@ptitude Observer

Part No. 32170700 Revision G

Installation Manual

Copyright © 2012 by SKF Reliability Systems All rights reserved. Aurorum 30, 977 75 Lulea Sweden Telephone: +46 (0) 31 337 10 00, Fax: +46 (0) 920 134 40



SKF Reliability Systems

SKF Condition Monitoring Center Aurorum 30 977 75 Luleå Sweden Telephone: +46 (0) 31 337 10 00 FAX: +46 (0) 920 134 40

For technical support, contact:

TSG-EMEA@skf.com for customers in Europe, Middle East and Africa. Telephone: +46 (0) 31 337 65 00

or

TSG-Americas@skf.com for customers in North America, South America and Asia. Telephone: +1 800 523 7514 Telephone in Latin America: +55 11 4448 8620

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Requirements

1

@ptitude Observer can be used in a network of unlimited number of users. However, there are minimum requirements for computers running SKF @ptitude Monitoring Suite.

SKF @ptitude Monitoring Suite contains the following components;

- @ptitude Observer
- @ptitude Observer database administrator
- @ptitude Observer monitor
- @ptitude Observer on-line device configurator
- @ptitude Observer data pump

To be able to install SKF @ptitude Monitoring Suite, check the hardware and operating system requirements listed below.

Note that the requirements must be fulfilled. Otherwise, we advise not to install the software.

Hardware Requirements

- One available Ethernet network connection for on-line systems
- One serial port connection for portable data collector systems such as *Microlog*.
- A Pentium IV, 1.0 GHz or higher CPU
- A recommended minimum of 1.0 GB RAM
- Mouse, track-ball, digital board or similar
- Graphics chip capable of displaying 16 bit colors with a minimum resolution of 1 024 x 768. For optimal experience when using @ptitude Observer, it is recommended to have a resolution of 1 920 x 1 200 or more.
- A DVD ROM drive for installation
- Free space on a hard disk, 500 MB (client) and 1.2 GB (database server) excluding machine and measurement data. The space necessary for the database depends on the amount of stored data.
- A backup system is recommended

Operating System Requirements

SKF @ptitude Observer supports the following operating systems;

- Microsoft Windows XP Professional with Service Pack 3
- Microsoft Windows 2003 Server with Service Pack 1
- Microsoft Windows 2008 Server
- Microsoft Windows Vista
- Microsoft Windows 7

2

General Guideline

In order to have a properly functioning SKF @ptitude Observer, follow the listed general guideline on installation and setup.

- 1. Insert the SKF @ptitude Observer DVD.
- 2. Install **a database engine** which will be used by @ptitude Observer.

The @ptitude Observer system uses Microsoft SQL Server 2008 as the recommended database engine, but it is also compatible with SQL Server 2000, 2005 and 2012, and Oracle as well.

Included in the SKF @ptitude Observer DVD are a royalty free version of SQL Server called Microsoft SQL Server Express and a royalty free version of Oracle server called Oracle 10g Express Edition. Both royalty free versions can be used for databases with sizes up to 10 GB.

• To install SQL Server Express version, follow the instructions in <u>SQL Server</u> <u>Express Installation</u>.

If you were to install a different version of SQL Server other than Express, check the SQL Server documentation for installation instructions.

- To install Oracle Server, follow the instructions in <u>Oracle XE Installation</u>.
- 3. Install **SKF @ptitude Monitoring Suite** components by following the instructions in <u>@ptitude Observer Suite Installation</u>.

SKF @ptitude Monitoring Suite contains the following components:

- **@ptitude Observer** is for data management and analysis of measurement data for condition monitoring. **@ptitude Observer** runs on all clients.
- **@ptitude Observer database administrator** is the tool for administrating the @ptitude Observer databases.
- **@ptitude Observer monitor** is the server service which works as the connector between IMx system, database, and @ptitude Observer clients. Detailed information can be found in <u>@ptitude Observer Monitor Service</u>.
- **@ptitude Observer Online device configurator** is a tool which allows to set the network configuration and identification for the on-line device. It also allows to view what the on-line device is measuring right now, clear measurement data, show current measurement configuration and synchronize the time.
- **@ptitude Observer data pump** allows to export and import @ptitude Analyst XML files.
- 4. Install @ptitude Observer database(s).

To be able to run @ptitude Observer, at least one database must be installed.

The database must be compatible to the latest installed @ptitude Observer version.

The installation of a new database or upgrading of an existing database is done through @ptitude Observer Database administrator.

If @ptitude Observer Database administrator component has not been installed, repeat step 3 and make sure that you select @ptitude Observer Database administrator at Custom Setup screen.

- Start @ptitude Observer Database administrator by clicking on the shortcut on the start menu located under Programs \ SKF @ptitude Monitoring Suite \ @ptitude Observer X.Y Database administrator.
- The instruction for installing Observer database is found in <u>Install Observer</u> <u>Database</u> section. In addition, the further detailed information are found in **Observer Database Administrator User Manual**.

The database settings are stored in a connection file for each database.

- 5. Set up @ptitude Observer with language and register with the license key.
 - Start @ptitude Observer by clicking on the shortcut on the start menu located under **Programs \ SKF @ptitude Monitoring Suite \ @ptitude Observer X.Y.**
 - Select a language to use.
 - Register with the license key.

It is possible to change the language and license key after the initial settings have been made. For more information, refer to <u>Edit Observer Settings</u>.

6. Create a connection between @ptitude Observer and database(s).

The connection between @ptitude Observer and database(s) is described in detail in Getting Started section of **@ptitude Observer User Manual**.

7. Set up the configuration of the **monitor settings**.

To be able to use @ptitude Observer as an on-line system, the communication and database storage are performed by the @ptitude Observer monitor service. The configuration of the monitor settings are described in <u>@ptitude Observer Monitor</u> <u>Settings</u>.

If @ptitude Observer monitor component has not been installed, repeat step 3 and make sure that you select @ptitude Observer monitor at Custom Setup screen.

8. Set up @ptitude Observer monitor computer.

If you use a PC as the @ptitude Observer monitor computer, then you need to configure <u>MasCon/IMx Network Settings</u> and activate <u>Time synchronization</u>.

9. Upgrade @ptitude Observer database(s).

If you have any databases which you have used with a previous version of @ptitude Observer, you need to upgrade these databases to the latest version in order to use them with the new version of @ptitude Observer. Please note that it is possible to run several different versions of @ptitude Observer software on the same computer. For more information, refer to <u>Software Upgrade</u>.

3

SQL Server Express Installation

1. Insert the SKF @ptitude Observer DVD.

If the installation program does not start, run the file Setup1.exe from the DVD.



Figure 3-1: Database server installation start

2. Press Microsoft SQL Server.



Figure 3-2: SQL server express 2008 installation

3. First, check the prerequisites before installing SQL Server Express 2008.

The prerequisites are the system requirements in order to be able to install SQL Server Express 2008. You can find out which version of Windows Installer, .NET Framework and Windows PowerShell are installed in your computer by checking "Control Panel/Add or Remove Hardware".

- Windows Installer 4.5 is required in order to install SQL Server Express 2008. If you don't have the Windows Installer 4.5 installed, press the link **Windows Installer 4.5** and follow the installation guides.
- A minimum of .NET Framework 3.5 SP1 is required in order to install SQL Server Express 2008. If you don't have .NET Framework 3.5 SP1 installed, press the link **.NET Framework 4** and follow the installation guides.
- Windows PowerShell 1.0 is required for Management studio express which is a free tool from Microsoft to administer SQL Server databases. However, this tool is not required to run @ptitude Observer.

If the prerequisites are met, press the link SQL Server Express 2008 R2.

1 SQL Server 2008 Setup		
Setup Support Rules Setup Support Rules identify pro before Setup can continue.	blees that might occur when you install SQL Server Setup support files. Palures must be corrected	
Setup Support Rules	Operation completed. Passed 6. Failed 0. Warning 0. Skipped 0.	Buru
		cel Holp

Figure 3-3: SQL server installation setup

4. On the Setup Support Rules screen press **OK** to continue the installation.

SQL Server 2008 Setup		
Setup Support Files Clek Instal to instal Setup Supp	ert files. To install or update SQL Serv	ver 2008, these files are required.
Setup Support Files	the following components are	required for SQL Server Setup
	Feature Name	Status
	Setup Support Files	
	Gathering user settings.	
		< gack gatal Carcel

Figure 3-4: SQL server installation

5. Next, click **Install** to continue.

SQL Server 2008 Setup Setup Support Rules		
Setup Support Rules identify pro before Setup can continue.	blems that might occur when you install SQL Server Setup support files. Failures i	must be corrected
Setup Support Rules	Operation completed. Passed: 9. Failed 0. Warning 1. Skipped 1.	
Product Key		
License Terms	Hide details <<	Re-run
Feature Selection Instance Configuration	View detailed report	
Disk Space Requirements		
Server Configuration	Rule	Status
Database Engine Configuration	Fusion Active Template Library (ATL)	Passed
Error and Usage Reporting	Unsupported SQL Server products	Passed
Installation Rules	Performance counter registry hive consistency	Passed
Ready to Install	Previous releases of SQL Server 2008 Business Intelligence Develop	. Passed
Installation Progress Complete	Previous CTP installation	Passed
complete	Consistency validation for SQL Server registry keys	Passed
	Computer domain controller	Passed
	Microsoft .NET Application Security	Not applicable
	Edition WOW64 platform	Passed
	Windows PowerShell	Passed
	🔥 Windows Firewall	Warning
	< Back Ne	ext > Cancel Help

Figure 3-5: SQL support files installation

6. After the support files have been installed, the SQL Server installation checks the computer to see if all the necessary requirements were fulfilled. Warning messages and "Not applicable" messages are accepted and the installation can be continued. To continue, click **Next**.

🚼 SQL Server 2008 Setup	
Product Key Specify the edition of SQL Server 201	08 to install.
Setup Support Rules Product Key License Terms Feature Selection Instance Configuration Disk Space Requirements Server Configuration Error and Usage Reporting Installation Rules Ready to Install Installation Progress Complete	Specify a free edition of SQL Server or provide a SQL Server product key to validate this instance of SQL Server 2008. Enter the 25-character key from the Microsoft certificate of authenticity or product packaging. If you specify Enterprise Evaluation, the instance will be activated with a 180-day expiration. To upgrade from one edition to another edition, run the Edition Upgrade Wizard. • Specify a free edition: Express Enter the product key:
	< <u>Back</u> Next > Cancel Help

Figure 3-6: SQL product key installation

7. On Product Key screen, input controls should be disabled. To continue click Next.



Figure 3-7: SQL installation license terms

8. On License Terms screen, the licence agreement is displayed. Read it through carefully. If you agree to the licence agreement, check "I accept the licence terms" and click **Next**.

🏶 SQL Server 2008 Setup		
Feature Selection Select the Express features to install clustered.	For clustered installations, only Database Engine Services and Analysis	Services can be
Setup Support Rules Product Key License Terms Feature Selection Instance Configuration Disk Space Requirements Server Configuration Database Engine Configuration Error and Usage Reporting Installation Rules Ready to Install Installation Progress Complete	Eeatures: Instance Features Sol. Server Replication Shared Features Sol. Clent Connectivity SDK Redistributable Features	Description: Server features are instance-aware and have their own registry hives. They support multiple instances on a computer.
	Select All Unselect All Shared feature directory: c:\Program Files\Microsoft SQL Server	1
	< <u>B</u> ack	Next > Cancel Help

Figure 3-8: SQL installation feature selection

9. On Feature Selection screen, make sure the option "Database Engine Services" is selected and click **Next**.

🚼 SQL Server 2008 Setup					
Instance Configuration Specify the name and instance ID for	the SQL Server instance.				
Setup Support Rules Product Key License Terms	 Default instance Named instance: 	MSSQLSERVER			
Feature Selection Instance Configuration Disk Space Requirements Server Configuration Database Engine Configuration Error and Usage Reporting	Instance ID: Instance root directory:		crosoft SQL Server crosoft SQL Server\\	1550L10.M550LSER	
Installation Rules Ready to Install Installation Progress Complete	Installed instances:	Features	Edition	Version	Instance ID
			< Back	Next >	Cancel Help

Figure 3-9: SQL installation instance configuration

10. On Instance Configuration screen, select Named instance and make sure the name is "MSSQLSERVER". Click **Next** to proceed.

🏶 SQL Server 2008 Setup		
Disk Space Requirements		
Review the disk space summary for the	e SQL Server features you selected.	
Setup Support Rules Product Key License Terms Feature Selection Instance Configuration Disk Space Requirements Server Configuration Error and Usage Reporting Installation Rules Ready to Install Installation Progress Complete	Disk Usage Summary: Comparison of the comparison of the sequired of the sequence of the sequ	
	< Back Mext > Cancel	Help

Figure 3-10: SQL installation disk space requirements

11. Review the disk space requirements and click Next.

Server Configuration				
Speciry the configuration. Setup Support Rules Product Key	Service Accounts Collation			
License Terms Feature Selection	Microsoft recommends that you u	use a separate account for each SQL	L Server service.	Startup Type
Instance Configuration Disk Space Requirements	SQL Server Database Engine	NT AUTHORITY\SYSTEM		Automatic 🔽
Server Configuration Database Engine Configuration Error and Usage Reporting Installation Rules Ready to Install Installation Progress		Lise the s d automatically where possible to us will need to specify a low privilege	e a low privilege	
Complete	Service	Account Name	Password	Startup Type
	SQL Server Browser	NT AUTHORITY\LOCAL S		Disabled 🔽

Figure 3-11: SQL installation server configuration

12. On Server Configuration screen, pick a user account which will be used for the installed SQL Services. If you don't know what to pick, the default settings will be recommended. Click **Next** to continue.

🚼 SQL Server 2008 Setup				
Database Engine Configu Specify Database Engine authenticati		trators and data directories.		
Setup Support Rules Product Key License Terms Feature Selection Instance Configuration Disk Space Requirements Server Configuration Database Engine Configuration Error and Usage Reporting Installation Rules Ready to Install Installation Progress Complete	Authentication Mod Windows auther Mixed Mode (SQ	L Server authentication and Windows authentic system administrator account	ase Engine.	SQL Server administrators have unrestricted access to the Database Engine.
		< <u>B</u> ack	<u>N</u> ext >	Cancel Help

Figure 3-12: SQL installation database engine configuration

13. The SQL Server installation shows the configuration for the database engine.

Here, you select an Authentication mode. @ptitude Observer is easiest to use in *Mixed Mode* which is recommended, but it also supports *Windows Authentication* Mode.

Type in the password for the account. Remember to save the password in a safe place, since it will be required later when configuring the system, e.g. when installing a new Observer database.

In addition, SQL Server 2008 needs to have a SQL Server administrator specified which was not required in the earlier versions of SQL Server. If you don't know which account to pick, it is recommended that you click the "Add Current User" button.

Press **Next** to continue.



Figure 3-13: SQL installation error and usage reporting

14. Here, you can set whether you want to send error and usage reports to Microsoft or not. You can leave the check boxes unchecked which is recommended and press **Next.**



Figure 3-14: SQL installation rules

15. SQL Server checks the installation rules. To continue, click Next.



Figure 3-15: SQL installation ready

16. Now the setup is ready for installation. If you are satisfied with your settings, press **Install**.

😫 SQL Server 2008 Setup		
Installation Progress		
Setup Support Rules Product Key License Terms	Setup process complete	
Feature Selection Instance Configuration Disk Space Requirements Server Configuration Database Engine Configuration Error and Usage Reporting Installation Rules Ready to Install Installation Progress Complete	Feature Name Image: Construction of the services Image: Construction of the services	Status Success
	I	Next > Cancel Help

Figure 3-16: SQL installation progress

17. The setup displays the installation progress bar. After the installation is finished, click **Next** to display the summary dialog then click **Close** to finish the SQL Server installation.

4

Oracle XE Installation

1. Insert the SKF @ptitude Observer DVD.

If the installation program does not start, run the file Setup1.exe from the DVD.



2. Press Oracle XE.



Figure 4-18: Oracle server installation options

- 3. There are two installation options.
 - **Oracle Client 10g Express Edition** is installed for a computer that is not used as the SKF @ptitude Observer database server.
 - Oracle Database 10g Express Edition is installed for a computer that serves as the SKF @ptitude Observer database server.

Oracle Client Expression Edition



Figure 4-19: Oracle Client Express Edition installation

1. Click **Next** to continue installing Oracle Client Expression Edition.

Oracle Client 10g Express Edition - Install Wizard	
License Agreement Please read the following license agreement carefully.	CATABASE EXPRESS EDITION
ORACLE DATABASE 10g EXPRESS EDITION LICENSE AGREEMENT	
To use this license, you must agree to all of the following terms (by either clicking the accept button or installing and using the program	
○ I do not accept the terms in the license agreement	Print
InstallShield	Cancel

Figure 4-20: Oracle client installation license agreement

2. Mark "I accept the terms in the license agreement" and click Next.

Oracle Client 10g Ex	press Ec	lition - Inst	all Wizard			<
Choose Destination Select folder where se						E BE
	Setup will install Oracle Client 10g Express Edition in the following folder. To install to this folder, click Next. To install to a different folder, click Browse and select another folder.					
✔ Oracle Client 10g E	xpress Ed	ition			72760 K	
Destination Folder						
C:\XEClient\					Browse	
Space Required on	C:		72760 K			
Space Available on InstallShield	C:	308	49204 K			
			< <u>B</u> ack	<u>N</u> ext >	Cancel	

Figure 4-21: Oracle client installation destination location

3. Choose the destination of the Oracle Client Expression Edition settings, then click **Next**. This makes the InstallShield® Wizard to prepare the installation of Oracle Client Express Edition.

Oracle Client 10g Express Edition - Install Wizard	X
Summary Review settings before proceeding with the Installation.	
Current Installation Settings:	
Destination Folder: C:\XEClient\ Port for 'Dracle Services for Microsoft Transaction Server': 2030	
<	~
InstallShield	
< <u>B</u> ack <u>I</u> nstall	Cancel

Figure 4-22: Oracle client installation settings summary

4. Review the settings before proceeding with the installation. If settings were set correctly, click **Install**.

Oracle Client 10g Express Edition - Install Wizard		
	InstallShield Wizard Complete	
	Setup has finished installing Oracle Client 10g Express Edition on your computer.	
DATABASE EXPRESS EDITION		
	< <u>B</u> ack Finish Cancel	

Figure 4-23: Oracle client installation to complete

5. Click **Finish** to complete the installation.

Oracle Database Expression Edition



Figure 4-24: Oracle Database Express Edition installation

1. Click **Next** to continue installing Oracle Database Expression Edition.

Oracle Database 10g Express Edition - Install Wizard	×
License Agreement Please read the following license agreement carefully.	CATABASE EXPRESS LOTTION
ORACLE DATABASE 10g EXPRESS EDITION LICENSE AGREEMENT	
To use this license, you must agree to all of the following terms (by either clicking the accept button or installing and using the program):	2
I go not accept the terms in the license agreement Definition	int
	ancel

Figure 4-25: Oracle database installation license agreement

2. Mark "I accept the terms in the license agreement" and click Next.

Oracle Database 10g Express Edition	on - Install Wizard	
Choose Destination Location		ORACLE
Select folder where setup will install files.		EXPRESS EDITION
Setup will install Oracle Database 10g E:	xpress Edition in the follo	owing folder.
To install to this folder, click Next. To ins another folder.	stall to a different folder, (click Browse and select
Oracle Database 10g Express Edition		1655988 K
Destination Folder		
C:\oraclexe\		Browse
Space Required on C:	1655988 K	
Space Available on C: InstallShield	30544056 K	
	< <u>B</u> ack	Next > Cancel

Figure 4-26: Oracle database installation destination location

3. Choose the destination of the Oracle Database Expression Edition settings, then click **Next**.

Oracle Database 10g	Express Edition - Install Wizard	
Specify Database Pa	asswords	ORACLE D A T A B A 3 E EXPRESS EDITION
Enter and confirm passw the SYSTEM database a	ords for the database. This password will be used for both the S accounts.	YS and
Enter Password	ХХХ	
<u>C</u> onfirm Password	XXX	
Database Home Page (ne SYSTEM user along with the password you enter here to log i after the install is complete.	in to the
InstallShield ————	< <u>B</u> ack <u>N</u> ext > (Cancel

Figure 4-27: Oracle database password

4. Enter and confirm password for the database. This password will be used for both SYS and SYSTEM database accounts. Click **Next**. This makes the InstallShield® Wizard to prepare for the installation of Oracle Client Express Edition.

Oracle Database 10g Express Edition - Install Wizard	X
Summary Review settings before proceeding with the Installation.	
Current Installation Settings:	
Destination Folder: C:\oraclexe\ Port for 'Oracle Database Listener': 1521 Port for 'Oracle Services for Microsoft Transaction Server': 2030 Port for HTTP Listener: 8080	<
	>
InstallShield	
< <u>B</u> ack <u>Install</u>	Cancel

Figure 4-28: Oracle database installation settings summary

5. Review settings before proceeding with the installation. You may change Destination Folder setting. Click **Install** to continue.

Oracle Database 10g Express Edition - Install Wizard			
	InstallShield Wizard Complete		
	Setup has finished installing Oracle Database 10g Express Edition on your computer.		
DATABASE EXPRESS EDITION			
	< <u>B</u> ack Finish Cancel		

Figure 4-29: Oracle database installation to complete

6. Click **Finish** to complete the installation.

@ptitude Observer Suite Installation

1. Insert the SKF @ptitude Observer DVD.

If the installation program does not start, run the file Setup1.exe from the DVD.



Figure 5-30: @ptitude Observer installation start

2. Press @ptitude Observer.



Figure 5-31: InstallShield Wizard for @ptitude Observer installation

3. InstallShiled® Wizard will guide you through the @ptitude Observer Suite installation. Click **Next** to continue.

🛃 SKF @ptitude Observer 9.0 - InstallShield Wizard	×
License Agreement Please read the following license agreement carefully.	
End-User License Agreement	^
THIS END-USER LICENSE AGREEMENT (this "Agreement") is entered into by and between SKF Condition Monitoring, Inc. and/or SKF Condition Monitoring Center AB (hereinafter referred to collectively as the "Licensor") and any person or business that executes this Agreement by clicking the "I agree" icon at the end of this Agreement or by accessing, using, or installing the Software ("Licensee" or "You"). Licensor and Licensee shall be referred to collectively in this Agreement as the Parties.	~
 ○ I accept the terms in the license agreement ○ I do not accept the terms in the license agreement 	
<pre> < Back Next > Cancel</pre>	

Figure 5-32: @ptitude Observer installation license agreement

4. Mark "I accept the terms in the license agreement" and click Next.

🛃 SKF @p	titude Observer 9.0 - InstallShield Wizard	
Click N	ion Folder lext to install to this folder, or click Change to install to a nt folder.	E
	Install SKF @ptitude Observer 9.0 to: C:\Program Files\SKF\Observer9.0\	<u>C</u> hange
InstallShield -	< <u>B</u> ack <u>N</u> ext >	Cancel

Figure 5-33: @ptitude Observer installation destination folder

5. Check the destination folder. If it was set to the correct folder, click **Next** to continue. Otherwise, click on Change to install to a different folder.

🔂 SKF @ptitud	le Observer 9.0 - InstallShield Wizard 🛛 🛛 🔀		
Setup Type Choose the	setup type that best suits your needs.		
Please sele	ct a setup type.		
Client ins	tallation		
1	Select this option to install the client components of the @ptitude Monitoring Suite.		
🔵 Server in	stallation		
17	Select this option to install the server components of the @ptitude Monitoring suite.		
🔵 Full / Cus	tom installation		
B	Choose which program features you want installed. For stand alone installations, this option should be selected.		
To also little to be			
InstallShield ———	< <u>B</u> ack <u>N</u> ext > Cancel		

Figure 5-34: @ptitude Observer installation setup type

6. Choose a setup type and click **Next** to continue.

Client installation and **Server installation** will install all the necessary components for you. Go to step 8.

However, **Full / Custom installation** requires you to choose which components to install as shown in the next step.

🐻 SKF @ptitude Observer 9.0 - InstallShield Wiza	ırd 🛛 🔀
Custom Setup Select the program features you want installed.	E
Click on an icon in the list below to change how a fer Optitude Observer Optitude Observer Database Adminis Optitude Observer Monitor Optitude Observer Online Device Cor Optitude Observer Data pump	ature is installed. Feature Description Observer Client software used for analysing data. This feature requires 138MB on your hard drive.
Install to: C:\Program Files\SKF\Observer9.0\	<u>C</u> hange
InstallShield	Next > Cancel

Figure 5-35: Example of @ptitude Observer installation custom setup

7. Select programs to install, then click **Next**. You may select program(s) to install by changing the installation option. There are different installation options as shown below.

🛱 SKF @ptitude Observer 9.0 - InstallShield Wizard 🛛 🔀
Custom Setup Select the program features you want installed.
Click on an icon in the list below to change how a feature is installed.
138MB on your hard drive. Install to: C:\Program Files\SKF\Observer9.0\
InstallShield Help Space < Back Next > Cancel

Figure 5-36: @ptitude Observer installation custom setup options

🕼 SKF optitude Observer S	.0 - InstallShield Wizard	×
	InstallShield Wizard Completed The InstallShield Wizard has successfully installed SKF @ptitude Observer 9.0. Click Finish to exit the wizard.	
	< Back Finish Cancel	

Figure 5-37: @ptitude Observer installation finish

8. Press Finish to complete the installation and exit InstallShield® Wizard.

Install Observer Database

After the @ptitude Observer suite has been installed, it's necessary to connect the suite to an Observer database.

If an Observer database already exists, the database needs to be <u>upgraded to the</u> <u>version of the @ptitude Observer suite</u> installed.

If there is no Observer database existing, it is necessary to <u>install a new Observer</u> <u>database</u>.

Note - For more information about @ptitude Observer database administrator software, refer to **Observer Database Administrator user manual**.

Upgrade an Existing Observer Database

- 1. Start the @ptitude Observer database administrator software by clicking on the shortcut on the start menu.
- 2. Log in to the database server using the login credentials specified when installing the SQL server.

💌 @ptitude Observer Databa	ise Administra	tor 8.5.0	
<u>File Server D</u> atabase <u>H</u> e	þ		
Databases			
Name	Version		
😸 Observer	8,5		
😸 Observer-trubine	8,4		
1			/

Figure 6-38: Example of Observer databases

- 3. In the database list, select the database to be upgraded and click the menu option **Database / Upgrade selected databases**.
- 4. Browse for the database definition file which contains information about how to upgrade the database and click OK. The definition file can be found in the folder \NewVer\Database administrator on the Observer DVD.
- 5. After the procedure is finished, the selected database is upgraded and the @ptitude Observer database administrator software can be closed.

Install a New Observer Database

- 1. Start the @ptitude Observer database administrator software by clicking on the shortcut from the start menu.
- 2. Log in to the database server using the login credentials specified when installing the SQL server.
- 3. Click on the menu option Server / Create new database.

Create database	
Name:	Observer
Database file Location:	c:\Program Files\Microsoft SQL Server\MSSQL10_50.MSSQLSERVER\MS
	Create <u>C</u> ancel

Figure 6-39: Example of Observer create database

- 4. Select a database name (default is Observer) and select where the database files should be stored (default is SQL server data directory).
- 5. Click on **Create** button.

Important - The database name cannot be the same as an already existing database.

- 6. During the installation, you will be asked if you want to install bearings and diagnosis rules. Click **Yes**.
- 7. You will be prompted for the location of the bearing file to import, please browse to the file bearing.brg which exists in the folder NewVer\Database administrator on the Observer DVD.
- 8. At the end of the Create database procedure you will be asked which measurement units to use for the standard diagnosis in Observer. Select the measurement units you want to use and click the **Update** button.

@ptitude Observer Monitor Service

To be able to use @ptitude Observer as an on-line system, the communication and database storage are performed by the @ptitude Observer monitor service. There can be several @ptitude Observer monitor services installed at the same time.

 To start a @ptitude Observer monitor service, start the @ptitude Observer Monitor Manager software by clicking on the shortcut on the start menu located in Programs\SKF @ptitude Monitoring Suite\@ptitude Observer X.Y Monitor Service Manager.

Dbserver Monitor Service Ma	nager				
File Action Help					
🐁 🕨 🔳 🖶 🍥 🗔					
Registered Monitor Services On Local	Computer				
Name	Version	Startup method	Port	Status	Executable path
🚳 Observer85	8.5.0	Automatic	1000	Running	C:\Program Files\SKF\Observer8.5\M
<					>
					1

Figure 7-40: Example of @ptitude Observer Monitor Server Manager

Observer Monitor Service Manager screen lists all the registered monitor services on the local computer.

Action allows the following interfaces;

- New allows to add new monitor services on the local computer.
- **Properties** allows to edit the properties of the already registered services through Connection interface.
- **Delete** deletes the selected registered service.
- **Start** starts the selected monitor service.
- **Stop** stops the selected monitor service.
- **Monitor Service Viewer** displays events, connections and status of the selected monitor service.
- View Log File allows to review a log file of the selected monitor service.
- **Refresh** updates the list with most current information.
- 2. To register a new monitor service, click a menu option **Action**, then **New**.

Connection	
Name	<u> </u>
Path:	C:\Program Files\SKF\Observer8.5\MonitorSer
Version:	
Database connection	on settings
Server:	SQL Server O Oracle
Name:	_
Authentication:	Windows authentication
Parameters:	
Database	
Service settings	
Port:	1000
Start delay:	20 s
Startup method:	Automatic
	Ok Cancel

Figure 7-41: Example of @ptitude Observer Monitor Service - connection

- **Name** is a unique name which has to be given to the service. It will be used to identify the registered database connection on local computer. Once a new service is registered, the name cannot be changed.
- **Path** defines the location of the executable file to be used as the service. The default path is C:\Program Files\SKF\Observer X.Y.
- Version displays the version of @ptitude Observer in use currently.

Connection	
Name	
Path:	C:\Program Files\SKF\Observer8.5\MonitorSer
Version:	
Database connect	tion settings
Server:	 SQL Server Oracle
Name:	•
Authentication:	SQL Server authentication
User name:	
Password:	
Parameters:	
Database	
Service settings -	1000
Port:	1000
Start delay:	20 s
Startup method:	Automatic
	Ok Cancel

Figure 7-42: Example of @ptitude Observer Monitor - database connection settings

Database connection settings

- **Server** is the type of database server such as SQL Server or Oracle. The Monitor Service settings vary depending on the server type.
- **Name** allows to select a server from the list of databases. (*local*) means that the database is on the same PC.
- Authentication defines whether to use *Windows authentication* or *SQL Server authentication* for SQL Server. This Authentication selection corresponds to the selection you have made when installing <u>SQL Server Express</u> at Database Engine Configuration screen.
- **User name** is the database user name.
- **Password** is the password for the user.
- **Parameters** allows to enter additional parameters for the connection. For example, if you want to force TCP/IP protocol, enter "*Network=DBMSSOCN*;" in this text box.
- **Database** is the selected database from a list of available databases on the database server.

Connection	
Name	
Path:	C:\Program Files\SKF\Observer8.5\MonitorSer
Version:	
Database connect	ion settings
Server:	SQL Server C Oracle
Name:	_
Authentication:	SQL Server authentication
User name:	
Password:	
Parameters:	
Database	
Consider a strike and	
Service settings - Port:	1000
Start delay:	20 \$
Startup method:	Automatic
	Ok Cancel

Figure 7-43: Example of @ptitude Observer Monitor - service settings

Service settings

- **Port** is used to assign which port the @ptitude Observer Monitor Service should use to communicate with @ptitude Observer and IMx devices. The default value is 1000.
- **Start delay** is used to give the database server some time (in seconds) to start before @ptitude Observer monitor tries to open the connection. It is recommended to set this field to 20 for the startup method *Automatic*. Whereas, it is recommended to set this field to 0 for the startup method *Manual*.
- **Startup method** sets the startup method of the service to either Automatic, Manual or Disabled.
 - Automatic means that the service starts when the operating system boots up.
 - Manual means that the service has to be started by the user either through @ptitude Observer Monitor Manager or through the services interface in windows.
 - > **Disabled** means that the service is completely disabled.

File Action View	Help						
← → 🔳 😭	🗟 🗟 😫 🖬 🕨 🗉 🕬						
Services (Local)	🌯 Services (Local)						
	ObsService_Observer85	Name A	Description	Status	Startup Type	Log On As	
	Start the service	Network DDE	Provides n		Disabled	Local System	
		Network DDE DSDM	Manages D Collects an S	Started	Disabled Manual	Local System Local System	
		Network Provisioning Service	Manages X		Manual	Local System	
		NT LM Security Support Provider	Provides s		Manual	Local System	
		NVIDIA Display Driver Service	Provides s S	Started	Automatic Automatic	Local System Local System	
		Coserver Moniton			Automatic	Local System	
		Grice Source Engine	Saves inst		Manual	Local System	
		ScaleMTSRecoveryService			Manual	Local System	
		Sector Contract Process and Alerts	Collects pe		Manual	Network S	
		🍓 Plug and Play	Enables a c 9	Started	Automatic	Local System	
		🏶 Portable Media Serial Number Service	Retrieves t		Manual	Local System	
		Spooler 🖏 Print Spooler	Loads files S	Started	Automatic	Local System	
		Reprotected Storage	Provides pr S	Started	Automatic	Local System	

Figure 7-44: Example of Window's interface Services

3. A recovery plan, in case of a unrecoverable error, of registered monitor services resides within Windows' interface **Services (Local)** which is located under Administrative Tools in Control Panel.

@ptitude monitor services start with the text "ObsService_".

Select a @ptitude monitor service, then select **Properties** under Action. Or right-click on a @ptitude monitor service and select **Properties**. Select **Recovery** tab

ObsService_Observer85 P	roperties (Local Computer)	? 🗙
General Log On Recovery	Dependencies	
Select the computer's respons	e if this service fails.	
<u>F</u> irst failure:	Restart the Service	*
Second failure:	Restart the Service	~
S <u>u</u> bsequent failures:	Restart the Service	~
Reset fail c <u>o</u> unt after:	0 days	
Restart ser <u>v</u> ice after:	1 minutes	
- Run program		
Program:		
	<u>B</u> rowse	
<u>C</u> ommand line parameters:	d of command line (/fail=%1%)	
	Restart Computer Options	
	OK Cancel A	pply

Figure 7-45: Example of Recovery setting

4. It is recommended to set the First, Second and Subsequent failures of the Recovery setting to "Restart the Service".

Edit Observer Settings

8

Language and License Key

When installing @ptitude Observer, a setting file called @ptitude Observer.ini is installed in C:\Users\[User name]\AppData\Roaming\SKF\Observer X.Y\Observer.ini. This section describes the different settings in that file.

The following is an example of the contents of a @ptitude Observer.ini file:

[System] Language=English RegKey=X53BB8-91JJ45-XY13GH-PC333L-9XMCV6-PP

- Language specifies which language to use.
- **Regkey** is the license key entered when installing the product.

You may edit the language and license key in this file.

Application Data Folder

With @ptitude Observer you can specify which folder to use as the application data folder (default is the user's own application data folder which is usually located in C:\Users\[Username]]. The application data folder is used to store user specific data for the @ptitude Observer application such as connection files and .ini files.

You can do this in one of two ways:

Using the USE_APP_PATH Keyword on the @ptitude Observer Properties Shortcut

Using this USE_APP_PATH keyword will cause the @ptitude Observer system to use the same folder as the executable file which resides in for its application data.

@ptitude Obser	ver 9.0 Properties 🛛 🛛 🔀
General Shortcu	.t Compatibility
	ptitude Observer 9.0
Target type:	Application
Target location:	Observer9.0
<u>T</u> arget:	server9.0\ObserverWinUI.exe'' USE_APP_PATH
<u>S</u> tart in:	
Shortcut <u>k</u> ey:	None
<u>R</u> un:	Normal window
C <u>o</u> mment:	
<u>Find</u>	Target Change Icon Advanced
	OK Cancel <u>A</u> pply

Figure 8-46: Assigning the executable file as an application folder

Create a new shortcut to the ObserverWinUI.exe file by editing the @ptitude Observer X.Y Properties Shortcut.

Add the text USE_APP_PATH in the target field as shown in the screen shot, above.

Using a Custom Folder on the @ptitude Observer Properties Shortcut

Instead of using the USE_APP_PATH keyword, it is also possible to specify a custom folder as an application data folder, for example "C:\myfolder".

@ptitude Observer 9.0 Properties
General Shortcut Compatibility
@ptitude Observer 9.0
Target type: Application
Target location: Observer9.0
Target: \Observer9.0\ObserverWinUI.exe'' ''C:\myfolder''
Start in:
Shortcut <u>k</u> ey: None
Bun: Normal window
Comment:
Find Target Change Icon Advanced
OK Cancel Apply

Figure 8-47: Assigning a custom folder as an application data folder

Note: if it's hard to locate the Observer.ini file, you can always click on the shortcut "User Application data" folder on Programs \ SKF @ptitude Monitoring Suite \ @ptitude Observer X.Y.

MasCon/IMx Network Settings

This step is only needed if the computer is to be used as the @ptitude Observer Monitor computer.

MasCon/IMx units use the TCP/IP protocol to communicate with @ptitude Observer Monitor. By default, the network setting for MasCon/IMx uses IP address of 10.0.0.1 and net mask of 255.255.255.0. If you want to use different IP address, you will need to configure the settings in MasCon/IMx units. MasCon48 is configured using the digital display on the front panel, and MasCon16 and IMx units are configured by creating and sending a configuration file to the unit via @ptitude Observer On-line device configurator software.

For further information, refer to the corresponding IMx unit's User Manual, and **@ptitude Observer On-line Device Configurator User Manual**.

Time Synchronization

10

This step is only needed if you use the PC as the @ptitude Observer monitor computer.

IMx, MasCon16, and MasCon48 use a built-in function in Windows for time synchronization. @ptitude Observer monitor's watch is used as the reference for time in the MasCon/IMx system. In order to activate time synchronization, please follow the procedure below.

- 1. Open port 123 in the firewall. This is done a bit differently depending on your operating system and eventually external firewall.
- 2. Go to services and check that "Windows Time" service start-up method is set to "Automatic" and is started.
- 3. Double click on the file EnableTimeSync.reg in the Extra\TimeSync folder on the Observer DVD. This will enter information in the registry to enable the time synchronization service on the computer.
- 4. Stop and start "Windows Time" service to make this change take effect.

Important - It is strongly recommended that you create a backup of the database before you start the upgrade procedure.

This section of the installation manual describes how to upgrade @ptitude Observer. Note that different versions require different procedures.

- For versions ProCon 6.4 or earlier, follow the procedures from 1 to 4.
- For versions @ptitude Observer 7 or ProCon 6.5, follow the procedures 3 and 4.
- For version @ptitude Observer 8 and 9, proceed directly to the procedure 4.

1. Preparing for Database Conversion of ProCon 6.4 or Earlier Version

In order for @ptitude Observer database administrator to be able to read and convert databases, databases first need to be upgraded to @ptitude Observer 7.

- On the @ptitude Observer installation DVD, allocate a folder in the location, [DVD]\Extra\Pre ProCon6.5 Upgrade\, which contains two files called DbAdmin.exe and DEF700.txt.
- 2) Double click on the DbAdmin.exe file and login with the **username** and **password**.
- 3) Select the database from the list and click **Update db from definition file** button and browse the **DEF700.txt** file and press **Update**.
- 4) After the upgrade has been completed, close @ptitude Observer database administrator software and continue with the conversion procedure 2, below.

2. Conversion Procedure for ProCon 6.4 or Earlier Version

- 1) Make sure ProCon, MasCon server or database tool is not running.
- 2) Uninstall database tool.
- 3) Uninstall ProCon.
- 4) Uninstall MasCon server.
- 5) If the installation of the latest @ptitude Observer has not been done yet, insert the @ptitude Observer DVD and follow the <u>@ptitude Observer Suite Installation</u> procedure.
- 6) Start @ptitude Observer database administrator and select the database you wish to convert.
- 7) Click on menu option Database/Convert Observer7/ProCon 6.5 database.
- 8) Select a new desired database name and click **Start** button.

Converting the database can take a long time. The more data in the database, the longer it takes. Therefore, it is strongly recommended to delete unnecessary data in the database before converting the database.

The conversion of the database keeps the original database intact. After the conversion, there will be two databases, one of the old version and the other of the new.

3. Converting from @ptitude Observer 7 or ProCon 6.5

- 1) Make sure that @ptitude Observer, @ptitide Observer Monitor or @ptitude Observer database administrator is not running.
- 2) Uninstall @ptitude Observer by using the add/remove interface in the control panel.
- 3) If the installation of the latest @ptitude Observer has not been done yet, insert the @ptitude Observer DVD and follow the <u>@ptitude Observer Suite Installation</u> procedure.
- 4) Start @ptitude Observer database administrator to do the database conversion.
- 5) Select the database that you wish to upgrade.
- 6) Click on menu option Database/Convert Observer7/ProCon 6.5 database.
- 7) Select a new desired database name and click **Start** button.

Converting the database can take a long time. The more data in the database, the longer it takes. Therefore, it is strongly recommended to delete unnecessary data in the database before converting a database.

The conversion of the database keeps the original database intact. After the conversion, there will be two databases, one of the old version and the other of the new.

4. Upgrading Procedure

- 1) Start @ptitude Observer database administrator.
- 2) Select the menu option Database, then Upgrade selected database.
- Select definition file which should be located in the same folder as @ptitude Observer or in the folder '[DVD]:\NewVer\Database administrator\' and has a file extension of .DEF. Click **Ok** to proceed.
- 4) Start @ptitude Observer.
- 5) Press the menu item **On-line** then select **MasCon/IMx** units.
- 6) Press the button **Firmware**.
- 7) Browse the folder for the firmware of the MasCon/IMx types you are using. The files are located in the '[DVD]:\NewVer' folder.

Note that you do not have to uninstall the database manager such as SQL Server or Oracle in order to upgrade the system.

Important - After a database conversion, all diagnosis in the database need to be recalculated in the Observer software. Until this is done all diagnosis will display the value O. The recalculation can be done at Observer Hierarchy view, by right clicking on a node and selecting Configure\Recalculate diagnoses.