

Username and Password Decryption

- [Introduction](#)
- [Firefox and Mozilla Based Browsers](#)
 - [Master Password](#)
 - [Username Field](#)
 - [Decrypted Username](#)
 - [Password Field](#)
 - [Decrypted Password](#)



Introduction

Most web browsers include a Password Manager so that the usernames and passwords required to log in to websites can be securely stored. These usernames and passwords are often encrypted and stored in a file in the user profile. For additional security, the user can also set a Master Password to protect the Password Manager. The user is then prompted to enter the Master Password when the browser needs to access the stored passwords.

Firefox and Mozilla Based Browsers

With NetAnalysis® v2.1, we have added the ability to decrypt and display any stored usernames and passwords for Mozilla Firefox and any browsers based on Mozilla. If a Master Password is known to the forensic examiner, he/she can enter this information when starting a new case.

New Case

×

Case Information

Import Options

Time Zone

Time Zone Name: (UTC) Dublin, Edinburgh, Lisbon, London ...

Code Page

Encoding Name: Western European (Windows) ...

Known Passwords

Passwords: password1
password2
password3

☐ Remember Case Reference

OK

Cancel

The screen above shows a number of known Master passwords added to the list so NetAnalysis can check each one for validity. If the Master password is correct, the stored usernames and passwords will be displayed in the grid and the information field for the appropriate records.

The screenshot shows the NetAnalysis v2.1 interface. At the top, there's a menu bar (File, View, Tools, Search, Index, Filter, Reports, Column, Window, Help) and a status bar (UTC) Dublin, Edinburgh, Lisbon, London). Below the menu is a 'Preview URL' field showing 'https://www.'. A table displays logon attempts with columns: Port, User, Logon User, Logon Password, and Redirect URL. The table has 5 rows, with the 3rd row highlighted in blue. Below the table, there's a detailed view of the selected record (Record 3 of 5). The detailed view shows fields like Master password, Hostname, Username Field, Encrypted Username, Decrypted Username, Password Field, Encrypted Password, Decrypted Password, Date Last Used, Date Created, Date Password Changed, Number of Times Used, Encryption Type, and GUID. Red arrows point from numbered boxes (1-5) to specific fields in the detailed view: 1 points to Master password, 2 points to Username Field, 3 points to Decrypted Username, 4 points to Password Field, and 5 points to Decrypted Password.

Port	User	Logon User	Logon Password	Redirect URL
443		ian.richardson		
443		ian.richardson		
443		ian.richardson@activist.com	28374ydsfsd	
443		ian.richardson		
443		ian.richardson		

Record 3 of 5

[Entry Type] = 'Sign On'

Information

- Master password: <empty>
- Hostname:
- Username Field: email
- Encrypted Username: MDoEPgAAAAAAAAAAAAAAAAAAAAEWfAYIKoZIhvcNAwECOnXd7T+jOrBCCQpF1MB1N4r6Xd9wx9Mmo5W1D21V5Qf+8nDI6B43Dcg==
- Decrypted Username: ian.richardson@activist.com
- Password Field: pass
- Encrypted Password: MDoEPgAAAAAAAAAAAAAAAAAAAAEWfAYIKoZIhvcNAwECOnXd7T+jOrBCCQpF1MB1N4r6Xd9wx9Mmo5W1D21V5Qf+8nDI6B43Dcg==
- Decrypted Password: 28374ydsfsd
- Date Last Used [UTC]: 2014-05-15 14:53:13.957
- Date Created [UTC]: 2014-05-14 12:09:54.872
- Date Password Changed [UTC]: 2014-05-14 12:09:54.872
- Number of Times Used: 3
- Encryption Type: 1
- GUID: {79f2b13f-95c1-4228-8419-2ddcb5d8d75}

www.digital-detective.net C:\Users\Joseph\...\jwx4gie7.default\signons.sqlite ID: 3

In the example above, the various fields identified by the numbers above are explained in the table below. Any decrypted usernames and passwords are also displayed in the Logon User and Logon Password columns.

Number	Information
1	Master Password <p>This value is shown as empty which indicates no master password has been set. If the correct master password was provided, then it would be displayed here.</p>
2	Username Field <p>This value shows the field name used to identify the username value. In this case, it is 'email'.</p>
3	Decrypted Username <p>This value shows the decrypted string for the username field.</p>
4	Password Field <p>This value shows the field name used to identify the password value. In this case, it is 'pass'.</p>
5	Decrypted Password <p>This value shows the decrypted string for the password field.</p>



We have obfuscated any sensitive information displayed in the screen above for security reasons. The username/password decryption feature is only available in the licensed version of NetAnalysis®.