Engineer^{IT}
Security Lock

Engineering Manual
User Access

ABB

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1 General Description of DigiLock

DigiLock is a **separate auxiliary program** for the scaleable control system Freelance 2000. It provides access control for **configuration with DigiTool** and for **operation and observation with DigiVis.** The access control system can be implemented for an entire Freelance 2000 system with a single DigiLock licence.

It is possible, even **without DigiLock,** to specify during configuration with DigiTool whether or not the operator at an operator station is allowed, for example, to alter a controller set-point. This specification has influence for every operator on the operator station.

In contrast, **with DigiLock,** it is possible to give operator A permission to operate a controller but not operator B.
A prerequisite is that the set-point have been marked as adjustable in the controller parameter mask. Then with appropriate entries in the tag list, permission to operate the controller is given to operator A and denied to operator B.

In a system with DigiLock installed, users are required to **login** before using DigiVis or DigiTool.

Technical Limitations:
Number of access groups (user profiles)   max. 16
Number of users: max. 1000

1.1 Procedure Overview

On the Engineering Station
1. Installing DigiLock on engineering station (PC with DigiTool)

2. Assign groups to project with DigiTool (Project Tree → *Edit* → *User groups*).

3. Using DigiTool, specify the project rights of each group in the tag list and in the project tree.

On the Operator Stations
1. Installing DigiLock on the operator stations (PCs with DigiVis)

2. Determine the groups and their system rights with DigiLock. (if necessary by copying the file DIGIMAT.UID per diskette from the engineering station to the control station).

3. Add user and assign to the groups.

2 DigiLock Installation

DigiLock can be installed on every PC which is to be used in the Freelance 2000 system. If there is an operator station without DigiLock, the users on this station have all rights.

DigiLock installation is carried out by the setup program, SETUP.EXE, included on the floppy disk. This program puts a file named **DIGILOCK.EXE** in the Freelance 2000 EXE directory.

1.1 Starting DigiLock Setup

The **Setup Program** is started from the Windows Program-Manager. Put the DigiLock floppy disk in drive A.

☞   Program Manager → *File* → *Run* → *Command Line*: **a:\setup**

The following dialog box will be displayed.
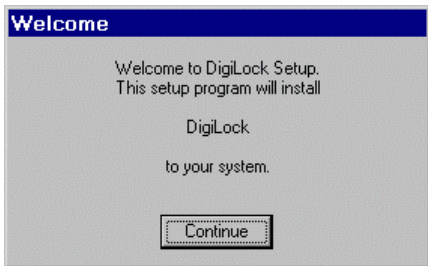
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CONTINUE   The installation will continue with the next dialog box.

☞ It is possible at any time to discontinue the installation with the **EXIT** button or to call up a help file with the **HELP** button. Both buttons are found in the lower right-hand corner of the Setup Desktop.
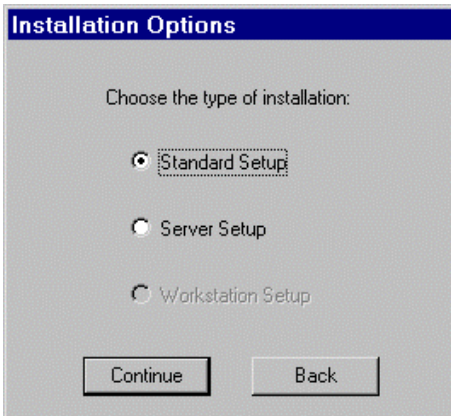
ac001us.bmp

Standard Setup	◉ Installation of DigiLock in the PC
Server Setup	◉ Installation of DigiLock in the Server for later workstation setup (enter destination path)
Workstation Setup	◉ Start setup from Server to the workstation

In the next window the **file path** will be defined; the default is c:\freelance. Or the disk drive is selected on which a Freelance component has already been found.
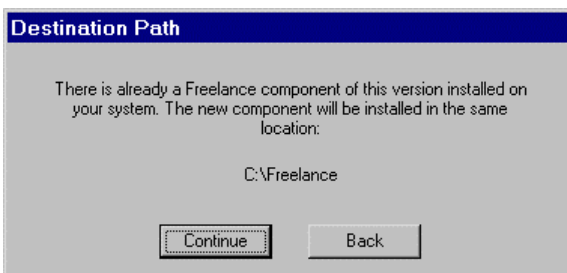
di4227us.bmp

CONTINUE	Opens the next dialog box.
BACK	Return to the previous window.

Completion of the installation will be accompanied by the following display:
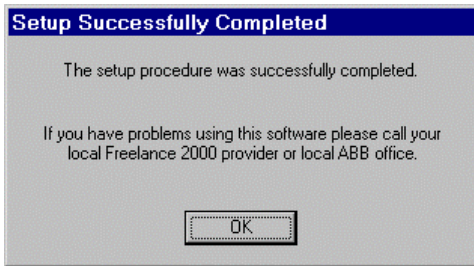
di4003us.bmp

Using the Task Bar, the program can be started with:

Start → Programme → Freelance 2000 → DigiLock

⚠ After the installation of DigiLock the user GUEST is logged in in DigiTool and DigiVis. He has no rights, that means:

- **GUEST is not able to configure with DigiTool,**
- **GUEST is not able to operate and observe with DigiVis.**

For solving this problem you have to configure users, groups and their rights immediately.

2.2 Initial Password for starting DigiLock

⚠ The **Initial Password** required to run DigiLock for the first time after installation is:

admin

When the program is first run, this password should be changed.

3 Call-up of DigiLock

There are three possibilities to call-up DigiLock:

3.1 Call-up from DigiTool

☞ DigiTool opening menu → *Options* → *Run DigiLock*

⚠ **Prerequisite:** The user logged in to DigiTool must be authorised to configure DigiLock.

3.2 Call-up from DigiVis

☞ DigiVis menu → *Options* → *Run DigiLock*

⚠ **Precondition:** The user logged in to DigiVis must be authorised to configure DigiLock.

3.3 Call-up from the Windows NT Task Bar

☞ *Start → Programs → Freelance 2000 → DigiLock*

4 DigiLock Password

4.1 General Note on DigiLock Password

The password must be given each time the DigiLock configuration dialog is started.

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⚠ The initial password, which must be used when starting DigiLock for the first time after installation, is: admin

To prevent the password from being compromised, it is shown as ******* on the screen.

4.2 Changing the DigiLock password

☞ DigiLock menu → *File* → *Password*

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In order to set a new password, the old password must be re-entered. The new password must then be typed in twice identically. Clicking OK stores the new password immediately; it must be used for future starts of the DigiLock configuration dialog.

⚠ **If you forget the password, please contact our technical service to get immediate assistance.**

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5 User interface

5.1 Menu overview DigiLock

File	*Save*	save current file
	Backup	backup of the current file
	Restore	restore file from backup
	Password..	change the password of DigiLock
	Exit	exit DigiLock

Edit	*Add*	add a new entry
	Delete	delete entries
	Modify	modify entries
	Rename	rename users or groups
	Set password..	change user password

View	*Users*	user data
	Group	group data
	Toolbar	switch on / switch off
	Status bar	switch on / switch off

5.2 Description of the Toolbar

All important functions are represented by buttons in the toolbar.
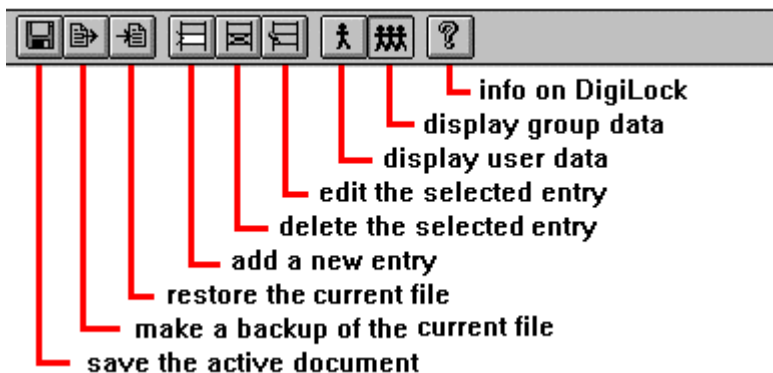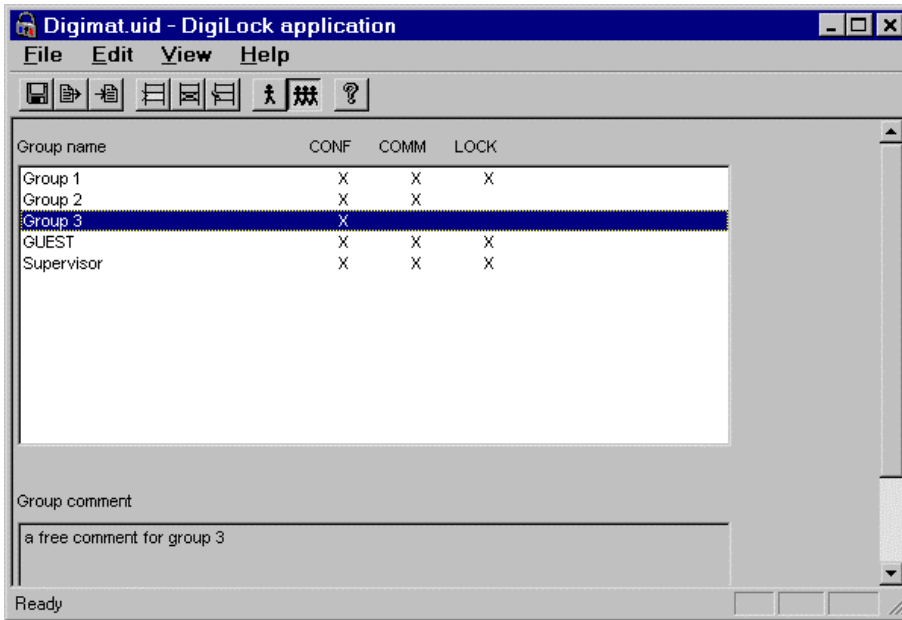

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6 Configuring users and groups with DigiLock

6.1 Group data, system rights

☞ DigiLock-menu → *View* → *Groups*

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Group name	defined by user
CONF	May configure
COMM	May commission, i.e. establish connection to process station and download programs
LOCK	May start DigiLock

Group entries can be edited, deleted or created with the Edit menu or with the appropriate tool from the toolbar.

☞ The group GUEST is always available and can't be edited, renamed or deleted.These settings apply to every project run on the associated engineering station.

6.1.1 Add a new group

☞ → *Edit* → *Add* → Enter a new group
or

☞ → Button "ADD" from toolbar → Enter a new group

6.1.2 Delete a group

☞ → *Edit* → *Delete*
or

☞ Select group → Button "DELETE" from toolbar

6.1.3 Modify group entries

☞ Select group entry → *Edit* → *Modify*
or "edit group data"

☞ Double clicking on group entry
or

☞ Select group entry → Button "MODIFY " from toolbar
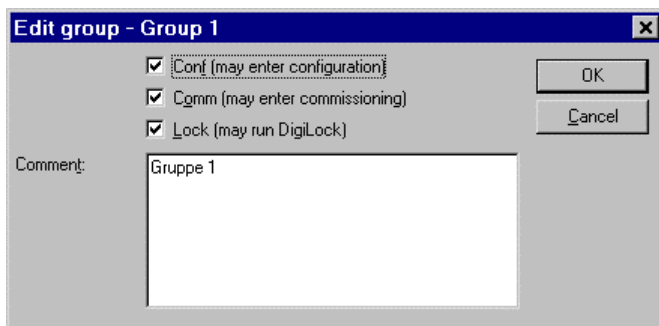
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6.2 User Data

⌕ DigiLock-menu → *View* → *User*
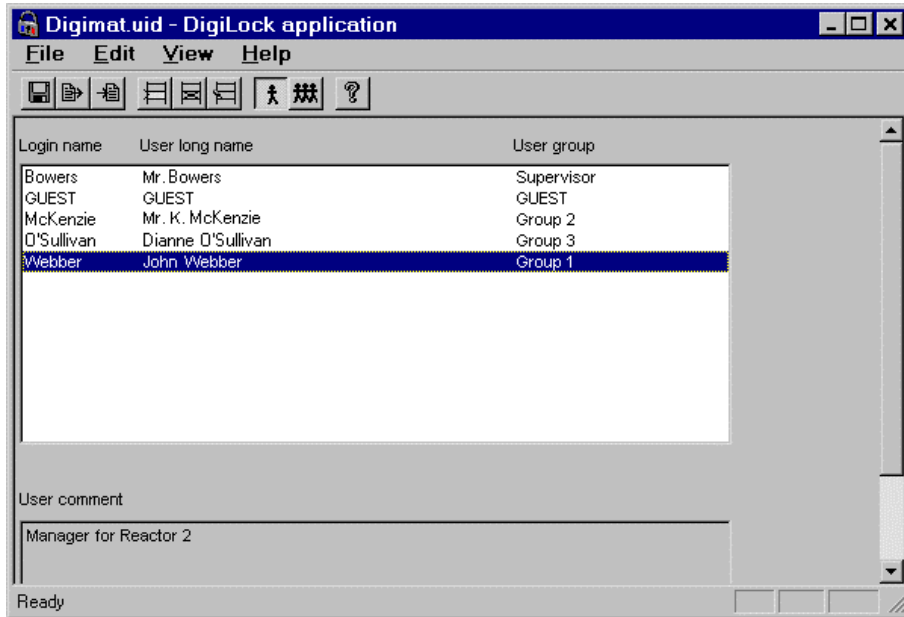
di4010uk.bmp

User entries can be edited, deleted or created with the *Edit* menu or with the appropriate tool from the tool bar.

⚠ Only the user GUEST can't be edited, renamed or deleted.

☞ A user obtains the system rights of the group assigned to him/her.

Login name   Name of the user, to be used for logging in into system. May be 8 characters long.

User long name: Arbitrary text. Preferably the exact identification of user.

User group   Name of the group the user is assigned.

☞ A user can be assigned to several groups through different login names.

6.2.1 Add a new user

→ *Edit*→ *Add* → Enter a new user
   or

→ Button "ADD" from toolbar → Enter a new user

6.2.2 Delete an user

Select user entry→ *Edit* → *Delete*
   or

Select user entry → Button "DELETE" from toolbar

6.2.3 Modify user entries

Select user entry → *Edit* → *Modify* or

Double clicking on user entry or

Select user entry → Button "MODIFY " from toolbar

Edit user - Webber	☒
Long name:	John Webber
Group:	Group 1 ▾ Add group
Comment:	Manager for Reactor 2
	OK Cancel

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6.2.4 Change user password

⚠ A **user's password** is initially set to the corresponding login name. The password can be changed by the user, either in DigiVis or in DigiTool.

If a user changes his password, the new password is not changed for all PCs in the Freelance system. The user has to change his password on every PC in the Freelance 2000 system, if he wants to have the same password everywhere as the configuration of DigiLock is stored locally. See also **page 21**, **DigiLock and several PCs**.

If necessary the supervisor can input a new password for each user.

🖰 Menu DigiLock → *Edit* → *Set password*

7 DigiLock on the Operator Station

Group and user data must also be configured on every control station. This can be done in the same manner as described on **page 12**, **Configuring users and groups with DigiLock**.

☞ To spare unnecessary work, the file Digimat.UID from the engineering PC can be copied to operator stations after configuring the groups and users.

On the operator station (with DigiVis), the DigiLock operator sees the following:

- Each user must log in before being allowed to perform any operations.
- The user name always appears in the status line.
- Entries or operator actions recorded in the signal sequence log can include the login name.

Standard user names

- NOLOCK No DigiLock licence
- GUEST   No one logged on, e.g. just after DigiVis is started
- SYSTEM System-initiated operation events (may appear in the signal sequence log)

When a user without proper authorisation attempts to operate a display, the following message box will pop up:

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In addition, the lack of authorisation will be signalled in the status line by highlighting the user name and focus icon in red.

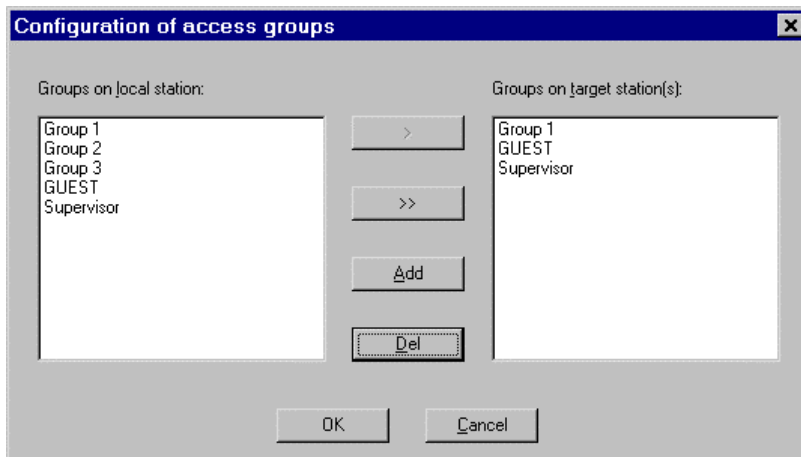# 8 Access rights configuration for the project

8.1 Specification of target PC user groups in the project

Different user groups can be defined on the engineering station and the operator stations. For this reason, the user groups of the target PC must be specified in the project.

The project tree has a submenu for configuration of access groups.

👌 *Edit → Access groups*

Configuration of access groups

Groups on local station:
```
Group 1
Group 2
Group 3
GUEST
Supervisor
```

>

>>

Add

Del

Groups on target station(s):
```
Group 1
GUEST
Supervisor
```

OK   Cancel

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When a new group is added, it is, by default, given "visualise" but no "operate" access rights to all currently existing objects (see further below).

>   The selected local engineering station groups are added to this project

>>   All groups on the local engineering station are added to this project.

ADD   Add a new access group to this project.

DEL   Delete an user group from the project.

8.2 Configuring access rights to displays and logs with DigiTool.

Which **faceplates** can be accessed by which user groups is specified in the DigiTool **tag list.** See also DigiTool 1 manual**.**

☞   Project tree → *System* → *Tag list*
      → select one or more tags by dragging the mouse over them (with the mouse button depressed)
      → *Edit* → *Access rights*

Which **standardised displays, logs and graphic displays** can be accessed by which access groups is specified in the DigiTool **project tree**

☞   Project tree → select one or more displays in the project tree by dragging to mouse over them (with the mouse button depressed)
      → *Edit* → *Access rights*

8.3 Inheritance hierarchy of access rights

On filing an new object, this object will obtain the access rights of its next-higher project tree node (parent node) as a default entry.

The following **inheritance hierarchy** has been established in order to simplify the configuration

*   An existing object has to get the modified access rights applying to its next-higher project tree node (parent node).
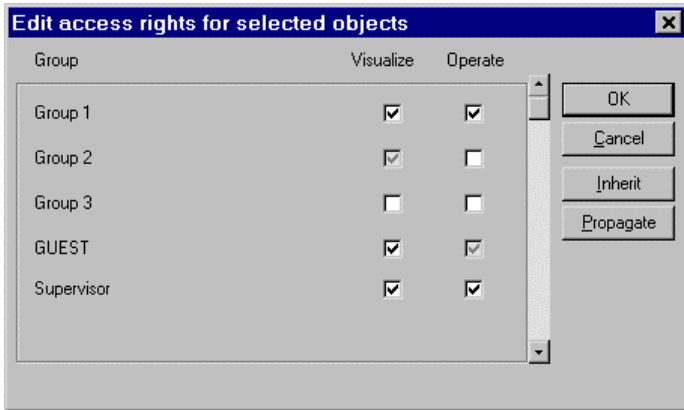
    ☞   access rights dialog → INHERIT

*   The rights currently applying to a project tree node can be forcibly assigned to all of the objects under it (it's children).

    ☞   access rights dialog → PROPAGATE

When an object is moved or copied, its rights (or those of the copy), remain unchanged.

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| ☑ | Access right applies to **all** selected objects (displays or tags) |

| ▓ | Access right applies to only some of the selected objects. |

| ☐ | Access right does not apply to any of the selected objects (displays or tags). |

| INHERIT | Set the rights over each of the selected objects to those of the project tree node above it. |

| PROPAGATE | Force the currently configured access rights applying to the selected project tree node to apply to all of the objects below it (child objects). |

9 DigiLock and several PCs

If a user changes his password on a PC, the new password is not changed for all PCs in the Freelance system. The configuration of DigiLock (user names, passwords and the assigned user groups) is stored in a file called DIGIMAT.UID in the Windows directory.
The user has to change his password on every PC in the Freelance 2000 system, if he wants to have the same password everywhere.

Also it is possible by copying the file DIGIMAT.UID to the other PCs with a floppy disk. This is not possible if the operator station is active.

☞   The configuration of DigiLock is local.

☞   This makes it possible for one user to be assigned to different groups on several control stations and therefore to obtain different rights, depending on which control station is logged in.

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Gross Automation, 1725 South Johnson Road, New Berlin, WI 53146, www.ssacsales.com, 800-349-5827

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