



SAP Basis Security BOT

Readme

Version 1.0

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1. Introduction

This document contains all essential information for the user to make full use of the Bot or Digital worker. This manual includes a description of the functions and capabilities and step-by-step procedures for setup & configuration of the SAP Security Bot. To create user, reset password, lock and unlock user by the SAP Basis Team. SAP Security Bot is required to protect SAP Systems and Critical Information from Unauthorized Access in a Distributed Environment while accessing the system locally or remotely.

1.1 Overview

Brief walkthrough from initiation through exit, scope of the Use case supported by high-level diagrams, workflows, pictures that describes the overall concept of the end to end flow in non-technical terminology. This bot is suitable for those professionals who have a good understanding about SAP Basis tasks and a basic understanding of the system security. After completing, you will find yourself at a moderate level of expertise in implementation of the security concepts in a SAP system.

1.2 Common Use cases

User Management for complex ERP implementation like SAP is high volume human dependant repetitive tasks which require a dedicated workforce deployment. These tasks like User creation, deletion, Password set/reset etc can be easily automated. Bot was deployed for

- SAP user id creation on request through email*
- Lock/Unlock SAP user id on request through email*
- Reset password for the SAP user id on request through email*

2. Requirements & Prerequisites

2.1 System Requirements

For this bot user require Automation Anywhere Client from which the bot will run and also the SAP server details:

SAP Version	EHP7 for SAP ERP 6.0
Connection Type	Custom Application Server
Application Server	00.00.00.000
Instance Number	00
System ID	AA1
SAP basis version	Component SAP_BASIS Release 740 SP Level 0004 Support Package SAPKB74004
SAP router String	/H/12.169.98.157/S/3299
Windows Version	Windows 10, Windows 8
Automation Anywhere version	Automation Anywhere client 2011

2.2 Prerequisites

*Before you start with this, we assume that you are well-versed with SAP Basis activities User Creations, Password Management, and RFC's. This bot will work only on Automation Anywhere Client version 2011. SAP version which is automated SAP ECC6.0. Two DLLs are required i.e. **sapnco.dll** and **sapnco_utils.dll** and Automation Anywhere Enterprise is integrated with SAP using BAPI (Business Application Programming Interface). BAPI is a standardized method of SAP Business Objects, we are using BAPI for all four bots i.e. for create, lock, unlock, reset password.*

2.3 Security Measures

Security parameters should be defined and password policies should be reviewed after regular time intervals. In a SAP Distributed Environment, there is always a need that you protect your critical information and data from unauthorized access, to make the system secure, you should have good understanding of user access profiles, password policies, data encryption and authorization methods to be used in the system.

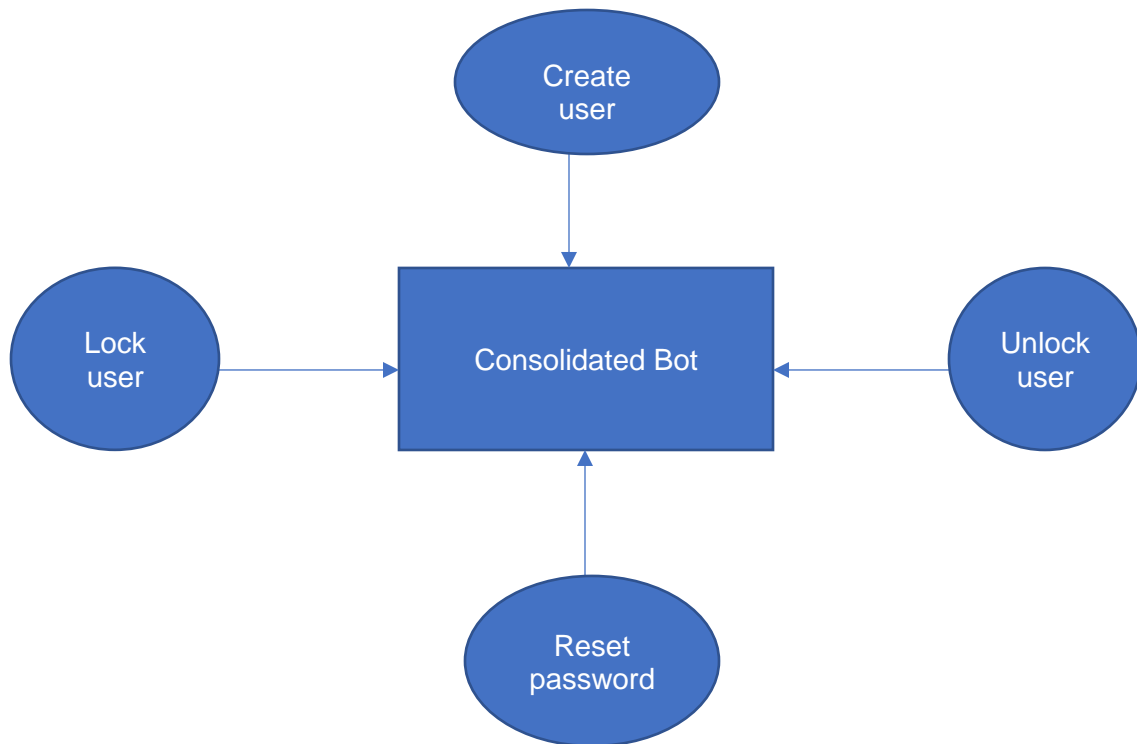
2.4 Disclaimers

*This bot is **attended bot** and only for SAP Basis not for any other SAP purpose. We strive to update the contents of our bot as timely and as precisely as possible.*

3. Getting Started

3.1 Skill Matrix

In this we have 4 taskbots i.e. create user, reset password, lock user and unlock user then consolidated all these 4 bots into one taskbot.



3.2 Installation Hierarchy

- 1. User need to have Automation Anywhere Client installed in it system, also should have control room URL with credentials to login.*
- 2. Should have SAP credentials for login into SAP portal. Make sure you Install the Plugin provided with the SAP license in order to work with SAP Integration command. For SAP Automation, copy the two DLLs - sanpnco.dll and sapnco_utils.dll, from the "SAP .NET Connector" installation folder to the "AAE Client installation folder" (For example: C:\Program Files (x86)\Automation Anywhere\Enterprise\Client). SAP .NET Connector is a separate installation that you can download from the SAP website with your SAP account. AAE is certified with SAP libraries of version 3.0.2.0 build using .NET Framework 2.0.*

3. *Automation Anywhere Enterprise is integrated with SAP using BAPI (Business Application Programming Interface).*

BAPI is a standardized method of SAP Business Objects that enables Automation Anywhere Enterprise to integrate with the R/3 System.

The SAP Integration command first establishes connection with SAP. Then it provides different actions to use BAPI to upload and download information to SAP.

It allows the user to run remote function calls using BAPIs with a series of actions as per the business requirements.

4. *Below is the SAP Marketplace link from where the SAP connector for .Net application needs to be downloaded.*

https://help.sap.com/doc/saphelp_crm700_ehp02/7.0.2.17/en-US/4a/097f2c449836eae10000000a421937/content.htm?no_cache=true

<https://websmp101.sap-ag.de/connectors>

Points to be kept in mind:

1. *The DLL should be 32bit as AAE supports only that*
2. *AAE is certified with SAP libraries of version 3.0.2.0 build using .NET Framework 2.0.*
3. *The installer is a .msi file which needs to be installed on the client machine*
4. *This would update the DLL files at the SAP installation folder automatically*
5. **Steps to get the SAP Connector DLL files:**

1) Copy the SAP Connector DLLs from the SAP installer folder (C:\Program Files (x86)\SAP)

2) Paste the files under the Client installation path

C:\Program Files (x86)\Automation Anywhere\Enterprise\Client

3) Exit and re-open the AAE application

Once done, test the SAP Integration connect command. This time the connection would be successful with proper connection details.

5. *Download the zip folder from AA bot store and create a folder into your local which has total 5 bots, excel sheet templates required to attach in the mail when user send any request whether to create, lock, unlock or reset password to the basis team.*

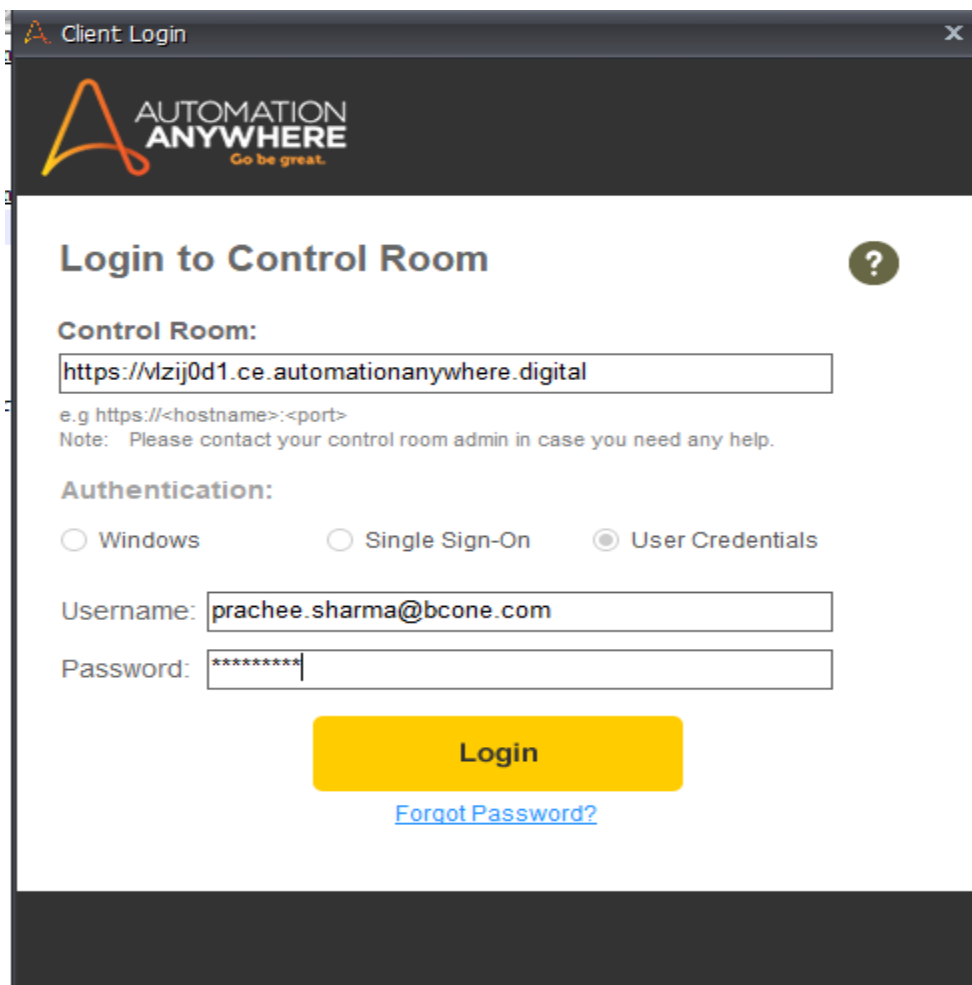
3.3 Quick Start

Guide the different users to quickly setup and configure the Bot or Digital worker with step by step representation supported by screenshots in a non-technical manner.

3.3.1 Setup

Provided a step by step guide for setting up external accesses required.

1. *Open Automation Anywhere Client with your control room credentials*



The screenshot shows the 'Client Login' window of the Automation Anywhere client. The window has a dark header with the Automation Anywhere logo and the tagline 'Go be great.'. Below the header, the title 'Login to Control Room' is displayed next to a help icon. The 'Control Room:' section contains a text box with the URL 'https://vlzj0d1.ce.automationanywhere.digital' and a note: 'e.g https://<hostname>:<port>' and 'Note: Please contact your control room admin in case you need any help.'. The 'Authentication:' section has three radio buttons: 'Windows', 'Single Sign-On', and 'User Credentials', with 'User Credentials' selected. Below this, the 'Username:' field contains 'prachee.sharma@bcone.com' and the 'Password:' field contains '*****'. A yellow 'Login' button is centered below the password field, and a blue link 'Forgot Password?' is positioned below the button.

Client Login

AUTOMATION ANYWHERE
Go be great.

Login to Control Room

Control Room:

e.g https://<hostname>:<port>
Note: Please contact your control room admin in case you need any help.

Authentication:

☐ Windows ☐ Single Sign-On ☒ User Credentials

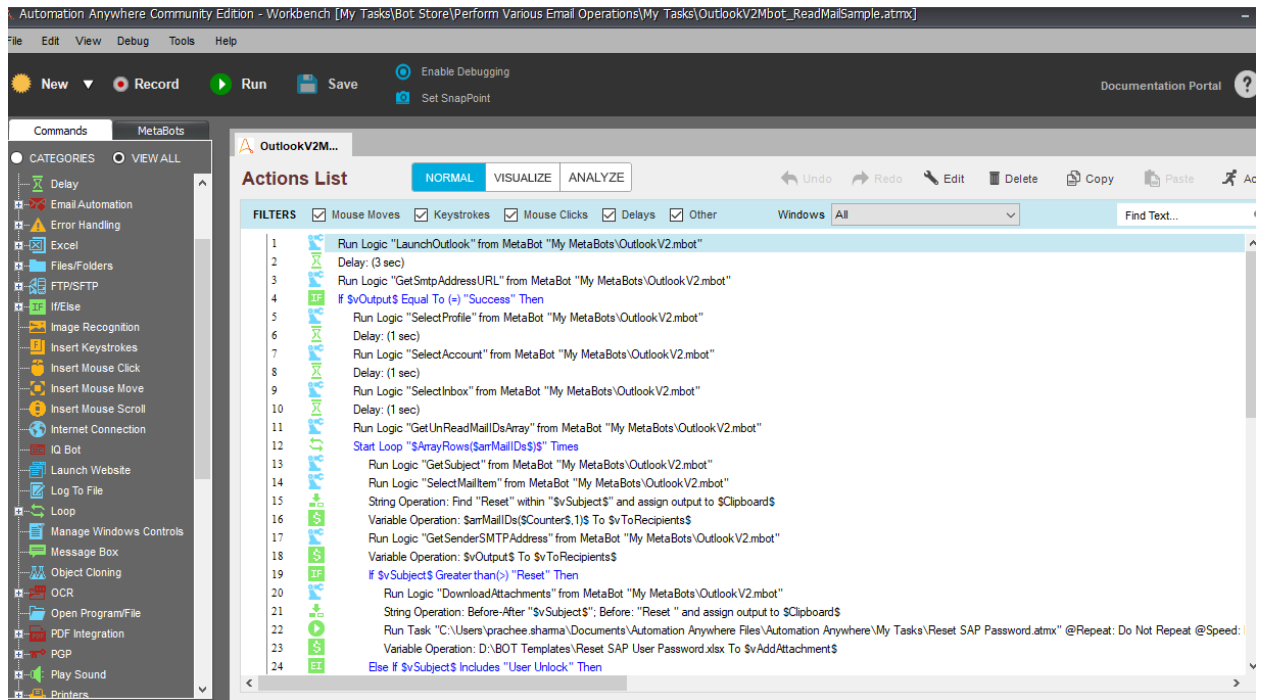
Username:

Password:

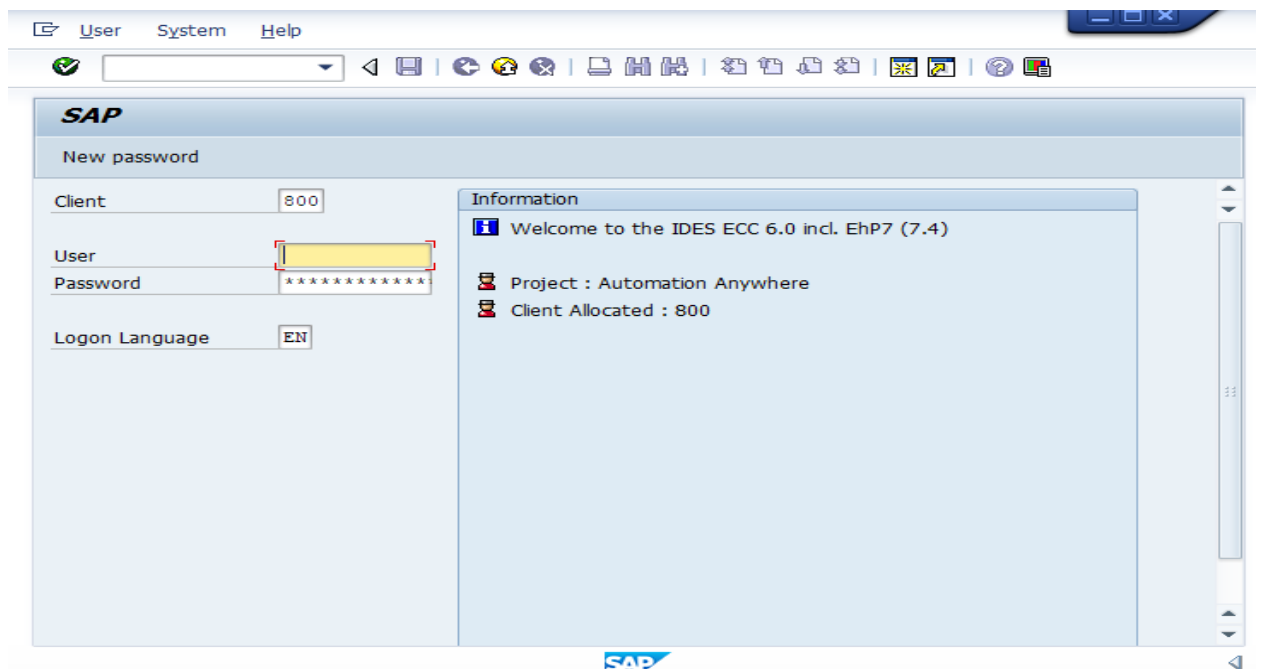
Login

[Forgot Password?](#)

2. Open Consolidated Bot



3. Login into SAP portal



Configuration

- 1. Create SAP user:** Through this bot SAP basis team can create a user account, in this case user need to send an email to the basis team for creating the account also attaching the template for create user. Template contains the fields like UserID, password, first name, last name, email ID, Department, Mobile No. user needs to fill these fields and send the mail. Now the Basis team will run the consolidated Bot, the bot will automatically read the subject line of the mail, subject line will always be **CreateUser** then run the consolidated bot and user will be created and confirmation mail will be send to the user with the attached template having status and date time stamp.
- 2. Lock SAP user:** If user wants to lock an account then user need to send an email to the basis team for locking the account also attaching the template for lock user. Template contains the fields like UserID, email ID user needs to fill these fields and send the mail. Now the Basis team will run the consolidated Bot, the bot will automatically read the subject line of the mail, subject line will always be **User Lock** then run the consolidated bot and user will be locked and confirmation mail will be send to the user with the attached template having status and date time stamp.
- 3. Unlock SAP user:** If user wants to unlock an account then user need to send an email to the basis team for unlocking the account also attaching the template for lock user. Template contains the fields like UserID, email ID user needs to fill these fields and send the mail. Now the Basis team will run the consolidated Bot, the bot will automatically read the subject line of the mail, subject line will always be **User Unlock** then run the consolidated bot and user will be locked and confirmation mail will be send to the user with the attached template having status and date time stamp.
- 4. Reset Password:** If user wants to reset password then user need to send an email to the basis team for reset the password also attaching the template for reset password. Template contains the fields like UserID, email ID user needs to fill these fields and send the mail. Now the Basis team will run the consolidated Bot, the bot will automatically read the subject line of the mail, subject line will always be **Reset Password** then run the consolidated bot and user will be locked and confirmation mail will be send to the user with the attached template having status and date time stamp. **But bot will not send the password to the user, Basis will team send another mail to the individual user with the new password.**

4. Limitations

The only limitation is that the reset bot will run and only send the confirmation to the user whether the password is reset or not. And later on Basis team will send the new password in another mail to the individual.

5. Troubleshooting & Support

5.1 Support

For any clarifications and doubts you can mail us at smarak.sahoo@bcone.com

Appendix C: References

Summarize the relationship of this document to other relevant references.

No.	Topic	Reference Link
1	How to Create a Control room account?	Click here