

## AUA Wrapper for Simatic Logon Service

### User Manual

Important Notice  
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## Safety Guidelines

This manual contains notices which you should observe to ensure your own personal safety, as well as to protect the product and connected equipment. These notices are highlighted in the manual by a warning triangle and are marked as follows according to the level of danger:



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### Safety Note

Contains important information on the acceptance and safety-related use of the product.

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### Warning

Indicates that death, severe personal injury or substantial damage to property **can** result if proper precautions are not taken.

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### Caution

Indicates that minor personal injury or property damage can result if proper precautions are not taken.

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### Note

Draws your attention to particularly important information on the product, handling the product, or to a particular part of the documentation.

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## Qualified Personnel

Only **qualified personnel** should be allowed to install and work on this equipment. Qualified persons are defined as persons who are authorised to commission, to ground, and to tag circuits, equipment, and systems in accordance with established safety practice and standards.

## Correct Usage

Note the following:



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### Warning

This device may only be used for the applications described in the catalogue and the technical description, and only with non-Siemens devices or components if they have been approved or recommended by Siemens.

This product can only function correctly and safely if it is transported, stored, set up, and installed correctly, and operated and maintained as recommended.

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Automation and Drives  
Industrial Automation Systems  
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We have checked the contents of this manual for agreement with the hardware and software described. Since deviations cannot be precluded entirely, we cannot guarantee full agreement. However, the data in this manual is reviewed regularly and any necessary corrections included in subsequent editions. Suggestions for improvement are welcomed.

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# 1 Functional Description

The AUA-Wrapper.dll is for a simple changeover of WinCC- projects with AUA to that of with Simatic Logon Service.

An AUAInterface.dll, whose AUA- calls are replaced by their corresponding Simatic Logon resp. WinCC- calls, is provided. It behaves as if it is communicating with AUA.

The WinCC – scripts of AUA projects can therefore be retained to the greatest possible extent, in case of upgrade to Simatic Logon Service.

The function calls that are not supported in Simatic Logon Service are logged.

The AUA-Wrapper.dll is exclusively meant for use in WinCC and not implemented for AUA- Client applications. Direct calls to AUA-Dispatchers are not emulated.

## 2 Preconditions

### 2.1 Software Preconditions

- Windows 2000 SP1.
- WinCC V5.x V6/ PCS7 V5.x.
- Simatic Logon Service.

### 2.2 System Preconditions

There are no special system preconditions.

## 3 Installation

It is important that the user who is logged in the machine where AUA Wrapper will be installed, has the privileges of an administrator for this particular machine.

1. Run the Setup.exe
2. Accept the license agreement.
3. Choose the destination folder for the documentation
4. Finish the installation

AUA Wrapper is now installed on the computer.

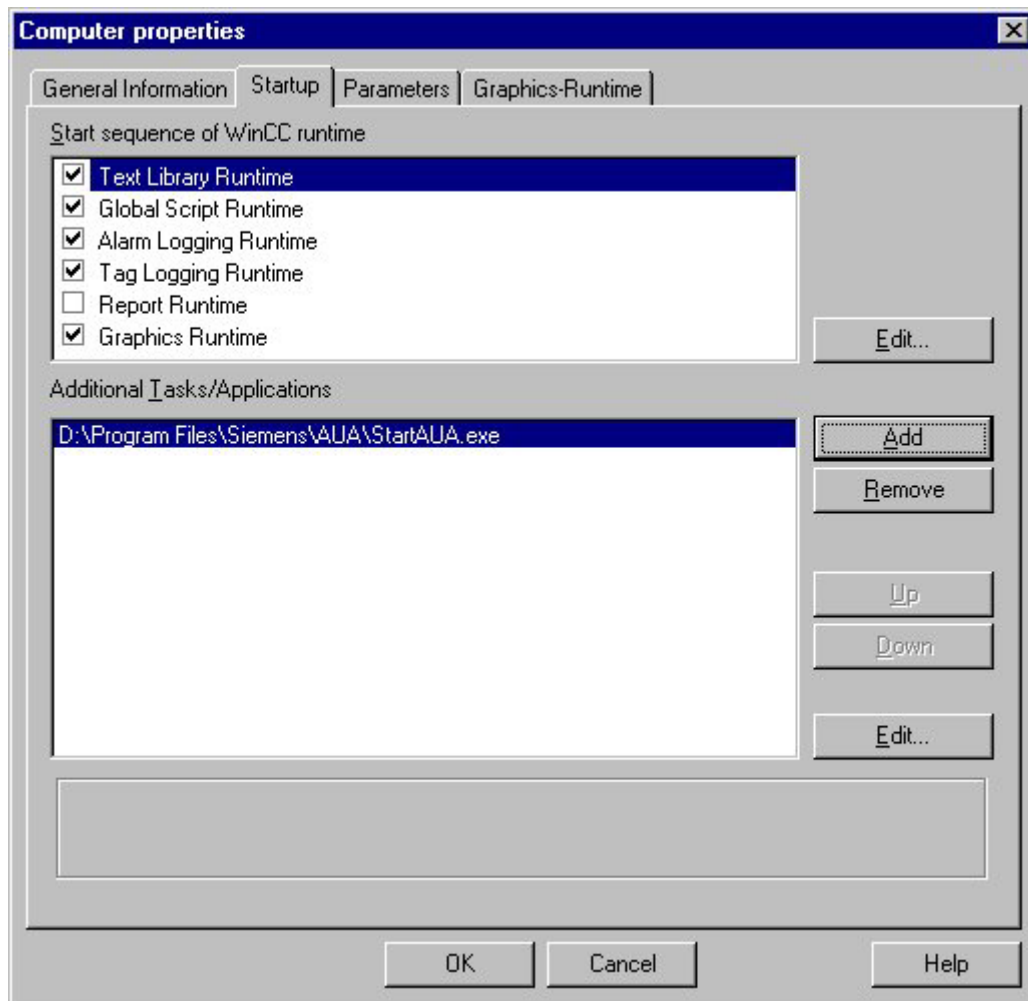
Installed files:

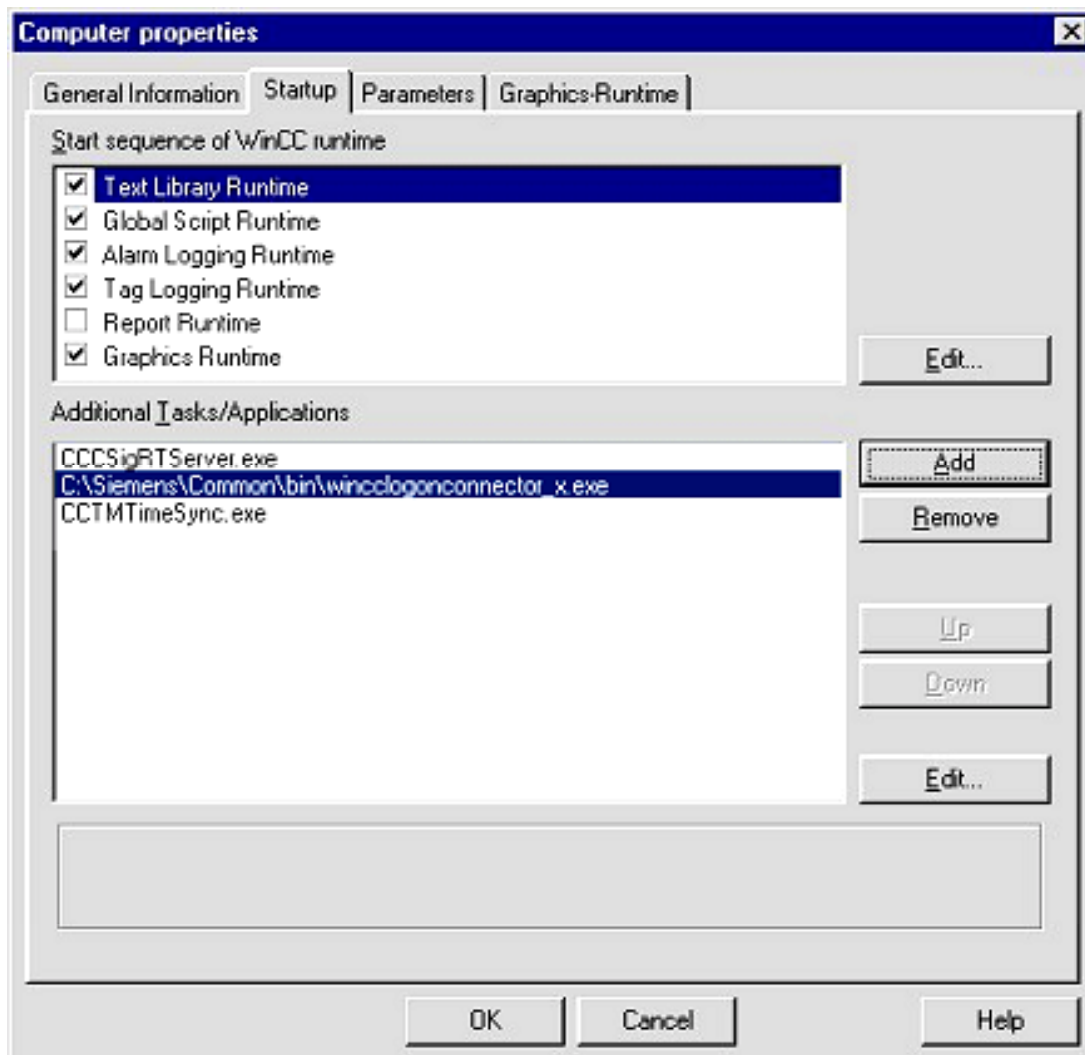
<b>Folder</b>	<b>Files</b>	<b>Comment</b>
<\System32>	AUAInterface.dll	This dll allows a simple interface call from WinCC -scripts.
<Installations-Folder>	AUA_Wrapper_Deutsch.pdf	User manual in german
	AUA_Wrapper_english.pdf	User manual in English

## 4 Engineering

### 4.1 WinCC Startup

Modify the link of file "StartAUA.exe" in "Additional Task/Applications" into "WnCCLogonConnector\_x.exe" in the 'Computer Properties' dialog .





## 4.2 Default domain setting

As a default, the function VerifyUser uses the local user administration. If another domain is desired, it can be set in the registry key.

```
[HKEY_LOCAL_MACHINE\SOFTWARE\Siemens\AUAWrapper]
"DefaultDomain"
```

## 5 Interface

The philosophies of AUA and Simatic Logon Service differ in some aspects. Therefore some functions are not supported in future.

### 5.1 Supported functions of AUA InterfaceDll

The following functions are supported in AUA- InterfaceDll further:

#### 5.1.1 Boolean InitAUA()

This function initializes Simatic Logon Service.

#### 5.1.2 Boolean ShowGUI()

This function displays the login dialog.

#### 5.1.3 Boolean HideGUI()

This function closes the login dialog.  
This function will be supported from AUA-Wrapper V1.2.

#### 5.1.4 BSTR GetCurrentUserID()

The return value of this function is the UserID of the currently logged in user.

#### 5.1.5 BSTR GetCurrentUserName()

The return value of this function is the UserName of the currently logged in user.

#### 5.1.6 BSTR GetCurrentGroup()

The return value of this function is the name of the group of the currently logged in user.

#### 5.1.7 BSTR LoginUser( BSTR UserID, BSTR Password)

With this function a user can be logged in without a Login-Dialog. Here it is checked whether the user exists and the correct password has been entered.  
This function will be supported from AUA-Wrapper V1.2.

#### 5.1.8 BSTR LogoutUser()

With this method, it is possible to logout the presently logged in user.  
The return value is "ok" if the logout is successful, otherwise an error message is returned.



### 5.1.9 BSTR VerifyUser(BSTR UserID, BSTR Password)

This function is useful for the implementation of an electronic signature. By passing the UserID and password, it is possible to verify that this user exists and that the password is correct.

The return value is "ok" -> user exist and password is correctly.  
 The return value have error message -> faulty UserID or passord

### 5.1.10 BSTR GetUsersGroup(BSTR UserID)

With this function, it is possible to retrieve the group Name by passing the UserID.  
 If the UserID does not exist, the return value will be an empty string.  
 Condition is the user has logged on once already.

### 5.1.11 Boolean GetSignature(LPCTSTR UserID)

This function is useful for the implementation of an electronic signature. After the entry of the UserID and password in a Dialog, it is possible to verify, whether this user exists and that the password is correct.

Return value TRUE -> if the user was correctly verified.  
 Return value FALSE -> faulty UserID or password.

## 5.2 Additional function

Because Simatic Logon service works with Windows user administrator together, the domain / workgroup entry belongs to some functions (at the moment VerifyUser). As a default, it uses the local user administration. To use another domain temporarily, the function SetDomain (LPCTSTR Domain) is added.

Domain can be set permanently in the registry key:

```
[HKEY_LOCAL_MACHINE\SOFTWARE\Siemens\AUAWrapper]
"DefaultDomain"
```

### 5.2.1 GetSignatureEx

```
boolean GetSignatureEx (DWORD dwTimeout, char *lpstrGroupName, char *lpstrDomain,
    DWORD dwDomainSize, char *lpstrUserID, DWORD dwUserIDSize, char *lpstrUserName,
    DWORD dwUserNameSize, char *lpstrListOfRoles, DWORD dwListOfRolesSize)
```

If it is required to sign electronically then this function can be used. Here a login dialog will be invoked and after successful authorization, it will be checked whether the user belongs a specific Windows user group.

Return value TRUE-> User exists and has entered the correct password and belongs to the corresponding user group

Return value FALSE-> Wrong password or the user doesn't exist or the user is not a member of the group

Hence the domain, UserID, user name as well as a list of Windows groups of the user can be returned. The previously logged-in user continues to be logged-in. This function will be supported from AUA-Wrapper V1.2.

## 5.3 Unsupported functions of AUA InterfaceDll

Principally all functions of AUAInterface.dll can be used further. However some functions are not supported by Simatic Logon Service. These functions return an error value.

The calls of unsupported functions are logged in the diagnostic files, namely AUA\_WrapperDll\_0.txt up to AUA\_WrapperDll\_20.txt. They are stored in 'Diagnose' folder of WinCC.

Each call to an unsupported function is logged in a file.

The following functions are not supported in AUA-InterfaceDll anymore:

### 5.3.1 BSTR GetCurrentBFGroup()

The rolls' management in Simatic Logon Service is specified by applications. If this function is called, the return value is "Function not supported".

### 5.3.2 Long GetLoginMessageID()

This function is not suitable for use in WinCC.  
The return value is -1.

### 5.3.3 Long GetLogoutMessageID()

This function is not suitable for use in WinCC.  
The return value is -1.

### 5.3.4 Boolean SetGroupRights(BSTR GroupName, short AppNR, long value)

The management of group rights is not supported in Simatic Logon Service.  
The return value is FALSE.

### 5.3.5 Long GetGroupRights(BSTR GroupName, short AppNR);

The management of group rights is not the function of Simatic Logon Service.  
The return value is -1.

### 5.3.6 BSTR GetUsersUserName(BSTR UserID)

This function is not being supported in Simatic Logon Service.  
The return value is "Function is not supported".

### 5.3.7 BSTR GetUsersBFGroup(BSTR UserID)

This function is not being supported in Simatic Logon Service.  
The return value is "Function is not supported".

## 6 Examples

In this chapter some WinCC example scripts for the automation interface are given.

### 6.1 Init AUA

```
#pragma code("AUAInterface.dll")
LPCSTR WINAPI InitAUA();
#pragma code()
InitAUA();
```

### 6.2 ShowGUI

```
#pragma code("AUAInterface.dll")
BOOL WINAPI ShowGUI(void);
#pragma code()
BOOL RetVal;
RetVal = ShowGUI();
printf("%d ",RetVal);
```

### 6.3 GetCurrentUserID

```
#pragma code("AUAInterface.dll")
LPCSTR WINAPI GetCurrentUserID(void);
#pragma code()

char *pCurrentUserID;
pCurrentUserID = GetCurrentUserID();

if (pCurrentUserID != NULL)
{
SetOutputValueChar("AUA.Pdl","CurrentUserID",pCurrentUserID);
}
```

### 6.4 GetCurrentUserName

```
#pragma code("AUAInterface.dll")
LPCSTR WINAPI GetCurrentUserName(void);
#pragma code()

char *pCurrentUserName;
pCurrentUserName = GetCurrentUserName();

if (pCurrentUserName != NULL)
{
SetOutputValueChar("AUA.Pdl","CurrentUserName",pCurrentUserName);
}
```

## 6.5 GetCurrentGroup

```
#pragma code("AUAInterface.dll")
LPCSTR WINAPI GetCurrentGroup(void);
#pragma code()

char *pCurrentGroup;
pCurrentGroup = GetCurrentGroup();

if (pCurrentGroup != NULL)
{
    SetOutputValueChar("AUA.Pdl","CurrentGroup",pCurrentGroup);
}
```

## 6.6 LogoutUser

```
#pragma code("AUAInterface.dll")
BOOL WINAPI LogoutUser();
#pragma code()

LogoutUser();
```

## 6.7 VerifyUser

```
#pragma code("AUAInterface.dll")
LPCSTR WINAPI VerifyUser(LPCSTR UserID,LPCSTR Password);
#pragma code()

char *pUserID;
char *pPassword;
char *pRet;

pUserID = GetOutputValueChar("AUA.Pdl","VerifyID");
pPassword = GetOutputValueChar("AUA","VerifyPassword");
pRet = VerifyUser(pUserID,pPassword);

if (pRet != NULL)
{
    SetOutputValueChar("AUA.Pdl","Verify",pRet);
}
```

## 6.8 GetUsersGroup

```
#pragma code("AUAInterface.dll")
LPCSTR WINAPI GetUsersGroup(LPCSTR UserID);
#pragma code()

char *pUserID;
char *pRet;

pUserID = GetOutputValueChar("AUA.Pdl","UserID");
pRet = GetUsersGroup(pUserID);

if (pRet != NULL)
{
SetOutputValueChar("AUA.Pdl","UsersGroup",pRet);
}
```

## 6.9 GetSignature

```
#pragma code("AUAInterface.dll")
BOOL WINAPI GetSignature(LPCTSTR UserID);
#pragma code()

char *pUserID;
BOOL Ret=FALSE;

pUserID = "develop";
Ret = GetSignature(pUserID);
```

## 6.10 GetSignatureEx

```
#pragma code("AUAInterface.dll")
BOOL WINAPI GetSignatureEx(DWORD dwTimeout,char *lpstrGroupName,char *lpstrDomain,
DWORD dwDomainSize, char *lpstrUserID, DWORD dwUserIDSize,char *lpstrUserName,
DWORD dwUserNameSize, char *lpstrListOfRoles, DWORD dwListOfRolesSize);
#pragma code()

char szDomain[_MAX_PATH +1];
char szUserID[_MAX_PATH+1];
char szUserName[_MAX_PATH+1];
char szRoles[_MAX_PATH+1];
GetSignatureEx(60000,"WinCC Administrator",szDomain,_MAX_PATH,
szUserID,_MAX_PATH,szUserName,_MAX_PATH,szRoles,_MAX_PATH);
{

printf("Hallo %s\r\n",szUserName );
}
```

## 6.11 SetDomain

```
#pragma code("AUAInterface.dll")
BOOL WINAPI SetDomain(LPCSTR Domain);
#pragma code()

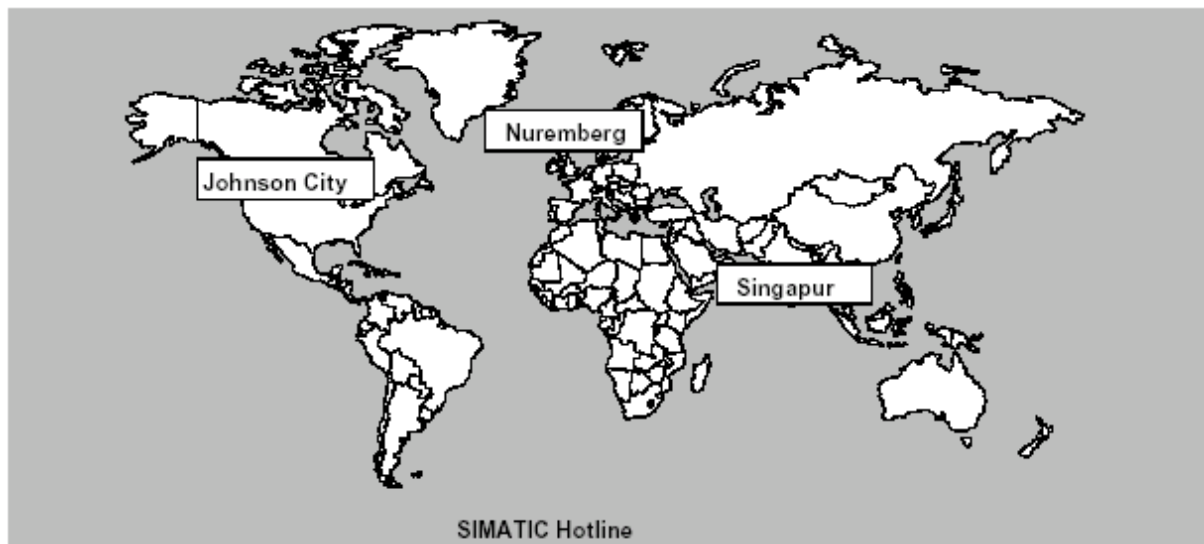
char *pDomain;
BOOL Ret;

pDomain = GetOutputValueChar("AUA.Pdl","Domain");

if (pDomain != NULL)
{
Ret = SetDomain(pDomain);
printf("%d ",Ret);
}
```

## 7 Support

### Automation and Drives, Service & Support



**Worldwide (Nuremberg)**  
**Technical Support**  
 (FreeContact)

Local time: Mo.-Fr. 7:00 to 17:00  
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 Fax: +49 (180) 5050 223  
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 ad.siemens.de  
 GMT: +1:00

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 sea.siemens.com  
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The languages of the SIMATIC Hotlines are generally German and English, in addition, French, Italian and Spanish are spoken on the authorization hotline.

## Service & Support on the Internet

In addition to our documentation, we offer our knowhow online on the internet at:

<http://www.ad.siemens.de/support>

where you will find the following:

- Current product information leaflets, FAQs (Frequently Asked Questions), downloads, hints and tricks.
- A newsletter giving you the most up-to-date information on our products.
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- Users and specialists from all over the world share information in the forum.
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