

# Systems and Network Security Assignment

## 4. Build an SAP Credential Analyzer

### a. Assignment Requirements

Create/code an SAP Credential Analyzer with your favorite development language (C, C#, Java etc.).

#### i. Minimum Requirements

- A group box with necessary textboxes and labels for entering SAP connection information: Application Server, username, password, system number, client number.
- Upon clicking an “add” button, the user should be able to add this server to a list. “remove” button does the opposite.
- A button, “Check Accounts”. The application connects to all of the systems and downloads usernames/ password hashes from those systems. The users with the same password hashes in all of the systems are displayed.
- A status bar with real-time detailed description which actions are performed.
- After user has entered sufficient number of systems (min 2), the add button should be enabled. If none items exist in the list, “remove” button should be disabled.
- Multithreaded application/ No GUI Freeze.
- Export function that saves output to a file (should ask for file location)
- GUI ergonomics
- Able to support at least 20 SAP systems for comparison.
- Installer that adds the software to windows start menu.

Upon clicking a button, the application needs to connect to different SAP systems and analyze the user accounts.

It should display the accounts, which have the same password in all of the systems.

The application should create a report with resulting information and present it to the user. Report can be any format.

## ii. Optional Requirements / Bonus Points (all minimum requirements should be fulfilled already)

- Checking which users have SAP\_ALL rights in those systems.

## b. Due Date

27<sup>th</sup>.July.2009 09:00 am.

## c. Delivery

Zip file including the source code/project files and binary. Please rename the zip file [StudentNumber]\_[NameLastname]\_Assignment4.zip

e.g 2838\_ErtungaArsal\_Assignment3.zip

Files will be uploaded to the file server before 27<sup>th</sup>.July.2009 09:00 am. Connection information will be sent out with a separate email.

## d. Notes

- You can use 10.36.0.222 and 10.36.0.223 via vpn.sabanciuniv.edu (<http://mysu.sabanciuniv.edu/bt/servisler/tr/ag/erisim/su-secure-client.msi> )
- The remote function call RFC\_READ\_TABLE retrieves tables and columns from the SAP system. Password information is stored on the USR02 table. Use "QUERY\_TABLE"

The screenshot shows the SAP Function Builder interface for the function module RFC\_READ\_TABLE. The 'Tables' tab is selected, displaying a table of parameters and their associated types.

Parameter Name	Typing	Associated Type	Default...	Optional	Pass Value	Short text
QUERY_TABLE	LIKE	DD02L - TABNAME		<input type="checkbox"/>	<input checked="" type="checkbox"/>	Table read
DELIMITER	LIKE	SONV - FLAG	SPACE	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Sign for indicating field limits in DATA
NO_DATA	LIKE	SONV - FLAG	SPACE	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	If <> SPACE, only FIELDS is filled
ROWSKIPS	LIKE	S0ID - ACCNT	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
ROWCOUNT	LIKE	S0ID - ACCNT	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

parameter to query usr02. Usernames are stored in the BCODE field, passwords hashes are stored in BCODE. RFC\_READ\_TABLE parameters are shown above.

- User profile information is stored in USR04. Fields BNAME and PROFS are relevant.
- You can use your innovative ideas regarding gui design, provided that mentioned functionality is fulfilled.
- **Never test your application against any system where you are not authorized/permitted!!!**