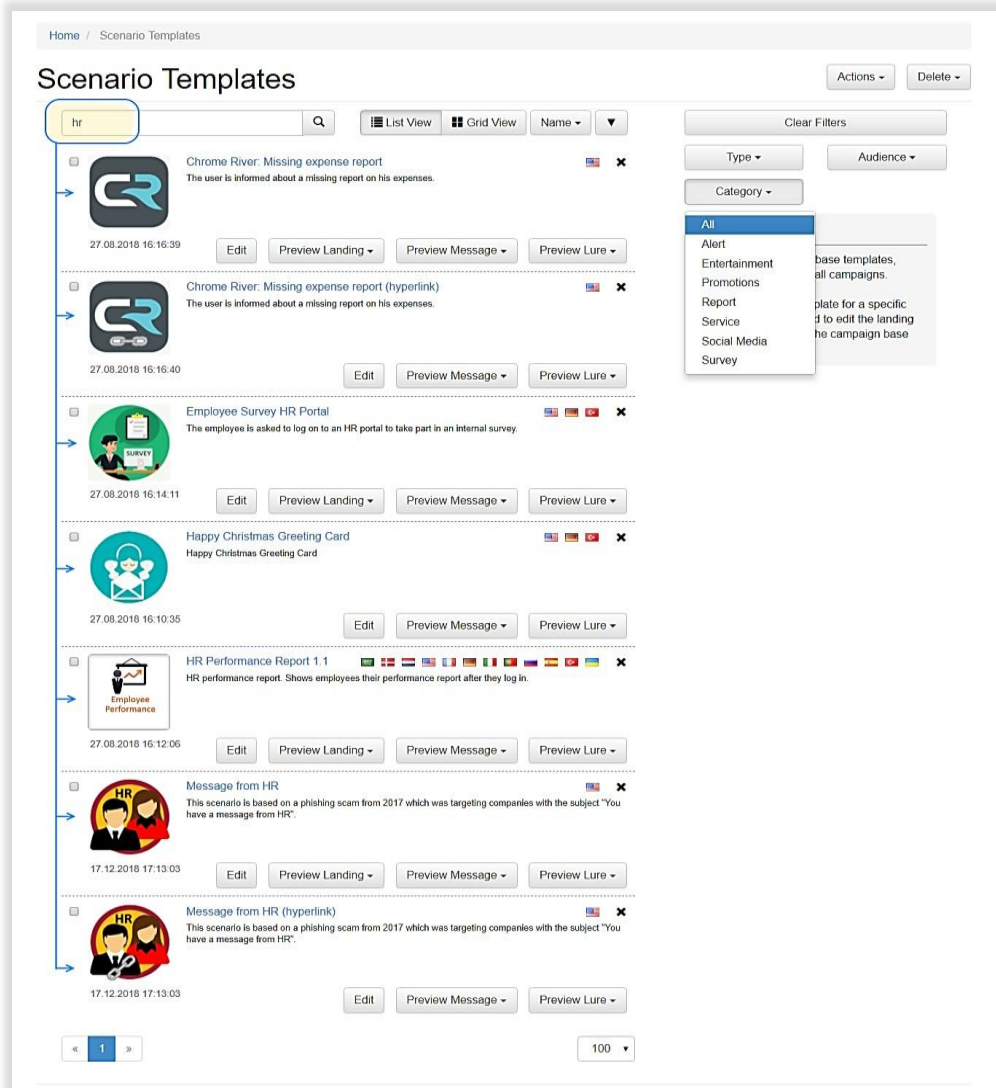
- Data entry validation toolkit:** In phishing simulations, false positives must be prevented for log-in fields (e.g., logging with invalid syntax). The company guidelines may also forbid the transmission of sensitive data such as passwords. For this purpose, LUCY provides a flexible input filtering engine that offers a suitable solution for every requirement.



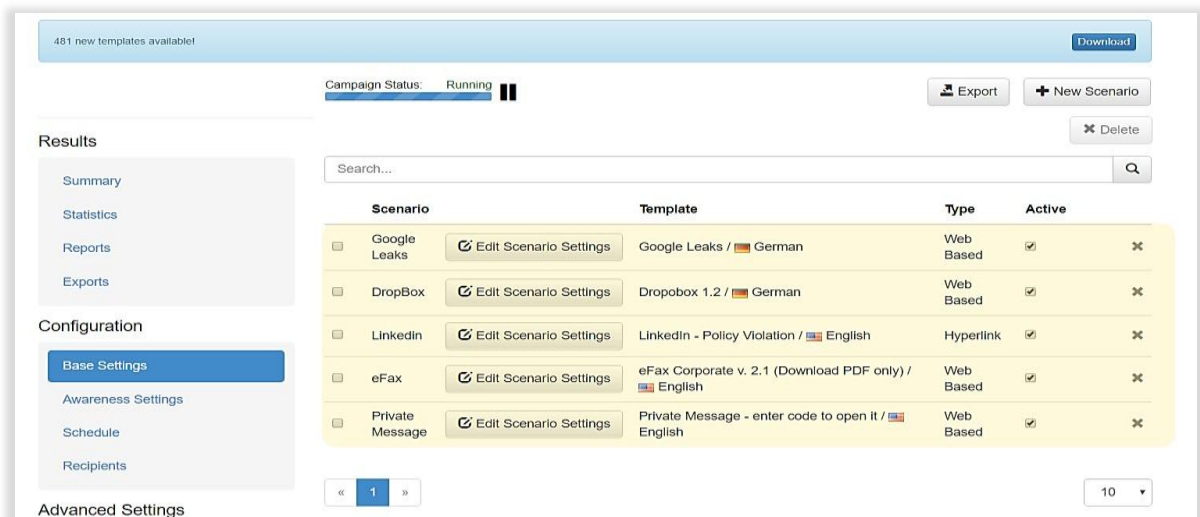
- Multilingual Attack Template Library:** LUCY comes with hundreds of predefined attack templates in more than 30 languages in the categories of data entry (templates with a website), file-based (e-mails or websites with a file download), hyperlink (e-mails with a link), mixed (combination of data entry and download), and portable media.



- **Sector and division specific templates:** Attack templates are available for specific industries or divisions.



- **Simultaneous attack template usage:** LUCY gives you the option to use multiple simulated attack templates in a single campaign. Mix the different types (hyperlink, file-based, etc.) with different attack themes to achieve the largest possible risk coverage and a better understanding of employee vulnerabilities. In combination with our scheduling randomizer, complex attack patterns can be executed over a longer period of time.



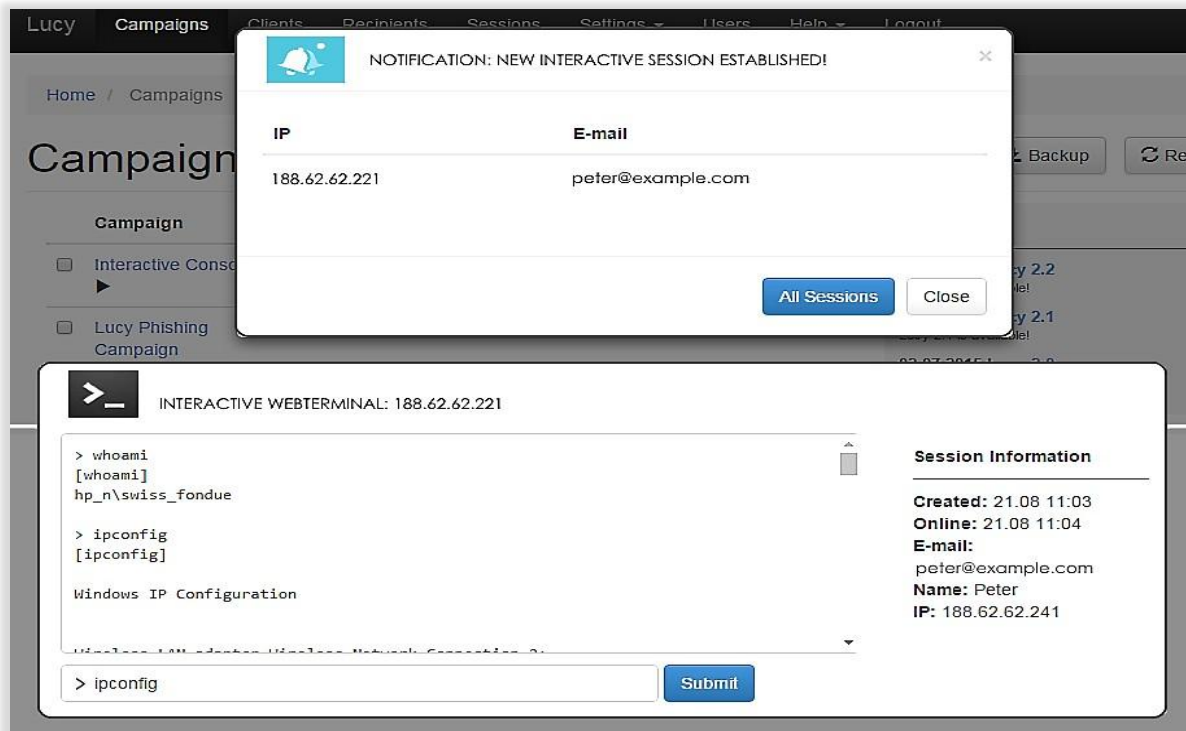
- Attack URL variations:** Take control of the generated URLs to identify the recipients. Use automated short (< 5 characters) or long URL strings or set individual URLs for each user. The manual URL creation allows you to form links that a user can easily remember. In environments where link clicks are disabled in e-mails, this is a must.

The screenshot displays the 'LINK TEST' interface. On the left is a configuration form with the following fields: E-mail (test@example.com), Phone, Language (N/A), Name (Test User), Gender (Please select...), Staff Type (IT Consulting), Location (USA), Division (Marketing), Link (marketing-usa-1), Comment, and OLI Special. A 'Save' button is at the bottom. On the right is a preview of an email. The email header shows 'So. 30.12.2018 11:29' and 'Test User <test@example.com>'. The subject is 'Affordable car leasing for our employees'. The body text reads: 'Dear employees', 'Together with CorporateCar-Leasing365, we offer all employees (except part-time employees) a discounted leasing offer. Our company receives a 73% discount on the entire fleet of CorporateCar-Leasing365 vehicles. A monthly leasing fee of e.g. USD 600 is thus reduced to USD 162.', 'Any interested staff member can access place via the Windows Logins):', and a link 'http://www.example.com/marketing-usa-1/'. A yellow callout box highlights this link. Below the link is another URL: 'https://www.CorporateCar-Leasing365.com'. The email ends with 'Best regards'.

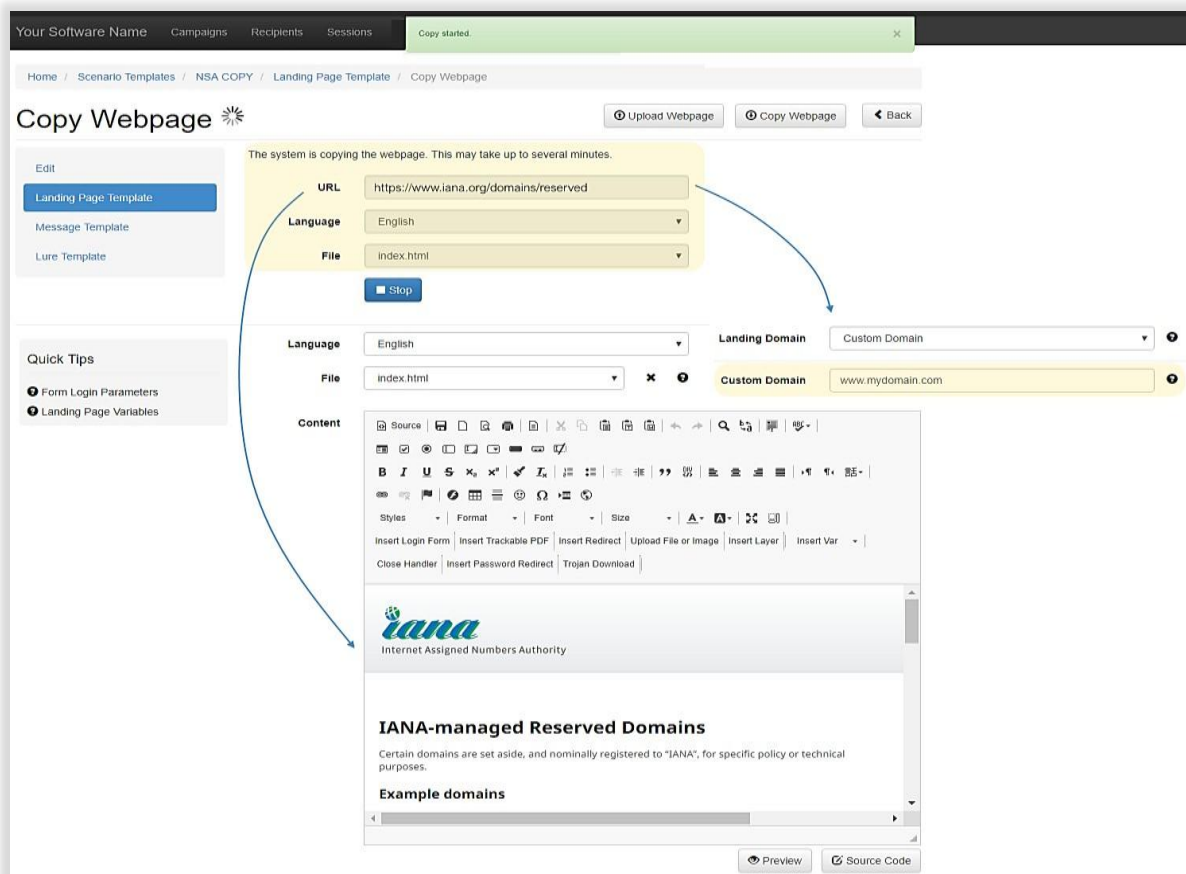
- URL shortening:** URL shorteners are a relatively new Internet service. As many online social services impose character limitations (e.g., Twitter), these URLs are very practical. URL shorteners, however, can be used by cyber criminals to hide the real target of a link, such as phishing or infected websites. For this reason, LUCY offers the possibility to integrate different shortener services within a phishing or smishing campaign.

The screenshot shows the 'URL Shortener' configuration interface. It includes the following fields: Landing Domain (cloudspace365.solutions), Subdomain (sms), Uri Shortener (N/A), Sender Name (004550776160), and Text (Check out this here %link%). A blue callout bubble next to the Uri Shortener dropdown shows a smartphone with a message: 'Check out this link here: goo.gl/KuraFG'. The interface also shows a 'Save' button and a character count of 26/140.

- Pentest-Kit:** The pentest kit is a submodule of the malware simulation toolkit and goes by the name "Interactive Sessions." It allows you to communicate interactively with a client pc that sits behind firewalls by using reverse http/s connections.



- Website cloner:** Quickly create highly professional landing pages for your campaigns. Clone existing websites and add additional layers with data entry fields, files for download, and more.



- Level-based attacks:** Level-based phishing training for employees serves to make the risk of social hacking measurable. Scientific analysis should also identify the most important risk factors so that individual training content can be offered automatically.

Your Software Name | Campaigns | Recipients | Sessions | Incidents | Settings | Support | Status | Tools | User

Home / Campaigns / New Campaign

## New Campa...

Campaign Status: Not Started

**New Campaign**

Name: Please select a campaign name ...

Client: Please select...

Industry: N/A

Notes: [Text Area]

**Setup Mode**  
 Expert Setup (Manual Configuration)  
 Pre-selected 5 minutes setup  
 Launch a saved campaign template  
 Level based campaign

Please choose a rule set

Go up one level: No attack success & attack reported

Stay in level: No attack success

Go down one level: Attack was successful

Please choose start & end level

Minimum Start Level: Please select...

Maximum End Level: Please select...

**Infrastructure testing**  
 Start a mail- and webfilter check campaign  
 Start a local windows check campaign

**E-Learning Settings**  
 Enduser Profiles Enabled  
 Allow Awareness Rescheduling  
 Ignore repeated answers in Awareness

**Tracking**  
 Track Responses  
 Email Tracking  
 Automated Reporting

Template: Please select... | Format: Please select...  
 Font Size: 12 | Font Family: Helvetica

Antivirus/Firewall Protection Interval: off

View Options:  Pinned

**Save**

- Spear phishing simulation:** The Spear Phish Tailoring works with dynamic variables (gender, time, name, e-mail, links, messages, division, country, etc.) which you can use in landing and message templates.

Landing Domain: cloudservices27.com  
 Subdomain: www

Message Type: Email  
 Language: English  
 Sender Name: News  
 Sender E-mail: news@cloudspace326.com  
 Recipient Header: To

Fake CC:

Subject: Documents for %email% - Internal Use

Content:

Dear %gender("MALE ADDRESSING", "FEMALE ADDRESSING")% %name%,

You have received an **encrypted document** for %email% which is accessible via the secure corporate cloud repository until %time("Y/m/d H:i:s", "6000")%. The document is only available for %division%, %location%, %staff-type%.

This message may contain information that is privileged and confidential. If you received this transmission in error, please notify the sender by reply email and delete the message and any attachments.

**Save**

Dynamic Variables:  
 •%static%  
 •%link%  
 •%name%  
 •%email%  
 •%message%  
 •%link-awareness%  
 •%division%  
 •%location%  
 •%staff-type%  
 •%comment%  
 •%gender%  
 •%time(FORMAT, OFFSET, ZONE)%

- DKIM / S / MIME Support for Phishing e-Mails:** Digitale Signaturen für E-Mails: Senden Sie signierte Phishing-Simulations-Mails (S / Mime). Verwenden Sie DKIM, um eine bessere Absenderbewertung zu erhalten.

Home / Campaigns / BOUNCE TEST / Base Settings / test / E-mail Template

**test** Scenario Status: Running

Message Type: Email

Language: English

Sender Name: test

Sender E-mail: otheres@cloudspace365.solutions

Recipient Header: To

Fake CC:

Subject: Affordable car leasing for our employees

Embedding Type: Embedded Images

Attachments: General Mail Settings

SMTP Fields: Name, Value

High Importance:

Receive Confirmation:

X-Mailer Header:

Custom X-Mailer: Lucy 4.4.8

Message-ID Header:

Advanced Mail Settings

Receive Sender E-Mail Replies:

Send Plain-Text Email:

Random E-mail:

DKIM Support:

DKIM Subdomain: mail

Forward E-mail:

Use Internal Mail Server (need to set up MX records for th):

Delivery Method: Use System Settings

Use S/MIME Certificate:

Generate Certificate:

SSL Certificate: Choose File No file chosen

SSL Key: Choose File No file chosen

SSL Key Password:

SSL Chain: Choose File No file chosen

Save

- Mail-Scanner:** Curious which e-mail addresses in your organization can be found on the Internet? Use LUCY's mail scanner and find out what a hacker already knows about your company.

Mail Scan

Scan started.

The system is searching recipients. This may take up to several minutes.

If Lucy can detect any mail recipients, they will be added automatically in the recipient list of this group.

Domain: phishing-server.com

Crawler:

Follow external links:

Maximum number of URLs to crawl: 100

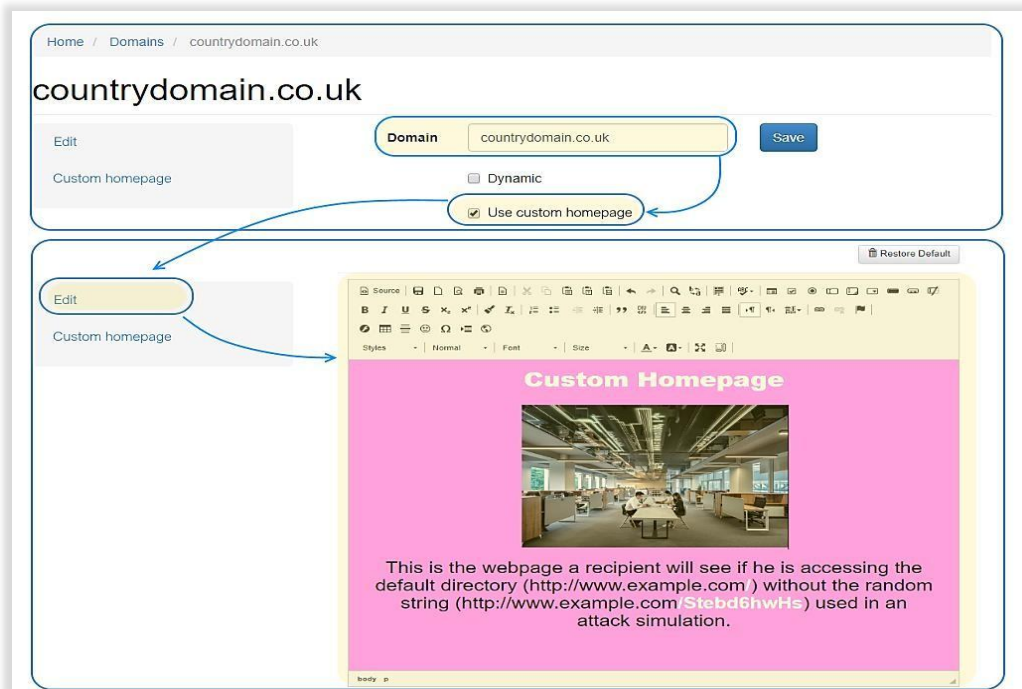
Maximum crawling time in minutes: 120

Search engines:

- Yahoo
- Lixam
- Wotbox
- Yandex
- Bing
- Public Key Servers
- Additional Sources
- Paid Sources



Stop

- Custom homepage creation:** Recipients with a better technical understanding could use their browser to call the domain or IP address associated with the randomly generated phishing link. To prevent error messages from appearing or the end user from even coming to the login area of the admin console, you can create generic "homepages" within LUCY for the domains used in the phishing simulation.



## TEST INFRASTRUCTURE

- Malware Testing Toolkit:** The Malware Simulation Toolkit is an advanced malware simulation suite capable of emulating various threats. It allows an auditor to access an advanced set of features equivalent to many of the tools employed by cyber criminals. The tool, therefore, allows the LUCY administrator to perform security checks without involving employees outside the IT department.

Nr	Test	Info	Result	Status	Risk	Solution
1	Command shell access test	View Details	Executed command: whoami (Full output)	Success	Low Risk	View Details
2	Read recent document	View Details	C:\Users\swiss_fondat\Desktop\STH-Example-Communication.doc (Full output)	Success	Low Risk	View Details
3	Access to last Outlook email	View Details	Email: [john.doe@phishing-server.com] Subject: [VPN C] Only last mail and 1st 5 symbols of subject are displayed for privacy reasons	Success	Low Risk	View Details
4	Screenshot	View Details		Success	Low Risk	View Details
5	Webcam access test	View Details		Success	Low Risk	View Details
6	Access to the Internet via IE	View Details	Received page url: http://www.google.com (Full output)	Success	Low Risk	View Details
7	Access to the Internet via HTTP	View Details	Error occurred: Invalid URI: The hostname could not be parsed. (Full output)	Fail	Medium Risk	View Details
8	Access to the Internet via IE proxy	View Details	Error occurred: Invalid URI: The hostname could not be parsed. (Full output)	Fail	Medium Risk	View Details
9	Access to the Internet via HTTP proxy	View Details	Error occurred: Invalid URI: The hostname could not be parsed. (Full output)	Fail	Medium Risk	View Details

- Mail and Web Filter Test:** This functionality provides the answer to one of the most important questions in securing Internet and mail traffic: Which file types can be downloaded from the Web, and which e-mail attachments are filtered out or not?

Home / Scenario Templates / Mail & Web Test / File List

## MWFT (1)

- Summary
- Base Settings
- Reports

Advanced Settings

- User Settings

Logs

- Supervision Log
- Message Log
- Errors

Campaign Status: Not Started
Reset Stats
Export
Start

Mail & Web Test Overview

**Dangerous File Types in archives**

Name	Downloaded	Mailed	Download Result	Mail Result
Dll-archiv-1.gz2	✓	✓	✗	✓
Dll-archiv-1.tar	✗	✓	✗	✗
Dll-archiv-1.zip	✗	✓	✗	✗
exe-archiv-1.gz	✗	✓	✗	✗

## File List

Mime Types
+ New File
+ New Class

- Dangerous File Types in archives ✗
- Profanity ✗
- Harmless Level 3 Files ✗
- Encrypted Class 1 Files ✗
- PDF & Office Exploits ✗
- Harmless Macros ✗
- Use Obfuscation technique to hide malware ✗
- Dangerous file types ✗

## Edit File

Edit
File List

Name

Mime Type

Class

Dangerous File Types in archives

File



- Active and Passive Client Vulnerability Detection:** This feature allows local testing of the client browser and detection of possible vulnerabilities based on custom JavaScript libraries and the browser's user agent data. The discovered plugins can be automatically compared with the vulnerability databases (CVE) to identify vulnerable devices.

test
Scenario Status: Running ||

Summary  
 Scenario Settings

**Template** Affordable car leasing for employees / English  
 Change/Select Template

**Active Detection**

<input checked="" type="checkbox"/> Advanced Information Gathering	<input checked="" type="checkbox"/> Popup Blocker	<input checked="" type="checkbox"/> Social Network
<input checked="" type="checkbox"/> Browser Details	<input checked="" type="checkbox"/> Geo Location	<input checked="" type="checkbox"/> Proxy
<input checked="" type="checkbox"/> Firebug Information		

test
Windows 10
Chrome 71

**Name** Oli  
**E-mail** oliver@lucysecurity.com  
**Phone** -  
**User History**

---

**Lure Sent** -  
**Message Sent** 28.12.2018 12:47:54  
**Training Sent**   
**Reported** -

---

**Success Rate** 12.50%  
**Click Rate** 17.50%  
**Clicks** 1  
**Successful Attack**   
**Trained** -  
**Out Of Office** -  
**Bounced** -  
**Responded** -

**Advanced Information Gathering**

<b>Browser Version</b>	5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/71.0.3578.98 Safari/537.36	<b>Browser Language</b>	en-US
<b>WebRTC</b>	<input checked="" type="checkbox"/>	<b>Browser Platform</b>	Win32
<b>VBScript</b>	<input checked="" type="checkbox"/>	<b>Window Size</b>	1536 x 824
<b>Quicktime</b>	-	<b>Cookies Enabled</b>	<input checked="" type="checkbox"/>
<b>RealPlayer</b>	-	<b>Silverlight</b>	-
<b>ActiveX</b>	-	<b>Google Gears</b>	-
<b>Java</b>	-	<b>WMP</b>	-
<b>Proxy</b>	-	<b>SVG Viewer</b>	-
<b>Popup Blocker</b>	-	<b>Flash</b>	-
<b>Social Networks</b>	google	<b>Websocket</b>	<input checked="" type="checkbox"/>
		<b>Firebug</b>	-
		<b>Geolocation</b>	-

Campaign Status: Running || Generated: 28.12.2018 12:54

Operating Systems

Windows 10      Windows 8

Browsers

Chrome 71.3578      Firefox 3.6.24

Top Plugins

Extended Analysis

**Vulnerable Applications (0)**

Java SE: 6u201 [CVE link](#)

**Plugins**

- ActiveTouch General Plugin Container 106
- Mozilla Default Plug-in 1.0.0.15
- Google Update 1.3.33.23
- Zoom launcher - 3.0.1
- Lifesize WebRTC plugin 1.0.22.0
- Skype for Business Web App Plug-in 15.8
- Skype Meetings App 16.2.0.242
- Java Deployment Toolkit 8.0.1810.13
- ! Java SE: 6u201

- **Spoofing-Test:** Test your own infrastructure for mail spoofing vulnerabilities.

Home / Mail Spoofing

## Mail spoofing test

Domain:  ✕ Start Test

Recipient Email:

---

Console Window

```
220 mx00.udag.de ESMTP ready
EHLO phishing-server.com
250-mx00.udag.de
250-SIZE 51200000
250-ETRN
250-ENHANCEDSTATUSCODES
250-8BITMIME
250 STARTTLS
MAIL FROM:
250 2.0.0 OK
RCPT TO:
250 2.1.5 Ok
DATA
354 End data with .
This is a test, please do not respond
.
250 2.0.0 Ok: queued as 2F085257DD
```

Alert! Mail Spoofing seems possible

## TECHNICAL TESTING

- **Reputation-Based e-Learning:** Train your employees according to their required skills. Measure employee abilities and enable friendly competition between colleagues (gamification). Based on the reputation profiles of each end user, the system can automatically provide them with multiple training sessions. The reputation profiles are based, among other factors, on the user's behaviour in phishing simulations. This ensures that users who are repeated offenders receive different training content from those who click on an attack simulation for the first time.

Summary

- Scenario Settings
- Mail Settings
- SSL Settings
- Landing Page Template
- Message Template
- Errors

Template: Affordable car leasing for employees / English

[✕ Change/Select Template](#)

Name:

Send Link to Awareness Website Automatically ⓘ

Send Awareness By Click Rate:  %

Send Awareness By Success Rate:  %

Awareness Delay:  ⓘ

---

Configuration

- Base Settings
- Awareness Settings

Export + New Awareness

Awareness	Course		Risk Level			
Comprehensive security course	<a href="#">✕ Edit Awareness Settings</a>	Comprehensive security course	0	+	-	✕
Repetition Course	<a href="#">✕ Edit Awareness Settings</a>	Avoid & Recognize Phishing Attacks (V 2.3)	2	+	-	✕
Short General teaching	<a href="#">✕ Edit Awareness Settings</a>	Email Only - This was a phishing simulation & Tips	3	+	-	✕

<< 1 >>
10 ▾

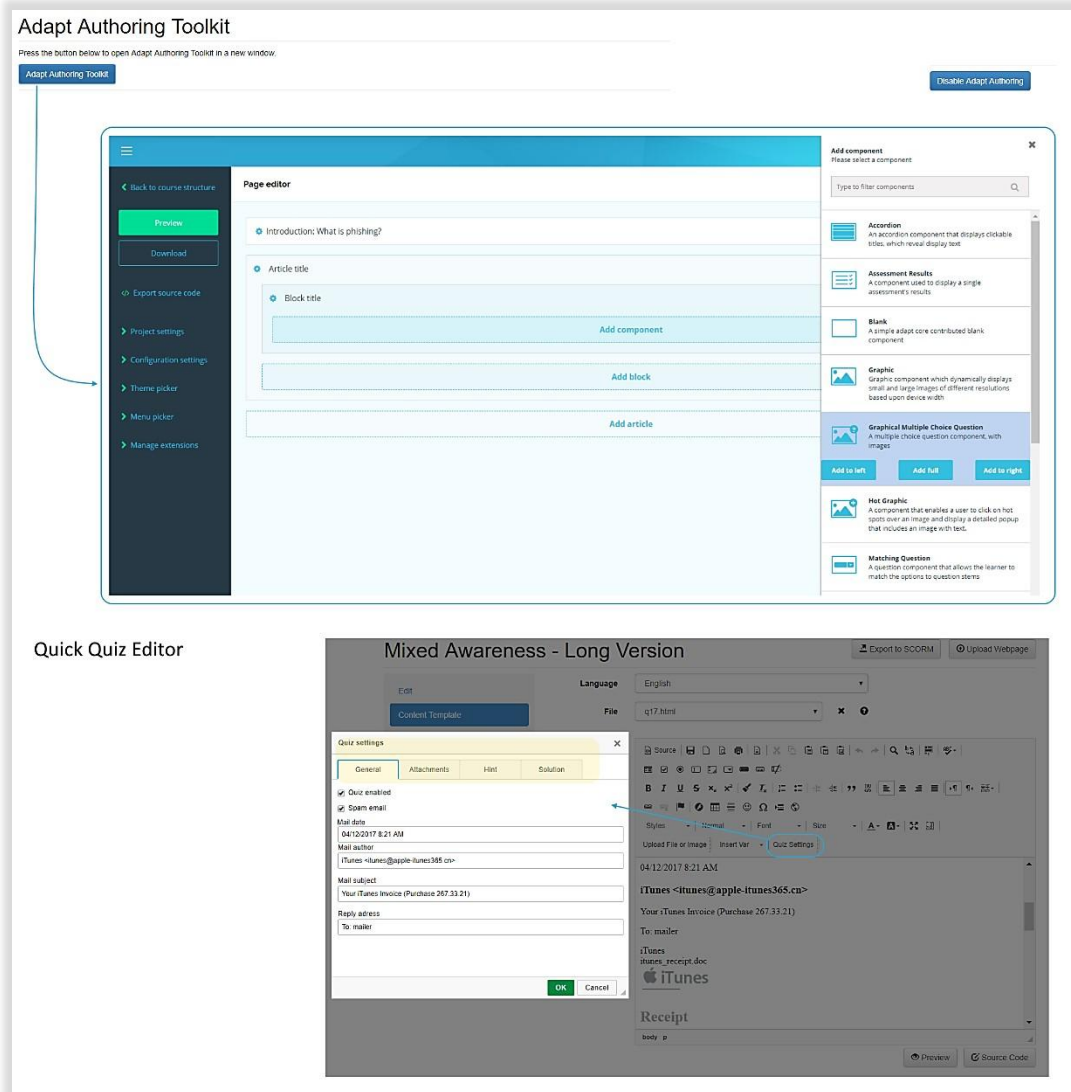
- End user Training Portal:** Learning Management System (LMS) functionality: Gives each employee permanent access to a personalized training homepage that features your own courses specifically tailored for them. On this homepage they can view their performance statistics, resume or repeat training, create course certificates, and compare their results with other departments or groups.

The screenshot shows a user profile for 'Oliver' with a rating of 53.00% for 'Phishing Noob'. A 'Rating History Chart' shows a steady increase in rating percentage over time, with a callout for a 29% rating on 2018-11-13. Summary statistics include 30 campaigns, 30 scenarios, 26 submitted, 6 reported, 12 test failed, 14 test passed, and 53% passed. Training statistics show 11 trainings launched, 6 completed, 5 not completed, and 54% completed. A table of available training includes 'Short General teaching', 'Comprehensive security course', 'Game: Spot the phishing Scam! (V 2.1)', and 'General Security Awareness Course (V 2.3)' with a 'Download Certificate' link.

- Awareness Education Diploma:** Certificates of e-Learning can be created and printed out by the recipient either directly within a training or inside the LMS portal.

The screenshot shows a 'Certificate of Completion' template editor. On the left, a 'Quick Tips' box lists variables like %name%, %awareness%, %score%, %date%, and %line%. The main editor shows a preview of the certificate with the text: 'Certificate of Completion', 'This is to certify that %name%', and 'ON 28.11.2018 at 13:50'. A larger preview below shows the final certificate with a logo placeholder, the name 'John Smith', and test results of 8/10 for the Mixed Awareness Course.

- e-Learning Authoring Toolkit:** The e-Learning Authoring Toolkit (Adapt) allows the creation of individualized learning content. Drag and drop videos or any other rich media format, insert exams from pre-defined menus, create interactive e-learning content from scratch in a short time.



- Rich Media Awareness Training:** Integrate rich media (video, audio, or other elements that encourage viewers to interact and engage with the content) in your awareness trainings. Use the existing educational videos, adapt them, or add your own rich media.

### Handouts

Hand out: Comprehensive security course (PDF/PPT)
   
 Topics in this course include "SHOULDER SURFING", "PORTABLE MEDIA ATTACKS", "VISHING (COLD CALLING)", "CLEAR DESK POLICY", "PHYSICAL SECURITY", "VISITORS AND IN-PERSON INTERACTION", "SOCIAL ENGINEERING", "PASSWORD SECURITY", "SECURE BROWSING", "SECURE SOCIAL NETWORKING", "USING PUBLIC WI-FI", "MOBILE SECURITY". The PDF is embedded in this static web page. The PowerPoint template is located within this template folder. You can download it: click on the left navigation item "content template" -> select the button "upload file or image" within the editor pane -> click "search server" to access the file manager in LUCY -> click "download." After you make desired changes to the word file, please save it as a PDF with the name "Info.pdf" and upload back to your LUCY instance using the file manager within this template. All content is 100 % customizable. Duration: 60-80 Minutes | Skill Level: Medium | Audience: All | Interactive: No
   
 30.10.2018 09:23:50
   
[Edit](#) [Preview Website](#) [Preview E-mail](#)

[...and many more](#)

### Games

Spot the difference!
   
 In this game the user is shown two very similar photos of everyday security situations. The user has to find the differences in the picture. At the same time he learns how to protect himself against various security risks in his company by displaying explanatory texts. Time: 15-20 minutes | Interactive: Yes | Category: Games
   
 15.11.2018 17:44:27
   
[Edit](#) [Preview Website](#) [Preview E-mail](#)

[...and many more](#)

### Posters

POSTER - "Password Mobile" (illustration)
   
 This template includes a poster (illustration) with the topic: "Password Mobile". If you want to edit the poster or process it for printing, please click on the navigation item "Content Template" to the left, then within the visual editor click the button "Upload File or Image". Within the tab "Image Info" please click on "search server" to download the Adobe Illustrator file.
   
 27.08.2018 16:13:19
   
[Edit](#) [Preview Website](#) [Preview E-mail](#)

[...and many more](#)

### E-Learning libraries

Awareness Training Library
   
 This template offers the possibility to link all existing LUCY training modules in a directory. The end user can then put together his desired training modules himself on an overview page
   
 27.08.2018 16:16:37
   
[Edit](#) [Preview Website](#) [Preview E-mail](#)

[...and many more](#)

### Videos

Secure social media usage video (close caption)
   
 In this security awareness video we talk about secure social media usage. The video has English subtitles. The content (animation, language, script) is customizable. More info about customization can be found here: <https://go.gd/HXWHSQ>. Duration: 5:40 minutes | Skill Level: Low | Audience: All | Interactive: No | Video stats possible: Yes
   
 27.08.2018 16:13:54
   
[Edit](#) [Preview Website](#) [Preview E-mail](#)

[...and many more](#)

### Screensavers

Screensaver: Security Illustrations (src)
   
 This screensaver, designed for a resolution of 1366x768 px, contains a series of illustrations on the subject of cybersecurity awareness. The illustrations (text or image) can be easily customized using Adobe Photoshop files inside the posters. The screensaver can be downloaded from the template. With the right mouse button you can install it in window.
   
 15.11.2018 17:44:28
   
[Edit](#) [Preview Website](#) [Preview E-mail](#)

[...and many more](#)

### E-Mail only courses

Email Only - This was a phishing simulation & Tips
   
 This is a template that does not have a web page integrated. The employee is informed about the phishing simulation and receives a few tips on how to better detect such attacks in the future.
   
 27.08.2018 16:13:25
   
[Edit](#) [Preview E-mail](#)

[...and many more](#)

### Static courses

Prevent Phishing Attacks: 5 Tips (Version 2.1)
   
 This static course contains 5 basic tips on how to prevent phishing attacks. Duration: 5 Minutes | Skill Level: Low | Audience: All | Interactive: No
   
 27.08.2018 16:14:11
   
[Edit](#) [Preview Website](#) [Preview E-mail](#)

[...and many more](#)

### Interactive Courses

Phishing, Spoofing & CEO Fraud
   
 In this course the student will be guided through various lessons. Topics covered include "Phishing", "Spoofing" & "CEO Fraud". These topics are covered in tips, static learning content, a quiz and a multiple-choice test. Only after completion of a chapter, a new one can be started. At the end of the training the participant can create a certificate with the exam results. Details on the configuration can be found in readme.html. Duration: 20-30 Minutes | Skill Level: Medium | Audience: All | Interactive: Yes
   
 15.11.2018 17:44:27
   
[Edit](#) [Preview Website](#) [Preview E-mail](#)

[...and many more](#)

### Exams

Internet Security Exam 1.2
   
 In this short quiz, the user is asked nine multiple choice questions in order to test their knowledge regarding internet security (email security, privacy, password security, etc.). Duration: 10-15 Minutes | Skill Level: Low | Audience: All | Interactive: Yes
   
 27.08.2018 16:12:54
   
[Edit](#) [Preview Website](#) [Preview E-mail](#)

[...and many more](#)

### Micro Modules

One Pager Phishing Awareness (responsive | 1.2)
   
 This is a static one page long phishing awareness html template. It works with a min resolution of 360 pixels.
   
 27.08.2018 16:14:22
   
[Edit](#) [Preview Website](#) [Preview E-mail](#)

[...and many more](#)

### Security News

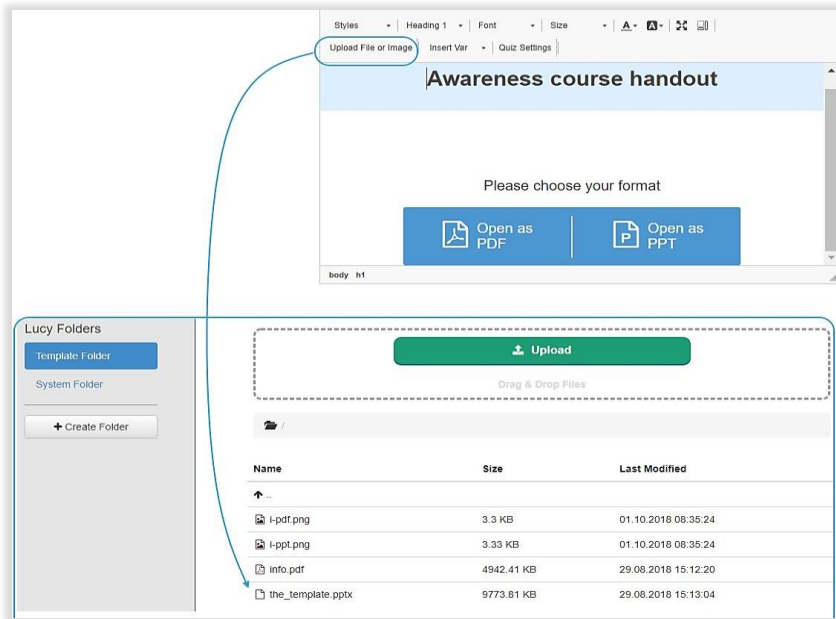
News: Do you know how to handle security incidents
   
 This course covers security incidents and the processes involved in reporting such incidents.
   
 28.12.2018 14:48:47
   
[Edit](#) [Preview Website](#) [Preview E-mail](#)

[...and many more](#)

- Training Library:** Your employees can access your organization's training content from an overview page called "training library." It contains a large selection of LUCY's regular e-learning templates, which serve as input. The overview page can be sorted by certain topics (video, quiz, test, etc.).

- Static Training Support:** Training content can also be published on static pages within LUCY or the intranet, giving the user permanent access to training content, independent of possible attack simulations.

- Offline Training Support:** LUCY is supplied with a series of editable templates (Adobe Photoshop or Illustrator files) for awareness training, such as posters, screensavers, fliers, etc.



- Microlearning Modules:** We have designed microlearning training modules (e.g., 1-minute videos or awareness 1-pagers) that can be tailored to the branding and policy needs of your organization.

### Micro Module: Phishing

In this course the student will be guided through different lessons. These include tips, video, quizzes and a test. Each learning content is in a separate chapter. Only after completion of a chapter, a new one can be started. At the end of the training the participant can create a certificate with the exam results. Details on the configuration can be found in readme.html. Duration: 15-25 Minutes | Skill Level: Medium | Audience: All | Interactive: Yes

18.12.2018 13:05:47

Edit
Preview Website ▾
Preview E-mail ▾

### Micro Module: Spoofing & CEO Fraud

In this course the student will be guided through various lessons. Topics covered include "Phishing", "Spoofing" & "CEO Fraud". These topics are covered in tips, static learning content, a quiz and a multiple-choice test. Only after completion of a chapter, a new one can be started. At the end of the training the participant can create a certificate with the exam results. Details on the configuration can be found in readme.html. Duration: 20-30 Minutes | Skill Level: Medium | Audience: All | Interactive: Yes

18.12.2018 13:05:43

Edit
Preview Website ▾
Preview E-mail ▾

### Micro Module: Password security

In this course the participant learns how to navigate the Internet safely.

26.12.2018 15:08:18

Edit
Preview Website ▾
Preview E-mail ▾

### Micro Module: Secure Storage

Security topics related to mobile data storage devices and cloud-based storage services are presented in this course. At the end of the course a test will be carried out. If the participant passes the test, he or she can create a diploma and print it out.

21.12.2018 14:43:58


Edit
Preview Website ▾
Preview E-mail ▾

### Micro Module: Workplace Security

In this course the employee learns how to behave in the workplace. Topics include the disposal of data, cleaning up the workplace, locking the screen, printing data, etc. At the end of the course a test will be carried out. If the participant passes the test, he or she can create a diploma and print it out.

...and many more!


- Video Customization:** Send us your company logo and we will include it in the training videos. You want another language? No problem. We will set the video to play in the language you prefer. You want a different scene? Simply download the video scripts and mark the desired changes.



27.08.2018 16:12:23

### Security Awareness Video: 7 Security Tips 1.3

In this short 3-minute security awareness video we have put together 7 security tips, which involve best practices and policies that promote security. The content (animation, language, script) is customizable. More info about customization can be found here: <https://goo.gl/HXN9SG>. Duration: 3 minutes | Skill Level: Low | Audience: All | Interactive: No



Edit
Preview Website ▾
Preview E-mail ▾

Upload

Drag & Drop Files

Name	Size	Last Modified
↑ ...		
2018.06.11_Lucy Data Privacy.mp4	44094.42 KB	27.08.2018 16:16:28
2018.06.11_Lucy Data Privacy.webm	34599.3 KB	27.08.2018 16:16:29

#### General Security Awareness Video

- **Example:** <https://youtu.be/i0iLy8racHI>
- **Current Language(s):** English, German, Spanisch, Dutch, French, Italian
- **Possible Translation in other Languages:** All\* (\*If you want to have the video in a different language you have the option to order this for USD 350)
- **Cost of scene changes:** See movie script\* (\*If you want to have the content changed (e.g. logo or different scenes altered) please download the movie script and send us back the desired changes within that document)
- **Movie Script:** [sample\\_lucy\\_movie\\_storyboard\\_general\\_awareness.docx](#)
- **Topics:** Social Engineering, Physical Security, Phishing, Clean Desk Policy etc.



- Mobile-Responsive Format:** Many of LUCY's built-in modules are available in a mobile-responsive format that gives your users the flexibility to take the training on any type of connected device.



- **Video Import/Export** You can export LUCY videos to your own system as well as import your own videos into LUCY.

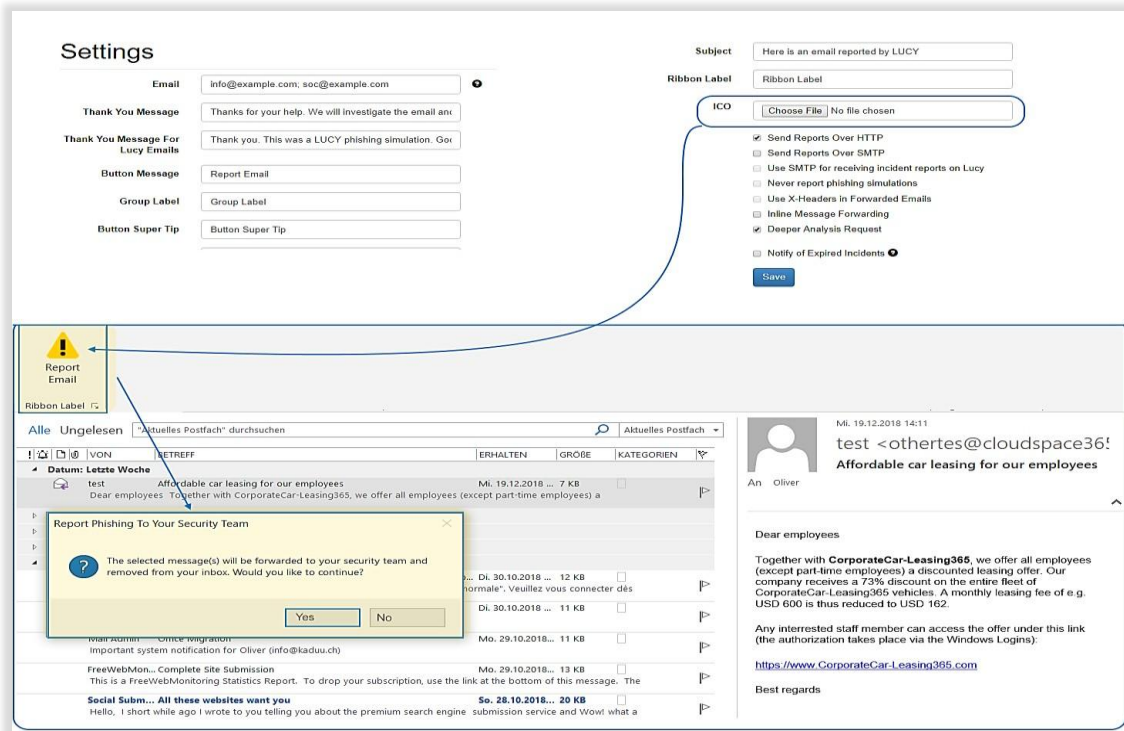
The screenshot shows the 'Awareness Templates' interface. At the top, there are search and view options (List View, Grid View) and a dropdown menu for 'Name'. Below this, a video titled 'Data Privacy & GDPR Video' is displayed with a thumbnail and a brief description. To the right of the video, there are filter buttons for 'Video', 'Duration', 'Audience', and 'Platform'. Below the video, there is a 'Lucy Folders' sidebar with options like 'Template Folder', 'System Folder', 'Create Folder', 'Rename', 'Copy', 'Move', 'Download', and 'Delete'. The main content area shows a file upload interface with a 'Drag & Drop Files' area and an 'Upload' button. Below this, a table lists files with columns for 'Name', 'Size', and 'Last Modified'. The files listed are '2018.06.11\_Lucy Data Privacy.mp4' (44094.42 KB), '2018.06.11\_Lucy Data Privacy.webm' (34599.3 KB), and 'jquery.js' (93.71 KB).

- **Dynamic Training Hints:** The implemented dynamic hints allow your administrator to set markers within the attack templates that could indicate to your employees, inside the e-learning material, where the phishing attack may have been detected.

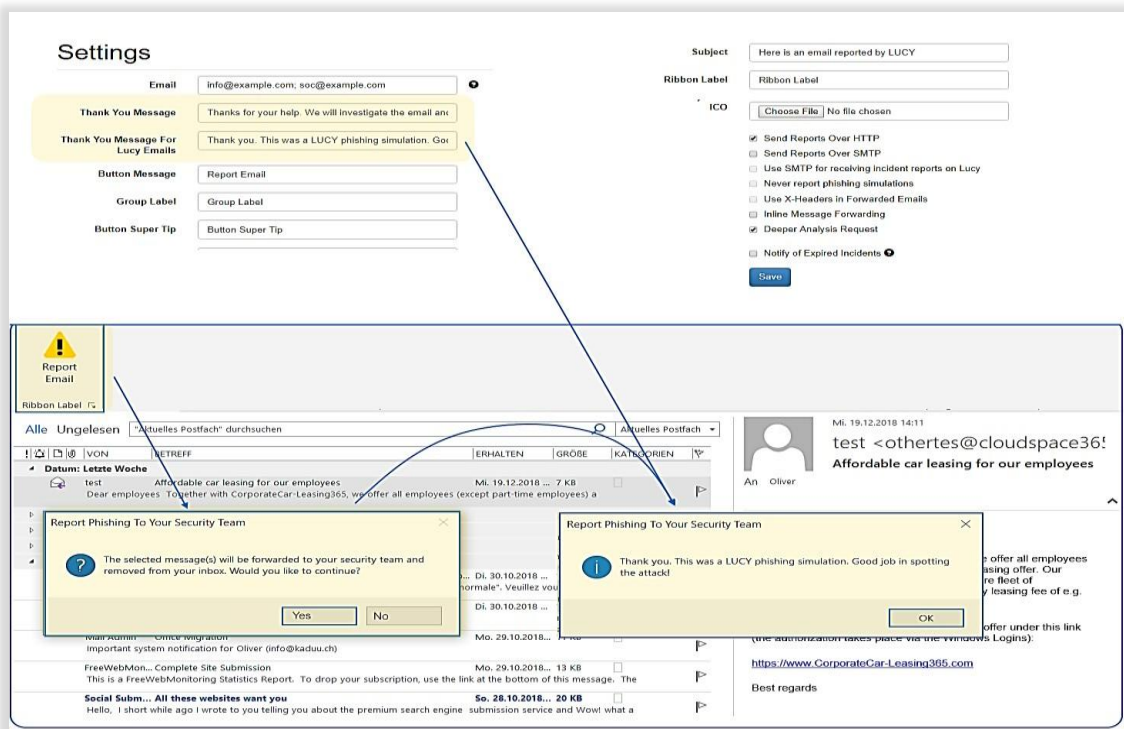
The screenshot shows the 'Comprehensive security course' interface. At the top, there is a breadcrumb trail: 'Home / Awareness Templates / Comprehensive security course / Content Template'. Below this, there are buttons for 'Export to SCORM' and 'Upload Webpage'. The 'Language' is set to 'English' and the 'File' is 'index.html'. The 'Content' area shows a rich text editor with various formatting options. Below the editor, there is a preview of the course content, which includes the text 'General Security Awareness Cou'. At the bottom, there is an 'Exports' table with columns for 'Date', 'Name', 'Extension', and 'Status'. The table lists three exports: '31.12.2018 15:08:53' (Awareness Template - Comprehensive security course), '29.12.2018 17:10:15' (Campaign - BOUNCE TEST), and '26.12.2018 15:19:11' (Awareness Template - Avoid & Recognize Phishing Attacks (V 2.3)). A yellow folder icon labeled 'scorm-export.zip' is shown next to the first export entry.

# ENGAGE EMPLOYEES

- Report E-mails with a single click:** End users can report suspicious e-mails with a single click to one or multiple e-mail accounts and have them forwarded to your LUCY incident analysis console.



- Positive Behavior Reinforcement:** Our plugin automatically provides positive behaviour reinforcement by showing gratitude to end users via a custom message defined by your organization.



- Deep Inspection Request:** Sometimes users want to know if the received e-mail can be opened safely. The user can optionally use the “deep inspection request” within the local plugin to tell the security team that he wants feedback on the reported e-mail.

The screenshot illustrates the workflow for requesting a deep inspection of a phishing email. It is divided into four main sections:

- Settings:** A configuration panel where users can define messages. The "Deeper Analysis Request Message" field is highlighted, indicating the text used for the request dialog.
- Email List:** A list of incoming emails. One email is selected, and a dialog box is triggered.
- Report Phishing To Your Security Team Dialog:** A yellow dialog box with a question mark icon asking, "Do you wish to request an additional message analysis from your security team?". It includes "Ja" (Yes) and "Nein" (No) buttons.
- Phishing Incident Reports Table:** A table listing reported incidents. The entry for the email in question is highlighted, showing a "Need more analysis" button next to its status.

Time	Email	Client	Campaign	Score	Status	Actions
29.12.2018 11:49	oliver@muenchow.ch	Lucy Test	BOUNCE TEST	0.00	Simulation	🚫🔍🗑️
19.12.2018 12:12	oliver@muenchow.ch	Lucy Test	BOUNCE TEST	0.00	Simulation	⚠️🚫🔍🗑️
19.12.2018 10:39	oliver@muenchow.ch	N/A	N/A	4.60	Open	⚠️🚫🔍🗑️ <b>Need more analysis</b>
03.12.2018	oliver@muenchow.ch	Lucy Test	Attack CS	0.00	Simulation	⚠️🚫🔍🗑️

- Automatic Incident Analysis:** Manage and respond to reported suspicious e-mails using a centralized management console: LUCY analyzer allows an automated inspection of reported messages (header & body). The analyzer includes an individual risk score, providing a real-time ranking of reported e-mails. The Threat Analyzer brings a noticeable relief for the safety team's work load.

Home / Phishing Incident Reports

## Incident Reports

Time	Email	Rating	Client	Campaign	Score	Status	
04.07.2018 14:20	oliver@muenchow.ch	★★★★★	N/A	N/A	0.00	Open	<input type="button" value="Send Abuse"/> <input type="button" value="Delete"/>
03.07.2018 14:45	oliver@muenchow.ch	★★★★★	Lucy Test	TEST 123	0.00	Simulation	<input type="button" value="Send Abuse"/> <input type="button" value="Delete"/>
03.07.2018 08:10	oliver@muenchow.ch	★★★★★	N/A	N/A	1.00	Open	<input type="button" value="Send Abuse"/> <input type="button" value="Delete"/>
02.07.2018 10:02	oliver@muenchow.ch	★★★★★	Lucy Test	LMS Access	0.00	Simulation	<input type="button" value="Send Abuse"/> <input type="button" value="Delete"/>
02.07.2018 09:54	palo@lucysecurity.com	★★★★★	N/A	N/A	0.00	Open	<input type="button" value="Send Abuse"/> <input type="button" value="Delete"/>
02.07.2018 09:54	palo@lucysecurity.com	★★★★★	N/A	N/A	0.00	Open	<input type="button" value="Send Abuse"/> <input type="button" value="Delete"/>

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Home / Phishing Incident Reports / 09.03.2018 12:17

## 09.03.2018 12:17

	Score	Rule active?
Reply-to Mismatch different reply-to address defined than the actual ( <a href="#">more info...</a> )	1.60	Active <input checked="" type="checkbox"/> Inactive <input type="checkbox"/>
New Domain Domain has been reserved in the last 30 days ( <a href="#">more info...</a> )	20.00	Active <input checked="" type="checkbox"/> Inactive <input type="checkbox"/>
Link Display mismatch link display name different from the actual link ( <a href="#">more info...</a> )	0.00	Active <input type="checkbox"/> Inactive <input checked="" type="checkbox"/>

---

**Overall Risk Score:** 2.5 of 10.0

**Email:** oliver@muenchow.ch  
**Message:** Download  
**Message Subject:** Only 7% of Our Customers Are Doing SEO Right. And You?  
**Thumbnail:**   
**Report Time:** 16.10.2018 09:25:20  
**Status:**   
**Notes:**

- Incident Auto Feedback:** The Incident Autoresponder allows sending an automated notification to the end user providing the results of the e-mail threat analysis. The message text is freely configurable, and the LUCY E-mail Risk Score can also be included, if required.

The screenshot shows the 'Autoresponder' configuration page. At the top, there is a navigation bar with 'Incidents' selected. Below the navigation, the page title is 'Autoresponder' with an 'Upload Message Template' button. A 'Quick Tips' sidebar on the left includes 'Autoresponder Email Variables'. The main configuration area includes an 'Enable Autoresponder' toggle, and fields for 'Subject' (Your email submission), 'Sender Name' (Security Team), and 'Sender E-mail' (soc@example.com). The 'Content' section features a rich text editor with a toolbar and a preview area. The preview shows a message starting with 'Dear %name%' followed by a paragraph: 'Thank you for reporting the suspicious email. This was analyzed by us. A risk score of %score% was found. The score ranges from 1-10. A risk score of more than 5 is most likely a malicious email.' Below this is 'Thanks' and 'Your SOC'. At the bottom right, there are 'Preview' and 'Source Code' buttons.

- Threat Mitigation:** The behavioural threat mitigator is a revolutionary approach to eliminating e-mail risks. It will support the security admin in shutting down the attack (e.g., sending an automated report to specified abuse team of providers involved in the attack).

The screenshot illustrates the 'Threat Mitigation' workflow. It starts with a 'Select Incident' table showing a list of incidents. The second row is selected, and a 'Send Abuse' button is highlighted. This leads to the 'Select Abuse Domain/IP' section, which displays 'MAIL HEADER' and 'MAIL BODY' information. A 'Send abuse report' button is also highlighted. Finally, the 'Select Abuse Template' section shows a form for configuring the abuse report, including fields for 'Subject', 'Sender Name', and 'Sender E-mail', and a rich text editor for the 'Content'. The content editor shows a template with variables like %email%, %time%, %domain%, and %report%.

Time	Email	Client	Campaign	Score	Status	Actions
19.12.2018 12:12	oliver@muenchow.ch	Lucy Test	BOUNCE TEST	0.00	Simulation	⚠️ 📧 🗑️
19.12.2018 10:39	oliver@muenchow.ch	N/A	N/A	4.60	Open	⚠️ 📧 🗑️
03.12.2018 20:52	oliver@muenchow.ch	Lucy Test	Attack CS	0.00	Simulation	⚠️ 📧 🗑️

Reference	Typ	Abuse
mail111.atf31.mcdlv.net	Domain	abuse@support.gandi.net
205.201.134.111	IP	abuse@mailchimp.com

**MAIL BODY**

Reference	Typ	Abuse
list-manage.com	Domain	abuse@support.gandi.net

- **Custom rule-based analysis:** Define your own rules for e-mail analysis and risk calculations.

Home / Phishing Incident Reports

Send Abuse Delete Delete All Settings Download Plugin

## Phishing Incident Reports

Time	Email	Client	Campaign	Score	Status	
29.12.2018 13:46	oliver@muenchow.ch	N/A	N/A	3.90	Open	⊗ ⊕ ✕
29.12.2018 11:49	oliver@muenchow.ch	Lucy Test	BOUNCE TEST	0.00	Simulation	⊗ ⊕ ✕
19.12.2018 12:12	oliver@muenchow.ch	Lucy Test	BOUNCE TEST	0.00	Simulation	⚠ ⊗ ⊕ ✕

### Score Factors

Custom Rules:

Domain Analysis:

Header Analysis:

SpamAssassin:

Save

### New Rule

Name:

Reg. Exp.:

Score:

Save

Summary
Header Analysis
Domain Analysis
Body Analysis
Threat Indicators

		Score	Rule active?	
Reply-to Mismatch	different reply-to adress defined than the actual ( <a href="#">more info...</a> )	1.60	Active <input checked="" type="checkbox"/> Inactive <input type="checkbox"/>	⊗ ✕
New Domain	Domain has been reserved in the last 30 days ( <a href="#">more info...</a> )	20.00	Active <input checked="" type="checkbox"/> Inactive <input type="checkbox"/>	⊗ ✕
Link Display mismatch	link display name different from the actual link ( <a href="#">more info...</a> )	0.00	Active <input type="checkbox"/> Inactive <input checked="" type="checkbox"/>	⊗ ✕

- Plugin customization options:** LUCY allows an easy customization and a complete white labelling of various plugin functions (displayed icon, feedback messages, ribbon label, transmission protocol, sent header, etc.)

The screenshot shows the 'Phishing Incident Reports' interface. At the top, there is a table with columns: Time, Email, Client, Campaign, Score, Status, and icons for Send Abuse, Delete, and Delete All. Below the table is a 'Settings' section with various input fields for messages and labels, and a 'Save' button. A dropdown menu is open from the 'Settings' button, showing options like 'Custom Rules', 'Score Factors', 'Abuse', 'Autoresponder', and 'Plugin Settings'. A blue arrow points from the 'Plugin Settings' option to the 'Settings' page.

- Third party integration:** Using LUCY's incident REST API automation, we can process reported e-mails and help your security team stop active phishing attacks while in progress.

The screenshot shows the 'API Whitelist' interface. At the top, there are buttons for '+ New', 'Delete', and 'API Documentation'. Below is a table with columns for IP addresses and a delete icon. Two IP addresses are listed: 192.168.10.231 and 192.168.12.114. Below the table is a 'Resources' section with a list of API endpoints. The endpoints are grouped into three columns: Resources, Endpoint List, and another Endpoint List. The first Endpoint List includes endpoints like /api/auth, /api/languages, /api/clients, etc. The second Endpoint List includes endpoints like /api/attachment-templates, /api/campaigns, etc. Below the endpoints is a section for /api/incidents, showing a GET endpoint for listing incidents and a DELETE endpoint for deleting an incident.



- Identify attacks with common patterns:** Apply LUCY's dashboard filters to detect common attack vectors across your organization. Search within all reported e-mails for similar indicators of compromise.

The screenshot shows the 'Incident Reports' dashboard. At the top, there are navigation links for 'Home / Phishing Incident Reports' and several action buttons: 'Send Abuse', 'Delete', 'Delete All', 'Settings', and 'Download Plugin'. Below this is a table of incident reports with columns for Time, Email, Rating, Client, Campaign, Score, and Status. A filter panel on the right allows users to search and filter reports based on Client, Reputation Filter, Min Score, From Date, To Date, Campaign, Status, and Email Domain.

Below the main table, there are two detailed views. The left view shows a 'Summary' for a report with an 'Overall Risk Score' of 3.9 of 10.0, displayed as a circular gauge. It includes fields for Email (sarah@test.com), Message, Message Subject (Sarah is on vacation), Thumbnail, Report Time (29.12.2018 13:46:13), Status (Open), and Notes. The right view shows a 'Phishing Incident Report' for the same email, with a score of 3.90 and status 'Open'. It includes a search bar and a filter dropdown.

- Incident user reputation profiles:** Classify users with an incident reputation score.

This screenshot shows the 'Incident Reports' dashboard with a red box highlighting the 'Rating' column. The table lists several reports, with the 'Rating' column showing star ratings (e.g., 5 stars for sarah@test.com, 4 stars for jon@example.com, 3 stars for frank@example.com, and 2 stars for barbara@test.com). The filter panel on the right is also visible, showing options to filter by Client, Reputation Filter, Min Score, From Date, To Date, Campaign, Status, and Email Domain.

- Integration with attack simulations:** Seamless report and dashboard integration with phishing simulations: identify the users who have behaved exemplarily in a phishing simulation.

**Campaign overview dashboard**

Search...

Statistics Phish Alert

Total:	43
Real Phishing:	0
Simulation:	24
Other (total - real - simulation):	19
Average response time (days):	0

Campaign	Type	Status	Recipients	Success
Ted1		-	3	0

**Campaign details statistics**

Total Stat

Category	Value
Sent	7
Opened	2
Clicks	2
Successful Attacks	2
Reported	1
Invalid Submits	0
Vulnerable Victims	0

**Campaign recipient statistics**

Name	E-mail	Phone	User History	Scenario Total Time	Downloaded Files	OS	Browser	IP
test	oliver@muenchow.ch	-	-	13.934	-	-	-	-
test	-	-	-	7.421	-	-	-	-
test	-	-	-	6.513	-	-	-	-

Success Rate: 4.16%  
Click Rate: 8.33%  
Clicks: -  
Successful Attack: -  
Trained: -  
Out Of Office: -  
Bounced: -  
Responded: -

- Easy Installation:** Install the Phishing Incident Plugin for Outlook, Gmail, Office365.

**Phishing Incident Reports**

Send Abuse Delete Delete All Settings Download Plugin

Time	Email	Client	Campaign	Score	Status
29.12.2018 13:46	sarah@example.com	N/A	N/A	3.90	Open

Filter: Microsoft Outlook 32-bit, Microsoft Outlook 64-bit, Microsoft Outlook 365, Gmail Addon

Client: All

Microsoft Outlook 64-bit setup (1).msi

Client: Lucy Test, All, Tenant3, Tenant4, Lucy Test, Test Client A, Client Inc USA

Lucy Report Addon Setup

Welcome to the Lucy Report Addon Setup Wizard

The Setup Wizard allows you to change the way Lucy Report Addon features are installed on your computer or to remove it from your computer. Click Next to continue or Cancel to exit the Setup Wizard.

Back Next Cancel