

# **File Format of User.dat**

---

SUMMARY: THE DOCUMENT IS PERTAINING TO THE FORMAT OF USER RIGHTS CONFIGURATION.

## UPDATES

Révision	Rédacteur	Action	Relecture	Date	Diffusion
1.0	Anonym	Created in French		04/23/1999	
2.0	JCW	Rewritten in English and updated	21CRF11 & WebVue	03/21/2007	
2.1	JCW	Updated	Visualization & Maintenance levels	05/07/2009	
2.2	JS			05/12/2009	
2.3	JCW	Updated	User info with E-mail & SMS	19/01/2010	

Information in this document is subject to change without notice and does not represent a commitment on the part of the supplier. The software described in this document is furnished under a license agreement. The software may be used or copied only in accordance with the terms of the agreement. It is against the law to copy software on any medium except as specifically allowed in the license agreement. The purchaser may make one copy of the software for backup purposes. No part of this manual may be reproduced or transmitted in any form or by any means, without the express permission of the supplier. Whilst the utmost care is taken to ensure the accuracy of the data contained herein, it is provided on the understanding that the supplier shall under no circumstances, be liable for any injuries, expenses, or losses which may be in any way attributable to the use or adaptation of such data.

All trademarks duly acknowledged.

The types of entry known in USER.DAT are as follows:

USER	User with the classic & advanced options
USERPWD (OLDPWD)	Used passwords
PROFILE	Profile
USERPROFILE	Association of a profile with a user
STATION	Association of a station with a user for a given profile
MENU	Menus associated with a profile
PROGRAMS	Login / logout programmes
WEBVUE	WebVue parameters
ADMIN	Administration of a user by 21 CFR 11

USER ENTRY				
No	Description	T	Size (bytes)	Value
1	Entry type header	C	4	USER
2	The name/identifier of a user account.	C	40	
3	The account password.	C	16	
4	The account description.	C	255	
5	The user account login time. It is set at his creation time associated with a profile or the begin time of his new password lifespan.	N	2	
6	The states of an account in order to strictly control a user	N	2	<p>Its value can be one of the following values:</p> <p>-3 : Deactivated by an administrator</p> <p>-2 : User account name not existing. Is considered as a clandestine user</p> <p>-1: Deleted logically</p> <p>0: Existing normally</p> <p>1: New Creation and needs to change the password at the 1<sup>st</sup> time logon, reactivated, or unlocked by Administrator's</p>

				intervention after 3 times of failures in login attempts.
7	The account owner's last name - the user's surname	C	12	
8	The account owner's first name - the user's forename.	C	12	
9	The account owner's role - a description of the user's function	C	12	
10	The times of failures in login attempts	N	2	
11	The password must be changed to the next authentication	B	1	0/1
12	The user account type.	N	4	Its value can be one of the following values:  0 : the user account is created with the SCADA  1 : the user account is a user of windows domain
13	The e-mail address	C	100	
14	The mobile phone number	C	100	
15	The fax number	C	100	Reserved

USERPWD ENTRY				
No	Description	T	Size (bytes)	Value
1	Entry type header	C	7	USERPWD
2	User account name	C	40	
3	The number of passwords used.	N	2	Max = 32
4	The 1 <sup>st</sup> password was used.	C	16	
...	...	C	16	
N+3	The N <sup>th</sup> password was used.	C	16	

OLDPWD ENTRY (obsolete)				
No	Description	T	Size (bytes)	Value
1	Entry type header	C	7	OLDPWD
2	The number of passwords used.	N	2	Max = 1024
3	The 1 <sup>st</sup> password was used.	C	16	
...	...	C	16	
N+2	The N <sup>th</sup> password was used.	C	16	

PROFILE ENTRY				
No	Description	T	Size (bytes)	Value
1	Entry type header	C	7	PROFILE
2	The name/identifier of a profile.	C	12	
3	Access rights	N	4	<b>Rights access</b> (bit 0) = 0x01  <b>Command and acknowledgement</b> (bit 1) = 0x02  <b>Window and layer access</b> (bit 2) = 0x04  <b>Exit</b> (bit 3) = 0x08  <b>Help</b> (bit 4) = 0x10  <b>Windows and configuration development</b> (bit 5) = 0x20  <b>Preferences</b> (bit 6) = 0x40  <b>Access to rights configuration</b>

			<p>(bit 7) = 0x80</p> <p><b>Desktop</b></p> <p>(bit 8) = 0x100</p> <p><b>Recipe</b></p> <p>(bit 9) = 0x200</p> <p><b>Save time table</b></p> <p>(bit 10) = 0x400</p> <p><b>Exceptions time table</b></p> <p>(bit 11) = 0x800</p> <p><b>Standard time table</b></p> <p>(bit 12) = 0x1000</p> <p><b>Zoom</b></p> <p>(bit 13) = 0x2000</p> <p><b>Administration</b></p> <p>(bit 14) = 0x4000</p> <p><b>WebVue</b></p> <p>(bit 15) = 0x8000</p> <p><b>Cryptography</b></p> <p>(bit 16) = 0x10000</p>
--	--	--	--



4	<p>Command access level</p> <p>To change the value of the variable at run time the user must have the corresponding command level. A command access level is from 0 to 29.</p>	N	4	<p>Level 0 (bit 0)</p> <p>Level 1 (bit 1)</p> <p>...</p> <p>Level 29 (bit 29)</p>
5	<p>Window access level</p> <p>When each window is created, it may be given an access level between 0 and 29. To open a window a user must have the corresponding window access level.</p>	N	4	<p>Level 0 (bit 0)</p> <p>Level 1 (bit 1)</p> <p>...</p> <p>Level 29 (bit 29)</p>
6	<p>Alarm acknowledgement level</p> <p>When an alarm is defined, it is given a level from 0 to 29. To acknowledge an alarm the user must have the corresponding alarm acknowledgement level.</p>	N	4	<p>Level 0 (bit 0)</p> <p>Level 1 (bit 1)</p> <p>...</p> <p>Level 29 (bit 29)</p>
7	<p>Recipe</p> <p>The recipe rights determine the Users ability to create, modify and save recipes created using the recipe system.</p>	N	4	<p>(None=0x70000000)</p> <p><b>Manager</b></p> <p>(Bit 0) = 0x01</p> <p><b>Save</b></p> <p>(Bit 1) = 0x02</p>

				<b>Creation</b> (Bit 2) = 0x04 <b>List modification</b> (Bit 3) = 0x08 <b>Real time</b> (Bit 4) = 0x10 <b>Access</b> (Bit 5) = 0x20 <b>Delete</b> (Bit 6) = 0x40 <b>Value modification</b> (Bit 7) = 0x80 <b>Send</b> (Bit 8) = 0x100
8	Mimic display layer  A mimic can be designed in multiple display layers from Layer 0 to Layer 15. These determine which of the mimic display layers a user is able to see.	N	4	Layer 0 (bit 0)  Layer 1 (bit 1)  ...  Layer 15 (bit 15)
9	Initial window  Selection of a window that opens automatically when a user logs in.	C	255	

10	Initial branch  Selection of a branch when a user logs in.	C	40	
11	Administration for the login box and the rights configuration	N	4	<b>Modify Date And Time</b> (Bit 0) = 0x01 <b>Modify Password</b> (Bit 1) = 0x02 <b>Create And Modify Users</b> (Bit 2) = 0x04 <b>Delete Users And Associations</b> (Bit 3) = 0x08 <b>Associate Station To User Profile</b> (Bit 4) = 0x10 <b>Create Profiles</b> (Bit 5) = 0x20 <b>Delete Profiles</b> (Bit 6) = 0x40 <b>Automatic Logoff</b> (Bit 7) = 0x80 <b>Password Lifespan</b> (Bit 8) = 0x100

12	Alarm masking level  When an alarm is defined, it is given a level from 0 to 29. To mask an alarm the user must have the corresponding alarm masking level.	N	4	Level 0 (bit 0)  Level 1 (bit 1)  ...  Level 29 (bit 29)
13	Authorization to access to WebVue	N	4	<b>Allow to access</b>  (bit 0) = 0x01
14	The profile description	C	80	
15				
16	The profile role	C	20	
17	Visualization level  To see the value of the variable at run time the user must have the corresponding visualization level. A visualization level is from 0 to 29.	N	4	Level 0 (bit 0)  Level 1 (bit 1)  ...  Level 29 (bit 29)
18	Use alarm acknowledgement level rights as alarm masking level rights	N	2	Yes = 1  No = 0
19	Use alarm acknowledgement level rights as alarm	N	2	Yes = 1  No = 0

	maintenance level rights			
20	<p>Alarm maintenance level</p> <p>When an alarm is defined, it is given a level from 0 to 29. To do maintenance on an alarm the user must have the corresponding alarm maintenance level.</p>	N	4	<p>Level 0 (bit 0)</p> <p>Level 1 (bit 1)</p> <p>...</p> <p>Level 29 (bit 29)</p>

USERPROFILE ENTRY				
No	Description	T	Size (bytes)	Value
1	Entry type header	C	11	USER PROFILE
2	User account name	C	40	
3	Profile name	C	40	
4	Association of profile with all the stations	B	1	

ADMIN ENTRY				
No	Description	T	Size (bytes)	Value
1	Entry type header	C	5	ADMIN
2	Profile level  Specifies the profile level for administering a hierarchical organization.	N	2	0 – 9  The level 0 is for the super-users.
3	Password lifespan  Specifies the life span for a password to be expired.	N	2	1 – 30 days,  2 – 12 months
4	Logoff timeout  Specifies the timeout for the automatic logoff when the account is inactive.	N	2	

WEBVUE ENTRY				
No	Description	T	Size (bytes)	Value
1	Entry type header	C	6	WEBVUE
2	Initial window  Selects the name of the mimic that is to be displayed when the user connects to the Supervisor using WebVue.	C	255	

3	Initial branch  Selects the branch for the above mimic.	C	40	
4	Project language  Specifies the language in which the WebVue Menu and tools will appear for a user's session.	N	2	-1 = Default, 0 = English, 1 = French.
5	Presentation language  Specifies the language in which the WebVue mimics will appear for a user's session.	N	2	-1 = Default, 0 = English, 1 = French, 2 = German, 3 = Italian, 4 = Spanish, 5 = Russian, 6 = Chinese.
6	Automatic login  Allows a User to start WebVue and connect to the Supervisor without having to enter a user name and password, i.e. no dialog box.	N	2	0/1
7	Alarm beeper  If ticked, WebVue will give an audible indication each time that there is an alarm transition to On - Not Acknowledged in an Alarm Display.	N	2	0/1

8	Alarm Filter  Is used to enter an SQL like expression to filter the contents of the Alarm Displays for a particular user.	C	512	
9	Log Filter  Is used to enter an SQL like expression to filter the contents of the Log Displays for a particular user.	C	512	
10	Multimedia Web  Allow use of scada verb Beep	N	2	0/1

STATION ENTRY				
No	Description	T	Size (bytes)	Value
1	Entry type header	C	7	STATION
2	User account name	C	40	
3	Profile name	C	40	
4	Station list name	C	40	
5	Station type	N	2	

MENU ENTRY				
No	Description	T	Size (bytes)	Value
1	Entry type header	C	4	MENU



2	User account name	C	40	
3	Initial window	C	255	
4	Initial branch	C	40	
5	Label in language 1	C	40	
6	Label in language 2	C	40	
7	Menu number	N	2	1 to 10

PROGRAMS ENTRY				
<b>N o</b>	<b>Description</b>	<b>T</b>	<b>Size (bytes)</b>	<b>Value</b>
1	Entry type header	C	8	PROGRAM S
1	Login program name	C	26	
2	Login branch name	C	40	
3	Login function name	C	30	
4	Login function arguments	C	255	
5	Logout program name	C	26	
6	Logout branch name	C	40	
7	Logout function name	C	30	
8	Logout function arguments	C	255	

The associations of a profile with a user USERPROFILE and a station with a user STATION must appear after the related user entries and the related profile entries in the USER.DAT file. If not, they won't be taken into account.

There are 2 residual access rights entries which are automatically created at the startup of a new project. They are as follows:

The **DEFPROFILE** entries:

```
PROFILE,DEFPROFILE,262143,1073741823,1073741823,1073741823,2147483647,65535,,,127,1073741823,1,,0,,1073741823,1,1,1073741823
PROGRAMS,DEFPROFILE,"","","","","","","","",""
WEBVUE,"","",0,0,0,0,"","",0
ADMIN,0,21,132
```

The **DEFUSER** entries:

```
USER,DEFUSER,,,0,0,,,0,0,0,,
USERPROFILE,DEFUSER,DEFPROFILE,1
```