MANUAL / BRUKSANVISNING / GUIDE D'INSTRUCTIONS / BEDIENUNGSANLEITUNG



ORILINK[®] Monitoring System

REMOTE ACCESS

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1. Introduction

The OriLink® monitoring system supports networked Client-Server functionality. This functionality is based on the in Windows native link between processes called COM/DCOM and standard ODBC database connection.

Due to the use of these in Windows native mechanisms most of it is available by default in any Windows version and by any available network type.

2. Supported features

In OriLink® there are three areas that supports network Client-Server.

2.1. The Engine/ PNP Array

Since OriLink uses COM for its internal linking between processes that can also be supported over a network by register the Engine COM server for remote distributed COM (DCOM) access. And then set the Windows firewall to accept incoming calls to the Engine DCOM server.

Then you can see hardware layouts, open reels from layouts, and configure hardware from any clients in the network.

For configuring the client must have an OriLink® pro license

For opening of reels the client needs a license for PcKeypad.

2.2. The Script service

Since OriLink® uses COM for its internal linking between processes that can also be used to support script calls over a network by register the Script Service COM server for remote distributed COM (DCOM) access. And then set the Windows firewall to accept incoming calls to the Engine DCOM server.

With this you can create automated dispensing ordered by for example a main frame production system or similar.

2.3. WinDb Manager

All internal interaction with the OriLink® database is done by ODBC. The ODBC (Open Data Base Connectivity) API is installed by default in every windows version and is based on an ODBC-key, an ODBC driver for the database in question and some parameter settings.

The default OriLink® database is an MsAccess database called "OriLinkDB_O2K.mdb" and is by default placed in the C:\Orilink folder.

Because of the ODBC concept the database can easily be moved to some other place in the network by just moving the database and re-point the ODBC key.

This also means that it is only to install WinDb Manager on other (client) PC's in the network and point their ODBC keys to the database and you can manage the OriLink® database from client PC's.

3. Installation

To install software you must be logged in with administrative rights

3.1. OriLink® Server

No specific installation other than a normal OriLink installation is needed.

3.2. OriLink® Clients

Here you can choose to install only the things needed but a complete OriLink® installation takes a very small amount of disk space so the easiest is to make a full install also on clients.

Note! -Make sure that you have the same versions of files on the Client as on the Server.

4. How to register the COM servers in Windows.

To register you must be logged in with administrative rights

4.1. Engine COM server

To register the Engine COM server you run/install the file "RegisterEngineCOMServer.reg"

Copy the file from your install media to the C:\Orilink of the OriLink® server.

Right-click and select Merge.

Depending on OS and the safety settings of the OS you can get a UAC warning.

Click Yes.

Eile Edit View Iools Help
Organize 🔻 🃸 Merge 👻 Print Burn New folder 🛛 🔠 👻 🗍 🔞
🚢 BOOTW7 (C:) 🔺 Name ~
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LightTest
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1 item selected
😯 User Account Control 🔀
Do you want to allow the following program to make changes to this computer?
v
Program name: Registry Editor
Verified publisher: Microsoft Windows
▼ show details
▼ Show details
Change when these notifications appear
Registry Editor
Adding information can unintentionally change or delete values and cause components to stop working correctly. If you do not trust the source of this information in C1/07InINRegisterEngineCOMerver: reg. do not add it to the registry.
Are you sure you want to continue?
[
Do it also
Registry Editor
The keys and values contained in C:\Orilnk\RegisterEngineCOMServer.reg have been successfully added to the registry.

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📙 C:\Orilink

G 🕞 🗸 🔸 BOOTW7... 🕶 Orilink 🕶

Depending of OS you get a verification request Click Yes.

If everything went well you should get a message like this.

4.2. Script Service COM server

To register the Script service COM server you run/install the file "RegisterScriptCOMServer.reg"

Copy the file from your install media to the C:\Orilink of the OriLink® server.

Right-click and select Merge.

Depending on OS and the safety settings of the OS you can get a UAC warning.

Click Yes.

Depending of OS you get a verification request Click Yes.

If everything went well you should get a message like this.



🌍 Use	er Account Control
•	Do you want to allow the following program to make changes to this computer?
	Program name: Registry Editor Verified publisher: Microsoft Windows
_	Show details
	Change when these notifications appear
Registry	y Editor
À	Adding information can unintentionally change or delete values and cause components to stop working correctly. If you do not trust the source of this information in C-(Orink]RegisterScriptCOMServer.reg, do not add it to the registry.
	Are you sure you want to continue?
	<u>Va</u> No
🚺 Regi	stry Editor
1	The keys and values contained in C:\Orlink/RegisterScriptCOMServer.reg have been successfully added to the registry.
	<u>_</u>

5. How to enable remote calls to COM servers.

By default when a com server is registered the remote access is disabled. This has to be enabled to accept remote calls.

Open control panel -> Administrative Tools -> Component services or use start menu item Run type in dcomcnfg and click <Ok>

5.1. General COM security

Expand Component services and right-click "My computer". Select Properties.

In the form that appears select tab COM Security.



Click <Add> and type in Anonymous.

elect Users or Groups		?>
Select this object type:		
Users, Groups, or Built-in security principals		Object Types
From this location:		
KONTORET		Locations
Enter the object names to select (<u>examples</u>):		
		Check Names
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Enter the object names to select <u>(examples)</u> : Anonymous	ОК	heck_Names

Component Services			- O ×
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Console Root	Name	Actions	
Component Services Computers	COM+ Applications	My Computer	
Image: Services (Local)	Running Processes	More Actions	

In Access Permissions click <Edit Limits>

Access Permission		<u>? ×</u>
Security Limits		
Group or user names:		
& Everyone & Performance Log Users (Konto & Distributed COM Users (Konto		
l Permissions	Add Allow	<u>R</u> emove Deny
Local Access Remote Access		
Learn about access control and pe	ermissions OK	Cancel

Click <Check Names> and then click <Ok>

Select Users or Groups		?×
Select this object type:		
Users, Groups, or Built-in security principals		Object Types
From this location:		
KONTORET		Locations
Enter the object names to select (examples):		
ANDNYMOUS LOGON		Check Names
Advanced	<u>ľ</u> ť	Cancel

Check Remote Access and click <OK>. Do the same for Launch and Activation Permissions

cess Permission		?>
Security Limits		
Group or user names:		
ANONYMOUS LOGON		
Everyone Reformance Log Users (Kor Bistributed COM Users (Kon		
Permissions for ANONYMOUS	A <u>d</u> d	<u>R</u> emove
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Learn about access control and p	permissions	
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aunch and Activation Permissi	n	?	<u>'</u> >
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ANONYMOUS LOGON			
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Permissions for ANONYMOUS		_	-
LOGON	Allow	Deny	
Local Launch			
Remote Launch	$\mathbf{\nabla}$		
Local Activation			
Remote Activation	\checkmark		
			1
Learn about access control and p	ermissions		
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5.2. Engine COM server

To make the engine accept incoming calls its COM server must be set for it. This is only needed if you want to use remote graphical layouts on other PC's in the network.



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 Configuration Permissions

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Select the Security tab, check the Customize radio button for "Launch and Activation Permissions" and click <Edit>

Users, Groups, or	Built-in security principals	 Object Types
From this location:		
alentec.se		Locations
Enter the object na	mes to select (examples):	
Enter the object na anonymous	mes to select (<u>examples</u>):	 Check-Names

Select DCOM Config. Expand Component services and right-click Engine COM server under DCOM Config. Select Properties from the menu that is shown



Click <Add>.

Select this object type:		
Users, Groups, or Built-in security pri	ncipals	Object Types
From this location:		
alentec.se		Locations
Enter the object names to select (exa	imples):	
ANONYMOUS LOGON		Gheck Names

Click <OK>

Then type anonymous in the white area and then click <Check Names>



Check all permission check boxes for "ANONYMOUS LOGON" and then click <OK>, then <OK> again.

5.3. Script Service COM server

To make the script service accept incoming calls its COM server must be set for it. This is only needed if you want to use remote script calls (OcpRun) from other PC's in the network.

Select DCOM config. Expand Component services and right-click "Script COM server" under DCOM Config. Select Properties from the menu that is shown.

Then follow the process described for the Engine COM server above.



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6. Windows firewall

Windows has a firewall of its own. In windows 7 and later it is more complex than in XP but generally the principle and purpose is the same. To be able to pass the firewall a remote call must pass the firewall to reach the target application. For this OriLink® needs two inbound rules one for the Engine and one for a DCOM port. The standard port for DCOM is 135.

From Control panel open the "Windows Firewall" manager and click the "Advanced settings" on the left side.

Then select "Inbound Rules" in the left pane and click "New Rule" in the right pane.

Start with the Engine rule so make sure that the Program radio button is checked and then click <Next>.

Type in the path to the OriLink® Engine. Install default is C:\Orilink\Engine.exe. Click <Next>

💣 New Inbound Rule Wizard		×
Rule Type		
Select the type of firewall rule to	iede.	
Steps:		
Rule Type Progen Action Profile Name	What type of rule would you like to create? Purgram Rule that controls connections for a program. Put Rule that controls connections for a ICP or UDP pot. Put Rule that controls connections for a ICP or UDP pot. Putefinate SinceCaches: Contern Rational Rule HITP Rule that controls connections for a Windows experience. Cutom nule.	
	Learn more about rule hores	

File Action View Help							
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Windows Firewall with Advanced :	Inbound Rules					Actions	_
Cutbound Rules	Name	Group	Profile	Enabled	1.4	Inbound Rules	
Connection Security Rules	🖉 AI Suite II		Private	Yes	4	New Rule	
Monitoring	🖉 AI Suite II		Private	Yes	4	- 42	
E - S Hontoning	Akamai NetSession Interface		Private	Yes	E	Tilter by Profile	•
	Akamai NetSession Interface		Private	Yes	E	Tilter by State	•
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	Akamai NetSession Interface		Public	Yes	E	Filter by Group	•
	Autodesk Content Service		Domai	Yes	+	View	•
	Ø Battle.net		Private	Yes	1	G Refresh	
	Ø Battle.net		Private	Yes	4	Q Refresh	
	Battle.net Update Agent		Private	Yes	+	🗟 Export List	
	🖉 Battle.net Update Agent		Private	Yes	1	Help	
	🖉 Battle.net Update Agent		Private	Yes	4	Not Not	
	Battle.net Update Agent		Private	Yes	4		
	🖉 Battle.net Update Agent		Private	Yes	+		
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	🖉 Battle.net Update Agent		Private	Yes	1-1		
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Program	
Specify the full program pat	h and executable name of the program that this rule matches.
Steps:	
Rule Type	Does this rule apply to all programs or a specific program?
Program	
Action	C All programs
Profile	Rule applies to all connections on the computer that match other rule properties.
Name	• Ihis program path:
	C:\Dnlink\Engine.exe Browse
	SPiogram Files Shownen horowse eve
	Learn more about spectrying and area

Make sure that the "Allow the connection" radio button is checked then click <Next>.

Give the rule an informative name and description then click





And the result should be a new inbound rule with the name you gave it in the centre pane.

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Cutbound Rules	Name -	Group	Profile	Enabled	1.	Inbound Rules	
Connection Security Rules	OriLink® Engine		Domai	Yes	1	New Rule	1
Monitoring	🕑 AI Suite II		Private	Yes	1	-	
122 1 10 10 10 10	🕑 Al Suite II		Private	Yes	+	Filter by Pr	۲
	Akamai NetSession Interface		Private	Yes	E	Tilter by State	۲
	Akamai NetSession Interface		Private	Yes	E	-	
	Akamai NetSession Interface		Public	Yes	E	Filter by Gr	۲
	Akamai NetSession Interface		Public	Yes	E	View	۲
	🕑 Autodesk Content Service		Domai	Yes	1	Q Refresh	
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	🕑 Battle.net		Private	Yes	+	📄 Export List	
	🕑 Battle.net Update Agent		Private	Yes	1	Help	
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	🕑 Battle.net Update Agent		Private	Yes	+	Disable Rule	
	🕑 Battle.net Update Agent		Private	Yes	1	Disable Rule	
	🕑 Battle.net Update Agent		Private	Yes	4	🔏 Cut	
	Battle.net Update Agent		Private	Yes	6 1	Copy	

Now create the DCOM port rule in the same way.

Click "New rule" in the left pane. Check the "Port" radio button.

Rule Type Select the type of firewall rule to on Steps: Rule Type Protocol and Posts Action Profile Name	eve. What type of rule would you like to anale? Pergram Rule that connections for a program. C Part	
Steps: Rule Type Protocol and Ports Action Profile	What type of tule would you like to create? C Brogram Rule that controls connections for a program.	
Rule Type Protocol and Ports Action Profile	C Program Rule that controls connections for a program.	
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💣 New Inbound Rule Wiza	rd	×
Name Specify the name and description	on of this rule	
Steps:		
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	' ≺Beck [Eingh] Carved	

💣 New Inbound Rule Wizar		
Protocol and Ports		
Specify the protocols and ports	to which this rule applies.	
Steps:		
Rule Type	Does this rule apply to TCP or UDP?	
Protocol and Ports	• ICb	
Action	○ <u>U</u> DP	
Profile		
Name	Does this rule apply to all local ports or specific local ports?	
	Specific local ports:	
	Example: 80, 443, 5000-5010	
	Learn more about protocol and ports	
	< Back Next> Cancel	

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🔗 Windows Firewall with Advanced	5 Inbound Rules					Actions
Inbound Rules Outbound Rules	Name +	Group	Profile	Enabled	Action A	Inbound Rules 🔺
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Konkoring	🔮 OriLink® Engine		Domai	Yes	Allow	-
a sy honoring	🕑 AI Suite II		Private	Yes	Allow	Tilter by Pr 🕨
	🕑 AI Suite II		Private	Yes	Allow	Tilter by State
	Akamai NetSession Interface		Private	Yes	Block	
	Akamai NetSession Interface		Private	Yes	Block	Filter by Gr 🕨
	SAkamai NetSession Interface		Public	Yes	Block	View 🕨
	Akamai NetSession Interface		Public	Yes	Block	Q Refresh
	Autodesk Content Service		Domai	Yes	Allow	C Kerresh
	🕑 Battle.net		Private	Yes	Allow	📑 Export List
	🕑 Battle.net		Private	Yes	Allow	Relp
	🕑 Battle.net Update Agent		Private	Yes	Allow	1 Help
	🕑 Battle.net Update Agent		Private	Yes	Allow	OriLink® Port 🔺
	🕑 Battle.net Update Agent		Private	Yes	Allow	Disable Rule
	🕑 Battle.net Update Agent		Private	Yes	Allow	Disable Rule
	Battle.net Update Agent		Private	Yes	Allow 💌	🔏 Cut
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Gene	sal	Programs and Servic	es	Computers
Protoco	and Ports	Scope	Advanced	User
Protoco	ols and ports			
S.	Protocol type:	Any		•
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	Remote port	All Ports		Ŧ
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	Internet Control (ICMP) settings:	Message Protocol	Gustomi	ze
	()			
eam mo	re about protocol	and ports		

7. Enable Engine broadcasting

To make the engine visible on the net, "broadcasting" must be enabled because it is disabled as install default. To do that rightclick the engine window or the small blue "O" in the systray in the lower right corner of the desktop.



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Select menu item Properties.

Uncheck "Disable Broadcast Server" and then click <Ok>.



8. ODBC (Database)

To be able to set up and use a ODBC key the logged in user must have read rights for viewing and reports and write rights for managing to the database.

8.1. ODBC Management tool

OriLink® is a WinAPI 32-bit application so to setup or change the ODBC key you must use the 32 bit ODBC Manager.

8.1.1. x32 system

For an x32 system you find the ODBC manager in Control Panel -> Administrative Tools -> Data Sources (ODBC)

8.1.2. x64 system

For an x64 system you find the 32 bit ODBC Manager as C:\Windows\SysWOW64\odbcad32.exe.

8.1.3. The ODBC Manager

It has two possible tabs.

8.1.3.1. System DSN

Default is <System DSN> tab. Setting up the ODBC key here makes it available for all users.

8.1.3.2. User DSN

Setting it up in <User DSN> tab makes it available only to the user that is logged in when it is set. This can be used on client PC's from which you want to be able to look at several system over the network.

🗃 ODBC Data Sou	rce Administrator		×			
User DSN System	DSN File DSN Drivers	Tracing Connection	n Pooling About			
<u>S</u> ystem Data Sou	ces:					
Name	Driver		Add			
OrilinkWinDB	Microsoft Access Driv	ver (*.mdb)	<u>R</u> emove			
			<u>C</u> onfigure			
×						
An ODBC System data source stores information about how to connect to the indicated data provider. A System data source is visible to all users on this machine, including NT services.						
	OK	Cancel Apply	Help			

9. Client

When there is one or more OriLink® "servers" in a network they can be accessed from "client" PC's.

9.1. Neighborhood/Layouts

To create a client graphic layout you use the network name or IP address of the OriLink® "server" you want to access.

First start HwMon2 in edit mode. This can be done from the "Windows start menu\OriLink\Create New Layout" and select menu "View" and item "Select tool". This will bring up the selector tool.

All OriLink® servers installed on Windows XP PC's visible to the net will automatically be shown in the selector list but due to limitations in the search tool in later versions of Windows they are not automatically shown.

To find the OriLink® servers on Windows Vista or later click the <Add Server> button at the bottom of the selector tool. Type in the IP address or network name of the OriLink® "server" PC you want to work with and click <OK>

Here there are two OriLink® "servers" present in the network, develop and "kontoret".

To make layouts for client PC's objects should be selected from the "net work name"/"IP address" not from the "Local Server"

If the separator line between the list view and the graphics are pulled to the right the Server column is shown. In this column you can see which server a graphic object is linked to.

For a layout graphic object to work on client PC's it cannot be linked to "Local Server" because that will only work on the OriLink® "server" that has the corresponding hardware connected.

9.2. Script

9.3. WinDb Manager

Create a user for each workshop that should be managed.

Create the ODBC key in <User DSN> and point it to the database for the workshop linked to the user.

This will make WinDb Manager connect to the OriLink® database for the workshop associated with the logged in user on the client PC.





ОK

Cancel

Example: (Name) Machine1 (DNS) olserv.server.com (IP) 192.168.92.67