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Download Device

Download via WLAN or GPRS

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Introduction

Download Devices enable you to download mass memory and driver card data from the DTCO to your computer on the fleet site or to a download archive (e.g. TIS-Web).

Features

- Automatic data transfer (at defined intervals) or started manually
- Mass memory and driver card data download without the need for an inserted company card in the vehicle
- Secure communication channels for the required range (WLAN or GPRS)
- Download files compatible with TIS-Web, TIS-Office and other digital tachograph data archiving solutions
- Can be used in any vehicle equipped with DTCO 1381 Release 1.3 or higher.

! Important

A DTCO 1381 update to Release 1.3 must be carried out in order to transfer data by means of a Download Device. The update can be carried out by any authorised workshop.◄

Data download

Data download with Download Devices is distinguished by

- fast data transfer thanks to data compression and
- secure data transfer by means of data encryption.

Time and costs

These combined aspects generate time and cost savings during the download process because

- the vehicles do not have to return to base to download,
- downloading runs automatically and without the need for an inserted company card in the vehicle and
- the entire process can be centrally monitored.

Two versions

The Download Device (DLD) is available in two versions, depending on the range required:

- DLD Short Range
  for vehicles which return to the fleet on a regular basis.

  Files for downloading are transferred to the company network via wireless LAN and saved; see the *Chapter entiteld “Data transfer with the DLD Short Range”*.

- DLD Wide Range
  for vehicles which almost never return to the fleet; see the *Chapter entitled "Transferring data with the DLD Wide Range"*.

  The DLD Wide Range transfers the download files via GPRS.

! Important

"Download device" and "DLD" in this documentation are synonymous with both the DLD Short Range and the DLD Wide Range versions.◄

Configuration

Included in the DLD package contents is the Remote TCO Manager (RTM) configuration software, with which

- various download configurations can be created (e.g. integration of download reminders from TIS-Office)
- download file forwarding can be managed, e.g. to TIS-Web
- the download process can be monitored, e.g. the authentication of the company card inserted in the computer on the fleet site.

This software also helps to integrate the DLD Short Range into the WLAN data communication system; see the *Chapter entitled "Configuring the DLD Short Range"*.

Since the requirements of GPRS data communication differ however, the basic configuration of the DLD Wide Range is created with the help of the DLD Remote Service and transferred to the DLD Wide Range; see the *Chapter entitled "DLD Remote Service"*.

Potential applications

You can use the DLD

- as a mobile device, i.e. no fixed installation in the vehicle is necessary.

  This means that you can use the DLD in every one of your vehicles equipped with a DTCO 1381 Rel. 1.3 for which an update has been carried out for the front interface.
- as a fixed installation in a vehicle; see the *Chapter entitled "Installing the Download Device"*.

Displays

The Download Device has three LEDs for displaying power supply, connection status and data transfer; also see the product package leaflet.

Integration in VDO data management

The following overview shows you all the options available from VDO for data transfer from digital tachographs to an archiving program.

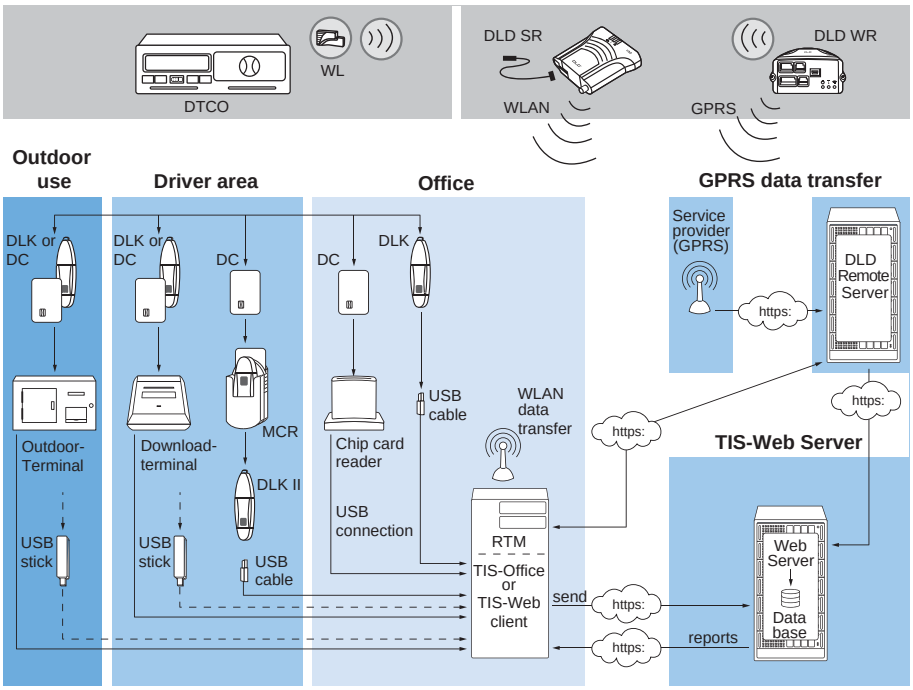

Fig. 1: Data management components

DC	Driver card	**DLD SR**	DLD Short Range
DLD WR	DLD Wide Range	**DLK**	Downloadkey (II) and TIS-Compact Downloadkey (II)
MCR	Mobile Card Reader	**WL**	Wireless link

Important

Details of paths to program or system folders, system settings details and screenshots are based on the Microsoft® Windows® Vista™ operating system.◄

General instructions

Data security instructions

Remote TCO Manager

Logging on to the Remote TCO Manager

You can only start the Remote TCO Manager configuration software by entering the access data correctly.

Take the following security precautions to protect your access data:

- Do not give your password to third parties. Our employees will never ask you for your password.
- Keep your personal access and account data (user name and password) in a safe place.
- Change your password regularly. The *Chapter entitled "Changing your password"* explains how you can change your password.

Logging off from the Remote TCO Manager

Always log off from the Remote TCO Manager program correctly, using **[Log Out]** in the upper menu area.

DLD Remote Service

Logging on to the DLD Remote Service

The basic configuration of the DLD Wide Range (which you can manage using the DLD Remote Service) can only be called up if the access data is entered correctly.

Take the following security precautions to protect your access data:

- Change the password you received from your service partner.
- Do not give your password to third parties. Our employees will never ask you for your password.
- Keep your personal access and account data (user name and password) in a safe place.
- Change your password regularly. The *Chapter entitled "Changing your password"* explains how to do this.

Logging off from the DLD Remote Service

Always log off from the DLD Remote Service correctly, using **[Logout]** in the upper menu area.

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Data transfer security

Data transfer

The procedure of transferring download files from the DTCO to the relevant server or target folder consists of several steps. The use of various encryption methods guarantees the security of the files throughout the entire downloading procedure.

DLD Wide Range

This DLD version transfers download files in three steps. Data encryption takes place between

- the wireless link and the DLD Wide Range by means of the AES algorithm.
- the DLD Wide Range and the “DLD Remote Server” by means of the XTEA algorithm.
- the “DLD Remote Server” and the TIS-Web Server by means of the SSL Internet protocol.

DLD Short Range

In the case of the DLD Short Range, download file encryption takes place

- between the DTCO 1381 and the DLD Short Range by means of the AES algorithm.
- during transfer to the WLAN access point by means of WPA-PSK, a conventional procedure to which both components electronically 'agree'.

Within most existing company networks, the security of the data during transfer from access point to the computer on the fleet site depends on the individual network protocol being used.

Instructions for installing the Download Devices

Important

Read these instructions carefully before installing the Download Device.◄

Personnel/technical requirements

Requirements for personnel

The manufacturer requires that persons who carry out the installation of Download Devices

- possess comprehensive, occupation-specific knowledge,
- have total proficiency in the performance of the relevant technical tasks and
- in the handling
  - of DLD components and
  - DTCO 1381 components

  and have received specific training in the performance of this task.

Personnel charged with installing a Download Device must have participated in a training course for DLD components installation.

Technical requirements

In order to carry out DLD installation correctly, the

- manufacturer's compulsory and recommended facilities, equipment and tools must be available.
- the premises, means of testing and relevant equipment must comply with the pertinent legal regulations of the country in which they are used.

General safety notes

The basic requirement for installation, commissioning and checking the Download Devices and its components in compliance with the safety requirements in force is a thorough knowledge of the general instructions, the safety notes and the safety regulations.

Important

As well as the instructions contained in this product manual, the valid rules and regulations for accident prevention and the recognised specialist technical rules for working properly and in compliance with safety regulations applying in your country must be observed.◄

Guarantee and liability

Guarantee and liability claims for personal and material damage are excluded if one or both of the following points have neither been observed nor adhered to:

Personnel

- All installation, commissioning and testing work on the Download Devices requires special knowledge and may only be carried out by trained specialist personnel; also see the *Chapter entitled "Requirements for personnel"*.

Components and replacement parts

- The use of components not expressly approved by VDO renders any liability claims null and void. This also applies to the use of replacement parts which have neither been manufactured nor approved by VDO.

Installation instructions

The Download Devices are quality products manufactured in accordance with the recognised rules of engineering.

These products comply with current quality assurance standards - they left the factory in a perfect condition, both safety-wise and technologically.

In order to maintain this condition you must carry out your work as a technician

- properly and correctly in accordance with the descriptions in this document and
- with the greatest possible accuracy.

Caution

Working on a motor vehicle can be dangerous. Carry out all work by observing the Health and Safety regulations for safety and accident prevention at work.◄

Instructions for installation in vehicles used for the transport of dangerous goods

Important

The Download Devices must **not** be installed in vehicles used for the transport of dangerous goods!◄

Instructions for installation in motor vehicles (general)

Important

The Download Device installation procedure will not affect your vehicle's safety systems in any way. If installation is carried out in a professional manner, the vehicle's technology systems and driving characteristics will neither be modified nor unduly influenced.

Please comply with the following general instructions for installing a Download Device:

- When working on electrical systems, always adhere to the vehicle manufacturer's guidelines and recommendations.
- Adhere to the manufacturer's guidelines regarding the installation site.
- Do not fit the mounting attachment near to moving parts, e.g. airbag covers.
- Ensure that no vehicle cables are damaged during the installation of the Download Device.
- Make sure that cable connectors are not accidentally unplugged or loosened during the Download Device installlation procedure.
- Safeguard all power cables in accordance with the relevant guidelines in this manual.
- To avoid damaging vehicle parts, familiarise yourself with the relevant documentation on these parts (and any special characteristics they may have) before you start removing covers, etc.
- Study the vehicle's wiring diagram to learn the locations of the cables for the fuel, hydraulics, compressed air and electrical systems.
- When unplugging connectors, do not simply jerk the cable - pull gently on the plug itself or on the releasing mechanisms designed for the purpose.
- Use only original Continental Automotive GmbH fitments and accessories.
- Install only undamaged components.
- While installing the Download Device, make sure that the device does not accidentally affect or impede vehicle functions or performance in any way.◄

Power supply

The Download Device may only be connected to voltages which are stipulated in the technical data; also see the *Chapter entitled "Product summary"* and *"Connecting the Download Device to the power supply"*.

Accessories

For reasons of operating safety, no modifications to accessories may be made.

Never use accessories which have been neither recommended nor approved by the manufacturer. They can cause accidents and operational disruptions.

Cables

Make sure that

- the cables are undamaged,
- no damage can be caused by other objects or the effect of heat and
- that the cables cannot cause any adverse effects or malfunctions.

Safeguard all power cables in accordance with the guidelines.

Instructions for working on the electrical system

Caution

Danger of short circuits!

The vehicle manufacturer's instructions on working with electrical systems must be adhered to!

- Before disconnecting the battery connection terminals, the following points must be observed:
  - Switch off all electrical consumers.
  - Disconnect the minus (-) **before** the plus (+).
- Disconnecting the vehicle battery will prevent short circuits; however, this could cause unwanted "side effects":
  - The car radio security code will be deleted.
  - In the case of intelligent systems, data could be deleted (e.g. the fault memory of the engine management system).◄

Instructions for laying and preparing cables

Caution

Danger of fire caused by short circuits!

Damaged cables can cause short circuits, adverse effects and malfunctions.

Please comply with the following instructions:

- Always adhere to the vehicle manufacturer's instructions.
- Lay the cables in such a way that they are not exposed to tensile, compressive or shearing forces.
- Secure the cables in professional manner, e.g. using adhesive tape or cable ties.
- Do not route cables over or around moving parts.
- If cables have to be routed through drilled holes in metal or plastic, use rubber grommets to protect them.
- Safeguard all power cables in accordance with the guidelines.
- Replace damaged cables immediately!◄

Product summary

Product summary - DLD Short Range

This section explains about the components, features and functions of your DLD Short Range.

Package contents - Basic Kit

Fig. 2: DLD Short Range – Basic Kit package contents

Article number A2C59512104

1 DLD Short Range

2 Mounting attachment

3 DLD Short Range booklet in 6 languages

4 Remote TCO Manager installation CD with product manual in 2 languages

5 Leaflet for the driver

6 Power supply cable for vehicle cigarette lighter

7 Communication cable (K-Line)

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Package contents - Extension Kit for fixed installation

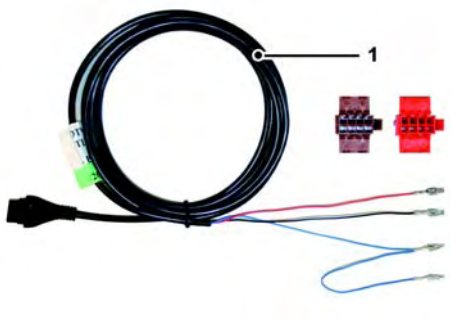

Fig. 3: DLD Short Range – Extension Kit package contents

Article number
A2C59512113

1 Vehicle electrical system connection cable

Technical data

Supply voltage	12 or 24 V
Dimensions	L 127 x W 128 x H 47 (mm)
Weight (without mounting attachment)	225 g
Interfaces	Power supply via vehicle cigarette lighter (12 or 24 V) or vehicle battery (fixed installation)
	Mobile use: K-Line connection Fixed installation: CAN bus connection
	Mini-USB interface (Type: B5)
	Connection for external antenna
Antenna	Internal WLAN antenna
DIP switch	CAN bus termination resistor (stationary use; Condition upon delivery: termination resistor active)
Data memory	2 MB
Protection class	IP54 on 5 sides
Temperature range	Storage: -40 °C to 85 °C Operation: -20 °C to 70 °C
Housing	Plastic

Connections and LEDs

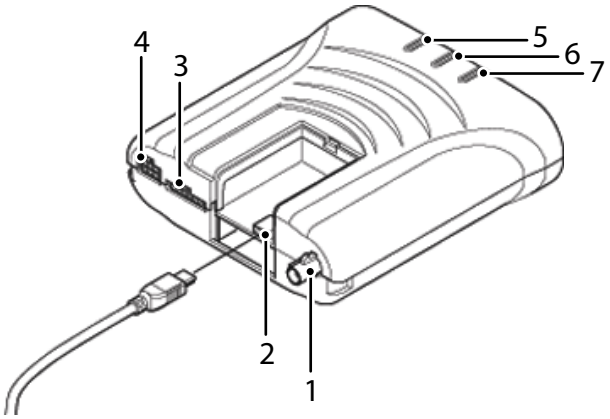

Fig. 4: DLD Short Range – Connections and LEDs

1 Connection for external antenna

2 Configuration area (cover removed) for

- connecting the mini-USB cable (Type B5) for configuration purposes
- setting the termination resistor (DIP switch) for the CAN bus (stationary use, activated)

3 Communication cable connection

- K-Line (mobile use; included in Basic Kit)
- CAN bus (stationary use; included in Extension Kit)

4 Power supply connection

- via vehicle cigarette lighter (mobile use; included in Basic Kit)
- via CAN bus (stationary use; included in Extension Kit)

5 Power supply LED

6 Data transfer LED

7 Connection status LED

Product summary - DLD Wide Range

This section explains about the components, features and functions of your DLD Wide Range.

Package contents - Basic Kit

Fig. 5: DLD Wide Range – Basic Kit package contents

Article number A2C59512117

1 DLD Wide Range

2 Wireless link

3 Mounting attachment

4 DLD Wide Range booklet in 6 languages

5 Leaflet for the driver

6 Remote TCO Manager installation CD with product manual in 2 languages

7 Power supply cable for vehicle cigarette lighter (with “Remote Button”)

Package contents - Extension Kit for fixed installation

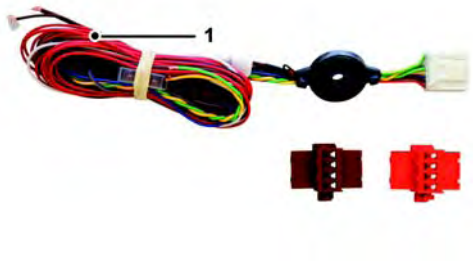

Fig. 6: DLD Wide Range – Extension Kit package contents

Article number A2C59512124

1 Vehicle electrical system connection cable (with buzzer and fuse)

Important

The “Remote button” (separate push-button) is not included in the Extension Kit package.

If you do not install a “Remote” button in the vehicle, you must adjust the DLD Wide Range basic configuration accordingly; see the *Chapter entitled “Registering and configuring a DLD Wide Range”*.◄

Technical data

Supply voltage	12 or 24 V
Power consumption	Normal operation: < 150 mA Sleep mode: ± 3 mA
External fuse protection	5 Amp (cable kit for fixed installation)
Dimensions	L 93 x W 95 x H 44 (mm)
Weight (without mounting attachment)	150 g
Interfaces	Mobile use: Power supply via vehicle cigarette lighter (12 or 24 V) Stationary use: CAN bus interface, power supply (W30) via vehicle battery
	not used if download takes place remotely
	not used if download takes place remotely
	not used if download takes place remotely
	Mini-USB interface (Type B5)
	Internal SIM card slot
Antenna	Internal antenna for Zigbee™ (wireless link) and GPRS data communication
DIP switch	CAN bus termination resistor (stationary use; Condition upon delivery: termination resistor active)
Data memory	8 MB and 2 MB (for download data: 4 MB)
Protection class	IP54 on 5 sides
Temperature range	
DLD Wide Range	Storage: -40 °C to 85 °C Operation: -20 °C to 70 °C
Internal GSM antenna	-25 °C to 70 °C
Housing	Plastic
Wireless link	
Frequency RF transmitter	2.4 GHz
Range RF transmitter	up to 10 m, depending on the position of the wireless link and the DLD Wide Range

Connections and LEDs

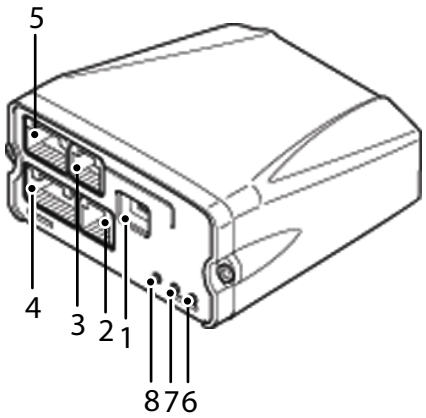

Fig. 7: DLD Wide Range – Connections and LEDs

1 Mini-USB cable (Type B5) connection for configuration purposes

2 not used if download takes place remotely

3 not used if download takes place remotely

4 Power supply connection

- via vehicle cigarette lighter (mobile use; included in Basic Kit)
- and for data communication via CAN bus (stationary use; included in Extension Kit)

5 not used if download takes place remotely

6 Connection status LED

7 Data transfer LED

8 Power supply LED

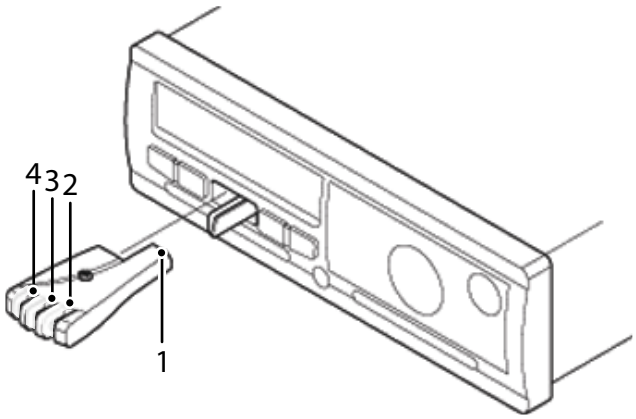

Fig. 8: DLD Wide Range – Wireless link – Connections and LEDs

1 Front interface (calibration and download interface)

2 Connection status LED

3 Data transfer LED

4 Power supply LED

Product summary - DLD Parameterization Kit

This section explains about the components of your DLD Parameterization Kit.

Package contents - Parameterization Kit

Fig. 9: DLD Parameterization Kit - Package contents

Article number
A2C59512127

1 Mini-USB cable for connecting the DLD to your computer

2 DLD Parameterization Kit booklet in 6 languages

3 Remote TCO Manager installation CD with product manual in 2 languages

4 DLD Short Range power supply adapter

Available products, accessories and replacement parts

Important

Only original or manufacturer-approved peripheral devices and accessories may be used. Modifications to the device may only be made if agreed with the manufacturer. Failure to do so may result in your guarantee being null and void!◄

The following products can be ordered using the correct article numbers:

Available products

Product	Article number
DLD Short Range – Basic Kit	A2C59512104
DLD Short Range – Extension Kit	A2C59512113
DLD Wide Range – Basic Kit	A2C59512117
DLD Wide Range – Extension Kit	A2C59512124
DLD Parameterization Kit	A2C59512127

Table 1: Available products - Basic, Extension and Parameterization Kits

The following accessories can ordered using the relevant article numbers:

Accessory

Accessories	Article number
Chip card reader for permanent access to company card	X11-140-002-004
Front windscreen holder	A2C59511864
Antenna, screw-on (DLD Short Range)	A2C59512132
DTCO Update Card (with leaflet) for	
• Front interface (1x)	A2C59512046
• Front interface (5x)	A2C59512047

Table 2: Accessories for DLD Short Range and DLD Wide Range

The following replacement parts can be ordered using the relevant article numbers:

Replacement parts for DLD Short Range

Replacement part	Article number
DLD Short Range	A2C59512105
Power supply cable for vehicle cigarette lighter	A2C59512106
Communication cable (K-Line)	A2C59512107
Mounting attachment	A2C59512108

Table 3: Replacement parts for DLD Short Range

Replacement parts for DLD Wide Range

Replacement part	Article number
DLD Wide Range	A2C59512118
Wireless link	A2C59512119
Power supply cable for vehicle cigarette lighter (with “Remote button”)	A2C59512120
Mounting attachment	A2C59512121

Table 4: Replacement parts for DLD Wide Range

Data transfer

Data transfer with the DLD Short Range

In the case of the DLD Short Range, DTCO download files (driver card and mass memory data) is transferred to the defined target folder in the fleet office computer via WLAN (Wireless Local Area Network).

To ensure that data transfer takes place in a user-friendly and secure manner, the following preconditions and requirements must be fulfilled. The *Chapter entitled "Data transfer"* explains the individual stages of data transfer with the DLD Short Range.

Preconditions

WLAN

WLAN (Wireless Local Area Network) is a local wireless network, the range of which is limited between the transmitter (in this case the DLD Short Range) and the receiver (in this case the WLAN access point).

Range

This limitation of max. 300 m wireless range (using an omnidirectional antenna) is determined by

- the permitted effective radiation power of the local wireless network in question (2.4 to 5.4 GHz).
- the possible location of a WLAN access point (internal or external area).
- the characteristics of the fleet site, e.g. open or built-up land.

Tip

To improve the wireless range for download data transfer, several access points can be used.◄

Areas of use

Data transfer with the DLD Short Range is mainly suitable for fleet owners

- whose vehicles return to the main fleet site or a sub-site on a regular basis and
- provided that a defined area of the site can be designated for access points, e.g. a parking area.

Costs

The DLD Short Range involves a one-off investment. No monthly fee is payable, because data downloading takes place via the existing company network.

Data protection

The procedure of transferring download files from the DTCO to the relevant server or target folder consists of several steps. Data encryption guarantees the security of the download files throughout the entire downloading procedure, also see the *Chapter entitled "Data transfer security"*.

Requirements

To ensure that secure data transfer can take place on the fleet site and that data can be copied to the intended computer environment, a relevant infrastructure must be prepared beforehand.

Required hardware

To transfer data using the DLD Short Range you will need

- a DTCO 1381 Rel. 1.3 (or higher) with a DTCO update already carried out by an authorised workshop.
- an access point with pre-prepared power and network connections that supports WPA-PSK and complies with the IEEE802.11 b/g standard.
- a computer with a network card for direct connection to the access point or for integration with the company network.
- an available USB port for connecting to a chip card reader into which a company card is inserted for authentication.

Condition

To enable access point operation, the computer environment must be capable of performing name resolution in the network (DNS function); see the *Chapter entitled "Installing the WLAN access point"*.

You must also make sure that the computer (stand-alone installation) can remain switched on overnight.◄

Required software

In order to transfer data successfully to the fleet office computer, the following requirements for the computer must be fulfilled:

- The Remote TCO Manager configuration software must be installed on a stand-alone computer or on the given client/server environment.
- Stand-alone or server installation: Depending on the access point used, device drivers and configuration software must be installed (manufacturer's product CD).
- Stand-alone or server installation: Depending on the chip card reader used, its device drivers must be installed (manufacturer's product CD).
- Stand-alone or client installation: If the configuration of a DLD Short Range is to be carried out on this computer, the USB driver must be installed from the product CD.

  You will also need the hardware components of the DLD Parameterization Kit (power adapter and mini-USB cable; also see the *Chapter entitled "Product summary - DLD Parameterization Kit"*.

Data transfer

Fig. 10: Data transfer with the DLD Short Range

1 DTCO and DLD identification and the establishment of a connection to the computer on the fleet site.

2 Transfer of card data and authentication of the company card in the DTCO

3 Data download to the DLD

4 Data transfer (encrypted) from the DLD to the computer on the fleet site.

5 If using TIS-Web: automatic transfer of download data after logging on to TIS-Web

Planning data transfer

With the Remote TCO Manager, you can define which data is to be downloaded from which vehicle/driver card and the times when download is to take place (e.g. daily, weekly or monthly).

Users of the TIS-Web or TIS-Office archiving solutions need only save the access data (or the path details to the product in question) in order to import the master records (managed there) and the created download reminders to the Remote TCO Manager.

The next download deadline is automatically saved in Data Management (per driver and vehicle) and in Remote Task Management under Authentication (as a due task).

! Important

Users of other archiving solutions must save and manage the master records and the download deadlines in Remote TCO Manager - you'll find more detailed information on this in the Remote TCO Manager Help.◄

Establishing a connection

When it is switched on, the DLD Short Range verifies (**1**) the DTCO it should connect with and which driver card is inserted. If the DLD Short Range is within the fleet site area in which data transfer is to take place, it will 'log on' to the WLAN access point. A connection to the Remote TCO Manager will also be established.

Upon receiving an authentication request, the Remote TCO Manager checks whether or not a data transfer for the particular vehicle (DTCO) or driver is planned for that day, basing its verification on existing tasks.

Transferring data from and to a vehicle

If a data transfer is due, the Remote TCO Manager (**2**) transfers the company card data to the DLD Short Range or DTCO for authentication. When the company card has been authenticated by the DTCO, the files (**3**) are downloaded from the DTCO and/or the driver card to the DLD Short Range.

To ensure data security, the DLD Short Range encrypts the downloaded files before they (**4**) are transferred by wireless to the WLAN access point - after decryption, they are then written to the relevant folder.

If you have a stored connection to the TIS-Web Server, when a user logs on to the TIS-Web Service, your data (**5**) will be automatically transferred for archiving and processed by the Service.

Transferring data with the DLD Wide Range

In the case of the DLD Wide Range, DTCO download files (driver card and mass memory data) are transferred via GPRS (mobile wireless network) to a specially equipped “DLD Remote Server” for e.g. decryption. From there the files are either sent directly to the TIS-Web Server, or they have to be downloaded to the computer on which the archiving solution is installed, e.g. for TIS-Office.

Tip

GPRS data transfer is more or less the same as sending an SMS from your mobile phone - the only difference is that GPRS data packets are much larger.◄

To ensure that this globally-functioning data transfer takes place in a user-friendly and secure manner, the following preconditions and requirements must be fulfilled. The *Chapter entitled “Data transfer”* explains the individual stages of data transfer with the DLD Wide Range.

Preconditions

GPRS

GPRS (General Packet Radio Service) is a service for transferring data packets within the GSM mobile wireless network (Global System for Mobile Communications). The range between the transmitter (in this case the DLD Wide Range) and the receiver (the receiving station of the mobile wireless provider) is only limited by the network grid of the selected provider.

Range

Further limitations on the wireless range limits of the DLD Wide Range can be determined by the mobile wireless provider's contract, which you (as the fleet operator) ultimately sign. There are basically two types of GPRS connections:

- without roaming

  connections are only permitted within one's own country.

- with roaming

  global connections are possible - cooperating service providers handle call forwarding in individual countries.

Tip

Depending on the service provider's rates, mobile wireless connections in foreign countries can be extremely expensive. Whether or not roaming is possible depends on the actual contract (SIM card range of functions) and the configuration of the DLD Wide Range.

The relevant consumer counselling offices (and of course your service partner) can provide you with more information on this.◄

Areas of use

Data transfer with the DLD Wide Range is eminently suitable for fleet owners whose vehicles hardly ever return to the main fleet site or even a sub-site.

Costs

The total costs of GPRS data transfer includes the costs for roaming (where applicable) and the costs for the amount of data transferred; the duration of the connection is irrelevant. In other words: you pay for the amount of data, not for the duration of the connection.

DLD Remote Server

The mobile wireless provider carries out the actual GPRS data transfer - but the customer-specific preparation and forwarding of this data, e.g. to the TIS-Web Server, is carried out by the “DLD Remote Server”, which is specially equipped for this task.

The tasks of the web-based DLD Remote Service also encompass

- the decryption of the files encoded by the DLD Wide Range before file transfer took place,
- the assignment of these driver card and mass memory files to the relevant recipient,
- the forwarding of the files to the TIS-Web Server, or the retention of the files for downloading, e.g. for TIS-Office and
- the documentation of these data processing and management steps.

This is why the configuration and consequently the integration of a DLD Wide Range in your GPRS-based data communication also takes place solely via this service; see the *Chapter entitled “Configuring the DLD Wide Range”*.

Since this cannot happen without your cooperation and a supervisory appraisal of the data communication process should always be possible, access to this DLD Remote Service is compulsory. Your service partner will set up this account for you and send you the access data by e-mail.

Data protection

The procedure of transferring download files from the DTCO to the “DLD Remote Server” or the TIS-Web Server consists of several steps. Data encryption guarantees the security of the download files throughout the entire downloading procedure, also see the *Chapters entitled “Data transfer security”* and *“Data transfer”*.

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Requirements

To enable secure data transfer from vehicle to archiving solution, a relevant infrastructure must set up beforehand.

Required hardware

To transfer data using the DLD Short Range you will need

- a DTCO 1381 Rel. 1.3 (or higher) with a DTCO update already carried out by an authorised workshop.
- a GPRS-capable SIM card (Subscriber Identity Module) which can be used in the DLD Wide Range.
- a computer with an Internet connection or a network card for integration with the company network.
- an available USB port for connecting to a chip card reader into which a company card is inserted for authentication.

✓ **Condition**

You must also make sure that the computer (stand-alone installation) can remain switched on overnight.◄

Required access rights

As described above, DLD Remote Service access must be set up to configure a DLD Wide Range and to exercise control over your data communication.

The access rights for this service can be oriented on individual requirements:

- The person who wants to configure a DLD Wide Range and integrate it into the GPRS-based data communication system (including the forwarding of data to the TIS-Web Server) will be given administrator rights.
- Persons who only wish to manage logged data transfer and the downloading of available driver card and mass memory files will be given user or read rights.

Required software

In order to transfer data successfully to the fleet office computer, the following requirements for the computer must be fulfilled:

- For DLD Wide Range configuration (authorised workshop or fleet site):
  - Stand-alone or client: Microsoft® Internet Explorer®, (Version 6.0 and higher)
  - Stand-alone or client: USB/GPRS modem driver (will be installed when configured a DLD using the DLD Remote Service for the first time).

    You will also need the mini-USB cable from the “DLD Parameterization Kit”; see the *Chapter entitled “Product summary - DLD Parameterization Kit”*.

- For download authentication, transfer of download deadlines and monitoring of download protocols (fleet site):
  - The Remote TCO Manager configuration software must be installed on a stand-alone computer or on the given client/server environment.
  - Stand-alone or server installation: Depending on the chip card reader used, its device drivers must be installed (manufacturer's product CD).

Condition

You must also make sure that the computer (stand-alone installation) can remain switched on overnight.◄

Data transfer

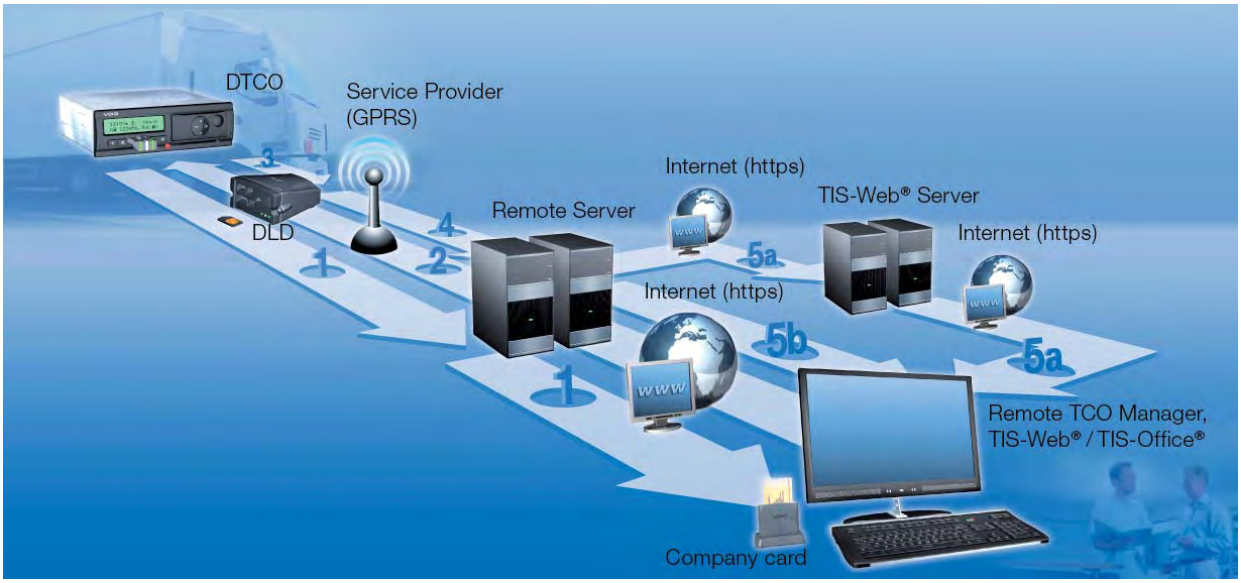


Fig. 11: Data transfer with the DLD Wide Range

1 DTCO and DLD identification and the establishment of a connection to the computer on the fleet site

2 Transfer of card data and authentication of the company card in the DTCO

3 Data download to the DLD (encrypted)

4 Data transfer (encrypted) from the DLD to the “DLD Remote Server”

5a If using TIS-Web:
automatic transfer of download data to the TIS-Web Server via a secure Internet connection; data is immediately available for evaluation

5b If using TIS-Office or another archiving solution:
data download from the “DLD Remote Server” via a secure Internet connection

Planning data transfer

With the Remote TCO Manager, you can define which data is to be downloaded from which vehicle/driver card and the times when download is to take place (e.g. daily, weekly or monthly).

Users of the TIS-Web or TIS-Office archiving solutions need only save the access data (or the path details to the product in question) in order to import the master records (managed there) and the created download reminders to the Remote TCO Manager.

The next download deadline is automatically saved in Data Management (per driver and vehicle) and in Remote Task Management under Authentication (as a due task).

The deadlines are automatically updated each time the DLD Wide Range connects with the computer on the fleet site.

! Important

Users of other archiving solutions must save and manage the master records and the download deadlines in Remote TCO Manager - you'll find more detailed information on this in the Remote TCO Manager Help.◄

Establishing a connection

When it is switched on, the DLD Wide Range verifies (**1**) the DTCO it should connect with and which driver card is inserted. Using the download deadlines (which have been updated and saved in the DLD Wide Range), it checks whether or not a data download (mass memory, driver card) is actually planned for that day.

If a download is planned, the DLD Wide Range will connect to the fleet office computer to call up the data of the company card inserted in the card reader.

! Important

If no corresponding download deadline is saved in the memory of the DLD Wide Range, the DLD Wide Range will then proceed in accordance with the stored basic configuration; see the *Chapter entitled “Configuring the DLD Wide Range”* on *Page 95*.◄

Transferring data from and to a vehicle

When the company card has been authenticated by the DTCO, the encrypted files (**3**) are downloaded from the DTCO and/or the driver card to the DLD Wide Range via the wireless link.

To ensure data security, the DLD Wide Range encrypts the downloaded files before they (**4**) are transferred via GPRS to the “DLD Remote Server”.

If you have a stored connection to the TIS-Web Server, your data (**5a**) will be automatically transferred to the Server via a secure (SSL) Internet connection and archived. The data will be available for evaluation the next time a user logs on to the TIS-Web Service.

However, if TIS-Office or another archiving solution is used, the download files (**5b**) must be downloaded from the DLD Remote Server to the intended target folder for archiving.

Commissioning the DLD Short Range

The steps involved

1	**Checking condition upon delivery**	– Verify that all package contents have been packed and are undamaged.	See the *Chapter entitled "Checking condition upon delivery"*
	The next two steps are only necessary if an access point has not yet been set up and/or the Remote TCO Manager has not yet been installed.		
2	**Setting up the WLAN access point**	– Configure the WLAN access point for data transfer using the DLD Short Range. – Install the WLAN access point at the intended location.	See the *Chapter entitled "Installing the WLAN access point"*
3	**Installing the Remote TCO Manager**	– Install the Remote TCO Manager.	See the *Chapter entitled "Installing the Remote TCO Manager"*
4	**Configuring the DLD Short Range**	– Start the Remote TCO Manager. – Configure the DLD Short Range and the Remote TCO Manager for communication. – Connect the DLD Short Range to the computer and transfer its configuration.	See the *Chapter entitled "Configuring a WLAN connection"* See the *Chapter entitled "Registering and configuring a DLD Short Range"*
	This next step is only necessary if the DTCO update for the front interface has not yet been carried out.		
5	**Update of the front interface on the DTCO 1381**	– Update DTCO 1381 Rel. 1.3 for remote download by an authorised workshop.	Also see the DTCO Update booklet.
	This next step is only necessary if the DLD Short Range is to be installed permanently in the vehicle; its mobile use is described in the leaflet for drivers (supplied with the package).		
6	**Installing the DLD Short Range in the vehicle**	– Connect the connection cable to the DTCO 1381 Rel. 1.3 (DLD Short Range fixed installation). – Connect the connection cable to the vehicle's electrical system (fixed installation of the DLD Short Range). – Install the mounting attachment. – Install the DLD Short Range in the mounting attachment.	See the *Chapter entitled "Installing a Download Device"*

7 **Importing download deadlines and creating tasks**	– Start the Remote TCO Manager. – Import download deadlines from TIS-Web. *or* – Import download deadlines from TIS-Office. *or* – Create a download task in Remote TCO Manager.	See the *Chapters entitled "TIS-Web settings"* or *"TIS-Office settings"* or *"Managing deadline-related tasks"*
8 **Carrying out a data download**	**Conditions:** • The vehicle is within the defined area of the fleet site. • The ignition is switched on. • A current task has been created in the Remote TCO Manager. **Procedure (mobile use):** – Connect the DTCO and DLD using the cable. – Connect the DLD Short Range to the power supply (vehicle cigarette lighter).	See the *Chapter entitled "Downloading data with the DLD Short Range"* See the leaflet for drivers (supplied with the package)

Table 5: Commissioning the DLD Short Range – the steps involved (tabular)

Preparations for commissioning

Checking condition upon delivery

Before starting installation and commissioning, the package supplied with the DLD Short Range should be checked, i.e all components must be in the package in undamaged condition; see the *Chapter entitled "Product summary - DLD Short Range"*, *Section "Package contents - Basic Kit"*.

All product components are exhaustively checked before leaving the factory - if, however, anything seems amiss, please contact your service partner.

Installing the WLAN access point

Before you can transfer data with a DLD Short Range, a WLAN access point must first be configured and installed.

Condition

To enable the DLD Short Range to communicate with an access point,

- the access point must support WPA-PSK and comply with the IEEE802.11 b/g standard.
- the computer environment must be capable of performing name resolution in the network (DNS function).
- the IP address given must match the company network, e.g. 192.168.10.XXX.

  The latter only applies if the company's internal parameters require a fixed IP address.◄

Important

If you want to configure a DLD Short Range, you will need to have some knowledge of networks and their installation.

Please consult your system or network administrator about setting up a relevant network connection and - where applicable - the associated IP addresses.◄

Installation

When installing a WLAN access point, the following points must be observed:

- If possible, the installation site should be located where data transfer is to take place, e.g. in the parking area.
- Power and network connections must be set up.

Please adhere to the manufacturer's instructions

- on network requirements, e .g. the implementation of domain names in IP addresses (DNS),
- on the maximum wireless range and
- on the protection class, if the device is to be set up outside the building.

Important

There are many possible installation locations and network configurations - we can only give you a few pointers to help you.

As we already mentioned in an earlier chapter, a professional electrical installation engineer and telecommunications/network technician must install the access point and integrate it into the existing network.◄

Tip

For a larger area, you can integrate several access points for DLD Short Range data communication.◄

Configuring the WLAN access point

There are many types of access points on the market today - in this product manual, we can only explain the main points of configuration. Please adhere to the guidelines of the individual manufacturers with regard to the following information.

Condition

The computer environment used must be capable of performing name resolution in the network (DNS function/ domain name system).◄

Tip

In the case of a stand-alone installation, DNS functions are not available by default (due to the operating system which is used) - no server functions.

However, there are relevant tools available on the Internet which can provide you with DNS functions, even for a stand-alone installation, e.g. “RaidenDNSD 1.3 RTM”.◄

Important

To transfer data, the WLAN access point must be connected to the computer with the Remote TCO Manager stand-alone or server installation, or it must be integrated into your company network.

To ensure the security of your company network, there are various security settings levels which you can configure:

- In the WLAN access point, “WPA-PSK” is set as a default security setting (Wi-Fi Protected Access - Pre-Shared Keys).
- The SSID (Service Set Identifier) or “name of the network” can be selected as “hidden” for the access point.
- You should disable the automatic assignment of IP addresses via DHCP (Dynamic Host Configuration Protocol) - assign the address manually, matching the network's number group.◄

Tip

As a rule, access points also offer you the option of saving fixed MAC addresses (Media Access Control) as an extra security precaution.

This specific physical device address is read out by the access point and saved as being access-entitled. This means that other (perhaps unknown) devices can no longer dial into the network via this access point, even if they have the same IP address.◄

Configuration

To configure the WLAN access point for data transfer with the DLD Short Range:

1 Connect the WLAN access point to a computer (stand-alone or server) or the company network using a network card or a hub.

- **You may have to insert the individual manufacturer's product CD into the CD/DVD drive to enable the initialisation or the initial configuration of the WLAN access point.**

2 Open Windows® Internet Explorer® and enter the WLAN access point's IP address.

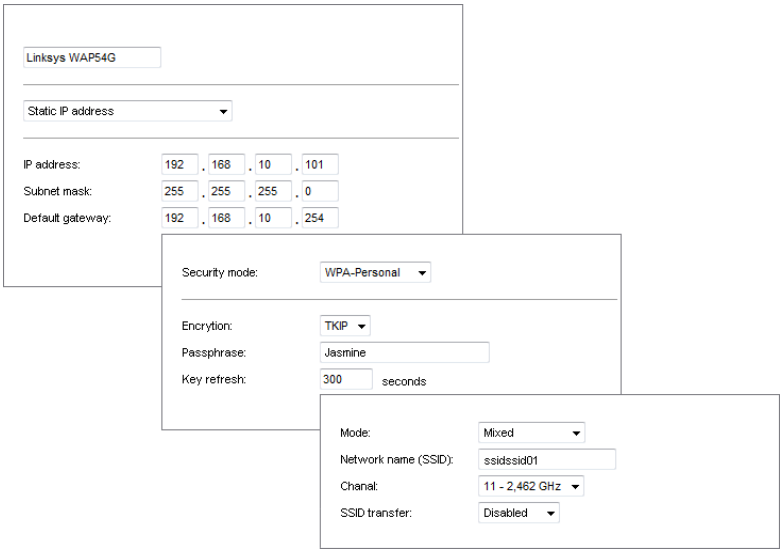
Depending on the manufacturer, a login page or a dialogue box for WLAN access point login is displayed.

Important

Please refer to the manufacturer's documentation for the factory-set IP address of the access point and other possible access data.◄

3 If required, enter your access data (password and user name) and click on [OK] to confirm.

The configuration software of the WLAN access point starts. You can now make settings at the WLAN access point.



4 Enter your preferred configuration data.

Important

Consult your system or network administrator to specify

- security settings.

  If (as recommended) you select **WPA-PSK**, you must set **TKIP** (Temporal Key Integrity Protocol) as the encryption.

- IP addresses for the WLAN access point.

  Remember that the IP address you assign must match the number group of the company network, e.g. 192.168.10.XXX.◄

Tip

Make a note of your settings - they are partly the same as the settings you'll need to configure the DLD Short Range; see the *Chapter entitled “Configuring a WLAN connection”*, *Page 67*.

These include

- the security setting with selected encryption and (if you select **TKIP**), the security key (e.g. Jasmine) and
- the network name (SSID), e.g. ssidssid01.
- the dynamic IP address or static IP address with gateway.

You should also make a note of the fixed IP address (recommended) - this enables you to check the accessibility of the access point within the network at any time, e.g. using the “PING” command.◄

- **If you wish, assign a new password to access the configuration of the access point.**

  Make a note of the password and keep it in a safe place, where it is inaccessible to third parties.

5 **Save the changes and end the configuration process.**

  The WLAN access point has been successfully configured! Now a DLD Short Range can be integrated into your network, after you have installed the Remote TCO Manager.

Remote TCO Manager

This Chapter describes the installation and the user interface of the Remote TCO Manager (RTM).

Use

You need the RTM in order to

- configure the DLD Short Range; see the *Chapter entitled "Registering and configuring a DLD Short Range"*.
- create and manage deadline-related tasks for downloading data; see the *Chapter entitled "Managing deadline-related tasks"*.
- authenticate the company card at the DTCO 1381 and authorise the download of mass memory or driver card data.

In the case of the DLD Short Range, the Remote TCO Manager also serves as a link between the data downloaded from the DTCO (and/or the driver card) and your archiving solution (e.g. TIS-Web or TIS-Office).

Important

The Remote TCO Manager is required for all possible usage. You must install the software from the product CD, whether you use DLD Short Range or DLD Wide Range.◄

System requirements

In order to use the Remote TCO Manager, your computer must meet the following requirements:

Hardware

Component	Requirement
Mainboard	Pentium 4, 1 GHz, 32 bit
Main memory	1 GB RAM
Hard disk memory	250 MB free hard disk memory for software installation and temporary storage of download files
Interfaces	• Stand-alone or server: USB 2.0 port for the permanent connection of a chip card reader • Configuration: free USB 2.0 port for connecting the Download Device • Stand-alone or server for the DLD Short Range: network connection (or hub) for connecting to the WLAN access point (RJ 45)
Transfer standard	If using TIS-Web: min. ADSL / VDSL

Software

Component	Requirement
Operating system	Stand-alone or client: Microsoft® Windows® XP or Vista™ (with current Service Pack) Server: Microsoft® Windows® Server 2003 (with current Service Pack) for DNS functions
Installation program	Microsoft® Windows® Installer 3.1 or higher
Display program	Adobe® Reader®
Internet browser	DLD Wide Range and/or TIS-Web: Microsoft® Internet Explorer® Version 6.0 or higher

Installing the Remote TCO Manager

Condition

To install the RTM, you must have either administrator rights or be authorised to install programs.◄

Important

Bear in mind that

- the software must first be installed on the server and then on the intended clients - the reason for this is that you must specify a server during RTM installation on a client (computer name or IP address).

  Please refer to the *Chapter entitled "Points to watch during installation"* for details regarding a client/server installation, communication interfaces and associated services.

- the server or stand-alone computer must have Internet access if you want to configure a DLD Wide Range or use TIS-Web as an archiving solution.

  DLD Wide Range configuration also requires the installation of an extra USB/GPRS modem driver; see the *Chapter entitled "Registering and configuring a DLD Wide Range"*.◄

To install the software:

Logging in to the operating system

1 Log on to the operating system with a user account that has administrator rights.

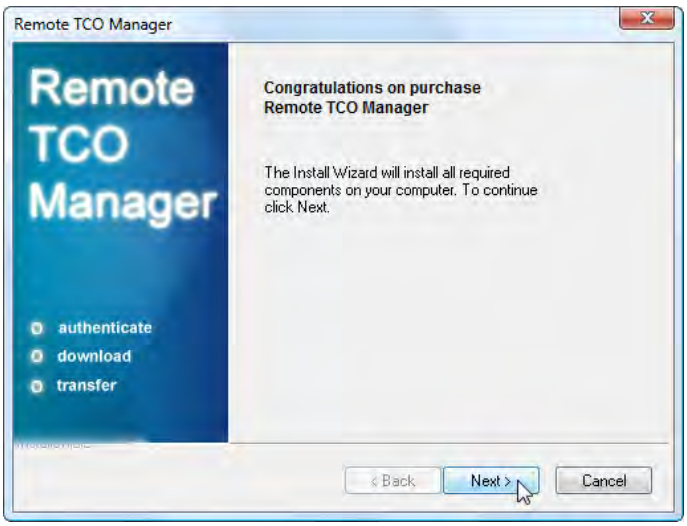
2 Close all active programs, but especially your active virus scanner, since it can cause problems during installation.

3 Insert the product CD into the CD/DVD drive.

The Installation Wizard starts automatically with a welcome dialogue screen.

Important

If the Autostart function on your computer is disabled, start Windows Explorer, switch to the CD/DVD drive and double-click on “setup.exe”.◄



4 **Click on [Next>] to continue the installation process.**

A dialogue box for country and language selection is displayed.

Selecting a country and language

5 **Select the country and language in which the software is to be installed.**

6 **Click on [Next>] to continue the installation process.**

The installation routine checks whether or not the necessary system components are available. If they are, the software licensing agreement is displayed.

Important

As regards the operating system, the Remote TCO Manager requires

- ".NET Framework" (software platform for flexible access to operating system functions and for data exchange).
- "VC++ Runtime Components" (runtime environment for programs which have been programmed in Visual C++).

Follow the Wizard's instructions (if necessary) to install the missing components.◄

Important

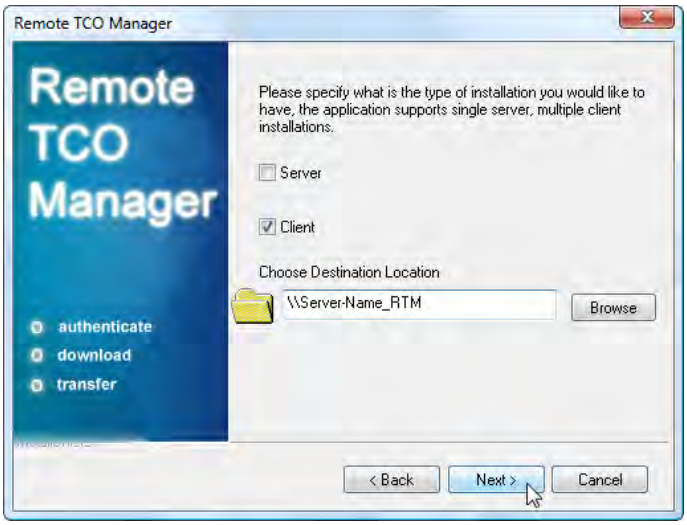
Read the software licensing agreement carefully.

If you wish you can also print out the agreement by clicking on **[Print]**.◄

Licensing agreement

7 If you want to continue with the installation, select "I accept the licence agreement" and click on [Next >].

A dialogue box for selecting the installation type is displayed.



Important

In the case of a stand-alone installation, both check boxes (Server **and** Client) must be selected (default setting).

The *Chapter entitled "Modifying installation settings"* has more information on how to modify the installation type (at a later date).◄

Installation type

- **Clear the**
  - **"Server" check box if you want to install the Remote TCO Manager as a client.**

    In this case, you can enter the name of the computer (on which the server is installed) directly
    - into the **Choose Destination Location** text box, e.g. "\\Program Server",
    - or click on **[Browse]** to specify the relevant computer in the network.
  - **"Client" check box if you want to install the Remote TCO Manager as a server.**

Important

Bear in mind that

- you must install the server before you can install the Remote TCO Manager as a client.

  The *Chapter entitled "Configuring the client/server environment"* has more information on how to configure a server-client connection and the points to watch for.
- when you select **Client**, the Installation Wizard continues the installation displaying the overview of the selected settings; see from *Step 13*.◄

8 After selecting the installation type, click on [Next>] to answer the Wizard's next prompt.

A dialogue box is displayed for selecting the type of DLD you want to manage.

DLD type

- **Clear the**
  - **“Short Range Download Devices” check box if you only want to use the DLD Wide Range to download files.**
  - **“Wide Range Download Devices” check box if you only want to use the DLD Short Range to download files.**

  Both devices are selected by default.

Important

The *Chapter entitled “Modifying installation settings”* has more information on how to modify the DLD version and how to add another device type (at a later date).◄

9 **After selecting the type of device, click on [Next>] to answer the Wizard's next prompt.**

A dialogue box for selecting the archiving solution is displayed.

Archiving solution

10 **Select the archiving solution with which you work (TIS-Web, TIS-Office or Others).**

Important

The archiving program you choose here specifies

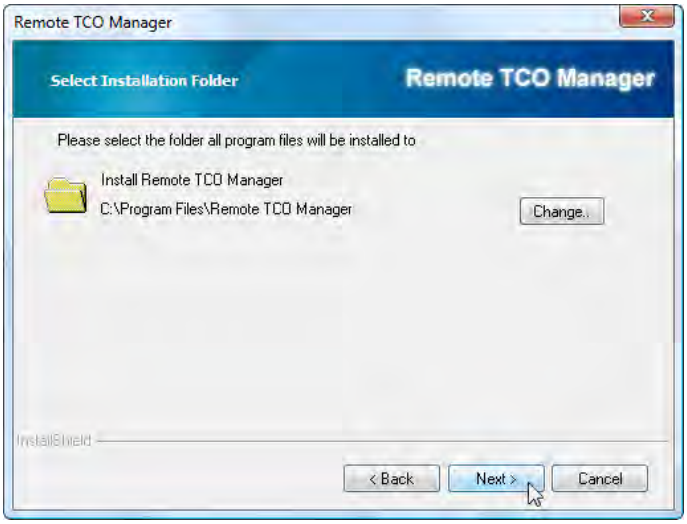
- the program from which the deadlines of due downloads are imported (only with TIS-Web and TIS-Office) and
- the program to which data is transferred for archiving and evaluation.

If you use both TIS-Web and TIS-Office, select TIS-Web (master) as your archiving solution.

The *Chapter entitled “Modifying installation settings”* has more information on how to change the selection you make now (at a later date).◄

11 **After selecting the archiving solution, click on [Next>] to answer the Wizard's next prompt.**

A dialogue box for selecting the installation folder is displayed.



Installation folder

12 **Click on**

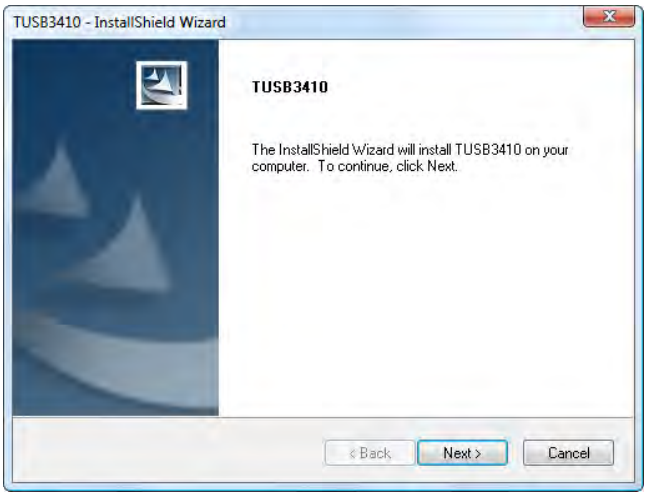
– **[Change..] if you want to specify a different path and/or folder for the installation.**

Confirm the change you made by clicking on **[OK]**.

– **[Next >] if you want to accept the default installation path (or the path/folder changes you made).**

During DLD type selection,

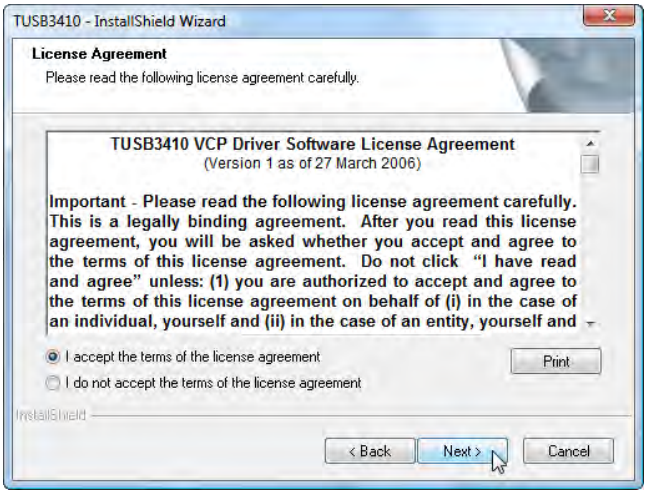
- if you also selected the DLD Short Range, the Installation Wizard for the USB driver now starts with a welcome dialogue screen.
- if you only selected the DLD Wide Range, you must install a separate driver; see the *Chapter entitled "Registering and configuring a DLD Wide Range"*. In this case, the Installation Wizard for the DLD Short Range USB driver will not start; continue with *Step 13*.



USB driver

- **Click on [Next>] to continue the installation process.**

  The software licensing agreement is displayed.



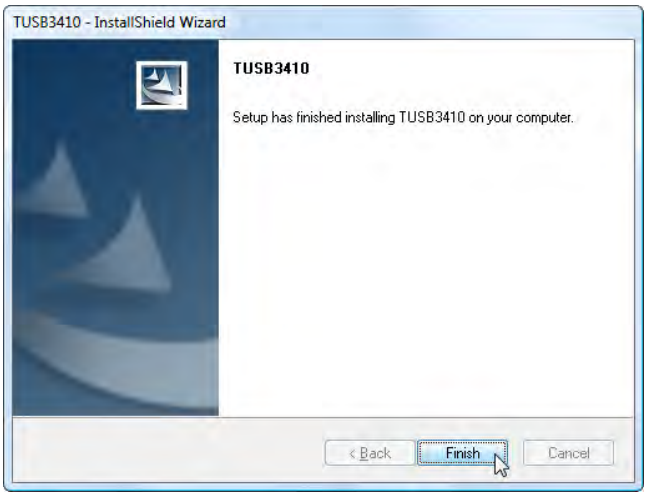
! Important

Read the software licensing agreement carefully.

If you wish you can also print out the agreement by clicking on **[Print]**.◄

- **If you want to continue with the installation, select "I accept the terms of the license agreement" and click on [Next >].**

  The USB driver will now be installed.

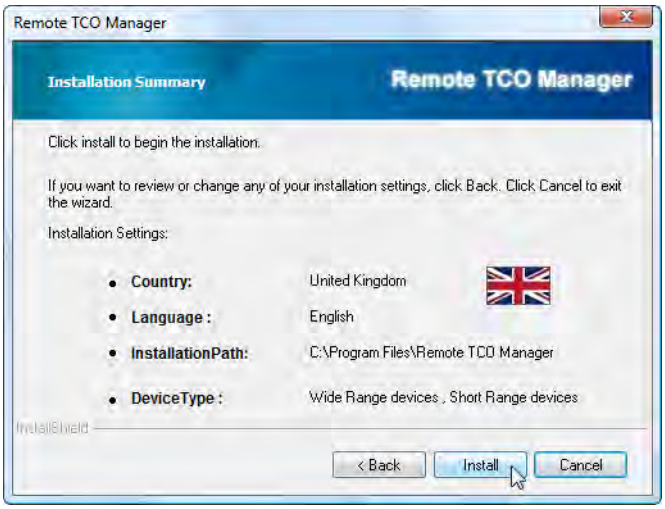


- **Click on [Finish] to install the DLD Short Range USB driver.**

  The USB driver will now be installed.

- **Now click on [Finish] to finish the USB driver installation process.**

  A dialogue box for checking the Remote TCO Manager installation settings is displayed.



Installation settings

13 **Click on**

- **[< Back] if you want to change a setting in a previous dialogue box.**
- **[Install] if you want to start Remote TCO Manager installation using the settings you have made.**

  A progress bar shows you the ongoing status of the software installation - when installation has finished, the dialog box for running the program will be displayed.

- **If you don't want to start the program, clear the “Run Remote TCO Manager” check box.**

14 Now click on [Finish] to finish the installation process.

You have now installed the Remote TCO Manager!

However, before you can start the program, you should read the following important note which applies particularly to client/server installations.

! Important

In the case of a client/server installation, please bear in mind that you must make several server settings before you start the program for the first time; see the *Chapter entitled "Configuring the client/server environment"*.

When the Remote TCO Manager is installed, the following ports are automatically enabled in the computer's protection system (Firewall). You must check that the following ports have been opened (for a client/server installation):

- Port 9991 for communication with a DLD (stand-alone/server)
- Ports 9992 and 9994 for communication between server and client

  These ports are only opened in the case of a client/server installation.
- Port 9993 for local installation (not opened for communication through the Firewall)

If these ports are already being used by other programs, you must specify (in the Remote TCO Manager) the ports you want to use as substitutes and open them via your Windows® Firewall.

The *Chapter entitled "Setting up and opening ports"* has more information on this.

You should also check the automatic start of the **RTM Authentication** and **RTM SR Communicator** services and correct them manually where necessary; see the *Chapter entitled "Checking and starting services"*.◄

Points to watch during installation

This section briefly describes what must be done before you start the “Remote TCO Manager” for the first time - and what you must check during the program start.

If you decided on a stand-alone installation, only the *Chapters entitled “Setting up and opening ports”* and *“Checking and starting services”* apply.

Condition

You have installed the Remote TCO Manager.◄

Important

Details of paths to program or system folders, system settings details and screenshots are based on the Microsoft® Windows® Vista™ operating system.◄

Configuring the client/server environment

Important

In the case of a client-server installation, the entire program operation is carried out via the client installation(s).

The only exceptions here are the RTM Authentication and RTM SR Communicator services, which are installed on the server and can only be activated there.◄

Checking the sharing of the “RTMServer” installation folder

To enable a client to access the RTM server installation, the “RTMServer” program folder is automatically shared for client access during installation.

When client-server installation has finished, verify that the folder has been shared on the intended server. It is not necessary to share the folder in the case of a stand-alone installation.

Condition

You must

- have administrator rights to share the “RTMServer” folder.
- make settings on the computer which acts as a server for the Remote TCO Manager.

Sharing enables clients to edit the data and to write this data back into the program environment, in turn enabling other clients to access it.◄

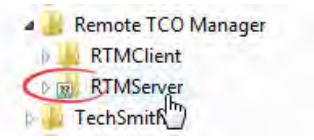
To check that the “RTMServer” installation folder has been shared:

Checking for sharing

1 **Open Microsoft® Windows® Explorer.**

2 **Open the directory in which the RTM installation files are stored, e.g. “C:\Program files\...\Remote TCO Manager”.**

The “RTMServer” folder symbol has an additional tag (a person), signifying that the folder has been shared.



- **You can check if the folder can be shared by clicking on “Network” and the computer name which acts as an RTM server.**

The shared folder and its sub-folder(s) should be accessible.

To share (if necessary) the “RTMServer” installation folder:

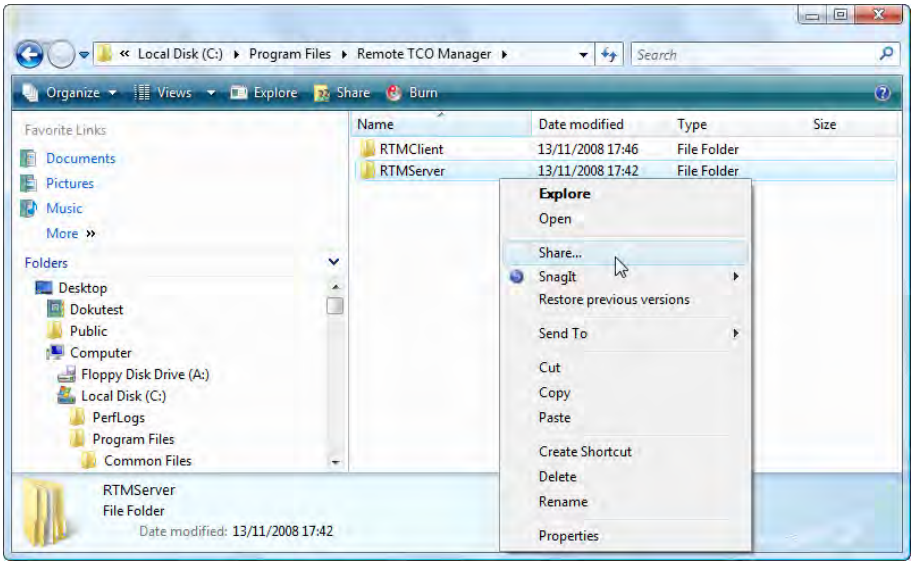
Sharing

1 **Open Microsoft® Windows® Explorer (if not open).**

2 **Open the directory in which the RTM installation files are stored, e.g. “C:\Program Files\...\Remote TCO Manager”.**

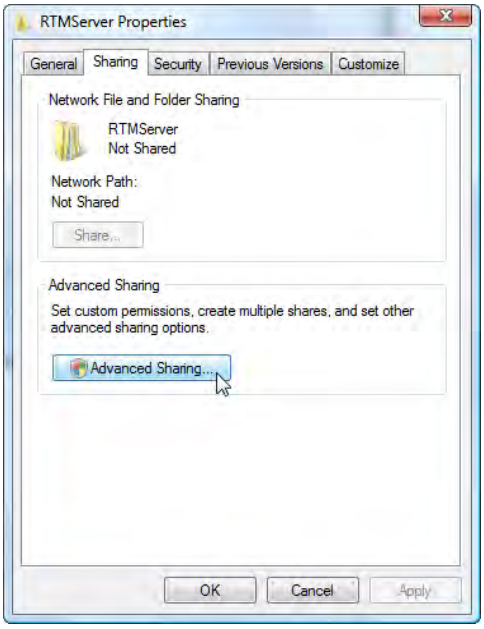
3 **Right-click on the “RTMServer” folder.**

A shortcut menu is displayed.



4 Click on “Share...”.

The **RTMServer Properties** dialogue box opens.

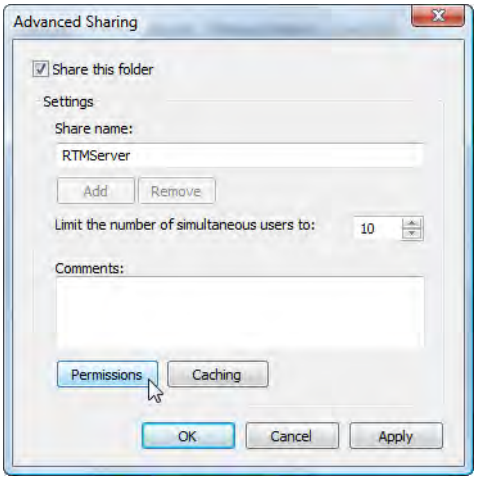


5 On the “Sharing” tab, click on [Advanced Sharing...].

A security warning message is displayed.

6 Click on [Continue] to confirm and continue with the procedure.

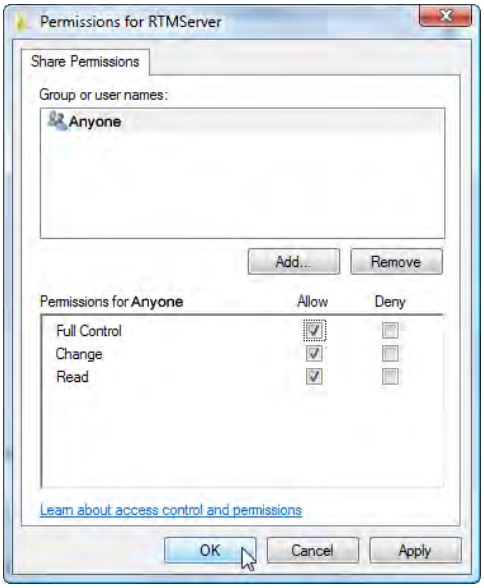
The **Advanced Sharing** dialogue box is displayed.



7 **Select the “Share this folder” check box.**

8 **Click on [Permissions] to configure access.**

The **Permissions for RTMServer** dialogue box is displayed.



Sharing a folder

9 **In the “Group or user names” list, select the “Anyone” entry.**

10 **For “Full Control” select the “Allow” check box.**

The “Change” check box is then selected automatically.

! Important

This enables access to the folder for all users on your company network.

If you want to enable access to the folder for only certain users, you can create access for these users via **[Add...]**.◄

11 Click on [OK] to confirm.

The **Permissions for RTMServer** dialogue box closes.

12 Click on [OK] to share the “RTMServer” folder.

The **Advanced Sharing** dialogue box closes.

13 Click on [OK] to close the dialogue box.

The **RTMServer Properties** dialogue box closes. The “RTMServer” folder is now enabled for client access.

- **Check sharing by, e.g.**
  - **– opening Microsoft® Windows® Explorer,**
  - **– clicking on “Network” and then on the name of the server computer on which the Remote TCO Manager is installed.**

    The shared folder and its sub-folder(s) should now be accessible.

Setting up and opening ports

Important

The following ports are opened for communication through the firewall during installation:

- Port 9991 for communication with a DLD (stand-alone/server)
- Ports 9992 and 9994 for communication between server and client

  These ports are only opened in the case of a client/server installation.
- Port 9993 for local installation (not opened in the Firewall)

If these ports are already being used by other programs, you must specify (in the RTM) the ports you want to use as substitutes and open them in the Microsoft® Windows® Firewall.◄

Tip

Ask your system administrator which ports are being used by other programs.

TIS-Office users must reserve Port 6001 or 6002 for the dongle.◄

Condition

You must have administrator rights to open ports in the firewall.◄

To open ports in your firewall:

1 **Choose “Start > Control Panel”.**

The Control Panel functional overview opens.

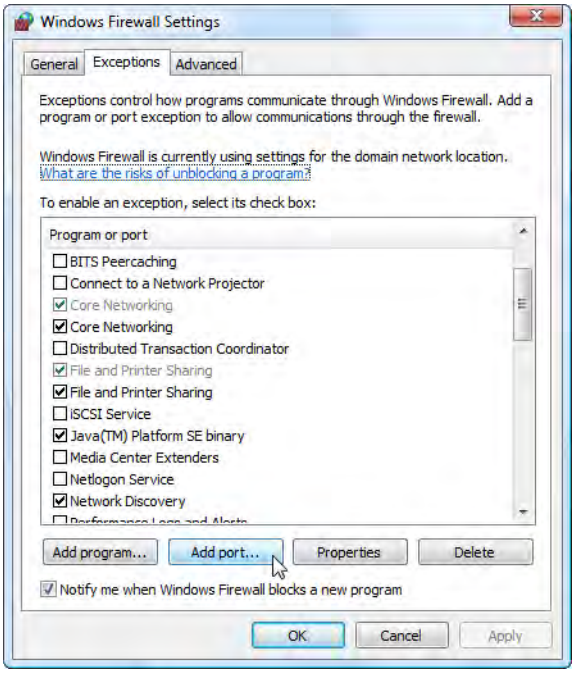
2 **Click on “Security” and Allow a program through Windows Firewall.**

A security warning message is displayed.

3 **Click on [Continue] to confirm and continue with the port opening procedure.**

The **Windows Firewall Settings** dialogue box is displayed.

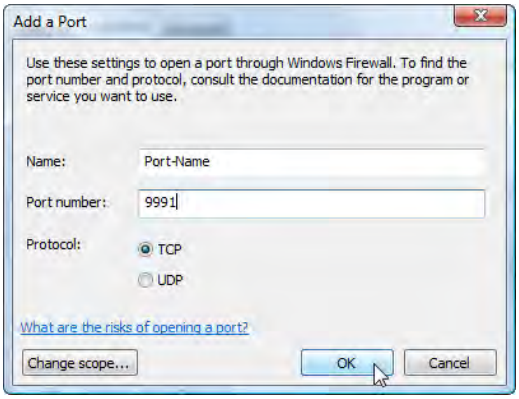
4 **Go to the “Exceptions” tab.**



Adding and opening a port

5 **Click on [Add port...] to add a new port for data communication.**

The **Add a Port** dialogue box is displayed.



6 **Enter a name and the port number.**

7 **Select the “TCP” protocol.**

8 **Now click on [OK] to add the port.**

The **Add a Port** dialogue box closes. The port has now been added.

The **Windows Firewall Settings** dialogue box is displayed in the foreground again.

Opening another port

- **Repeat *Steps 5* to *8* if you want open more ports.**

Checking and starting services

! Important

In the case of a stand-alone or server installation, the **RTM Authentication** and **RTM SR Communicator** services are set up in the system and started when a user logs on to the computer.

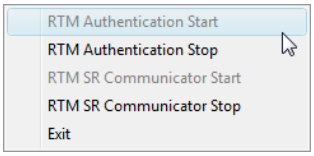
If one of these services has not started, you can check and (if necessary modify it) via

- the RTM icon in the notification area of the taskbar or
- ”**Control Panel** > **System and Maintenance** > **Administrative Tools** > **Services**“.◄

Checking and starting services via the notification area

1 **In the notification area of the taskbar, right-click on the RTM icon.**

A shortcut menu is displayed.



Restarting RTM Authentication

2 **Click on “RTM Authentication” Start to restart the service.**

Restarting RTM SR communication

3 **Click on “RTM SR Communicator Start” to restart the service.**

Checking and starting services via the Control Panel

1 **Choose “Control Panel > System and Maintenance > Administrative Tools”.**

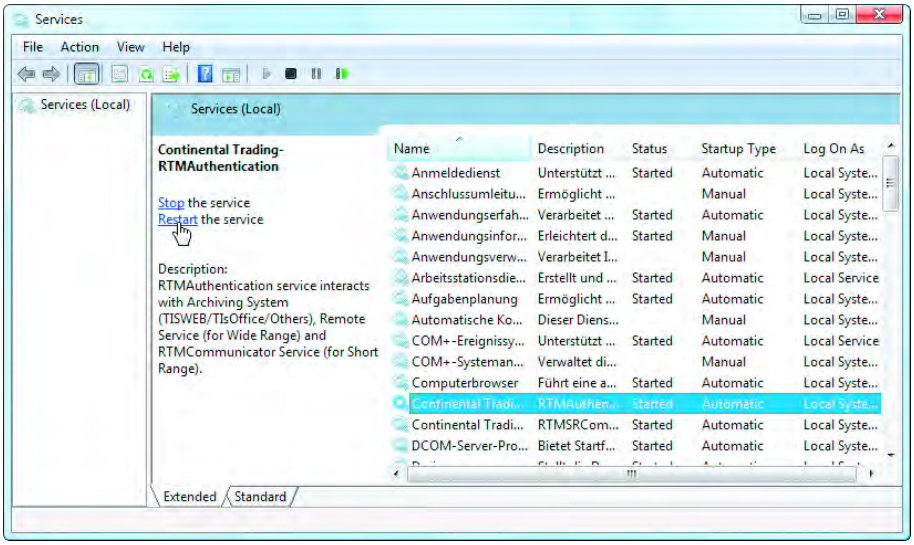
The overview of the administrative functions opens.

2 **Double click on “Services”.**

A security warning message is displayed.

3 **Click on [Continue] to confirm.**

The **Services** window opens.



Restarting RTM Authentication

4 **Select “Continental Trading-RTMAuthentication” and click on the “Restart” link to restart the service.**

Restarting RTM SR communication

5 **Select “Continental Trading-RTMSRCommunicator” and click on the “Restart” link to restart the service.**

Starting the program

Important

To use the Remote TCO Manager, you must always enter a user name and password after starting the program.

You specify these details the first time you log on to the Remote TCO Manager.◄

Starting the program

1 **Start the Remote TCO Manager by**

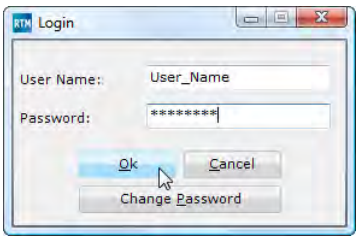
- **double-clicking on the program icon on your Desktop or**
- **clicking on the relevant entry via "Start > All Programs".**

The **Login** dialogue box opens.

Important

If you're starting the Remote TCO Manager for the first time, the details you specify here will determine your future login data.

Make a note of your user name and password and keep it in a safe place where it is inaccessible to third parties.◄



Access data

2 **Enter your access data (User Name and Password) and click on [OK].**

The Remote TCO Manager starts, opening at the **Data Management** tab by default.

Outstanding actions are displayed in the **RTM Messages** dialogue box, e.g. missing chip card reader, missing TIS-Web address (see *Page 57*).

- **You can**
  - **make settings for individual archiving solutions,**

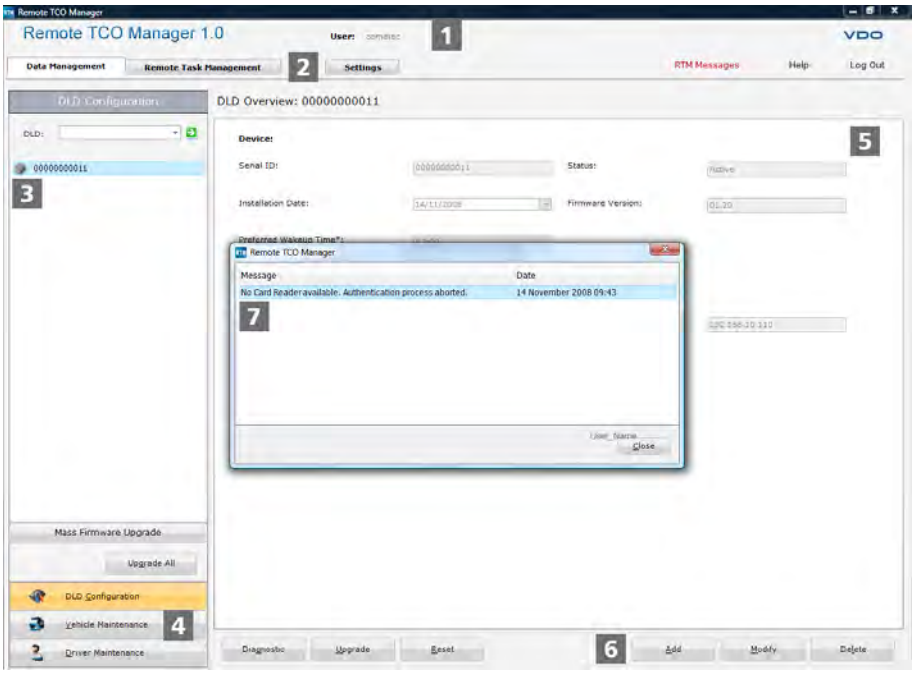
    See the *Chapters entitled "TIS-Office settings"*, *"TIS-Web settings"* and *"Settings for other products"*.
  - **configure the first DLD Short Range and integrate it into your data communication system,**

    See the *Chapter entitled "Registering and configuring a DLD Short Range"*.
  - **manage deadline-related tasks or**

    See the *Chapter entitled "Managing deadline-related tasks"*.
  - **learn about the user interface and general functions in the following Chapters.**

Remote TCO Manager interface

Using the Remote TCO Manager, you can configure the DLD Short Range and manage all data downloads carried out by your DLDs.



1 Heading area
2 Tabs
3 Selection pane
4 Module buttons
5 Display and Editing area
6 Action area (buttons)
7 Dialogue boxes, e.g. **RTM Messages**.

1 Heading area

This area is always displayed - it shows you the currently valid access data (User). It also offers you

- (via **RTM Messages**) information about
  - components that are not connected (e.g. the card reader with company card) or
  - about incorrect settings (e.g. TIS-Web or DLD Remote Service access data).
- (via **Help**) detailed information about program tabs, functions, boxes and buttons (Help) and
- (via **Log Out**) the correct way to end the program.

! Important

The **RTM Messages** function is only enabled when messages are available. If messages are available, the link is displayed in red.◄

2 **Tabs**

Topic-associated functions are assigned to the various tabs.

In the tabs, the module buttons take you to additional functions, or give you the option of selecting individual DLD Short Range devices, vehicles or drivers.

3 **Selection pane**

In the Selection pane you can select e.g. a DLD Short Range, a vehicle or a driver.

4 **Module buttons**

The module buttons enable modules with additional functions or selection options, e.g. **[Vehicle Maintenance]**.

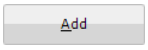
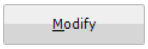
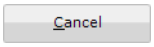
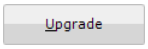
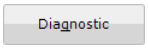
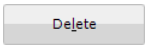
5 **Display and Editing area**

This area is reserved for the display and editing of data. You'll find DLD Short Range configuration details here, for example.

6 **Action area**

Various functions are available for you here, depending on the tab you called up and the previously-activated module or function.

Here is an overview of the most important buttons:

Click on	
	if you want to add another DLD.
	if you want to modify existing data. The displayed boxes are made available for editing.
	if you want to cancel what you have entered. The individual tab is displayed, but the boxes are unavailable.
	if you want to save your entries and modifications.
	if you want to carry out a firmware upgrade for one DLD Short Range device or for all of them.
	if communication problems have occurred and you want to check a DLD Short Range connection (error messages).
	if you want to delete a data record (e.g. a DLD or a vehicle).
	if you want to delete one of the deadline-related tasks.

! Important

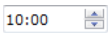
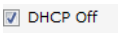
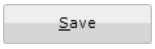
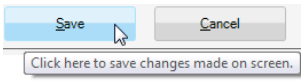
You can only delete tasks which you have previously added (via **[Add]**) and which have have not yet been started.◄

7 **Dialogue boxes**

Dialogue boxes are always displayed when you have triggered an action via a button or the upper menu area, e.g. in order to select an item or confirm an action.

The **RTM Messages** dialogue box is always shown if an action is expected of you when the RTM is started or when using the program, or if you have clicked on this function if it is active (active = displayed in red).

The below actions/descriptions apply to all areas of the Remote TCO Manager

	Symbol	Description
Moving within a list		The TAB key enables you to move line by line between cells; the arrow keys enable vertical and horizontal movements.
Spin box		This box gives you the option of directly using the desired entry or using the two buttons with the up and down arrows.
Check box		The check box allows you to specify whether or not the given option (from a group of options) should be enabled (by selecting it). A checked box means that the option is enabled. Multiple choices are possible.
List box		The down arrow of this box enables you to select an entry from a list or a date from a calendar (also within a table).
Module		These are buttons in a tab, via which you can access further functions or displays, e.g. Vehicle Maintenance.
Option button		This specifies whether or not the given option should be enabled (similar to the check box). A checked box means that the option is enabled. Multiple choices are possible.
Tabs		This is for selecting the desired work area (the tab) or the data you require, e.g. Data Management or Remote Task Management.
Button		A click on this graphical element triggers a specific action in the form of either text or symbol(s).
Tooltip		Brief information about a button or box over which the mouse pointer is resting.

Setting the user interface language

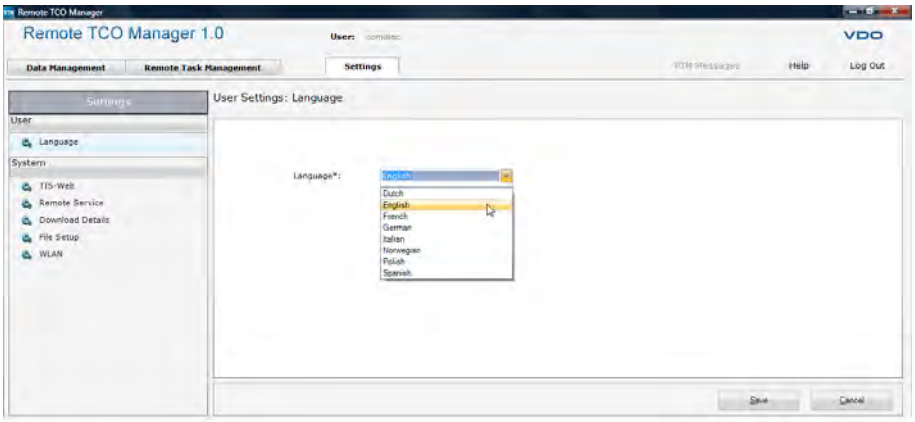
To set the language:

1 **Select the “Settings” tab.**

The tab is displayed.

2 **Under “User”, click on “Language”.**

The list box for language selection is displayed.



3 **Select your preferred language from the list.**

4 **Now click on [Save] to save your selection.**

A dialogue box for selection confirmation is displayed.

5 **Click on [OK] to confirm.**

The language is now set.

Changing your password

Important

You can only change your password via the **Login** dialogue box during program start.

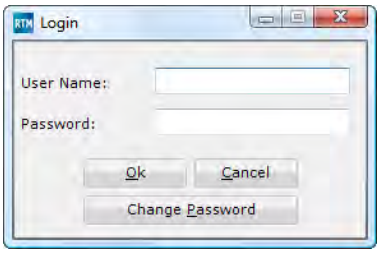
Before you can change your password, you must close and restart the Remote TCO Manager.◄

To change your password:

Starting the program

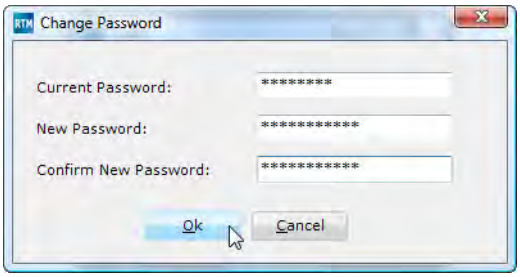
1 **Start the Remote TCO Manager.**

The **Login** dialogue box opens.



2 **Click on [Change Password].**

The dialogue box opens.



Current Password

3 **Enter your current password.**

New Password

4 **Enter your new password.**

Important

As a rule, you can freely assign a password.

If the system does not accept your new password, a message is displayed which you must confirm.

Enter a different password.◄

Confirm New Password

5 **To confirm the new password, enter it again.**

Activating the new password

6 **Save the changed password by clicking on [OK].**

A dialogue box for confirming your new password is displayed.

7 **Close the dialogue box by clicking on [OK].**

Your new password is now valid for logging in to the Remote TCO Manager.

Important

Change your password regularly for security reasons - and do not give it to third parties.

Make a note of your password and keep it in a safe place where it is inaccessible to third parties.◄

Resetting a password

Condition

You should have administrator rights in order to be able to delete the RTM password file.◄

Important

You access data (user name and encrypted password) is saved in the “LoginDetails.txt” file.

You can delete this file as the program will prompt you to enter your user name and password (as during your first login after installation). Then the password file will be (re-)created; also see the *Chapter entitled “Starting the program”*.◄

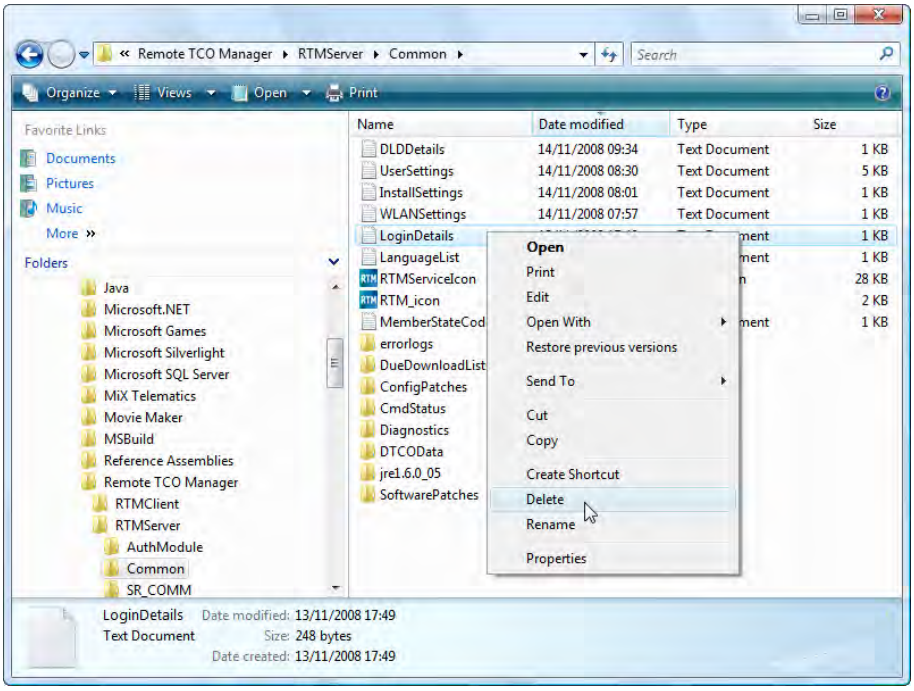
To delete the password file and reset the password:

1 **Open Microsoft® Windows® Explorer (if not open).**

2 **Open the directory in which the RTM installation files are stored, e.g. “C:\Program Files\...\Remote TCO Manager”.**

3 **Open the “RTMServer > Common” folder and right-click on the “LoginDetails.txt” file.**

A shortcut menu is displayed.



4 **Click on [Delete] to delete this file (which contains your user name and your encrypted password).**

Security queries for deletion confirmation are displayed.

5 **Click on [Continue] to confirm.**

The file is deleted.

- **Start the Remote TCO Manager and enter your new access data (user name and password).**

The “LoginDetails.txt” file is recreated.

Logging out

Important

Always close the Remote TCO Manager program correctly, using **[Log Out]** - this ensures that active communication connections are ended properly.◄

Ending the program

1 **Click on “[Log Out]” in the upper menu area.**

A dialogue box for confirmation is displayed.

2 **Close the dialogue box by clicking on [OK].**

The Remote TCO Manager closes.

Modifying installation settings

Important

Settings which you configure during installation generally cannot be modified in the Remote TCO Manager - the two exceptions here are the connection to the server (**Settings** > **Download Details** > **RTM server IP/Name**) and the language selection.

You can only do this in the “InstallSettings.txt” file in the RTM installation directory, e.g. “C:\Program Files\Remote TCO Manager\RTMServer\Common”.◄

You can change the following settings in this file:

- the DLD version (download with DLD Short Range or DLD Wide Range)
- the archiving solution (TIS-Web, TIS-Office, or a different archiving solution)
- the installation type (you can only modify a stand-alone installation)

Important

In the case of a client/server installation, the “InstallSettings.txt” file is only located on the server.◄

Condition

You must have administrator rights to modify any entries in the “InstallSettings.txt” file.

In the case of a client/server installation, you must modify the “InstallSettings.txt” file on the computer which is currently acting as a server.◄

To modify the settings in the “InstallSettings.txt” file:

1 **Open Microsoft® Windows® Explorer.**

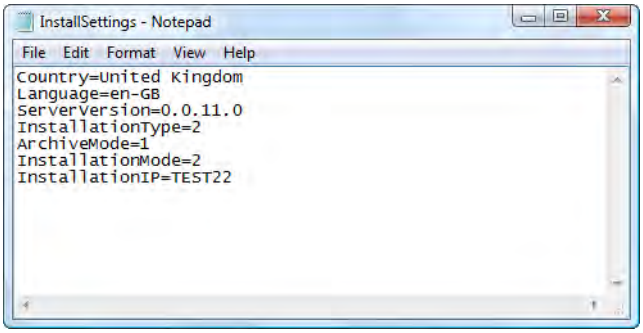
2 **Open the directory in which the RTM installation files are stored, e.g. “C:/Programs/Remote TCO Manager”.**

3 **Open the “RTMServer/Common” folder.**

The folder's files are displayed.

4 **Double click on the “InstallSettings.txt” file.**

The file opens in the Editor.



DLD versions

5 Modify the device assignment for downloading (DLD Short Range and/or DLD Wide Range) via the “InstallationType” key. Select

- **InstallationType=0 if you want to use only the DLD Wide Range to download files from the DTCO 1381,**
- **InstallationType=1 if you want to use only the DLD Short Range to download files from the DTCO 1381, or**
- **InstallationType=2 if you want to use both DLD models to download files from the DTCO 1381.**

What you select here will also change the range of functions provided by the Remote TCO Manager.

Archiving solution

6 You can modify the archiving solution via the “ArchiveMode” key. Select

- **ArchiveMode=0 if you are a TIS-Office user,**
- **ArchiveMode=1 if you are a TIS-Web user,**
- **ArchiveMode=2 if you use a different archiving solution.**

Important

The archiving program you choose here specifies

- the program from which the deadlines of due downloads are imported (only with TIS-Web and TIS-Office) and
- the program to which data is transferred for archiving and evaluation.

If you use both TIS-Web and TIS-Office, select TIS-Web (master) as your archiving solution.◄

Condition

You can only modify the installation type for a stand-alone installation (a downgrade or reset).

You cannot modify a client-server installation due to the lack of specific program components. In cases like this, you must first uninstall the program, then reinstall it.◄

Caution

If you have to uninstall the Remote TCO Manager which is currently in use, all the settings saved in the program (e.g. WLAN settings) will be irrevocably lost.◄

Tip

If it is still technically possible, create and print out screenshots of all the configuration areas. When you have reinstalled the program, you can use the screenshots to quickly reenter your configuration data.

If you have TIS-Office on the same computer, we recommend that you regularly back up your database to an external data disk (e.g. to a CD-ROM).◄

Installation type

7 **You can modify the installation type of a stand-alone installation via the "InstallationMode" key. Select**

- **"InstallationMode=0" if you want to use the stand-alone installation as a client installation.**
- **"InstallationMode=1" if you want to use the stand-alone installation as a server installation.**
- **"InstallationMode=2" if you want to reset the former stand-alone installation to its previous status.**

Important

When you change a stand-alone installation setting to a client installation, the Remote TCO Manager must be installed as a server on a different computer.

The **RTM Authentication** and **RTM SR Communicator** services must also be disabled on the former stand-alone installation.

The *Chapter entitled "Configuring the client/server environment"* has more information on how to configure your client/server connection.◄

Saving your settings

8 **Click on "File > Save" to save your new settings in the "InstallSettings.txt" file.**

The changes will take effect when you start the Remote TCO Manager.

Important

If you are a Windows® Vista™ user, it may be that the "InstallSettings.txt" file cannot be saved.

If this occurs, save the "InstallSettings.txt" file to a different folder (e.g. create a folder on your Desktop); then copy it to the "RTMServer/Common" folder.◄

Important

Depending on the changes you make, you must still enter the data of the selected archiving solution or restart both services.

See the *Chapter entitled "Preparing to download data"* for more on this.◄

Configuring the DLD Short Range

This Chapter explains how to configure your DLD Short Range for WLAN data communication.

Configuring a WLAN connection

! Important

The “Remote TCO Manager” enables you to prepare various basic configurations for data communication via a local wireless network (WLAN).

This in turn will enable you to, e.g.

- flexibly adapt the use of the DLD Short Range to the network conditions in your company, e.g. for individual sites, or
- for operating different WLANs on the same site.◄

✓ Condition

You have meanwhile installed and configured a WLAN access point for downloading data; see the *Chapter entitled “Installing the WLAN access point”*.

The computer environment is capable of performing name resolution in the network (DNS function).◄

! Important

The WLAN settings in the Remote TCO Manager must match the configuration of the corresponding WLAN access point. Please ask your network administrator about this.◄

To configure access to a WLAN access point:

1 Start the Remote TCO Manager (if not already started).

The **Data Management** tab and the **RTM Messages** dialogue box (where applicable) are displayed.

2 Go to the “Settings” tab.

The tab opens.

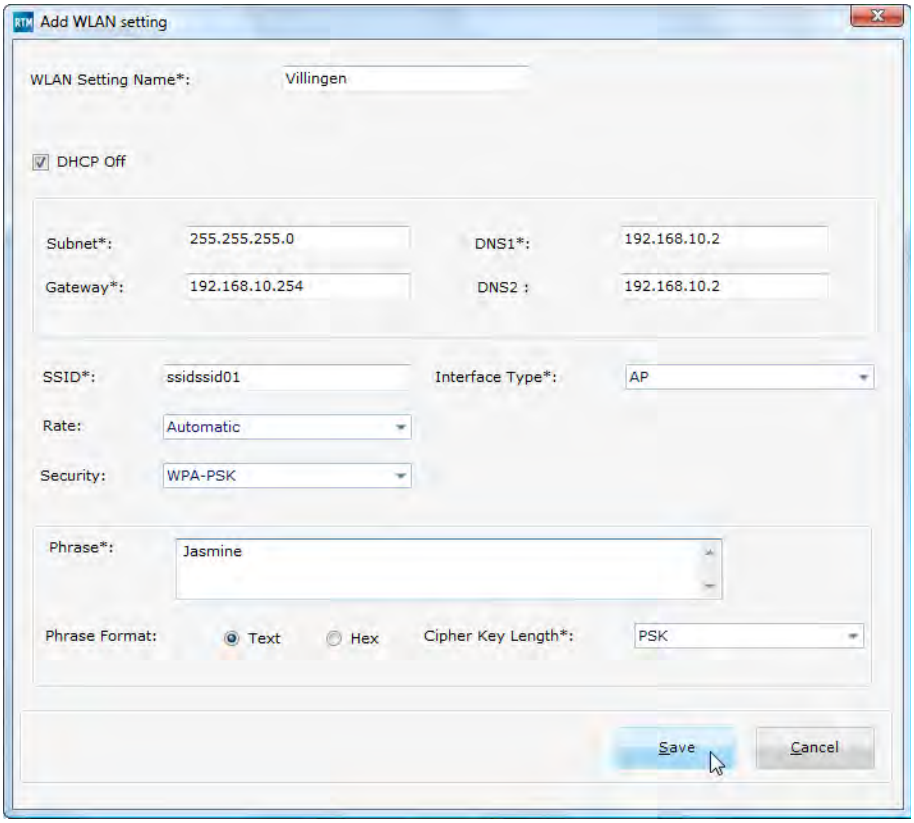
3 Click on “System” and “WLAN”.

If WLAN settings have already been created, a list of these basic settings will be displayed.

Saving WLAN settings

4 Click on [New].

The **Add WLAN setting** dialogue box opens.



5 Enter a name for the (basic) settings of the WLAN connection in the "WLAN Setting Name" box.

Give an accurately descriptive name to the DLD Short Range allocations, e.g. the location of the WLAN access point.

Obtaining IP addresses automatically

- **Use the "DHCP Off" check box to specify whether the DLD Short Range**
  - **should use a static IP address (the relevant network details should be entered in the dialogue box) when contacting the company network.**

    The check box is selected by default (with check mark).
  - **should obtain a network address automatically.**

Tip

During the initial configuration of a DLD Short Range, obtaining the IP address automatically is the simpler method - but it is also more insecure, because other devices can dial into the company network via the WLAN access point - and it also complicates the monitoring of logged on devices, since fixed assignment in this case does not exist.◄

Important

If you wish to follow our recommendation and assign static IP addresses to the DLD Short Range, click on "**Data Management** > **DLD Configuration**" to assign an address to an individual DLD Short Range device; see the *Chapters entitled "Registering and configuring a DLD Short Range"* and *"Modifying a configuration"*.◄

- **Enter (as recommended) the data for “Subnet”, “Gateway”, “DNS1” and “DNS2”.**

  Remember that these details must correspond to those of an existing company network.

6 **Copy the “SSID” from the configuration of the WLAN access point.**

  See the *Chapter entitled “Configuring the WLAN access point”*.

7 **In the “Interface Type” list, select**

  – **“AP” if you only want to set up one WLAN access point for data transfer, or if you want to assign base station status to that access point.**

  – **“ADHOC” if you only want to set up a network with several WLAN access points, all of which have equal status.**

Important

If several access points are used in your company network, you must

- only use the WLAN settings for the intended base station (**AP** interface type).

  All other access points connect to the (company) network via this base station and the DLD Short Range devices can use any of these access points for data communication.

- create WLAN settings for each individual access point (**AP** interface type).

  Each WLAN access point connects independently to the (company) network in accordance with these settings - this means that if you assign this WLAN setting to a particular DLD Short Range, that device can only communicate with its corresponding WLAN access point.◄

8 **In the “Rate” list, select the desired speed of the data transfer.**

  Automatic is selected by default.

9 **In the “Security” list, select the security setting from the configuration of the WLAN access point.**

  See the *Chapter entitled “Configuring the WLAN access point”*.

  If you decide on **None** (as in the case of the access point), continue with *Step 13*.

Important

If you select **None**, the security of your company network will be restricted.

Also bear in mind that the security selection you make must correspond to that of the access point - otherwise the DLD Short Range will not be able to connect to the WLAN network.◄

10 **Under “Phrase”, copy the same text from the configuration of the WLAN access point.**

See the *Chapter entitled “Configuring the WLAN access point”*.

11 **Select**

- **– “Text” if the text – as entered – is to be used as a PSK (pre-shared key).**
- **– “Hex” if the PSK you enter is to be converted into a hexadecimal system code.**

What you select here must correspond to the access point configuration; also see the *Chapter entitled “Configuring the WLAN access point”*.

12 **In the Cipher Key Length list, select the type of encryption setting from the configuration of the WLAN access point.**

See the *Chapter entitled “Configuring the WLAN access point”*.

! Important

The WLAN settings in the Remote TCO Manager must match the configuration of the corresponding WLAN access point.

The PSK (pre-shared key) and its encryption are saved during configuration in the DLD Short Range.

Do not change the PSK or its encryption code simply at random - if you do, the DLD Short Range will no longer be able to log on to the company network - disabling any exchange of data.◄

Saving a WLAN setting

13 **Click on [Save] to save the settings.**

The **Add WLAN setting** dialogue box closes.

Modifying a WLAN setting

- **Click on**
  - **– [Modify] if you want to modify existing settings.**

    To do this, repeat *Steps 5* to *13*.
  - **– [Delete] if you want to discard an existing (basic) setting, then confirm with [OK].**

    The WLAN setting is removed from the overview.

! Important

When modifying WLAN settings, please bear in mind that

- once a name has been given it cannot be changed - in this case all you can do is delete the WLAN setting, create it again with a new name and assign it accordingly.
- the configuration of a DLD Short Range must be updated if you want to make changes to settings that have been already assigned.

  Also see the *Chapter entitled “Modifying a configuration”*.
- a WLAN setting should not be deleted if it is assigned to a DLD Short Range.◄

Registering and configuring a DLD Short Range

Condition

You have

- installed the Remote TCO Manager and
- saved the settings of your WLAN access point in the Remote TCO Manager.

You have on hand

- a DLD Parameterization Kit and
- a DLD Short Range◄

Important

The DLD Parameterization Kit contains a mini-USB cable and a power supply adapter for the DLD Short Range's power supply.

During initial configuration, the DLD Short Range must be connected to the computer and to a power supply.

Later changes to the calibration can also be transferred via a WLAN connection; see the *Chapter entitled "Modifying a configuration"*.◄

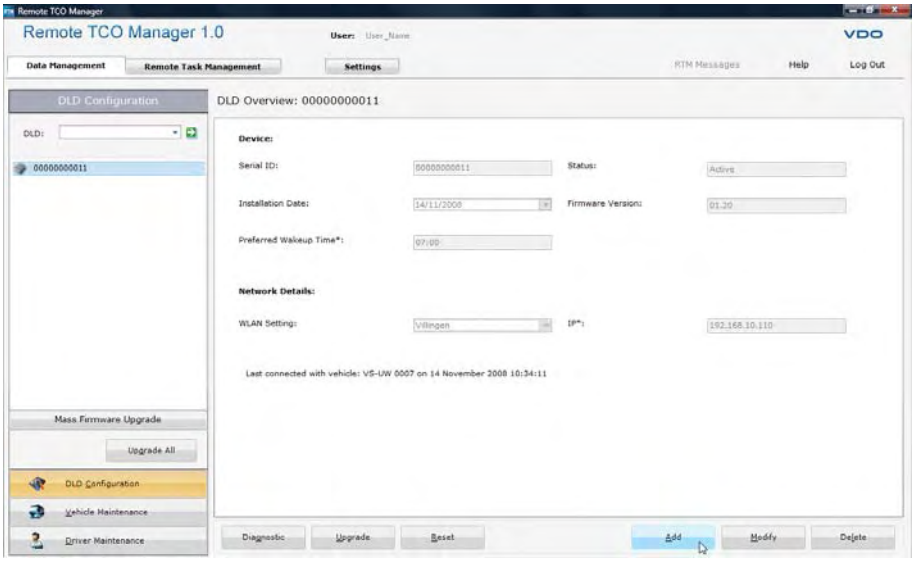
To register a new DLD Short Range in the Remote TCO Manager:

1 **Start the Remote TCO Manager (if not already started).**

The **Data Management** tab and the **RTM Messages** dialogue box (where applicable) are displayed.

2 **Go to the "Data Management" tab and click on "DLD Configuration".**

If any DLD Short Range devices have already been registered, a list of these will be displayed.



Connecting the DLD Short Range

3 **Connect the DLD Short Range to the computer by**

– **connecting the power supply adapter (from the DLD Parameterization Kit) to the power supply and the DLD Short Range.**

  The LEDs now light up briefly. The power supply LED turns green. The power supply has now been installed.

– **removing the cover of the mini-USB interface.**

  Gently press the cover down to the housing edge and carefully lever off the cover.

– **connecting the mini-USB cable (from the DLD Parameterization Kit) to the USB port of your computer and to the mini-USB interface of the DLD Short Range.**

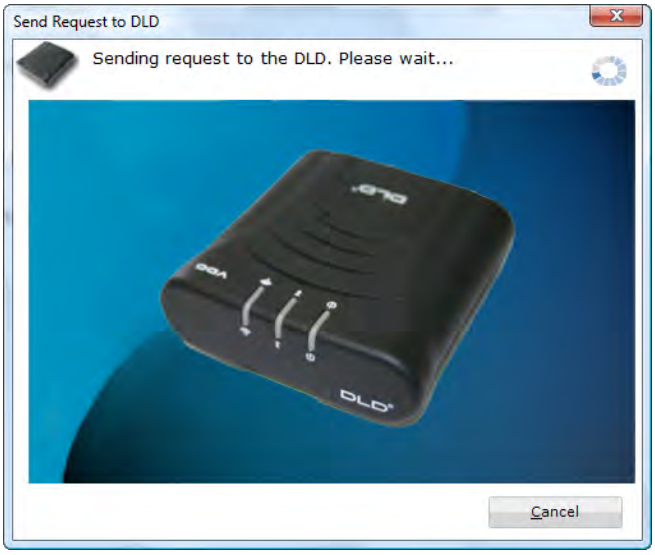
  The connection status LED flashes green. The DLD Short Range and the Remote TCO Manager are now connected.

Registering the DLD Short Range

4 **Click on [New] to register the DLD Short Range.**

The DLD Short Range data is requested. A dialogue box with the ongoing status of the request is displayed.

When the DLD Short Range data has been imported, the display changes accordingly.



Tip

Do not worry if you happened to click on **[New]** before connecting a DLD Short Range device.

After the Remote TCO Manager has checked whether or not a DLD Short Range is connected, you will be prompted to either repeat or to end the procedure.◄

5 **Now click on [Finish] to close the dialogue box.**

A dialogue box for entering further parameters and saving the data is displayed.

Important

If you change to a different tab or module, or if you select a different DLD Short Range **without saving** the settings, a dialogue box will be displayed asking you whether or not the data should be saved.

Click on **[Yes]** to save the data of the new DLD Short Range.◄

6 **Close the dialogue box by clicking on [OK].**

The DLD Short Range's device and network data will now be displayed in the Display and Editing area.

Configuring the DLD Short Range

7 **Specify your preferred time for DLD activation and data download time via "Preferred Wakup Time*".**

However, DLD Short Range data download can take place at any time you wish.

8 **Select one of the configured WLAN connections from the "WLAN Setting" list.**

Also see the *Chapter entitled "Configuring a WLAN connection"*.

9 **Enter the IP address (under "IP*") which the DLD Short Range is to use for data communication.**

Important

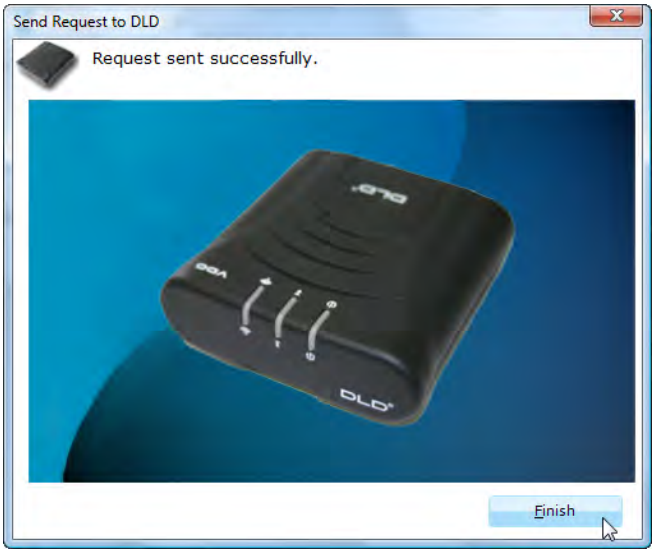
Whether or not you have to assign an IP address to the DLD Short Range depends on the WLAN setting. If you have cleared the **DHCP Off** check box (no check mark), you do not have to assign an IP address. In this case, the **IP*** box is unavailable.

Also see the *Chapter entitled "Configuring a WLAN connection"*.◄

10 **Click on [Save] to register the DLD Short Range.**

The configuration is transferred to the DLD Short Range. A dialogue box with the ongoing status of the configuration is displayed.

When transfer is complete, the display will change accordingly.



11 Now click on [Finish] to close the dialogue box.

A dialogue box is displayed confirming the registration of the DLD Short Range.

12 Close the dialogue box by clicking on [OK].

The DLD Short Range is now registered on the system and displayed in the Selection pane.

13 Remove the connection between the DLD Short Range and the computer by

- **removing the mini-USB cable from the computer and the DLD Short Range.**
- **removing the power supply connection from the DLD Short Range and (if you do not wish to add any more DLDs) the power supply adapter.**
- **replacing the connector panel cover.**

The DLD Short Range is now ready to download data. You can give the device and the Download leaflet to your driver for mobile operations.

! Important

For fixed installation in a vehicle, see the *Chapter entitled "Installing a Download Device"*.◄

Modifying a configuration

Important

The transfer of a configuration modification can either take place

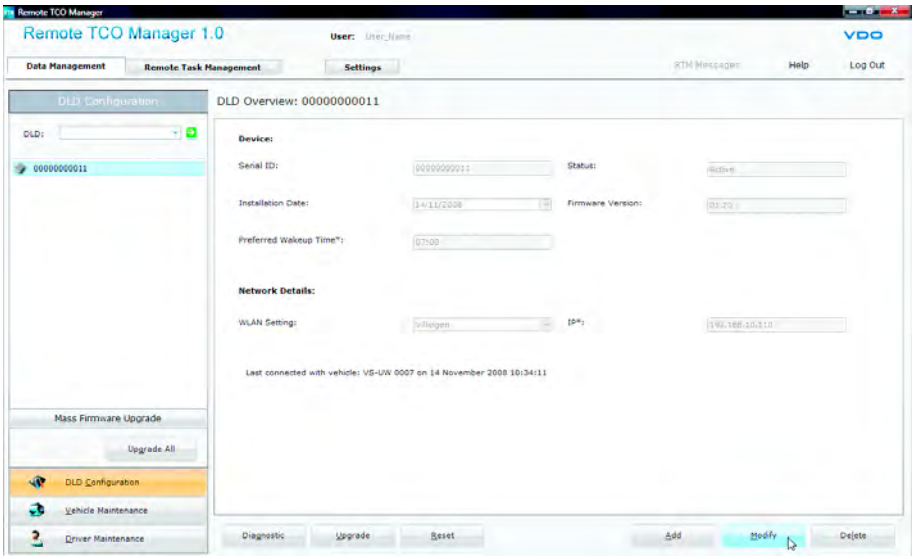
- via the WLAN connection or
- the mini-USB cable.

If no wireless connection is active, you can create a task in the Remote TCO Manager which will enable transfer of the modified configuration the next time contact is made with the DLD Short Range; to do this click on **Remote Task Management** > **Configuration**.◄

To edit the configuration of a DLD Short Range:

1 **In the Remote TCO Manager, select the “Data Management” tab.**

The tab opens with the **DLD Configuration** module.



2 **Select the DLD Short Range the configuration of which you wish to edit and click on [Modify].**

The DLD configuration is displayed.

You can only edit the entries in the **Preferred Wakeup Time***, **WLAN Setting** and **IP*** boxes.

Caution

Click on **[Reset]** to delete the configuration saved on the DLD Short Range and reset the DLD to its initial state.

Bear in mind than any download files stored in the DLD will also be deleted; see the *Chapter entitled “Performing DLD diagnostics”*, *Section “Transferring download files”*.◄

Important

Do not change the IP address of the DLD Short Range simply at random.

The settings for the WLAN access point must always be taken into account. Otherwise data can no longer be exchanged between the Download Device and the Remote TCO Manager!◄

- **Connect the DLD Short Range to the computer using the mini-USB cable.**

  See the *Chapter entitled "Registering and configuring a DLD Short Range"*, *Step 3*.

3 **Edit the settings and confirm with [Save].**

The modification will be transferred immediately if a wireless connection exists.

If no wireless connection currently exists, use the displayed dialogue box to specify whether the configuration data should be transferred by mini-USB cable, or the next time contact with the DLD takes place.

4 **Select**

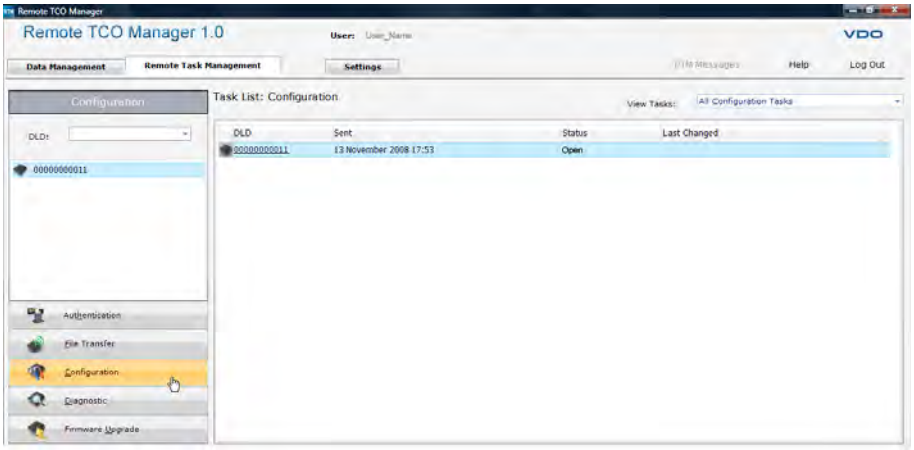
– **[Via USB] if the modified configuration is to be transferred to the DLD Short Range via the mini-USB cable.**

  A dialogue box with the ongoing status of the data transfer is displayed. When transfer is complete, the display will change accordingly.

  In this case, continue with *Step 5*.

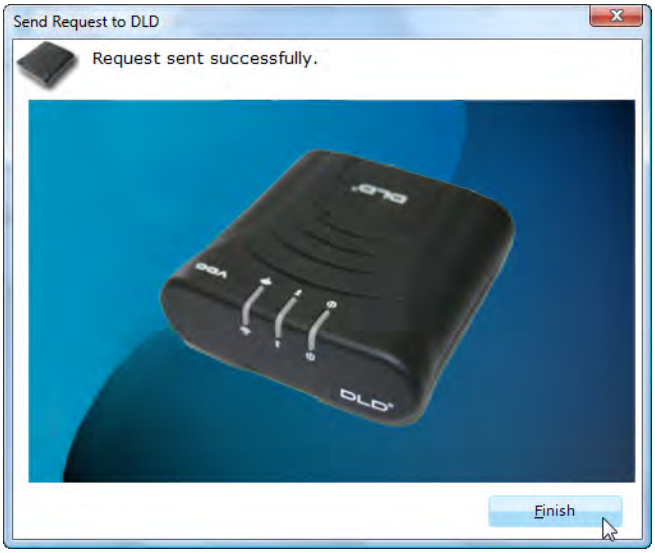
– **[Send] if you want to create a task in the RTM to transfer the configuration.**

  Click on **Remote Task Management** > **Configuration** to display a new task for the DLD in question - the task will be carried out the next time contact is made with the DLD.



- **Verify that the task has been correctly carried out when the relevant vehicle comes in.**

  If the task has been carried out correctly, **Processed** is displayed (under Status). The current configuration has been transferred successfully.



5 **Now click on [Finish] to close the dialogue box.**

A dialogue box is displayed confirming the modification of the DLD Short Range's configuration.

6 **Close the dialogue box by clicking on [OK].**

7 **Remove the connection between the DLD Short Range and the computer by**

- **removing the mini-USB cable from the computer and the DLD Short Range.**
- **removing the power supply connection from the DLD Short Range and (if you do not wish to add any more DLDs) the power supply adapter.**
- **replacing the mini-USB interface cover.**

The current configuration has been transferred successfully. You can now give the DLD Short Range to a driver.

Commissioning the DLD Wide Range

The steps involved

1	**Checking condition upon delivery**	– Verify that all package contents have been packed and are undamaged.	See the *Chapter entitled "Checking condition upon delivery"*
2	**Selecting and inserting the SIM card**	– Purchase a SIM card from your wireless network provider and insert it in the DLD Wide Range.	See the *Chapter entitled "Selecting and using the SIM card"*
	This next step is only necessary if you do not yet have a DLD Remote Service account.		
3	**Setting up a DLD Remote Service account**	– Contact your Service Partner and apply for a DLD Remote Service account.	*See the Chapter entitled "Access data for the DLD Remote Service"*
4	**Logging in to the DLD Remote Service**	– Install Microsoft® Silverlight™ (if required). – Log on to the DLD Remote Service.	See the *Chapter entitled "DLD Remote Service"* See the *Chapter entitled "Logging on"*
	This next step is only necessary if the USB/GPRS modem driver for configuring the DLD Wide Range has not yet been installed.		
5	**Installing the USB/ GPRS modem driver**	– Start the DLD Remote Service. – Install the USB/GPRS modem driver for DLD Wide Range.	See the *Chapter entitled "DLD Remote Service"*
6	**Configuring the DLD Wide Range**	– Start the DLD Remote Service. – Connect the DLD Wide Range to the computer. – Enter the SIM card's communication data. – Configure the communication and data transfer.	*See the Chapter entitled "Registering and configuring a DLD Wide Range"*
	This next step is only necessary if the DTCO update for the front interface has not yet been carried out.		
7	**Update of the front interface on the DTCO 1381**	– Update DTCO 1381 Rel. 1.3 for remote download by an authorised workshop.	Also see the DTCO Update booklet

	This next step is only necessary if the DLD Wide Range is to be installed permanently in the vehicle; its mobile use is described in the leaflet for drivers (supplied with the package).		
8	**Installing the DLD Wide Range in the vehicle**	– Connect the connection cable to the DTCO 1381 Rel. 1.3 (DLD Wide Range fixed installation). – Install and connect the connection cable to the vehicle's electrical system (DLD Wide Range fixed installation). – Install and connect the “Remote button” if necessary. – Install the mounting attachment. – Install the DLD Wide Range in the mounting attachment.	*See the Chapter entitled “Installing a Download Device”*
	This next step is only necessary if the Remote TCO Manager has not yet been installed.		
9	**Installing the Remote TCO Manager**	– Install the Remote TCO Manager.	*See the Chapter entitled “Installing the Remote TCO Manager”*
10	Importing download deadlines and creating tasks	– Start the Remote TCO Manager. – Import download reminders from TIS-Web. *or* – Import download reminders from TIS-Office. *or* – Create a download task in the Remote TCO Manager.	*See the Chapters entitled “TIS-Web settings”* or *“TIS-Office settings”* or *“Managing deadline-related tasks”*
11	**Carrying out a data download**	**Conditions:** • The vehicle is stationary. • The ignition is switched on. • A current task has been created in Remote TCO Manager and is stored in the DLD Wide Range memory. **Procedure (mobile use):** – Plug the wireless link into the DTCO 1381. – Connect the DLD Short Range to the power supply (vehicle cigarette lighter). – Press the “Remote button” if necessary.	*See the Chapter entitled “Downloading data with the DLD Wide Range”* See the leaflet for drivers (supplied with the package)

Table 8: Commissioning the DLD Wide Range – the steps involved (tabular)

Preparations for commissioning

Checking condition upon delivery

Before starting installation and commissioning, the DLD Wide Range product package should be checked, i.e. all components must be in the package in undamaged condition; see the *Chapter entitled "Product summary - DLD Wide Range"*, *Section "Package contents - Basic Kit"*.

All product components are exhaustively checked before leaving the factory - if, however, anything seems amiss, please contact your service partner.

Important

In the case of the DLD Wide Range, you must also check the pairing between the wireless link and the DLD Wide Range.

You can only check a pairing by means of a data download, see the *Chapter entitled "Downloading data with the DLD Wide Range"*.◄

Selecting and using the SIM card

Important

You only need a SIM card to transfer data with the DLD Wide Range.◄

Selecting a SIM card

SIM card

A SIM card (Subscriber Identity Module) is a chip card which is used to authenticate users in a mobile wireless network. Mobile wireless network providers use the card to provide mobile telephone and data connections to users.

The services that a SIM card provides depend on the mobile wireless network provider and the services included in the contract you sign.

Tip

Acquaint yourself with all the freely available information on mobile wireless network providers to learn about their services and what they cost.

If you contact your authorised workshop or service partner, they will be pleased to inform you about providers and their services. The following list contains some key points to watch for.◄

Selection criteria

When you are choosing a SIM card, bear in mind the following criteria:

- The SIM card must be GPRS-capable.
- A SIM card is only for data transfer, so a “Data only” card is more than adequate.
- Add up and compare providers' costs for setup, monthly flat rate, data transfer and roaming (data transfer from other countries).
- Is data transfer from other countries really needed?

Important

Depending on the service provider's rates, GSM connections to other countries can be extremely expensive. Whether or not roaming is possible depends on the actual contract conditions and the settings of the DLD Wide Range; also see the *Chapter entitled “Registering and configuring a DLD Wide Range”*.◄

Condition

To activate the SIM card and enable the integration of the DLD Wide Range into the data communication system via the DLD Remote Service, you will need the following data. The following information will be sent to you by your mobile wireless network provider when the contract has been signed:

- Phone number of the SIM card (MSISDN – Mobile Subscriber Integrated Services Digital Network Number),
- personal identification number (PIN) and a master PIN (PUK – Personal Unblocking Key) for authenticating or unblocking a card on the mobile wireless system and
- the Internet address of your mobile wireless network provider's connection point for data communication via GPRS (APN – Access Point Name).

The following criteria may also apply, depending on the signed contract and the agreed additional security measures against third party usage of the SIM card:

- User name and
- password.

Keep this information in a safe place, inaccessible for third parties.◄

Inserting the SIM card

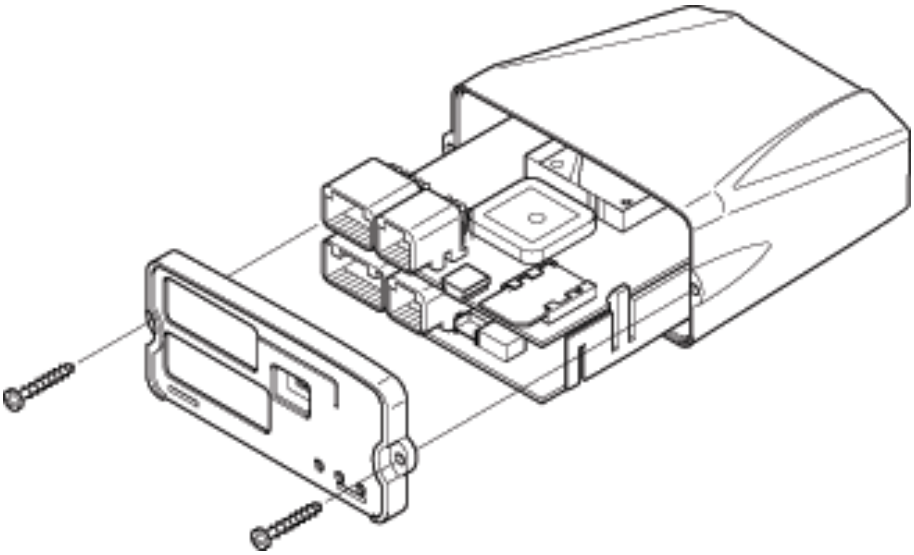


Fig. 12: DLD Wide Range Inserting a SIM card

To inserting the SIM card into the DLD Wide Range:

Opening the housing

1 **Remove the two Phillips screws on the front of the DLD Wide Range's housing.**

2 **Remove the connector panel cover.**

- **If necessary, carefully take the double circuit board partly out of the housing.**

Sliding the SIM card in

3 **Slide the SIM card into its holder, as shown in the *illustration 12*.**

The contacts should be facing downwards; the angled corner is positioned at the front on the right (facing you).

- **If necessary, carefully push the double circuit board back into the housing.**

Closing the housing

4 **Replace the connector panel cover.**

5 **Tighten the two Phillips screws on the connector panel cover.**

Do not overtighten the screws - you could damage the screw thread.

Access data for the DLD Remote Service

The basic configuration and integration of a DLD Wide Range into your GPRS data communication system takes place solely via the web-based DLD Remote Service.

The reasons for this are

- the data security of the transfer of download files.

  All download files are encrpyted by the DLD Wide Range before being transferred (in the form of GPRS data packets) to the “DLD Remote Server” via the server of the mobile wireless network provider. Only there are the encrypted files reconverted to mass memory and/or driver card files; also see the *Chapter entitled “Data transfer”*.

- the assignment of the transferred download files.

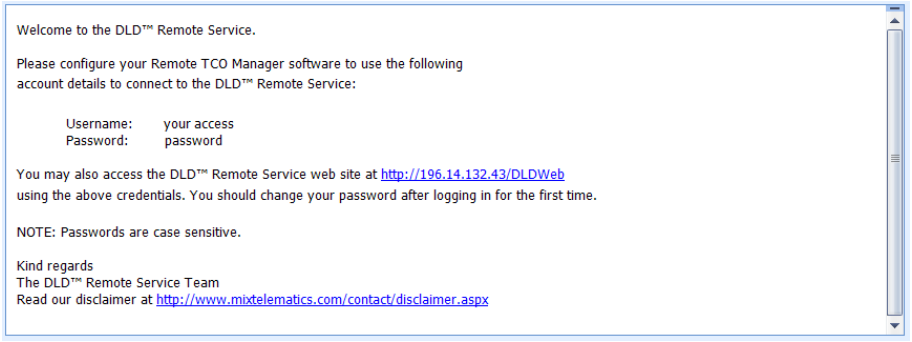
  After decryption has taken place, these download files must be assigned to the individual phone number of the SIM card (i.e. to the relevant recipient) - and temporarily saved. The telephone number (MSISDN) must be saved in the DLD Remote Service.

- the distribution of the transferred download files.

  The DLD Remote Service must also know whether or not the files are to be forwarded to your TIS-Web Server account for archiving. Of course you can download your own files at any time, e.g. to archive them with TIS-Office.

Yet another factor that makes this service so useful is that all DLD Wide Range devices assigned to a particular DLD Remote Service account can be centrally managed; see the *Chapter entitled “Configuring the DLD Wide Range”*.

To use this web-based service, you need access data which is sent to the individual user (e.g. an authorised workshop) by e-mail.


Welcome to the DLD™ Remote Service.

Please configure your Remote TCO Manager software to use the following account details to connect to the DLD™ Remote Service:

Username: your access
Password: password

You may also access the DLD™ Remote Service web site at http://196.14.132.43/DLDWeb using the above credentials. You should change your password after logging in for the first time.

NOTE: Passwords are case sensitive.

Kind regards
The DLD™ Remote Service Team
Read our disclaimer at http://www.mixtelematics.com/contact/disclaimer.aspx

Important

Bear in mind that you have two different user roles available for setting up a DLD Remote Service account:

- Administrator

  This role must be assigned if DLD Wide Range devices are to be added to the system and configured for data communication via GPRS.

- User

  This role can be assigned if status messages are solely to be monitored and files are to be downloaded.

The *Chapter entitled "Creating a new user"* explains all about creating users.◄

Tip

This is why you must speak to the relevant contact person (like your service partner) to clarify who should integrate the DLD Wide Range into your data communication system.◄

DLD Remote Service

Important

Using the web-based DLD Remote Service, you can integrate a DLD Wide Range device (DLD WR) into your data communication system via GPRS and configure it for data download from the DTCO.

You will need the Remote TCO Manager for authenticating a download, forwarding download deadlines and monitoring the download protocols; see the *Chapter entitled "Preparing to download data"*.◄

This Chapter describes the access procedure and the interface of the DLD Remote Service.

Use

You need the DLD Remote Service in order

- to configure the DLD Wide Range; see the *Chapter entitled "Registering and configuring a DLD Wide Range"*, and
- to manage files downloaded with the DLD Wide Range; see the *Chapter entitled "Documentation in the DLD Remote Service"*.

System requirements

In order to use the DLD Remote Service, your computer must meet the following requirements:

Hardware

Component	Requirement
Mainboard	Pentium 4, 1 GHz, 32 bit
Main memory	1 GB RAM
Interface	Free USB 2.0 port for connecting the DLD Wide Range
Transfer standard	min. ADSL / VDSL

Software

Component	Requirement
Operating system	Microsoft® Windows® XP or Vista™ (with current Service Pack)
Internet browser	Microsoft® Internet Explorer® Version 6.0 or higher

In order to use the DLD Remote Service and to configure a DLD Wide Range, you must also install the following software components:

Additional components

Component	Requirement
Web presentation technology	Microsoft® Silverlight™ 2 or higher (installs with the first log on)
USB/GPRS modem driver	USB/GPRS modem driver for DLD Wide Range (see the *Chapter entitled "Configuring the DLD Wide Range"*)

Logging on

Important

In order to use the DLD Remote Service, you must

- always log on with your own personal access data.

  If you do not have any access data as yet, please contact your service partner. The access data will then be sent to you immediately (e.g. by e-mail).
- start Microsoft® Internet Explorer® as an administrator (right mouse button), if you are using the Microsoft® Vista™ operating system.

Bear in mind that when you first log on to the DLD Remote Service, the web application will check whether or not Microsoft® Silverlight™ is installed.◄

Tip

If you cannot install Microsoft® Silverlight™ via the Internet (the MS Silverlight installation procedure is described below), there is also an installation file on the product CD.◄

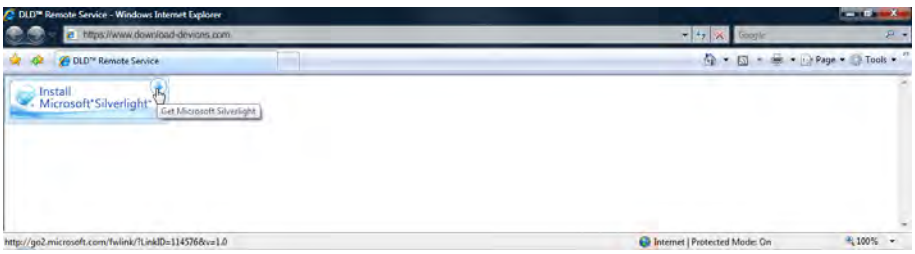
To log on to the DLD Remote Service:

Internet address

1 **Start Microsoft® Internet Explorer®, and enter the following address in the address box:**
http://196.14.132.43/DLDWeb

The web application now checks whether or not Microsoft® Silverlight™ is installed.

If it is, the DLD Remote Service home page will open - you can now continue with *Step 2*.



Installing Microsoft® Silverlight™

- **Click on the arrow symbol to install Microsoft® Silverlight™.**

  A security warning message is displayed.

- **Click on [Run] to carry out a direct installation of Microsoft® Silverlight™.**

  A progress display shows you the download status - when the download has finished, another security query is displayed.

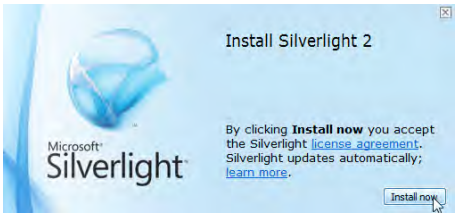
Important

You can of course download the installation file in a folder of your choice to save it: Click on **[Save]** to do this.

However, then you have to start the installation with a double click on the file.◄

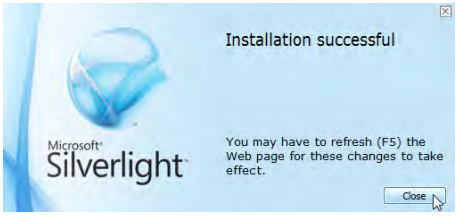
- **Click on [Run] again to start the Microsoft® Silverlight™ Installation Wizard.**

  A dialogue box with information about the licence agreement is displayed.



- **Click on [Install Now] to start the installation.**

  A progress display shows you the ongoing status of the installation - when the installation has finished, an “Installation successful” message is displayed.



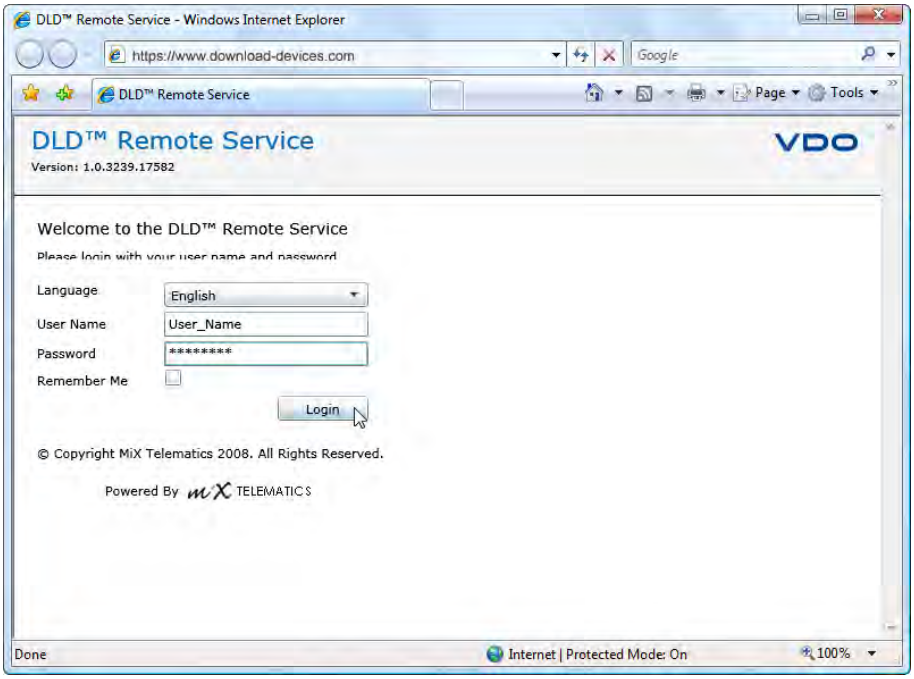
- **Click on [Close] to end the installation.**

  Microsoft® Silverlight™ is installed and the DLD Remote Service home page is displayed.

Tip

If the DLD Remote Service home page is not displayed automatically, press the **F5 key** (in accordance with the information from the closing dialogue with Microsoft® Silverlight™).

The Microsoft® Internet Explorer® screen is updated and the DLD Remote Service home page is displayed.◄



Selecting a language

2 **Select your preferred language from the “Language” list.**

Logon page: Entering the access data

3 **Enter your access data (user name and password) and click on [Login].**

The “DLD Remote Service” will now start (by default at the tab which was last opened); see the *Chapter entitled “DLD Remote Service user interface”* on *Page 89*.

! Important

Always log on with your own personal access data.◄

DLD Remote Service user interface

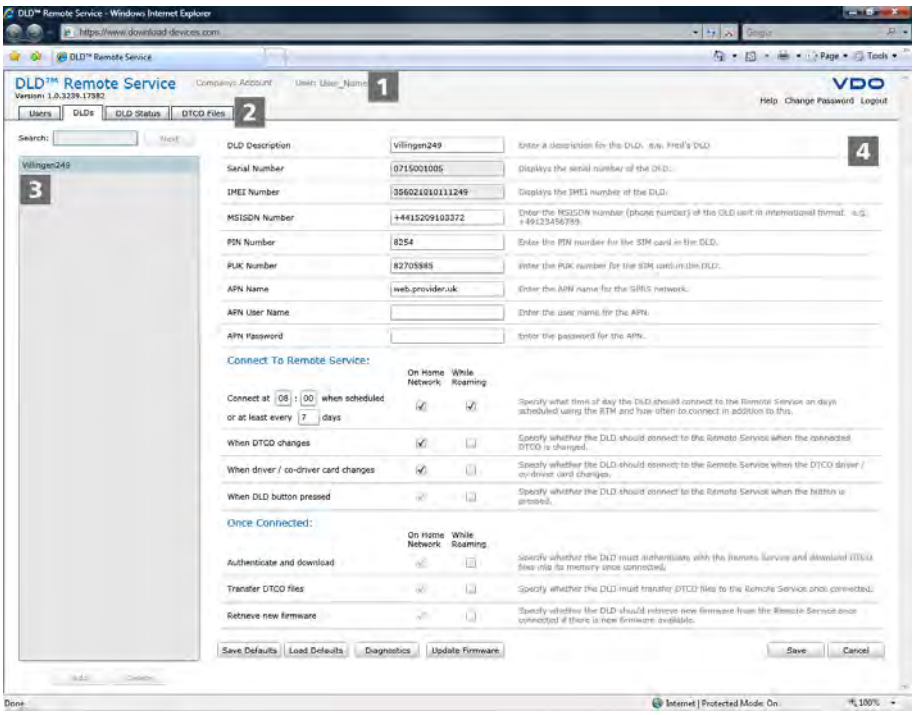
Using the web-based DLD Remote Service, you can configure a DLD Wide Range, manage the access data of other users and monitor authentication and data download.

You can also download temporarily stored files from the “DLD Remote Server” for further use, e.g. for archiving in TIS-Office.

! Important

Bear in mind that your user role (with which your account is linked) directly affects what you can do with the following tabs and functions.

Contact your service partner if you want to configure a DLD Wide Range yourself.◄



1 Heading area
2 Tabs
3 Selection pane
4 Display and Editing area

1 Heading area

This area is always displayed - it shows you the currently valid access data (company and user). It also offers you

- (via **Help**) detailed information about the program's tabs, functions, boxes and buttons (not currently stored),
- (via **Change Password**) the possibility to change your account's password at any time and
- (via **Logout**) to end the service correctly.

2 **Tabs**

Topic-associated functions are assigned to the various tabs.

You can use these tabs to manage users, configure a DLD Wide Range, view the current connection status of a DLD Wide Range or download temporarily-stored files to your computer.

3 **Selection pane**

In the Selection pane you can select a DLD Wide Range to edit its configuration, for instance.

4 **Display and Editing area**

This area of the DLD Remote Service is reserved for the display and editing of data. It shows you

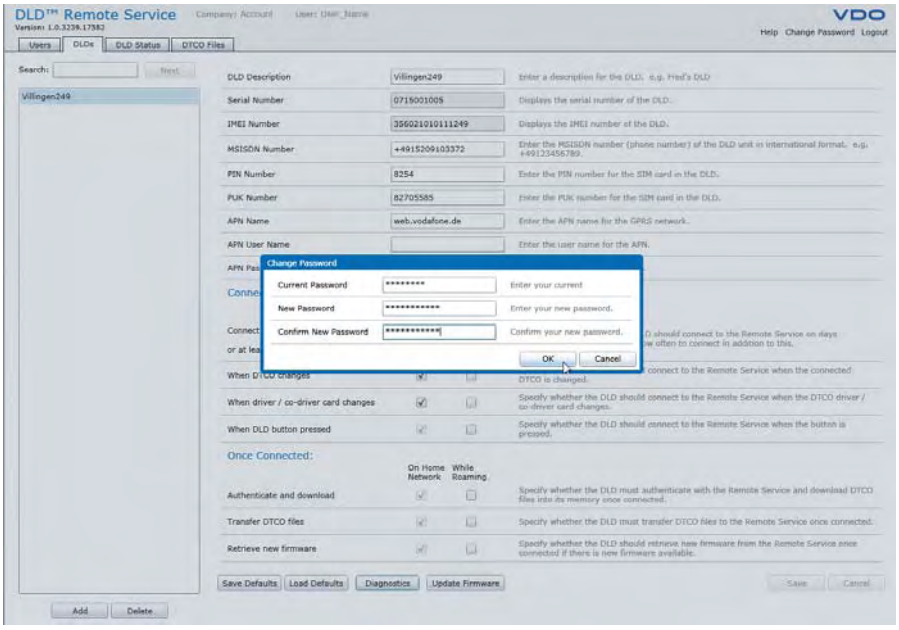
- users and user settings
- the configuration of the DLD Wide Range
- the connection status of the DLD Wide Range
- the downloaded mass memory and driver card data.

Changing your password

To change your password:

1 **In the Heading area, click on [Change Password].**

The dialogue box for entering your password opens.



Previous Password

2 **Enter your current password.**

New Password

3 **Enter your new password.**

Important

As a rule, you can freely assign the password.

If the system does not accept the password you enter, a message will be displayed which you must confirm.

Enter a different password.◄

Confirm new password

4 **To confirm the new password, enter it again.**

Activating the new password

5 **Save the changed password by clicking on [OK].**

Your new password is now valid for logging on to the DLD Remote Service.

Important

Change your password regularly for security reasons - and do not give it to third parties.◄

Important

Always save your current password in the Remote TCO Manager. Otherwise the DLD Remote Service and the Remote TCO Manager cannot connect with one another, and downloading with the DLD Wide Range cannot be carried out.

The *Chapter entitled "DLD Remote Service settings"* has more information on this.◄

Resetting a password

Condition

In order to reset a password, the person who logs on must

- be set up as a user of your company account and
- have administrator's access rights.

If no one else in your company has administrator's access rights, please contact your service partner who provided you with your access data.◄

Important

Please note that you cannot reset your own password when logged on to your account.◄

To reset a password:

1 **If you have not done so already, log on as an “Administrator”.**

The DLD Remote Service now starts at the tab which was last opened.

Tab: Users

2 **Go to the “Users” tab.**

A list of all created users on your company account is displayed in the Selection pane.

Resetting the password

3 **Select the user whose password you want to reset.**

The user data is displayed in the Display and Editing area.

4 **Click on [Reset Password].**

A password reset query is displayed.

5 **Click on [Yes] to confirm.**

A dialogue box now tells you that the password has been reset successfully and that confirmation of this will be sent to the user by e-mail.

6 **Click on [OK] to close the dialogue box.**

Creating a new user

Condition

You have administrator's access rights for the DLD Remote Service.◄

To create a new user in the DLD Remote Service:

1 **If you have not done so already, log on as an “Administrator”.**

The DLD Remote Service now starts at the tab which was last opened.

Tab: Users

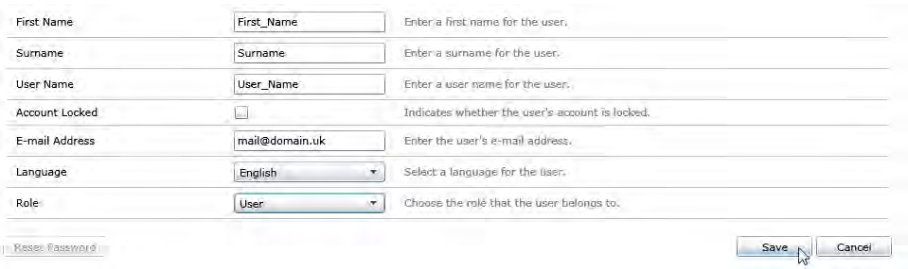
2 **Go to the “Users” tab.**

A list of all created users on your company account is displayed in the Selection pane.

Adding a user

3 **Now click on [Add] to create another user.**

The boxes in the Display and Editing area are made available for editing.



4 **Enter the “First Name”, “Surname” and “User Name” of the new user.**

Tip

Use only the following characters to allow for variations in the keyboard layouts of the different languages:

A to Z, a to z, 0 to 9, underline (_), dash (-), comma (,), dot (.) and space ( ).◄

5 **Enter the e-mail address to which the access data is to be sent (user name and password).**

6 **Select the “Language” to be used for the user interface.**

7 **In the “Role” list, select**

- **“Administrator” if the new user is to be given unlimited access rights.**
- **“User” if the new user may only download files and view the status of the DLD.**

Saving the settings

8 **Click on [Save] to save the new user's data.**

The user name will be checked and the user created.

If the check is completed uneventfully, an e-mail with the access data will be sent to the new user.

Important

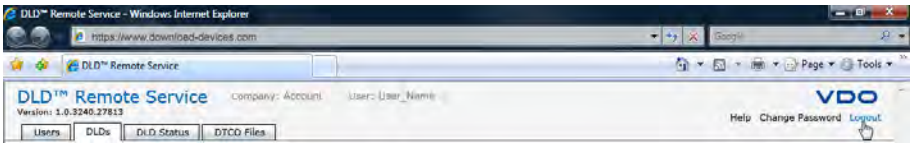
If the user name you select has already been assigned, a message to that effect is displayed. If this happens, select a new user name to create the user.◄

Tip

To modify a user's data, select the user in the Selection pane and make the changes in the relevant box.

Don't forget to save the changes!◄

Logging off



Important

Always use **[Logout]** to log off correctly from the DLD Remote Service.◄

Logging off

- **Click on [Logout] in the Heading area.**

The connection to the “DLD Remote Server” will be closed and the login dialogue box will be displayed.

Configuring the DLD Wide Range

In this Chapter, you'll learn how to configure your DLD Wide Range for GPRS data communication. Configuration via the Remote TCO Manager is only necessary for download details which are transferred automatically to a DLD Wide Range during each authentication procedure (like download deadlines); see the *Chapter entitled "Specifying download details"*.

Registering and configuring a DLD Wide Range

Condition

You have on hand

- access data for the DLD Remote Service (access data to which the "Administrator" user role has been assigned).
- a DLD Parameterization Kit.

The computer to which you want to connect a DLD Wide Range for configuration must also have a special USB/GPRS modem driver installed. When you first add a DLD Wide Range, you will be prompted to install this driver.◄

Important

The mini-USB cable is used to connect the DLD Wide Range to the computer which in turn establishes the connection to the DLD Remote Service.

Configuration can only take place via a mini-USB cable.◄

To register a new DLD Wide Range in the DLD Remote Service:

1 **If you have not done so already, log on as an "Administrator".**

The DLD Remote Service now starts at the tab which was last opened.

2 **Go to the "DLDs" tab.**

If any DLD Wide Range devices have already been registered, a list of these will be displayed.

Connecting the DLD Wide Range

3 **To connect the DLD Wide Range to the computer, connect the mini-USB cable (from the DLD Parameterization Kit) to the USB port of your computer and to the mini-USB interface of the DLD Wide Range.**

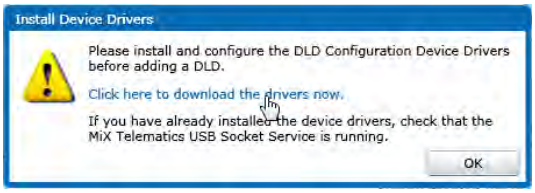
The power supply LED turns green. The mini-USB cable power supply is connected.

The connection status LED flashes green. The DLD Wide Range and the DLD Remote Service are now connected.

4 **Click on [Add] to register the DLD Wide Range.**

The web application now checks whether or not the required USB/GPRS modem drivers are installed: Wavecom USB driver and DLD Configuration Device Driver.

If so, the device-specific data of the connected DLD Wide Range will be downloaded and you can now continue with *Step 5*.



Installing the USB/ GPRS modem driver

- **Click on the link to download the device driver.**

  A security warning message is displayed.

- **Click on [Run] to carry out a direct installation of the device driver.**

  A progress display shows you the download status - when the download has finished, another security warning is displayed.

Important

You can of course download the installation file in a folder of your choice to save it: Click on **[Save]** to do this.

However, then you have to start the installation with a double click on the file.

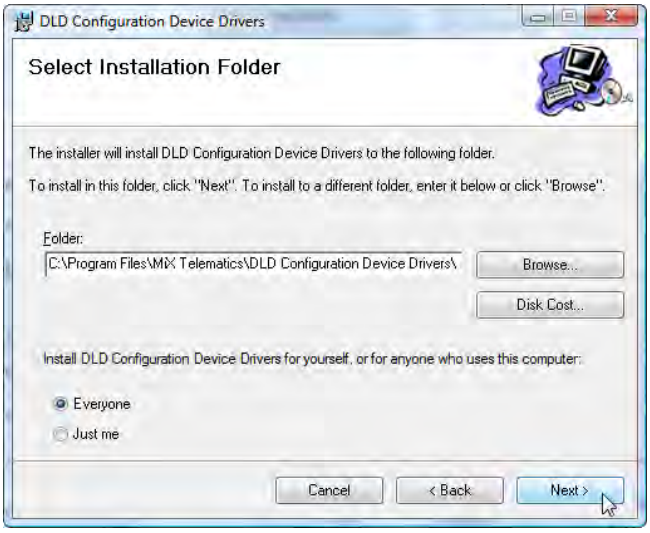
The Wavecom USB driver will be installed automatically.◀

- **Click on [Run] again to start the USB/GPRS modem driver Installation Wizard.**

  The welcome screen for the **DLD Configuration Device Drivers** Installation Wizard is displayed.

- **Click on [Next] to continue installation.**

  Now you must select an installation folder.



- **You can accept the default folder or you can click on [Browse...] to select a new path - confirm by clicking on [OK].**
- **Select**
  - **“Everyone” if the USB/GPRS modem driver is to be available to all users of the computer.**

    This option ensures that the driver is automatically made available to every DLD Remote Service user.
  - **“Just me” if the driver is only to be installed for the user who is currently logged on.**
- **Click on [Next] to continue installation.**

  Several dialogue boxes are now displayed informing you about the installation of the “WCUSBSER” driver - you must confirm these by clicking on **[Next]** .

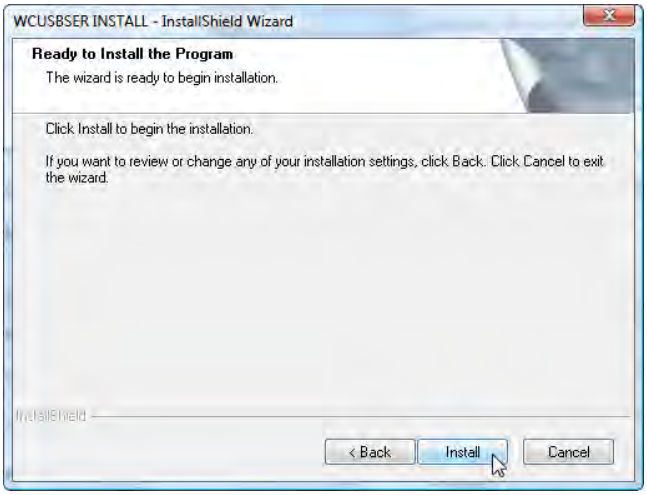
! Important

If problems crop up during the installation of the USB/GPRS modem driver, please verify that the following components have been installed on the computer:

- Microsoft® .Net Framework (Version 3.0 and higher)

  This comes pre-installed with the Microsoft® Vista™ operating system.
- Microsoft® Visual C++ (from Version 2008).

To find information about the installed programs, click on **Start** > **Control Panel** > **Programs** > **Programs and Functions**.◀



- **Click on [Install] to start the installation procedure (after configuring the installation and confirming the messages).**

  A security warning is displayed, informing you that the credentials of the publisher of the driver software could not be verified.

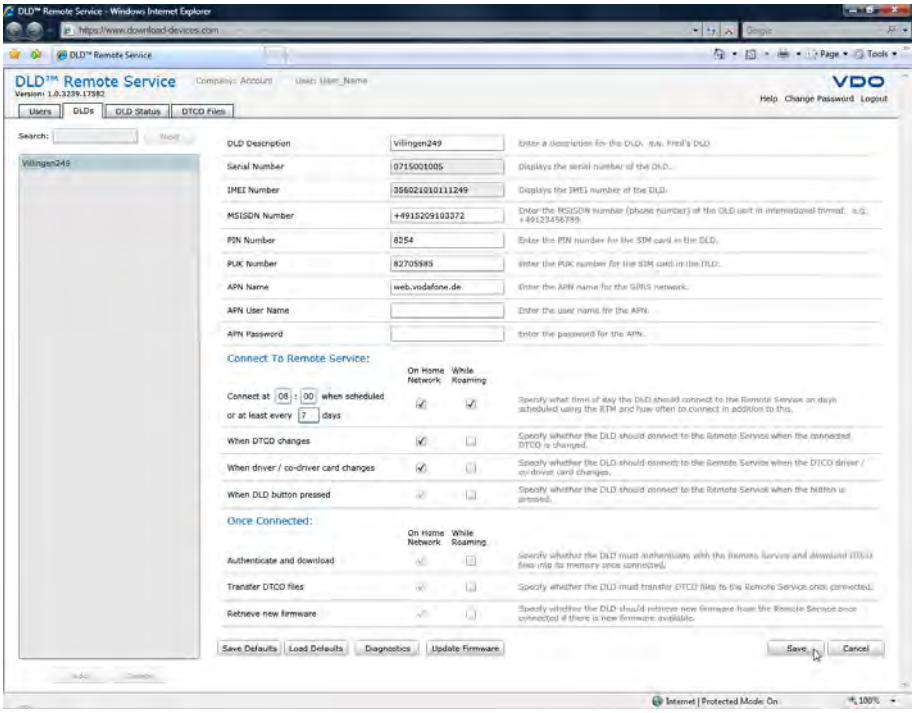
- **Click on [Install this driver software anyway] to continue installation.**

  The USB/GPRS modem driver will now be installed.

- **Click on [Finish] to finish the installation.**

  The driver is installed and the DLD Remote Service now starts to download the device data of the connected DLD Wide Range.

  The device's serial number and a specific identification number (given to all mobile wireless end user devices, (IMEI – International Mobile Equipment Identity) are downloaded.



5 **Enter a name for the DLD Wide Range in the “DLD Description” box.**

Use an accurately descriptive name for easy identification in future, e.g. the site name with the three last numbers of the serial number.

Activating the SIM card

6 **In the “MSISDN” box, enter the number which is to be used to contact the SIM card in the mobile wireless network.**

! Important

Enter the number as follows (see the example):
“Country code abbreviation – Area code without 0 – subscriber's number”, e.g. +441563524617.◄

PIN and PUK

7 **Enter the PIN (Personal Identification Number) and the PUK (Personal Unblocking Key) of the SIM card (as provided by your mobile wireless network provider).**

APN

8 **In the “APN Name” box, enter the name of the mobile wireless network provider's access point (APN) for the SIM card.**

APN User Name and Password

- **Enter the user name and the password permitting the usage of data transfer (if this information is included in the documentation of the mobile wireless network provider).**

  If the information is not in the provider's documentation, leave these text boxes blank.

Condition

Use the check boxes under **Connect To Remote Service** to specify the conditions for communication between the DLD Wide Range and the DLD Remote Service.

The requirements for connection are as follows:

- The DLD Wide Range must be connected to a power source, e.g. the vehicle cigarette lighter and
- the SIM card is authorised for connections from other countries (Roaming).

  If the mobile wireless contract does not include roaming, please contact your mobile wireless network provider to change this. Where necessary, the current card may have to be replaced by a new one.◄

Important

The rule of thumb is that additional costs are involved every time a connection with another country is made - even if you have a contract for the amount of data (as in the case of GPRS connections) and not a contract based on hours.

Since the establishment of a connection between the DLD Wide Range and the DLD Remote Service involves only a message, additional costs are minimal for these small packets of data. However, it does make sense to select the “While Roaming” check box for vehicles which mainly operate in other countries.◄

Tip

If you want to have a DLD Wide Range as a fixed installation in a vehicle, but without a “Remote button”, you should use the default settings for the Home Network.◄

Guidelines for establishing connections

9 Use the time and interval (days) boxes to specify the specific times and and at which intervals the DLD Wide Range is to connect with the DLD Remote Service.

Connection with the DLD Remote Service takes place irrespective of the download deadlines; see the *Chapter entitled “Preparing to download data”*.

10 Select the desired “On Home Network” and/or “While Roaming” check boxes.

Tip

This setting enables you to check which DLD Wide Range is active, based on the logged authentications.◄

11 Select the “On Home Network” and/or “While Roaming” check boxes for “When DTCO changes” if you want the DLD Wide Range to send a message to the effect that it is now connected with another DTCO.

12 Select the “On Home Network” and/or “While Roaming” check boxes for “When driver/co-driver card changes” if you want the DLD Wide Range to send a message to the effect that another driver or co-driver card has been inserted in the DTCO.

13 **Select the “While Roaming” check box for “When DLD button pressed” if you want the DLD Wide Range to send a message (even from other countries) to the effect that the “Remote button” has been pressed.**

The “On Home Network” check box is selected by default.

Important

If the connection with the “DLD Remote Server” has just been established, it makes sense to transfer the files immediately.

Use the check boxes under **Once Connected:** to specify for which case the data transfers should apply, even for “foreign” connections.

The “On Home Network” check boxes are selected by default.◄

Guidelines once connected

14 **Also select the “While Roaming” check box for “Authenticate and download” if, once connected with another country,**

- **company card data is to be transferred to the DLD Wide Range and**
- **mass memory and/or driver card data files are to be transferred to the DLD Wide Range.**

  The mass memory and driver card files are temporarily stored in the DLD Wide Range until they are transferred to the “DLD Remote Server”.

15 **Also select the “While Roaming” check box for “Transfer DTCO Files” to transfer the downloaded files to the “DLD Remote Server” if connection with another country is involved.**

Tip

For the two above settings, you have the following compromise between costs and use:

- If you also permit **Authenticate and download** for foreign connections, the data transferred from the DTCO will be saved in the DLD Wide Range, ready for transfer.

  The costs for establishing a connection and authentication will be minimal thanks to the very small packets of data involved - but downloading from the DTCO will have taken place (i.e. if you require it).

- If you keep the default setting for **Transfer DTCO Files**, the temporarily-stored data will be transferred only when the vehicle is located within the range of its Home Network.

  The next time a connection is established, the data will be transferred - and the costs will be reasonable. A new authentication is not necessary.

Also bear in mind that the settings for every DLD Wide Range can be modified when required, e.g. during a police vehicle check on the motorway.◄

16 **Also select the “While Roaming” check box for “Retrieve new firmware” to transfer a new firmware (device driver) or new configuration to the DLD Wide Range if connection with another country is involved.**

17 Click on [Save] to save the settings.

A dialogue box for testing the GPRS connection and the DLD Wide Range's firmware is displayed.

18 Click on [Yes] to check the GPRS connection and the firmware version of the DLD Wide Range. Then click on [OK] to confirm.

Registration of DLD Wide Range devices takes place in the DLD Remote Service.

The middle LED flashes, indicating that data transfer is in progress.
The settings are transferred to the DLD Wide Range.

When transfer is complete, the LED goes off.

19 Remove the connection between the DLD Wide Range and the computer by removing the mini-USB cable from the computer and the DLD Wide Range.

The DLD Wide Range is now ready to download data. You can give the device and the Download leaflet to your driver for mobile operations.

! Important

For fixed DLD installation in a vehicle, see the *Chapter entitled "Installing a Download Device"*.◄

✓ Condition

To download data successfully with the DLD Wide Range, you must first install the Remote TCO Manager. The RTM software establishes a connection between the DTCO and company card and files to be downloaded and archiving solutions.

The *Chapter entitled "Installing the Remote TCO Manager"* explains how to install the Remote TCO Manager.◄

Modifying a configuration

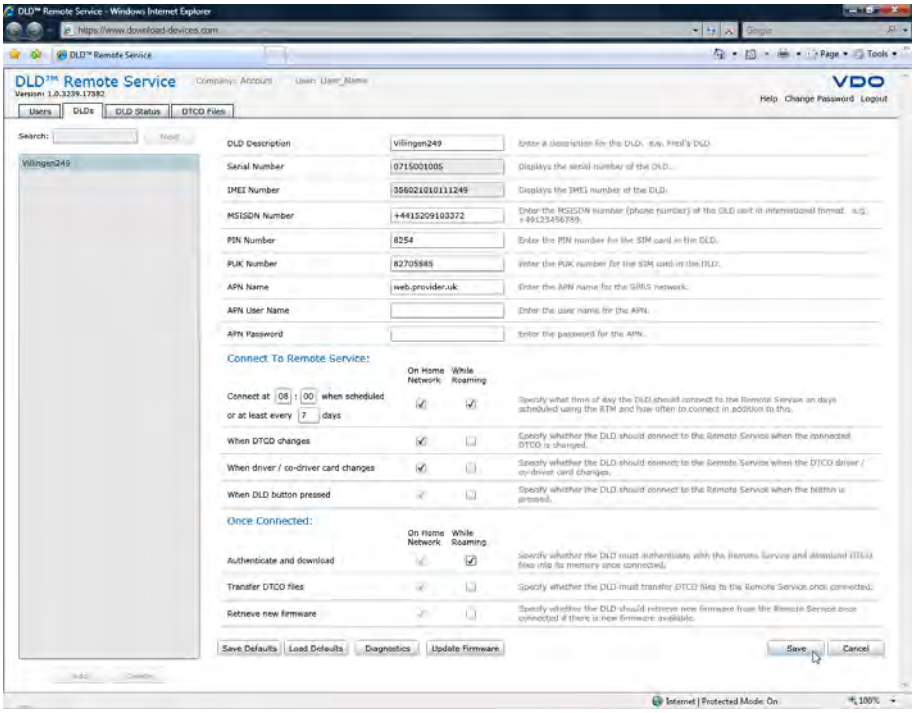
Important

If you want to modify SIM card or mobile wireless network provider's details, you must connect the DLD Wide Range to the computer.◄

To edit the configuration of a DLD Wide Range:

1 **In the DLD Remote Service, select the “DLDs” tab.**

A list of all registered DLDs is displayed in the Selection pane.



2 **Select the DLD Wide Range the configuration of which you wish to modify.**

The current configuration of the DLD Wide Range is displayed in the Display and Editing area. The entries can now be modified.

3 **Modify the settings (if desired) and confirm the changes with [Save].**

Important

The next time a connection is established with the DLD Remote Service in the Home Network, the new configuration will be transferred to the DLD Wide Range.

If a connection with another country is involved, the time at which the new configuration is transferred depends on the configuration itself (“While Roaming” check box also selected for **Retrieve new firmware**).

See the *Chapter entitled “Specifying download details”* for information about data blocks.◄

Assigning a new wireless link

To download data from the DTCO to the DLD Wide Range, a wireless link is required. The link is inserted in the front interface of the DTCO; also see the *Chapter entitled "Connections and LEDs"*.

An individual wireless link is assigned to each DLD Wide Range in the factory - a wireless link can only communicate with its particular DLD (unless later paired with a different DLD). If the wireless link is lost, for example, a new one must be assigned to the DLD.

Important

The wireless link is only required for mobile DLD Wide Range use.◄

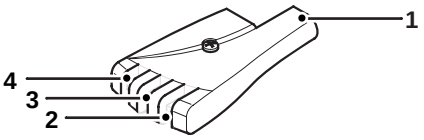


Fig. 13: Wireless link – Connections and LEDs

1	Front interface (calibration and download interface)	**3**	Data transfer LED
2	Connection status LED	**4**	Power supply LED

Important

A wireless link can be assigned to (paired with) any single DLD Wide Range.

Ensure that no other wireless links are active nearby - otherwise your DLD Wide Range could be assigned to (paired with) the wrong wireless link.◄

To assign a new wireless link to a DLD Wide Range device:

Wireless link

1 Insert the wireless link into the front interface of the DTCO 1381.

The wireless link's LEDs flash red and green alternately. After roughly 5 seconds only the power supply LED will flash green.

Connecting the power supply

2 Connect the power supply cable to the DLD Wide Range and to the vehicle cigarette lighter.

The power supply LED turns red. After roughly 5 seconds all LEDs flash green. The power supply LED flashes green.

3 Press the "Remote button" on the connecting power supply cable until you hear two signal tones, one after the other.

The assignment (pairing) of the DLD Wide Range to the old wireless link is cancelled and overwritten by the new wireless link.

Installing a Download Device

Important

All installation work requires special knowledge. This is why installation - and commissioning - may only be carried out by service technicians!◄

The steps involved

Important

Special tools are necessary for the power supply, network connection and installation of the device. In the following chapters it is assumed that all the necessary tools and auxiliary equipment are available and that the persons responsible know how to use these tools and this equipment; also see the Technical Product Manual for the DTCO 1381.◄

1	**Checking condition on delivery**	– Verify that all package contents have been packed and are undamaged.	See the *Chapter entitled "Checking condition upon delivery"*
2	**Determining the installation location**	– Determine the installation location: – dashboard *or* – windscreen **Tip:** The Download Device can also be kept in the glove compartment.	See the *Chapter entitled "Determining the installation location"*
	This next step is only necessary if the DTCO update for the front interface has not yet been carried out.		
3	**Update of the front interface on the DTCO 1381**	– Update DTCO 1381 Rel. 1.3 for remote download by an authorised workshop.	Also see the DTCO Update booklet
	These next steps are only necessary if the Download Device is to be connected to the vehicle's electrical system.		
4	**Determining the connection and plug configurations**	– Determine necessary connections using connection and plug configuration diagrams.	See the *Chapter entitled "Connecting the Download Device to the DTCO 1381"*
5	**Laying and connecting cables**	– Lay connection cables. – Connect connection cables to the vehicle's electrical system. – If required, connect the "Remote button" to the vehicle's electrical system and install it (only DLD Wide Range).	See the *Chapter entitled "Connecting the Download Device to the power supply"* See the *Chapter entitled "Connecting the Remote button (option)"*

	The next steps are always necessary.		
6	**Configuring the Download Device**	– Configure the DLD Short Range. *or* – Configure the DLD Wide Range.	See the *Chapters entitled “Configuring the DLD Short Range”* or *“Configuring the DLD Wide Range”*
7	**Installing the Download Device**	– Install the front windscreen holder or the mounting attachment. – Install the Download Device. **Tip:** The Download Device can also be kept in the glove compartment.	See the *Chapter entitled “Installing the Download Device”*
8	**Connecting the Download Device**	**Fixed installation:** – Connect the Download Device to the connection cable. – If required, connect the “Remote Button” to the Download Device (only DLD Wide Range). **Mobile use:** – Plug in the wireless link on the DTCO (only DLD Wide Range). – Use a Communication cable (K-Line) to connect the Download Device to the DTCO (only DLD Short Range). – Connect the Download Device to the power supply.	See the *Chapters entitled “Connecting the DLD Short Range to the DTCO” “Connecting the DLD Wide Range to the DTCO”* See the leaflet for drivers (supplied with the package)
9	**Carrying out a data download**	– Carry out a data download.	See the *Chapters entitled “Downloading data with the DLD Short Range” “Downloading data with the DLD Wide Range”*

Table 4: Installing a Download Device – the steps involved (tabular)

Checking condition upon delivery

Before installation and commissioning, the supplied Download Device package should be checked, i.e. all components must be in the package in undamaged condition.

Important

Bear in mind that for a fixed installation of the Download Device, you will need the Basic Kit AND the relevant Extension Kit.

For the DLD Short Range, see the *Chapter entitled "Product summary - DLD Short Range"*, *Section "Package contents - Basic Kit"* and *Section "Package contents - Extension Kit for fixed installation"*.

For the DLD Wide Range, see the *Chapter entitled "Product summary - DLD Wide Range"*, *Section "Package contents - Basic Kit"* and *Section "Package contents - Extension Kit for fixed installation"*.◄

All product components are exhaustively checked before leaving the factory - if, however, anything seems amiss, please contact your service partner.

Important

In the case of the DLD Wide Range, you must also check the pairing between the wireless link and the DLD Wide Range.

You can only check a pairing by means of a data download; see the *Chapter entitled "Downloading data with the DLD Wide Range"*.◄

Preparing for installation

The following chapters will show you what you should bear in mind during installation and the preparations you should make.

Determining the installation location

You can use the mounting attachment to place the DLD

- directly on the dashboard or
- the front windscreen holder to position it on the windscreen.

Important

According to Article 35b of the German Road Traffic Licensing Regulations (StVZO) the driver's field of view must not be impaired in all operating situations and weather conditions.◄

Caution

Installation on the dashboard

Do not fit the mounting attachment near to moving parts, e.g. airbag covers.

Make sure that

- you leave enough room for the connecting cable and
- the Download Device is not covering defroster outlets on the dashboard.◄

Caution

Installation on the windscreen

Make sure that

- the Download Device is positioned as low as possible - this will avoid impairing the driver's field of view,
- the Download Device is not positioned near shelves or moving parts, e.g. storage compartments,
- you leave enough room for the connecting cable and
- the Download Device is not covering defroster outlets on the dashboard.◄

Laying cables

The following cables are required for permanent installation of the Download Device in the vehicle:

- Cable for connecting the Download Device to the vehicle battery
- Cable for connecting the Download Device to the DTCO
- Optional:
  - DLD Short Range: cable for connection to an external antenna
  - DLD Wide Range: cable for connecting the Remote button

! Important

When laying cables, make sure that

- the cables are fixed at short intervals (approx every 500 mm) so that they do not vibrate.
- the cables are not run over sheet metal and plastic parts with sharp edges. If possible, they should not be bent.◄

Setting the termination resistor

Both the DLD Short Range and DLD Wide Range have an adjustable termination resistor which is used to connect additional devices to the CAN bus (plug connector C) on the DTCO (line structure).

When the DLD is delivered, the termination resistors for the Controller Area Network are activated which means that the Download Device is the last unit in a series of connected devices.

Termination resistor - DLD Short Range

The DIP switches for setting the CAN termination resistance on the DLD Short Range are located under the cover. The following illustration shows the activated termination resistor (status upon delivery): Both DIP switches are set to ON. For information on how to open the cover, please refer to the *Chapter entitled “Registering and configuring a DLD Short Range”*.

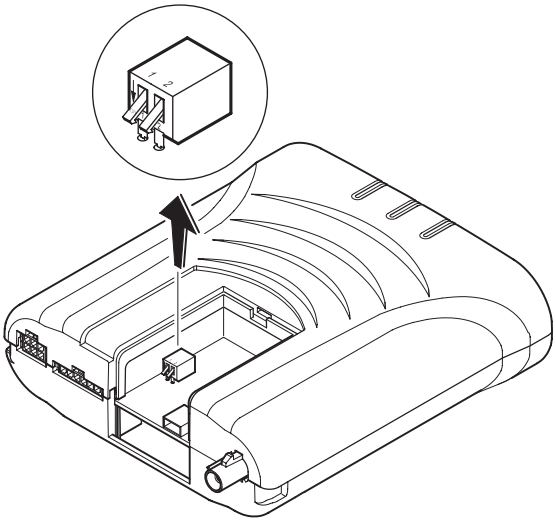


Fig. 14: Termination resistor DIP switches – DLD Short Range (fixed installation)

Termination resistor - DLD Wide Range

The DIP switches for setting the CAN termination resistance on the DLD Wide Range are located inside the housing - on the board below the SIM card. The following illustration shows the activated termination resistor (status upon delivery): DIP switch 4 is set to ON. For information on how to open the housing, please refer to the *Chapter entitled “Inserting the SIM card”*.

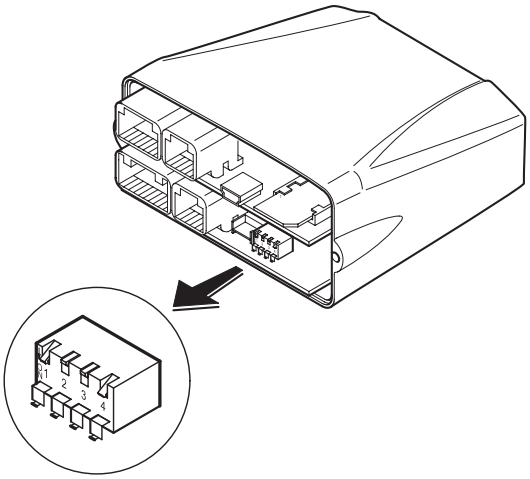


Fig. 15: Termination resistor DIP switches – DLD Wide Range (fixed installation)

Connecting the Download Device to the power supply

Caution

Danger of short-circuit!

Bear in mind that during all installation work (especially when working on the vehicle's electrical system), the vehicle manufacturer's instructions must be adhered to!

Safeguard all power cables in accordance with the relevant guidelines and follow the safety instructions in the *Chapter entitled "Instructions for installing the Download Devices".*◄

Caution

Danger of explosion!

In vehicles constructed for the transport of dangerous goods (ADR vehicles), the Download Device's electrical circuit must be broken by means of the battery circuit breaker.◄

Power supply - DLD Short Range

The following illustration shows the connector assignment for supplying a DLD Short Range with power (fixed installation).

Important

Connection to power using terminal 30 must be made **after** the vehicle's main switch (also see the Section *"Power supply - DLD Wide Range"*). The power cable must be protected with a 5 A fuse.◄

DTCO

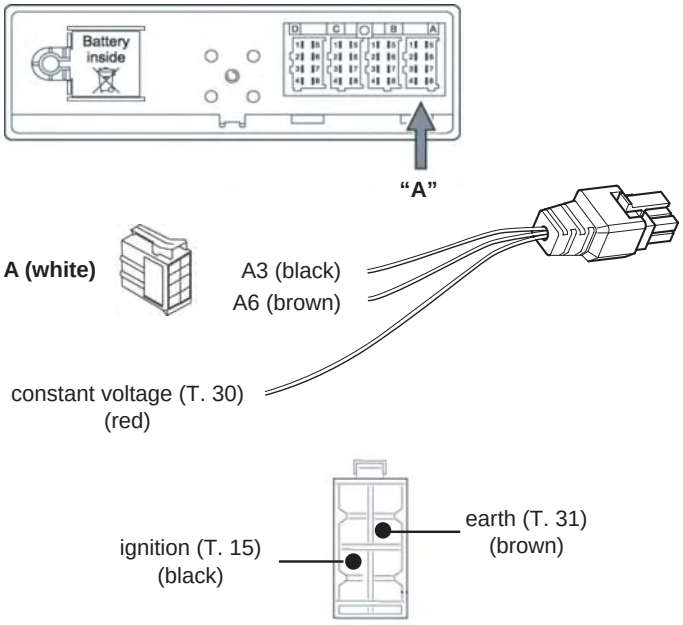


Fig. 16: Power supply – DLD Short Range (fixed installation)

Power supply - DLD Wide Range

The following illustration shows the connector assignment for supplying a DLD Wide Range with power (fixed installation).

Important

Connection to power using terminal 30 must be made **after** the vehicle's main switch. The power cable must be protected with a 5 A fuse.◄

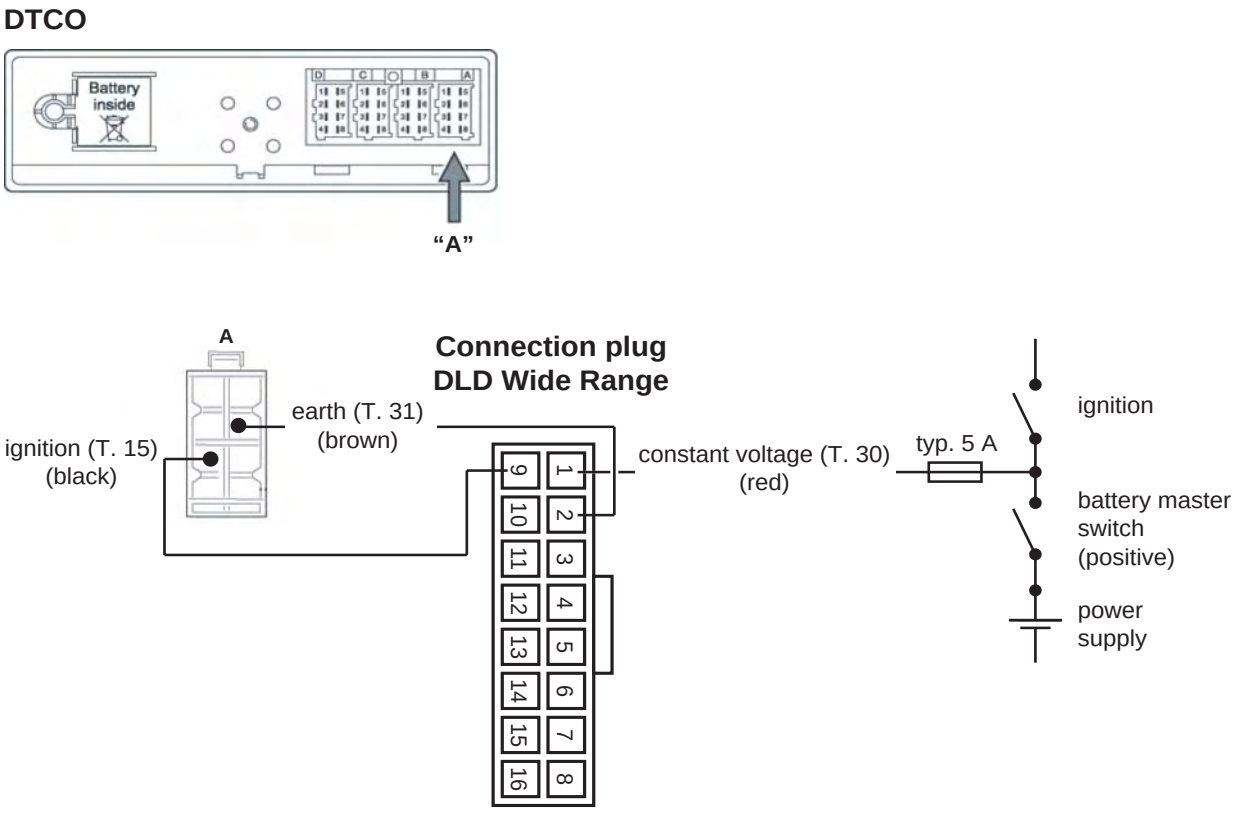


Fig. 17: Power supply – DLD Wide Range (fixed installation)

Connecting the Download Device to the DTCO 1381

Important

You should only connect the Download Device to the CAN interfaces of the DTCO 1381 if the DLD is to be used as a fixed installation in the vehicle.◄

Overview of DLD Short Range connections

The following illustration shows the connector assignment for data communication of a DLD Short Range and a DTCO via CAN2 (fixed installation).

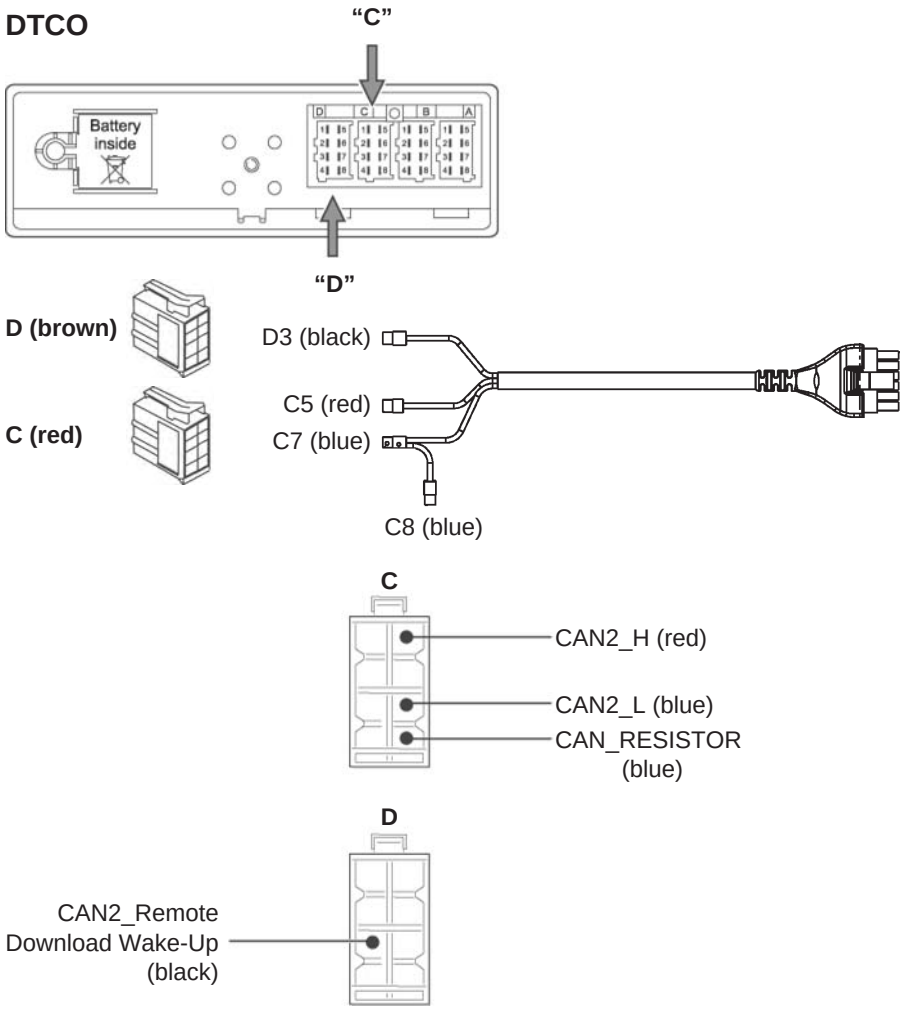


Fig. 18: Connections between the DLD Short Range and the DTCO 1381

Overview of DLD Wide Range connections

The following illustration shows the connector assignment for data communication of a DLD Wide Range and a DTCO via CAN2 (fixed installation).

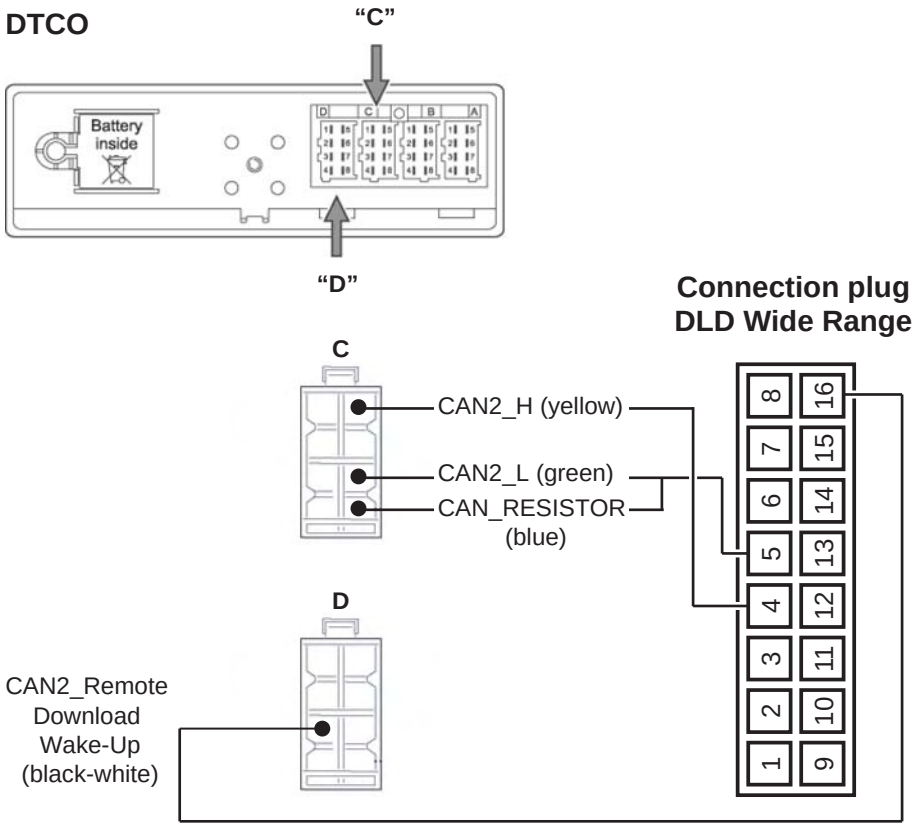


Fig. 19: Connections between the DLD Wide Range and the DTCO 1381

Connecting cables to the DTCO 1381

Condition

You have the Extension Kit for DLD fixed installation.◄

Important

Panelling or covers may have to be removed, depending on the interior design of the vehicle.

When removing these, adhere to the vehicle manufacturer's instructions and guidelines.◄

To connect the Download Device to the DTCO 1381:

1 **Remove the DTCO 1381 from its compartment.**

Important

The DTCO Technical Product Manual has more detailed information about removing the DTCO 1381.◄

2 **Remove the connector cover.**

3 **On the rear of the DTCO, remove plug C (red) and D (brown) from plug compartments “C” and “D” respectively.**

4 **Connect the connection cable to the C plug (red) and D plug (brown) of the DTCO 1381, as shown in *Figure 18* (DLD Short Range) or *Figure 19* (DLD Wide Range).**

A Remote button can also be connected if required; see the *Chapter entitled “Connecting the Remote button (option)”*.

- **DLD Wide Range:**
  Connect 5 A connection cable fuse in fuse box.

5 **On the rear of the DTCO 1381, plug the red plug into plug compartment “C” and the brown plug into plug compartment “D”.**

- **Refit the connector cover (where applicable) on the DTCO 1381, secure by means of a raised-head screw and seal.**

Important

In some countries, the fitting and sealing of the connector cover is not statutory.◄

6 **Refit panelling and covers (where applicable).**

7 **Re-install the DTCO 1381 into its compartment.**

Important

The DTCO Technical Product Manual has more detailed information about installing the DTCO 1381.◄

Connecting the Remote button (option)

Important

In the case of a DLD Wide Range fixed installation, you cannot use the Remote button fitted to the vehicle cigarette lighter power supply cable.

To use this function, a separate Remote button must be connected.

The Remote button (separate push-button) is not included in the Extension Kit supply package.◄

Important

When installing the Remote button (separate push-button), you must follow the vehicle manufacturer's instructions and guidelines (e.g. for the installation location.◄

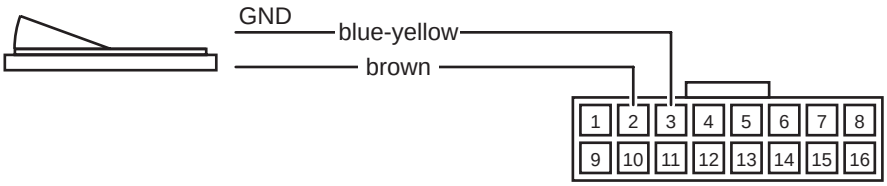


Fig. 20: DLD Wide Range connections: Connecting the Remote button

To connect a separately mounted Remote button:

1. **Connect pins 2 and 3 of the connection cable to the Remote button (separate push-button).**
2. **Install the Remote button (separate push-button) in accordance with the vehicle manufacturer's guidelines.**

Installing the Download Device

Important

If the Download Device is not used as a fixed installation (connected to the DTCO 1381 via the front interface), you do not have to install it.

In this case, the DLD can be kept in the glove compartment.◄

There are two ways to install a Download Device in a vehicle. You can use the mounting attachment to place the Download Device

- directly on the dashboard or
- in the front windscreen holder to position it on the windscreen.

Important

The front windscreen holder is not included in the DLD Basic Kit.◄

Installing the DLD on the dashboard

Condition

For DLD dashboard placement, you will need the mounting attachment. This is included in the Basic Kit; also see the *Chapter entitled "Package contents - Basic Kit"*.◄

Caution

Danger of short-circuit!

Before you start attaching the mounting attachment, you must check for cables that could be damaged during installation; also see the *Chapter entitled "Determining the installation location"*.◄

Important

The screws and tools required for DLD dashboard placement are not included in the supply package.◄

To install the Download Device using the mounting attachment:

1 **Attach the mounting attachment to the desired dashboard location using 4 screws (Ø 4 mm).**

2 **Place the Download Device in the mounting attachment.**

3 **For a fixed installation: Lay and connect the connection cable; see the *Chapter entitled "Connecting the Download Device to the DTCO 1381"*.**

- **Connect the Remote button if required; see the *Chapter entitled "Connecting the Remote button (option)"*.**

Installing the Download Device on the windscreen

✓ **Condition**

For DLD windscreen placement, you will need the mounting attachment and the front windscreen holder.

The front windscreen holder is not included in the Extension Kit; also see the *Chapter entitled "Available products, accessories and replacement parts"*.◄

To install the Download Device using the front windscreen holder:

1 **Attach the mounting attachment to the front windscreen holder.**

2 **Attach the front windscreen holder to the chosen position on the windscreen; see the *Chapter entitled "Determining the installation location"*.**

3 **Place the Download Device in the mounting attachment.**

4 **For a fixed installation: Lay and connect the connection cable; see the *Chapter entitled "Connecting the Download Device to the DTCO 1381"*.**

- **Connect the Remote button if required; see the *Chapter entitled "Connecting the Remote button (option)"*.**

Connecting the DLD Short Range to the DTCO

Fixed installation

✓ **Condition**

The connection cable between the Download Device and the DTCO 1381 has been connected; see the *Chapter entitled "Connecting cables to the DTCO 1381"*.◄

- **Connect the connection cable (data cable to DTCO) to the DLD Short Range; see the *Chapter entitled "Product summary - DLD Short Range"*, *Section "Connections and LEDs"*.**

Mobile use

Connecting the data cable to the DTCO

1 **Use the Communication cable (K-Line) to connect the DLD Short Range to the front interface of the DTCO 1381.**

Connecting the power supply

2 **Connect the power supply cable to the DLD Short Range and to the vehicle cigarette lighter.**

Connecting the DLD Wide Range to the DTCO

Fixed installation

✓ **Condition**

The connection cable between the DLD and the DTCO 1381 has been connected; see the *Chapter entitled "Connecting cables to the DTCO 1381"*.◄

- **Connect the connection cable (data cable to DTCO) to the DLD Wide Range; see the *Chapter entitled "Product summary - DLD Wide Range"*, *Section "Connections and LEDs"*.**

Mobile use

Wireless link

1 Insert the wireless link into the front interface of the DTCO 1381.

Connecting the power supply

2 Connect the power supply cable to the DLD Wide Range and to the vehicle cigarette lighter.

Preparing to download data

In this Chapter, you'll learn how to prepare a DLD for downloading data. Before you can download data, there are a few preparatory settings to be made in the Remote TCO Manager and in the archiving solutions you use.

✓ **Condition**

You have

- installed the Remote TCO Manager; see the *Chapter entitled "Installing the Remote TCO Manager"*.
- made the necessary settings if you are using a client-server installation; see the *Chapter entitled "Points to watch during installation"*.
- configured the Download Device; see the *Chapters entitled "Configuring the DLD Short Range"* and *"Configuring the DLD Wide Range"*.

The Download Device is also available (mobile or fixed) in individual vehicles.◄

TIS-Web settings

Importing download deadlines from TIS-Web

In order to use TIS-Web download reminders in the Remote TCO Manager, you must first save the connection data for your TIS-Web account. Only then can you

- import the download deadlines from the list of download reminders into the Remote TCO Manager and
- carry out DLD downloads based on these deadlines.

✓ **Condition**

The following requirements must be fulfilled:

- You work with the archiving solution TIS-Web 3.
- During installation, you specified that you work with the archiving solution TIS-Web 3.

In the case of a client-server installation, all settings are made via the client installation(s).◄

Important

If you use a proxy server as a means of connecting to the Internet, please consult your system or network administrator to obtain the proxy address (IP) and proxy port.◄

To importing download deadlines from TIS-Web:

1 **Start the Remote TCO Manager (if not already started).**

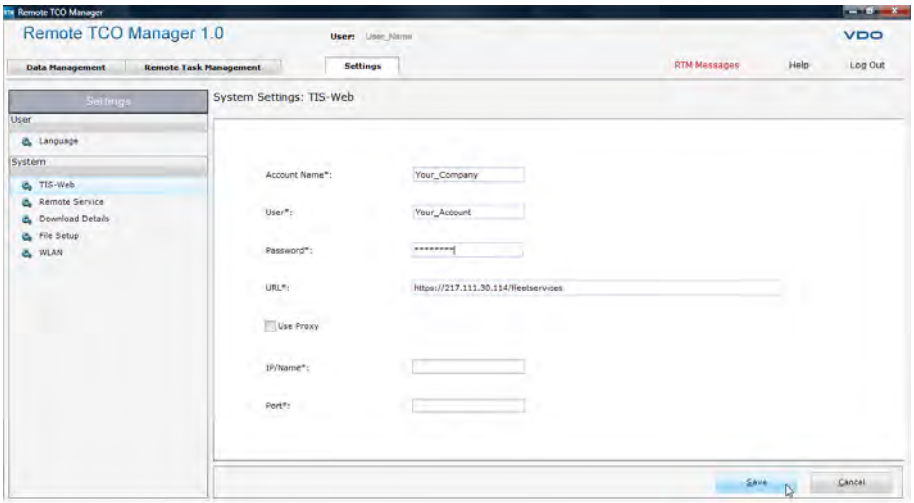
The **Data Management** tab and the **RTM Messages** dialogue box (where applicable) are displayed.

2 **Go to the “Settings” tab.**

The tab opens.

3 **In “System”, click on “TIS-Web”.**

The text boxes for your TIS-Web account access data are displayed.



Access data

4 **Enter your access data (Account Name, User and Password).**

Important

The TIS-Web Server (Uniform Resource Locator) can normally remain unchanged, since it is usually saved during program installation.◄

Using a proxy

- **Select the “Use Proxy” check box if your company uses a proxy server to access the Internet.**

  When this check box is selected, both of the following boxes are compulsory.

- **Enter your proxy server's IP address and port details.**

Important

You only have to enter “Proxy” details if your company uses a proxy server to access the Internet.◄

5 Click on [Save] to save the settings.

The Remote TCO Manager can now access the download deadlines of your TIS-Web account.

Important

The download deadlines will be transferred to the Remote TCO Manager during the next download procedure.

The *Chapter entitled "Configuring data download"* has more information on this.◄

Tip

DTCO and driver card downloading takes place in cycles, e.g. every 3 months for mass memory data and every 28 days for driver card data. If you are a TIS-Web user, you can specify these download cycles in your TIS-Web account.

If you want to make an unscheduled download of mass memory or driver card data, you must specify this in the Remote TCO Manager; see the *Chapter entitled "Managing deadline-related tasks"*.◄

Adding a new vehicle

Important

New vehicles must be added in TIS-Web and there are two ways to do this:

- You can download mass memory data using a Downloadkey, for example, and import the data into TIS-Web.
- You have equipped a new vehicle
  - with a DLD Short Range and the vehicle enters the wireless range of the access point.

    Authentication and download are carried out and the vehicle is automatically added to the TIS-Web Server during data transfer and the archiving of the download data.
  - with a DLD Wide Range.

    Download data is transferred to the Remote Server in accordance with the details (in DLD Remote Service) on establishing connections and transfer range. The vehicle is automatically added to TIS-Web during the subsequent data transfer to the TIS-Web Server and the archiving of the download data.

  The download configuration already corresponds to this archiving solution's requirements; see the *Chapter entitled "Configuring data download"*.◄

Adding a new driver

Important

There are also two ways of adding a new driver in TIS-Web:

- You can download the driver card data using a chip card reader, for example and import the data into TIS-Web.
- You can also use a DLD to download driver card data. The new driver is then automatically added in TIS-Web.

  Here the **Card Download** data block must be selected in **Settings** > **Download Details**; see the *Chapter entitled "Configuring data download"*.◄

TIS-Office settings

Condition

The following requirements must be fulfilled:

- You have installed Patch 2.6.7 (or higher) for data transfer from and to TIS-Office 2.6 (stand-alone or server).

  This patch is on the Remote TCO Manager product CD in the "X:\tis-office patch 2.6.7" folder.
- During RTM installation, you specified that you work with the archiving solution TIS-Office.◄

In addition to installing Patch 2.6.7, you must also make some settings in both programs in order to transfer data between the Remote TCO Manager and TIS-Office.

- In the Remote TCO Manager, you must
  - save the connection data to the computer on which TIS-Office is installed (stand-alone or server); see the *Chapter entitled "Importing download deadlines from TIS-Office"*.

    This specifies the location where the "RTM SR Communicator" can find the patch-created folders called "DLListLocation" and "UPListLocation" for your download deadlines (XML files) and the location to which the download files are to be transferred.
  - specify the time at which your download deadlines are to be updated; see the *Chapter entitled "Configuring data download"*.

    This specifies at which time (once per day) the download deadlines should be updated.

– specify the time at which the downloaded mass memory and driver card files are to be transferred to TIS-Office; see the *Chapter entitled "Settings for download files"*.

  This specifies the time (once per day) at which the download files (saved temporarily in the "C:\Program Files\Remote TCO Manager\RTMServer\Common\DTCOData" folder) are to be transferred to the new "UPListLocation" TIS-Office folder.

Important

If the Remote TCO Manager and TIS-Office are not installed on the same computer, you must manually share the "DLListLocation" and "UPListLocation" folders in the TIS-Office program environment (stand-alone or server).

Also see the *Chapter entitled "Sharing download reminder folders"*.◄

- In TIS-Office (using administrator access to the ToolBox), you must specify

  – when TIS-Office is to generate the download deadlines from the Reminder List and save them in the "DLListLocation" folder.

    This specifies at which time (once per day) the XML file with the download deadlines should be updated.

  – the intervals between the retrieval of transferred download files (by the "TIS-Office File Transfer Service") from the "UPListLocation" folder for subsequent import.

    This specifies when the retrieval of the download files from the named folder is to take place, in intervals of between 4 and 24 hours.

  The *Chapter entitled "Configuring data transfer for TIS-Office"* has more information on these two settings.

Important

If you use TIS-Office to archive the tachograph data of several companies, you must also specify (in the ToolBox) the company-specific folder from which the download data is to be transferred.

Please note that TIS-Office also creates a second XML file (in addition to the XML file with the download deadlines) - this second file contains the company's assignments of vehicles and drivers, because the Remote TCO Manager has to know the vehicle/driver to which/whom data is to be assigned.

Also see the *Chapter entitled "Configuring data transfer for TIS-Office"*.◄

Only when you have made the settings described above can you

- import the download deadlines from the list of download reminders into the Remote TCO Manager once a day,
- carry out DLD downloads based on these deadlines and
- transfer the downloaded files to the predefined folders and retrieve them for import into TIS-Office.

Important

All communication between TIS-Office, the TIS-Office ToolBox and the Remote TCO Manager is based on the TCP/IP network protocol. This runs in the background.◄

Sharing download reminder folders

Important

You only have to share the following folders if the Remote TCO Manager and TIS-Office are not installed on the same computer.

Also bear in mind that communication between the two computers must be already set up in the company network.◄

Access to the “DLListLocation” and “UPListLocation” folders must be enabled if you want the Remote TCO Manager to import the download reminder deadlines from TIS-Office and transfer the download files to TIS-Office.

Condition

You must

- make the necessary settings on the computer on which TIS-Office is installed as a stand-alone or on which the server components are installed and
- have administrator rights on that computer if you want to share folders.◄

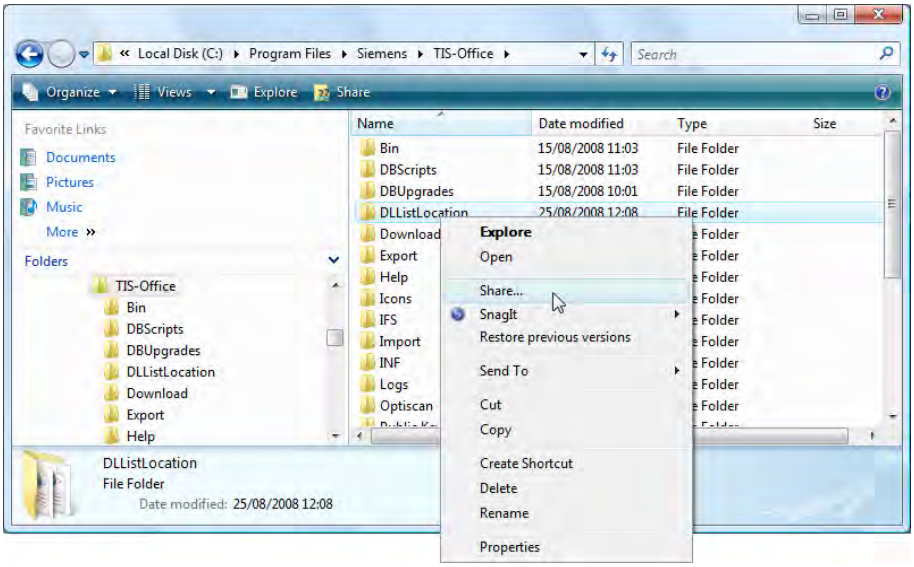
To share the two folders:

1 **Open Microsoft® Windows® Explorer.**

2 **Open the directory in which the TIS-Office installation files are stored, e.g. “C:\Program Files\...\TIS-Office”.**

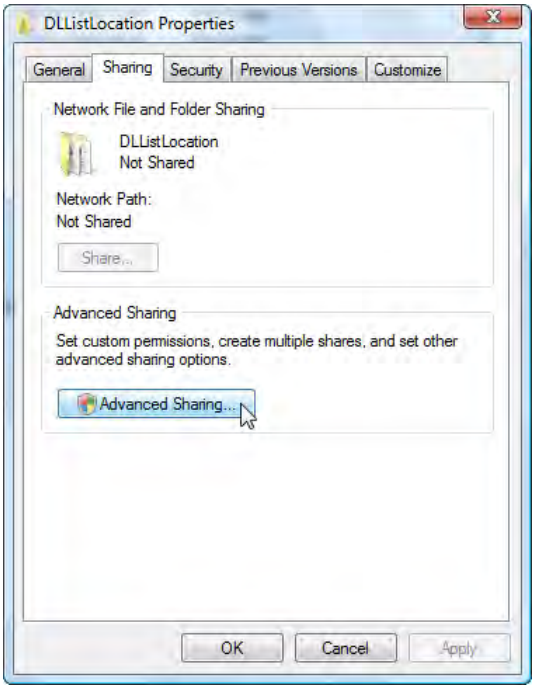
3 **Right-click on the “DLListLocation” folder.**

A shortcut menu is displayed.



4 Click on “Share...”.

The **DLListLocation Properties** dialogue box opens.

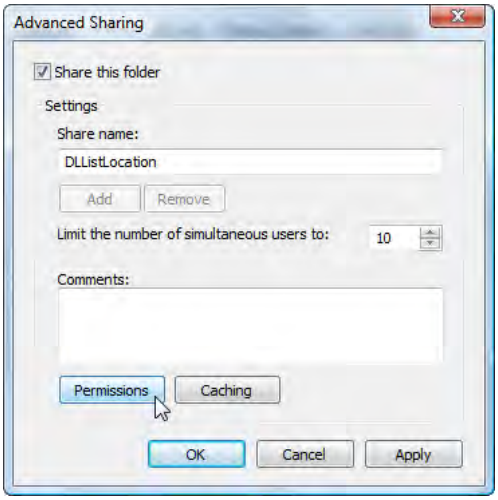


5 On the “Sharing” tab, click on [Advanced Sharing...].

A security warning message is displayed.

6 Click on [Continue] to confirm and continue with the procedure.

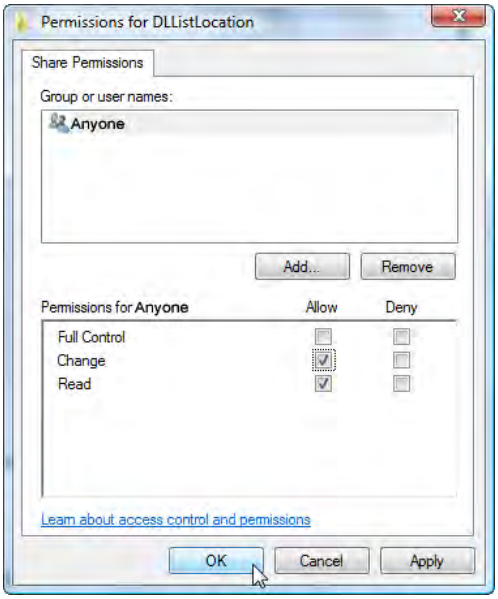
The **Advanced Sharing** dialogue box is displayed.



7 **Select the “Share this folder” check box.**

8 **Click on [Permissions] to configure access.**

The **Permissions for DLListLocation** dialogue box is displayed.



9 **In the “Group or user names” list, select the “Anyone” entry.**

Sharing folders

10 **Select the “Allow” check box for “Read” and “Change”.**

! Important

This enables access to the folder for all users on your company network.

If you want to share the folder for only certain users, you can create access for these users via **[Add...]**.◄

11 **Click on [OK] to confirm.**

The **Permissions for DLListLocation** dialogue box closes.

12 **Click on [OK] to share the "DLListLocation" folder.**

The **Advanced Sharing** dialogue box closes.

13 **Click on [Close] to close the dialogue box.**

The **DLListLocation Properties** dialogue box closes. The "DLListLocation" folder is now shared.

Sharing the UPListLocation folder

14 **Repeat *Steps 3* to *13* for "UPListLocation" and share this folder for "Read" and "Change".**

The "UPListLocation" folder is now shared.

- **Check sharing by, e.g.**
  - **– opening Microsoft® Windows® Explorer and**
  - **– (via "Network") clicking on the name of the computer on which TIS-Office is installed.**

    The folders you are checking should be accessible.

Importing download deadlines from TIS-Office

✓ **Condition**

Since the Remote TCO Manager and TIS-Office are not installed on the same computer, you have now shared the "DLListLocation" and "UPListLocation" folders on the TIS-Office computer (stand-alone or server); see the *Chapter entitled "Sharing download reminder folders"*.◄

To import download reminders from TIS-Office:

1 **Start the Remote TCO Manager (if not already started).**

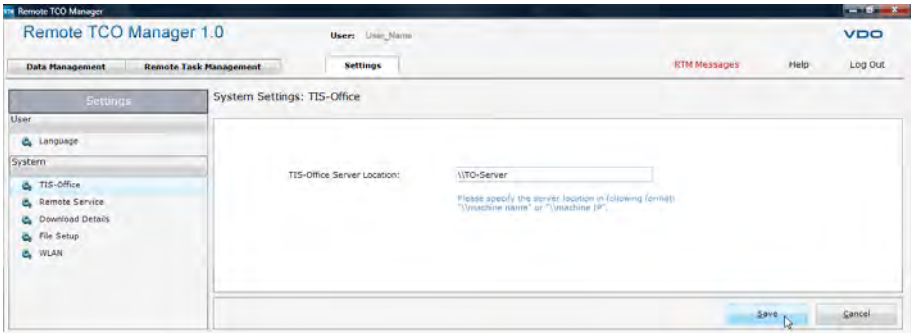
The **Data Management** tab and the **RTM Messages** dialogue box (where applicable) are displayed.

2 **Go to the "Settings" tab.**

The tab opens.

3 **In "System", click on "TIS-Office".**

The text box for the site (computer name) of the TIS-Office installation is displayed (stand-alone or server).



Database site

4 Enter the name of the computer on which your TIS-Office database is located.

Important

You have to enter details here even if the Remote TCO Manager and TIS-Office are installed on the same computer.

Choose “Start > Control Panel > System and Maintenance > System”.

Make a note of the required network connection settings when the programs are installed on different computers.◄

5 Click on [Save] to save the settings.

The Remote TCO Manager can now access the download deadlines (XML file) of your TIS-Office installation (DLListLocation) and in turn transfer the mass memory and driver card files which have been downloaded by DLD (UPListLocation).

Important

The download deadlines are transferred to the Remote TCO Manager (once a day), in accordance with what you specified in **Download-Details**. The *Chapter entitled “Configuring data download”* has more information on this.

The transfer of the download files is carried out (also once a day) in accordance with what you specified in **File Setup**; see the *Chapter entitled “Settings for download files”*.◄

Tip

DTCO and driver card downloading takes place in cycles, e.g. every 3 months for mass memory data and every 28 days for driver card data. If you are a TIS-Office user, you can specify these download cycles in TIS-Web Settings.

If you want to make an unscheduled download of mass memory or driver card data, you must create a corresponding task in the Remote TCO Manager; see the*Chapter entitled “Managing deadline-related tasks”*.◄

Adding a new vehicle

Important

New vehicles must be added in TIS-Office and there are two ways to do this:

- You can download mass memory data using a Downloadkey, for example, and import the data into TIS-Office.
- You have equipped a new vehicle
  - with a DLD Short Range and the vehicle enters the wireless range of the access point.

    Authentication and download are carried out and the vehicle is automatically added to TIS-Office during download data import, in accordance with the relevant settings.
  - with a DLD Wide Range.

    Download data is transferred to the Remote Server in accordance with the details (in DLD Remote Service) on establishing connections and transfer range. The vehicle is automatically added during the subsequent data transfer to TIS-Office, in accordance with the relevant settings.

Here the **Technical Data** data block must be selected in **Settings** > **Download Details**; see the *Chapter entitled "Configuring data download"*.◄

Adding a new driver

Important

There are also two ways of adding a new driver in TIS-Office:

- You can download the driver card data using a chip card reader, for example, and import the data into TIS-Office.
- You can also use a DLD to download driver card data. The new driver is then automatically added in TIS-Office.

  Here the **Card Download** data block must be selected in **Settings** > **Download Details**; see the *Chapter entitled "Configuring data download"*.◄

Configuring data transfer for TIS-Office

To enable TIS-Office to accept the files (downloaded via WLAN or GPRS) for archiving in the database, you must use the TIS-Office ToolBox

- to specify the time at which download deadlines are to be created and transferred to the “DLListLocation” folder.
- to specify the intervals between transfer of the data from the default “UPListLocation” folder, or from a company-specific folder which you have specified beforehand.

You only have to save folders via the ToolBox if you use TIS-Office to archive and manage the tachograph data of several companies.

Condition

To configure data transfer you must

- have administrator access to TIS-Office ToolBox (stand-alone or server).

  The TIS-Office Toolbox instruction manual has more information on this.
- create new folders in the TIS-Office program folder - if you use TIS-Office to archive and manage the tachograph data of several companies - before you start making the settings described below.

  You must create one folder per (managed) company, e.g. “C:\Program Files\...\TIS-Office\Download\Company1”.

  Remember to share these folders if the Remote TCO Manager and TIS-Office are not installed on the same computer; see the *Chapter entitled “Sharing download reminder folders”*.◀

Tip

If you don't have the TIS-Office ToolBox manual at hand, here are the administrator's access data for

- **User ID***: TISOFFICEDBA
- **Password***: dbasvsso◀

To set up automatic data transfer in the ToolBox:

Starting the program

1 Select “ToolBox”, via “Start > All Programs > TIS-Office”.

2 Using administrator's access rights, start the ToolBox by
- **right-clicking on the “ToolBox” program and**
- **selecting “Run as administrator” from the shortcut menu.**

A security query is displayed, informing you that a program is trying to access the computer.

3 **Click on [Allow] to start the program.**

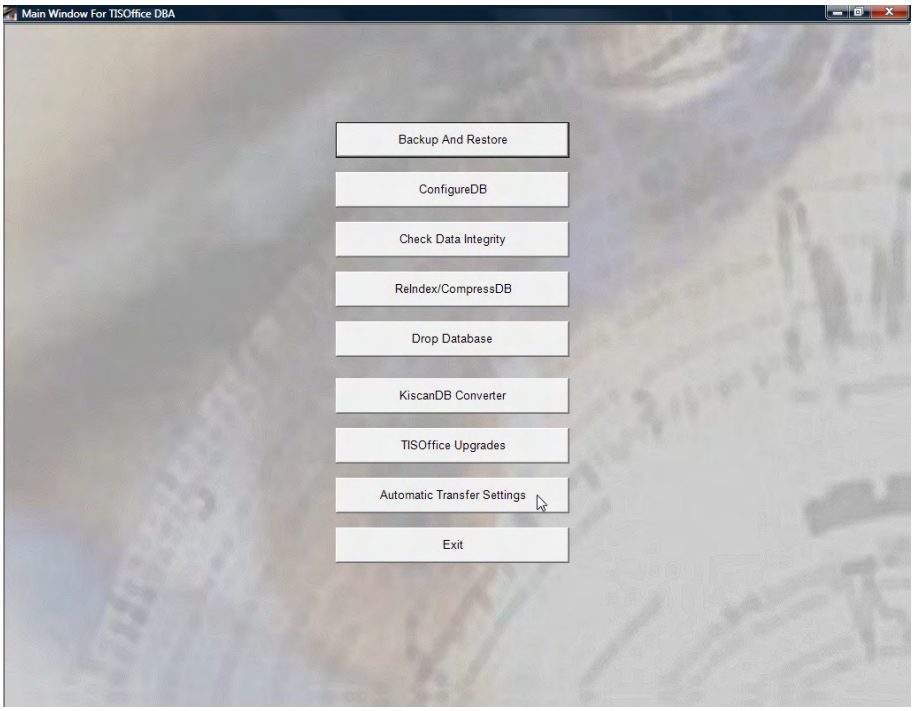
The **TIS-Office Administrator ToolBox** dialogue box opens.

4 **Enter your administrator access data and click on [OK] to confirm.**

The **Select Language** dialogue box opens.

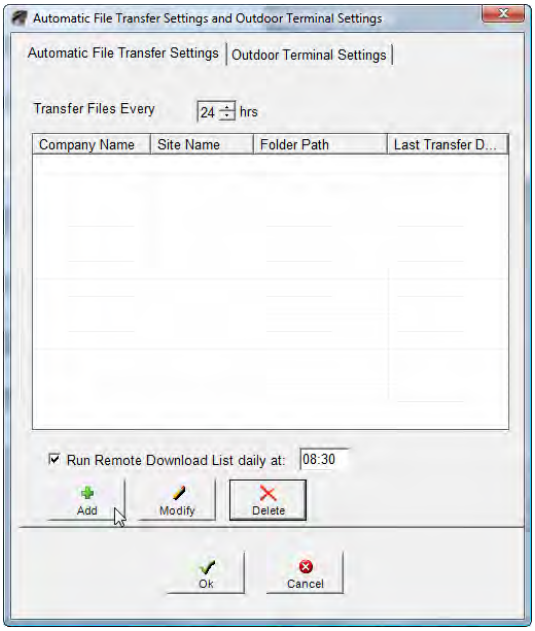
5 **Select the language in which the ToolBox user interface is to be displayed and confirm with [OK].**

The TIS-Office ToolBox opens.



6 **Click on [Automatic Transfer Settings].**

The dialogue box opens.



7 Select the “Automatic File Transfer Settings” tab.

8 Select the “Run Remote Download List daily at” check box, and enter the time at which the download deadlines file is to be saved.

All current download deadlines from the TIS-Office Reminder List will in future be generated and written to a XML file at this specified time.

This file is saved in the “DLListLocation” folder and downloaded by “RTM SR Communicator” in accordance with the settings in **Settings** > **Download Details** > **Data Download Time**.

Tip

The download times should not be identical.

If you specify “08:30” for creating download deadlines in TIS-Office ToolBox, the “RTM SR Communicator” should retrieve the XML file not before “08:45”.◄

Important

A second XML file (in addition to the XML file with the download deadlines) is also created - this second file contains the assignments of vehicles and drivers to a company.◄

9 Use the “Transfer Files Every” to specify the interval between the transfer of download files (by the “TIS-Office File Transfer Service”) from the “UPListLocation” folder (or from a company-specific folder) for subsequent import.

If you want to use TIS-Office to archive and manage the tachograph data

- of only one company, continue with *Step 10*.
- of several companies, follow the optional steps for setting up the relevant path details.

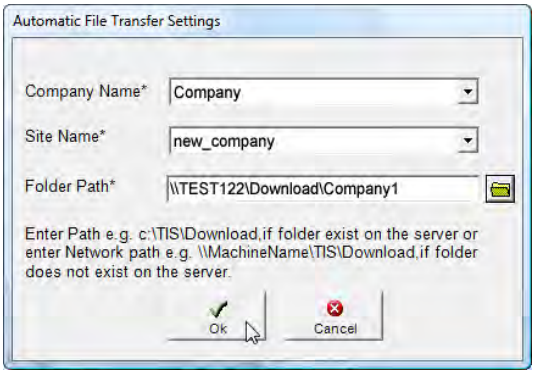
Important

Remember that you only need company-specific folders

- if you want to use TIS-Office to archive and manage the tachograph data of several companies **and**
- you must have **created** these **beforehand** in the TIS-Office program folder (and shared them where necessary)!◄

- **Click on [Add] to specify the folder from which TIS-Office is to import the download files.**

  The **Automatic File Transfer Settings** dialogue box opens.



- **Select the company and site names (where applicable).**
- **In the “Folder Path*” box, enter the path to the folder from which TIS-Office is to import the download files.**

Important

Bear in mind that this (source) directory on the relevant computer (e.g. TIS-Office Server) must be enabled for access!

The *Chapter entitled “Sharing download reminder folders”* has more information on sharing a folder.◄

- **Click on [OK] to confirm.**

  The **Automatic File Transfer Settings** dialogue box closes.

  A new entry for automatic data transfer has now been created in the **Automatic File Transfer and Outdoor Terminal Settings** dialogue box.

10 **Click on [OK] to confirm and close the dialogue box.**

Your entries have now been saved.

Important

The TIS-Office data service (File Transfer Service) can

- generate download deadlines once a day and save them as an XML file and
- transfer the download files for further processing between the specified intervals.◄

Settings for other products

If you use a different archiving solution, you cannot (as yet) import available download deadlines in the Remote TCO Manager. You have to manually add vehicles and drivers in the Remote TCO Manager in order to carry out an on-schedule download.

Adding a new vehicle

To add a new vehicle in the Remote TCO Manager:

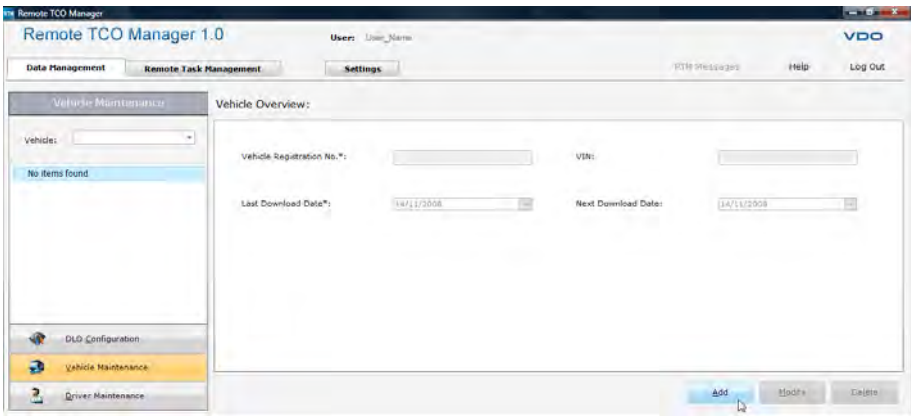
1 **Start the Remote TCO Manager (if not already started).**

The **Data Management** tab and the **RTM Messages** dialogue box (where applicable) are displayed.

2 **In the “Data Management” tab, click on [Vehicle Maintenance].**

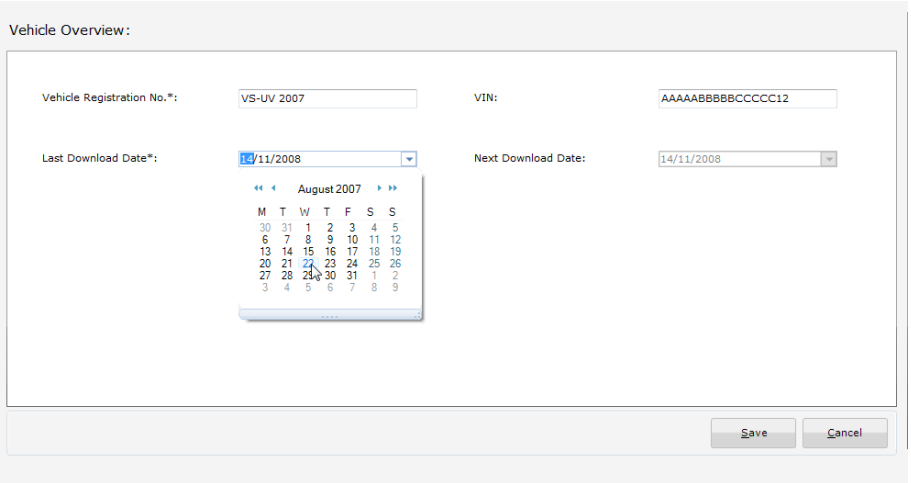
A list of all existing vehicles is displayed in the Selection pane.

The data of the currently selected vehicle is displayed in the Display and Editing area.



3 **Now click on [Add] to add a new vehicle.**

The text boxes for adding a new vehicle are displayed in the Display and Editing area.



4 **Enter the vehicle's details (registration number and identification number).**

Important

The data you enter in the Remote TCO Manager must match the master records which are saved in the DTCO. Otherwise downloading cannot take place.

Please note how the vehicle registration number is written here.◀

5 **In the “Last Download Date” box, click on ▾ to select the date of the last download.**

Important

Based on this last download date and the download interval, the Remote TCO Manager now creates independent tasks for the on-schedule downloads.

Specify the download interval in the **Settings** tab under **Download Details**; see the *Chapter entitled “Specifying a download interval”*.◀

6 **Click on [Save] to save the settings.**

The vehicle has now been added.

Adding a new driver

Condition

You have the driver card of the new driver at hand.◄

To add a new driver:

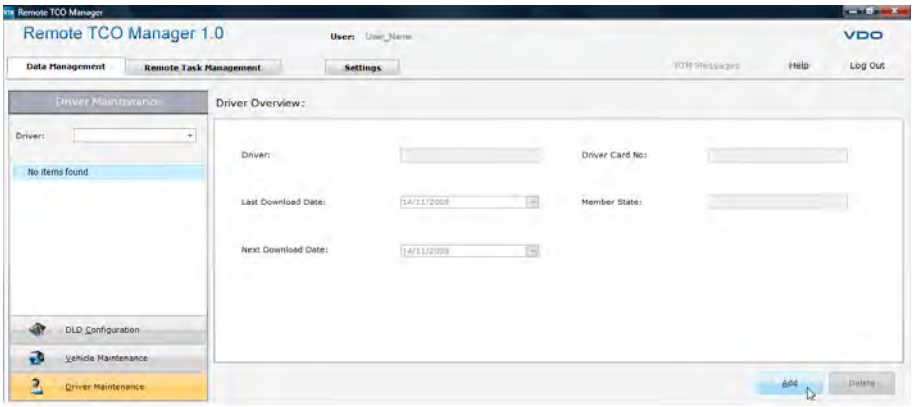
1 **Start the Remote TCO Manager (if not already started).**

The **Data Management** tab and the **RTM Messages** dialogue box (where applicable) are displayed.

2 **On the “Data Management” tab, click on [Driver Maintenance].**

A list of all existing drivers is displayed in the Selection pane.

The data of the currently selected driver is displayed in the Display and Editing area.



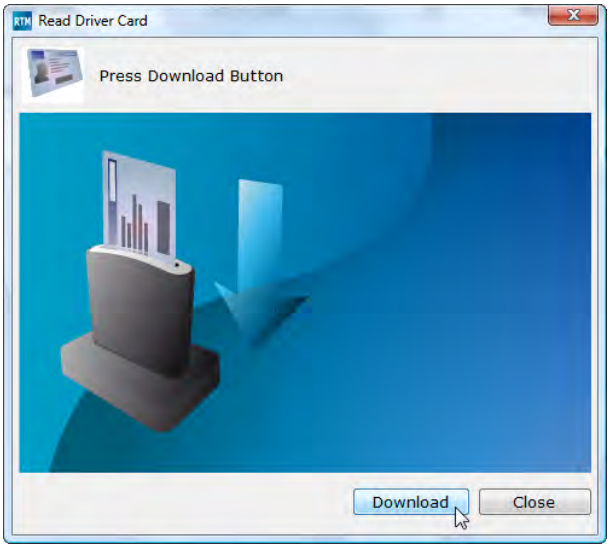
3 **Now click on [Add] to add a new driver.**

The **Read Driver Card** dialogue box opens.

Important

Make sure that you insert the driver card into the chip card reader only when the program prompts you to do so. If you insert it too soon, the card may not be recognised.

In the case of stand-alone installations, the permanently-inserted company card must be removed when a driver card is read out - two chip card readers are not supported.◄



4 **Now click on [Download] to download the driver card data.**

A prompt is displayed asking you to insert the driver card into the card reader.

5 **Insert the driver card into the card reader.**

The driver card data is downloaded.

A message is displayed informing you that the card data has read in successfully and can now be removed from the chip card reader.

Important

Stand-alone: Make sure that you insert the company card in the chip card reader again when the driver card read-in procedure has finished.◄

6 **Now click on [Close] to close the “Read Driver Card” dialogue box.**

A dialogue box confirms the addition of the driver card data to the other relevant data.

7 **Close the dialogue box by clicking on [OK].**

The driver has now been added.

Important

Based on this last download date and the download interval, the Remote TCO Manager now creates independent tasks for the on-schedule downloads.

Specify the download interval in the **Settings** tab under **Download Details**; see the *Chapter entitled “Specifying a download interval”*.◄

Specifying download details

When you have made all the relevant settings for your archiving solution, you still have to make some download settings.

Important

Bear in mind that the following settings options depend on your archiving solution - deviations in program interface displays may therefore occur.◄

Configuring data download

Important

When

- specifying the data blocks you want to download (via a DLD) from the DTCO always adhere to your country's legal regulations on the archiving of mass memory and driver card data (M and C files).
- you specify the transfer of download deadlines, make sure that transfer only occurs once a day.

Also bear in mind that within the interaction of the TIS-Web or TIS-Office archiving solutions, an on-schedule download of mass memory and driver card files can only take place if the download deadlines have been imported into the Remote TCO Manager beforehand.◄

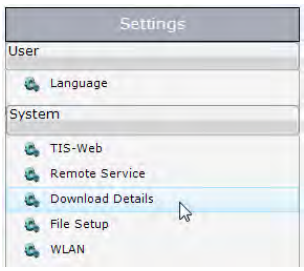
To specify data blocks and the time to update deadlines:

1 **Start the Remote TCO Manager (if not already started).**

The **Data Management** tab and the **RTM Messages** dialogue box (where applicable) are displayed.

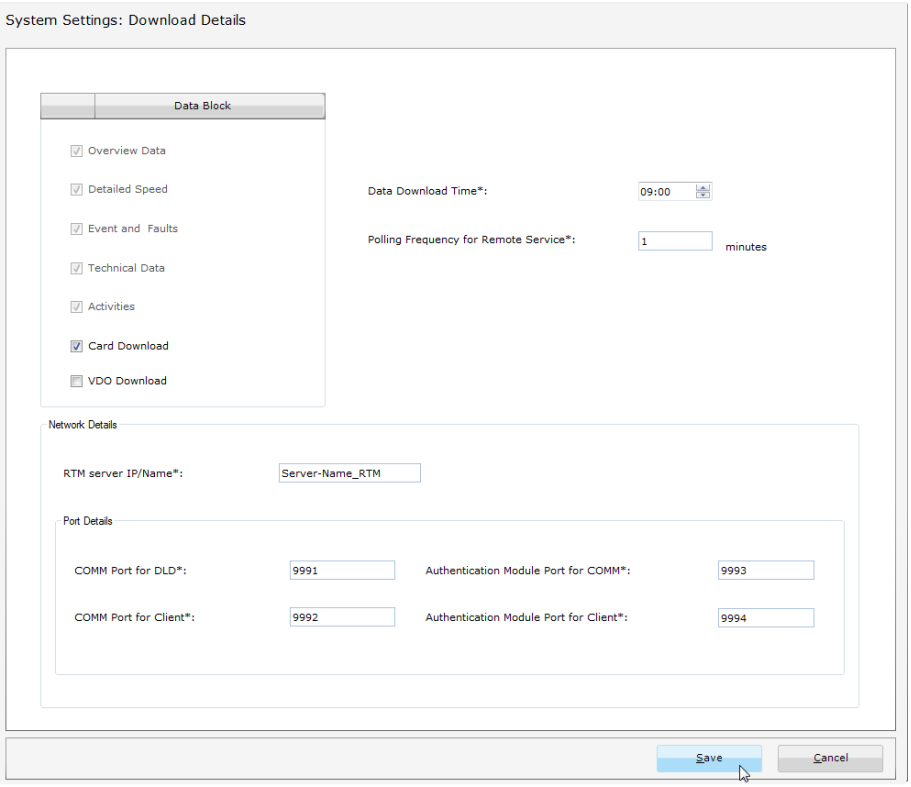
2 **Go to the “Settings” tab.**

The tab opens.



3 **In “System”, click on “Download Details”.**

Depending on your archiving solution, the download configuration and network details are now shown in the Display and Editing area.



Configuring data download

4 **Under “Data Block”, select the data blocks you want to download.**

Important

In addition to the existing country-specific legal regulations for specifying datablocks, there are three more aspects to consider:

- The display of the settings depends on the DLD and archiving versions selected during the installation process; also see the *Chapter entitled “Specifying a download interval”* (about “third party” archiving solutions).
- TIS-Office users must ensure that the data blocks selected in the Remote TCO Manager match the selections in TIS-Office.

  TIS-Web users already have datablocks selected for them by default, thus preventing incorrect archiving.
- If you also want to download driver card data, select the **Card Download** check box.

This enables you (as a user of a third party archiving solution) to add new drivers' card data to your archiving solution; also see the *Chapter entitled “Adding a new driver”*.◄

Tip

DLD Wide Range configuration via the Remote TCO Manager is only necessary for download details, which are transferred automatically to the DLD Wide Range during each authentication procedure (like download deadlines).◄

Setting a time for updating

5 **In the "Data Download Time*" box, enter a daily time at which your deadlines are to be updated.**

Setting the interval between contact attempts

6 **In the "Polling Frequency for Remote Service*" box, enter the intervals between the times at which the Remote TCO Manager should again attempt to contact the Download Device (if the DLD Remote Service cannot establish contact with the DLD Wide Range.**

Important

Only TIS-Web and TIS-Office users may use **Data Download Time** to specify when updates are to take place.

Users of other archiving solutions can specify the download interval at this stage; see the *Chapter entitled "Specifying a download interval"*.◄

Checking the computer name

7 **Under "Network Details", check the name of the computer (stand-alone installation) or the server which you entered during installation.**

Important

Remember that these details must be absolutely correct - otherwise

- company card authentication (stand-alone and server) and
- the connection between client and server

may not function correctly.

Also see the *Chapter entitled "Specifying a computer name"*.◄

Checking your port details

8 **Under "Network Details", check the details on the ports for communication to the DLD Short Range, or between client and server.**

Important

Please bear in mind that the default ports here have already been set up and enabled for access within the system environment during installation.

If you require other ports, enter them in these text boxes and set them up in the system environment; see the *Chapter entitled "Setting up and opening ports"*.◄

Saving the settings

9 **Click on [Save] to save the settings.**

A dialogue box is displayed confirming that the settings have been saved.

10 **Close the dialogue box by clicking on [OK].**

Specifying a download interval

Important

DTCO and driver card downloads are subject to legal regulations, e.g. every 3 months for mass memory data and every 28 days for driver card data.

If you use an archiving solution other than TIS-Web or TIS-Office, the interval for data download is specified in the Remote TCO Manager.◄

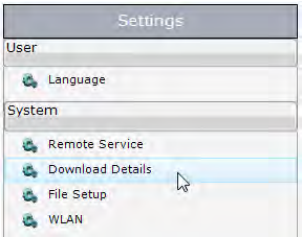
Tip

If you want to make an unscheduled download of mass memory or driver card data, you must specify a corresponding, unscheduled download in the Remote TCO Manager; see the *Chapter entitled "Managing deadline-related tasks"*.◄

To specify the interval for mass memory and driver card data:

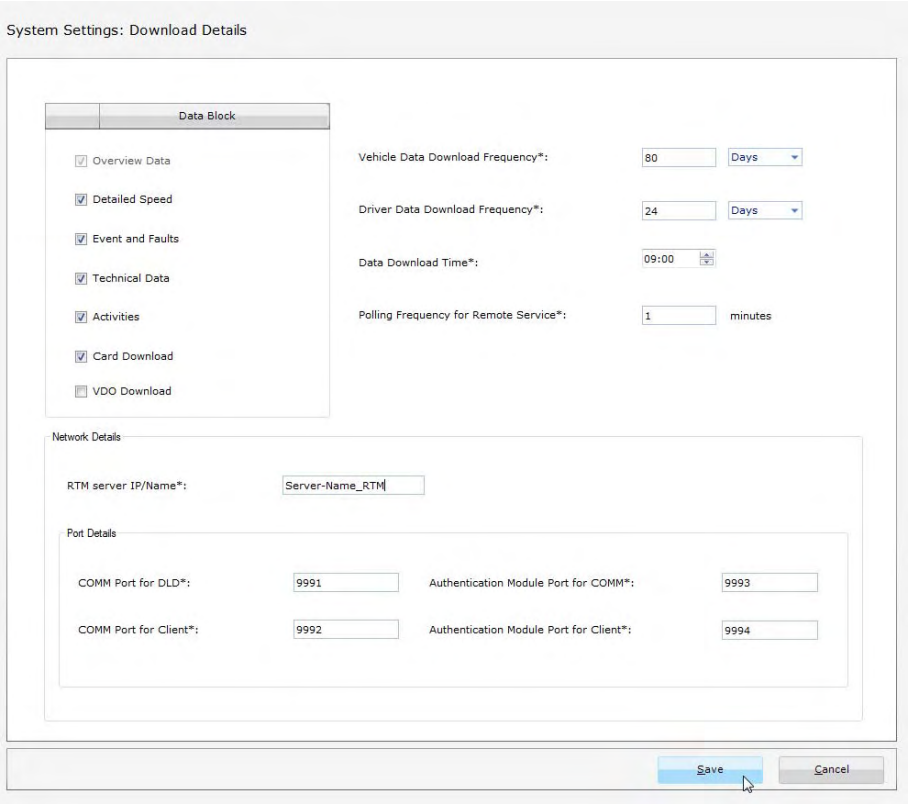
1 **Select the "Settings" tab.**

The tab opens.



2 **In "System", click on "Download Details".**

The download configuration and network data is displayed in the Display and Editing area.



Specifying a download interval

3 **In the "Vehicle Data Download Frequency*" boxes, specify the intervals between mass memory downloads.**

4 **In the "Driver Data Download Frequency*" boxes, specify the intervals between driver card downloads.**

! Important

The Remote TCO Manager now creates on-schedule tasks for the download, corresponding to the intervals you entered in the **Vehicle Data Download Frequency** and **Driver Data Download Frequeny** boxes.◄

Saving the settings

5 **Click on [Save] to save the settings.**

A dialogue box is displayed confirming that the settings have been saved.

6 **Close the dialogue box by clicking on [OK].**

Specifying a computer name

Computer names may not be ambiguous or incorrect - this is necessary for

- successful data communication between client and server and
- the successful authentication of the company card (where the chip card reader must be connected either to a stand-alone installation or the Remote TCO Manager Server).

The computer name is specified by default during installation of the Remote TCO Manager. This takes place

- automatically in the case of stand-alone and server installations, through the reading out of the system information.
- in the case of client installations, when you enter the name upon being prompted to do so by the Installation Wizard.

  Also see the *Chapter entitled "Installing the Remote TCO Manager"*.

If you have to change the computer name, perhaps due to a change in the system network (stand-alone or server installation), you must also make the corresponding change in the Remote TCO Manager (stand-alone or client installation).

Caution

If you have to uninstall the Remote TCO Manager which is currently in use, all the settings saved in the program (e.g. WLAN settings) will be irrevocably lost.◄

Tip

Before you uninstall the RTM, create a backup (if technically possible) of all the TXT files from the "C:\Program Files\RTMServer\Common*.txt" folder (stand-alone or server) and save it to a folder of your choice or to an external data disk (e.g. a USB stick).

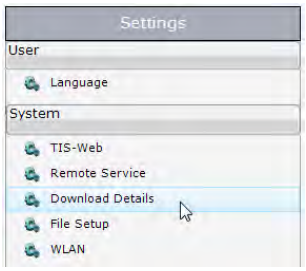
When the stand-alone computer or the (RTM) server have been (re-)installed, copy the TXT files to your folder by overwriting the existing data.

If you have TIS-Office on the same computer, we recommend that you regularly back up your database to an external data disk (e.g. to a CD-ROM).◄

To change the name of your computer:

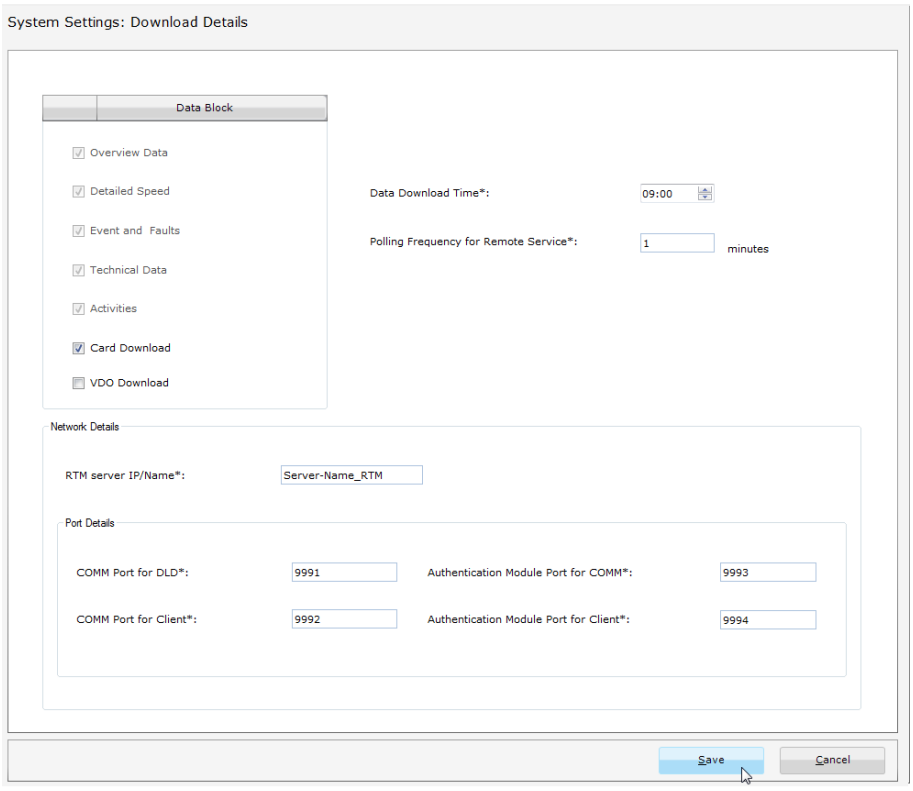
1 **Select the “Settings” tab.**

The tab opens.



2 **In “System”, click on “Download Details”.**

The download configuration and network data is displayed in the Display and Editing area.



Entering a computer name

3 **In the “RTM server IP/Name*” box, enter the name of the computer (stand-alone or client installation).**

Saving the settings

4 **Click on [Save] to save the settings.**

A dialogue box is displayed confirming that the settings have been saved.

5 **Close the dialogue box by clicking on [OK].**

DLD Remote Service settings

The Remote TCO Manager establishes the connection between the

- DTCO 1381 and the company card and
- download files and the archiving solution.

To enable the DTCO 1381 to receive company card data via the DLD Wide Range, you must save the connection data to the DLD Remote Service in the Remote TCO Manager.

Condition

You have installed the Remote TCO Manager on a computer with Internet access.

You have received your DLD Remote Service access data from your service partner (e.g. by e-mail).◄

To enter DLD Remote Service connection data:

1 **Start the Remote TCO Manager (if not already started).**

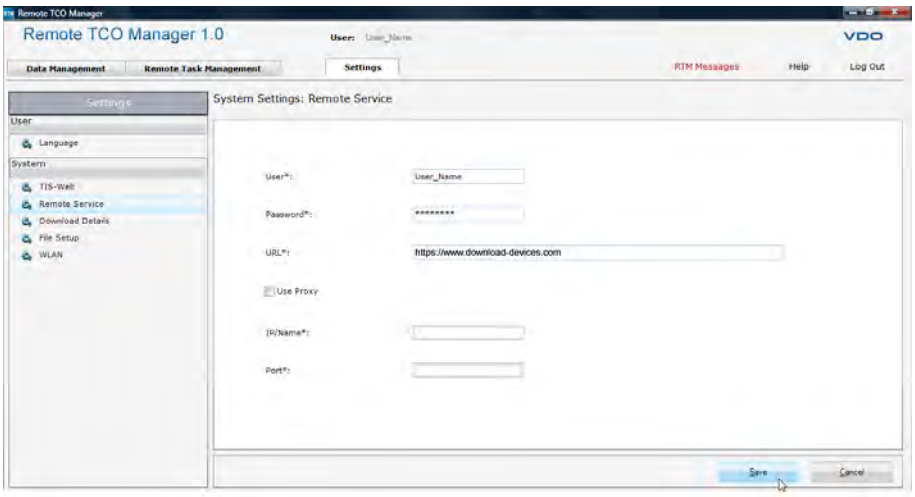
The **Data Management** tab and the **RTM Messages** dialogue box (where applicable) are displayed.

2 **Go to the “Settings” tab.**

The tab opens.

3 **In “System”, click on “Remote Service”.**

The text boxes for the DLD Remote Service account access data are displayed in the Display and Editing area.



4 **Enter the access data (User and Password) which you received from your service partner (e.g. by e-mail).**

Important

You receive the data for **User** and **Password** (user name, password) from your service partner.

Always enter your current password in the Remote TCO Manager. Otherwise the DLD Remote Service and the Remote TCO Manager cannot connect with one another and downloading with the DLD Wide Range cannot be carried out.

The URL (Uniform Resource Locator) for the “DLD Remote Server” can normally remain unchanged, since it is usually saved during program installation.◄

Using a proxy

- **Select the “Use Proxy” check box if your company uses a proxy server to access the Internet.**

  When this check box is selected, both of the following boxes are compulsory.

- **Enter your proxy server's IP address and port details.**

Important

You only have to enter “Proxy” details if your company uses a proxy server to access the Internet.◄

5 Click on [Save] to save the settings.

Otherwise the DLD Remote Service and the Remote TCO Manager cannot connect with one another

The DLD Wide Range can now access the current download deadlines and company card data.

Settings for download files

Important

You can only save target directories for data transfer via the DLD Short Range.

Data which you download with the DLD Wide Range

- is automatically forwarded to the TIS-Web Server if you are a TIS-Web user, or
- must be manually downloaded from the DLD Remote Service if you use either TIS-Office or a different archiving solution; see the *Chapter entitled “Documentation in the DLD Remote Service”*.

This function is only available if you selected the DLD Short Range during installation.◄

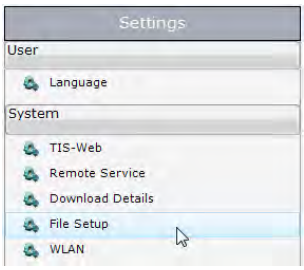
To create target directories for download files and data communication with TIS-Office:

1 **Start the Remote TCO Manager (if not already started).**

The **Data Management** tab and the **RTM Messages** dialogue box (where applicable) are displayed.

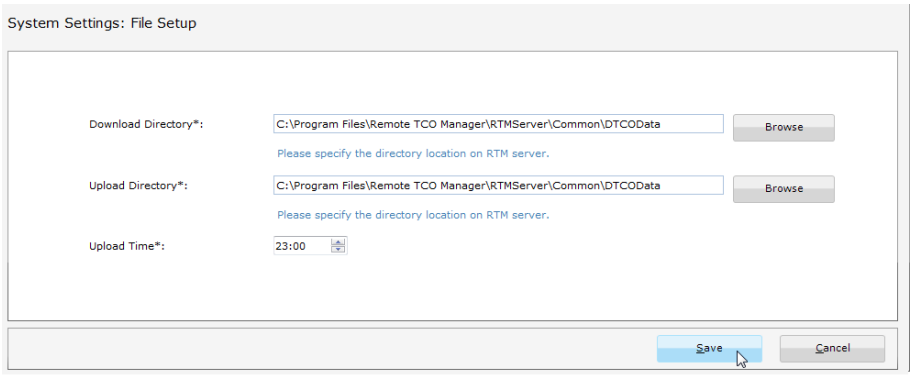
2 **Go to the “Settings” tab.**

The tab opens.



3 **In “System”, click on “File Setup”.**

The text boxes for entering directory details are displayed in the Display and Editing area.



Specifying a target directory for download files

4 **Click on [Browse] to specify the directory in which the download files transferred by the DLD Short Range are to be saved.**

Normally, you will not have to change this, since a target directory has already been saved during program installation.

Specifying an upload directory

5 **Click on [Browse] to specify the directory from which the download files are to be transferred to TIS-Web or TIS-Office.**

This is usually the same directory in which your download files are saved.

Normally, you will not have to change this, since a target directory has already been saved during program installation.

Important

If you select different directories, you will have to manually copy the download files to the upload directory.

Automatic uploading of data from the import directory is only available for TIS-Web and TIS-Office users.

If the Remote TCO Manager and TIS-Office are not installed on the same computer, this directory must also be shared; see the *Chapter entitled "TIS-Office settings"*.

If you use a different archiving solution, you must verify that your archiving solution supports automatic data transfer. Otherwise the download files must be manually transferred to the relevant import directory.◄

Caution

If you have to uninstall the Remote TCO Manager, check beforehand whether or not mass memory or driver card data is still in the target directory.

If data is still in the directory, copy it to a directory of your choice before uninstalling the RTM.◄

Setting a time for uploading

6 In the "Upload Time" box, enter the time at which data transfer to the TIS-Web Server is to take place.

The time you specify here applies to all download files which the DLD Short Range retrieves from the DTCO and which are (temporarily) saved in the **Upload Directory**.

7 Click on [Save] to save the settings.

Managing deadline-related tasks

A deadline-related task specifies when company card data is requested for authentication purposes by a DTCO. The request for company card data is followed by a download of mass memory or driver card data.

Important

Bear in mind that DLD Remote Service settings allow a differentiation between home network and roaming - this can cause a conflict with the transfer of download files via the DLD Wide Range in the case of connections with other countries; also see the *Chapter entitled "Registering and configuring a DLD Wide Range"*.◄

If you are a TIS-Web or TIS-Office user, these deadline-related tasks are created automatically per vehicle and per driver for you in the Remote TCO Manager during the transfer of the download deadlines - and updated after each download. If you use a different archiving solution, you must also specify your download deadlines (in addition to vehicles and drivers); see the *Chapter entitled "Settings for other products"*.

If you want to make an unscheduled download of mass memory or driver card data, you must create a corresponding task in the Remote TCO Manager.

Important

Bear in mind that the creation of a task like this is also absolutely necessary for the critical authentication and data transfer procedure which is initiated by pressing the "Remote button" in the vehicle (and carried out by the DLD Wide Range).◄

Tip

For a critical data download, e.g. an on-the-spot request by the authorities, we recommend the following procedure:

- Create a task for the vehicle and/or driver in question.
- Inform the driver that he should take a short break. Then he should switch on the ignition (first making sure that the DLD is properly connected) and press the "Remote button".

Authentication and data download will follow.◄

Condition

Vehicle and driver data is created in the Remote TCO Manager.

In the case of a client-server installation, the server must be operating. Otherwise no deadline-related tasks will be displayed for the current day.◄

To specify a deadline-related task for authentication:

1 **Start the Remote TCO Manager (if not already started).**

The **Data Management** tab and the **RTM Messages** dialogue box (where applicable) are displayed.

2 **Go to the "Remote Task Management" tab.**

The tab opens with the **Authentication** module.

The deadline-related tasks for the current day (plus other tasks which are due) are displayed in the Display and Editing area.

Important

When you select a different day, only the tasks for that day will be displayed.◄

Tip

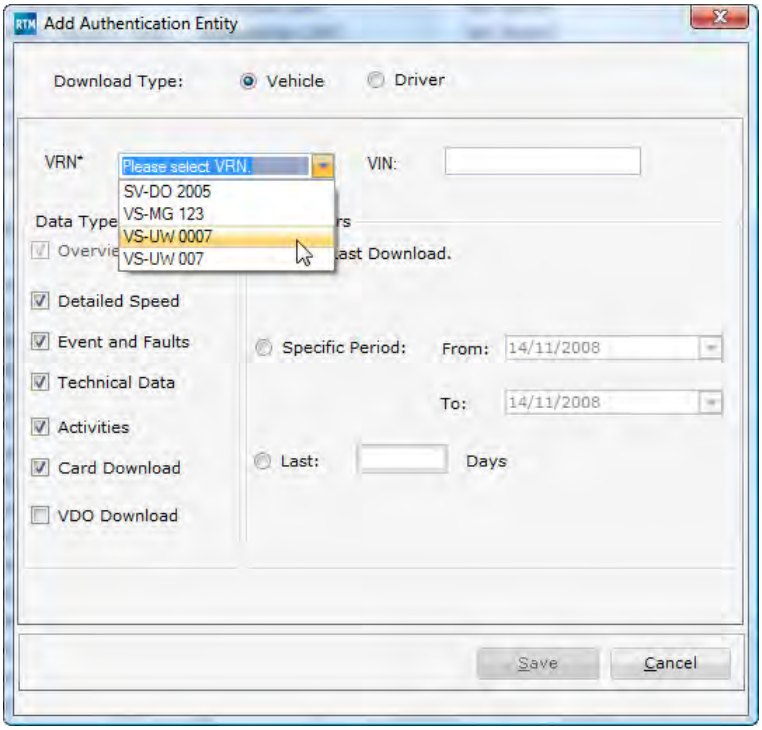
If no deadline-related tasks are shown for the current day, although you are aware that a deadline is due, you can

- check the time of the data download in the **Settings** tab; see the *Chapters entitled "Configuring data download"*, *"Setting a time for updating"*, or
- restart the **RTM Authentication** and **RTM SR Communicator** services.

The list should now be correctly updated.◄

3 Click on [Add] to create a critical task.

The **Add Authentication Entity** dialogue box opens.



4 Under "Download Type", specify whether you want to create a task for a vehicle or for a driver.

The **Download Type** selection you make here determines which boxes are displayed in the dialogue's lower area.

Creating tasks for a driver or vehicle

5 In the

– **"Driver Name*" box, click on to select a driver.**

The **Driver Card No.** and **Member State** boxes are completed automatically.

Continue with *Step 8*.

– **"VRN*" box, click on to select a vehicle.**

Continue with *Step 6*.

6 **Under “Data Type”, specify the data blocks you want to download.**

7 **Under “Parameters”, specify the period over which the data blocks are to be downloaded. Select**

- **“Since last Download” if only the data since the last download is to be downloaded.**
- **“Specific Period” (enter dates) if you want to download data over a specific period.**
- **“Last … Days” (enter days) when data of the last few days should be downloaded.**

8 **Click on [Save] to create the tasks for authentication and the subsequent data download.**

A dialogue box is displayed confirming the creation of the task.

9 **Close the dialogue box by clicking on [OK].**

Downloading data with the DLD Short Range

If the DLD is ready for operation, you can read out driver cards and the mass memory of the DTCO 1381, or you can transfer the DLD Short Range's temporarily saved data to your computer or the TIS-Web Server.

Data download is documented in the Remote TCO Manager; see the *Chapter entitled "Documenting downloads"*.

Downloading data

Condition

The following requirements must be fulfilled:

- A DTCO 1381 Rel 1.3 is installed in the vehicle and the front interface has been updated.
- The vehicle is located on the fleet site within the area defined for data downloads.
- The ignition is switched on.
- The computer is switched on and the Remote TCO Manager is running.
- The chip card reader is connected to the computer on which the Remote TCO Manager is installed (stand-alone or server) and the company card is inserted.
- A current task for authentication or data downloading is available.

The download procedure is ready to go!◄

Important

If various company cards are used within the company and if one or more of these cards has been logged on to one or more DTCO 1381 devices, each company card must be inserted into the corresponding DTCO device.◄

To download the data using a DLD Short Range:

Driver card

1 Make sure that the driver card is inserted in the DTCO 1381 before you start the driver card download procedure.

Important

You only have to carry out *Steps 2* and *3* if the DLD is not used as a fixed installation.

If the Download Device is connected to the DTCO 1381 via the CAN interface (i.e. with a permanent power source), wait for the download to end (the data transfer LED goes out after a short time).◄

2 **Use the Communication cable (K-Line) to connect the DLD Short Range to the front interface of the DTCO 1381.**

Connecting the power supply

3 **Connect the power supply cable to the DLD Short Range and to the vehicle cigarette lighter.**

All three LEDs turn green. The DLD Short Range will now be initialised.

The power supply LED turns green. The power supply is connected and operational.

The connection status LED flashes green. The DLD Short Range (DTCO) and the Remote TCO Manager (company card) are now connected.

Important

A list of deadline-related tasks is saved in the Remote TCO Manager. The Remote TCO Manager uses this list to check whether or not a data download is planned.◄

The data transfer LED flashes green. The files are downloaded.

The download process can take a few minutes.

When the data transfer LED first stops flashing and all three LEDs light green for more than one minutes, the download process has ended

Important

You only have to carry out *Steps 4* and *5* if the DLD is not used as a fixed installation.◄

4 **Remove the power supply cable from the vehicle cigarette lighter and - if required - from the DLD Short Range.**

The power supply is disconnected, the LEDs go out.

5 **Remove the K-Line connector from the front interface of the DTCO 1381 and - if required - from the DLD Short Range.**

Documenting downloads

There are two ways of checking whether or not the transfer of mass memory and driver card files has been successful:

- The download data is available in TIS-Web (current download) or in TIS-Office (import of files).
- Authentication and the download process are logged in the Remote TCO Manager.

To check a data download with the Remote TCO Manager:

1 **Start the Remote TCO Manager (if not already started).**

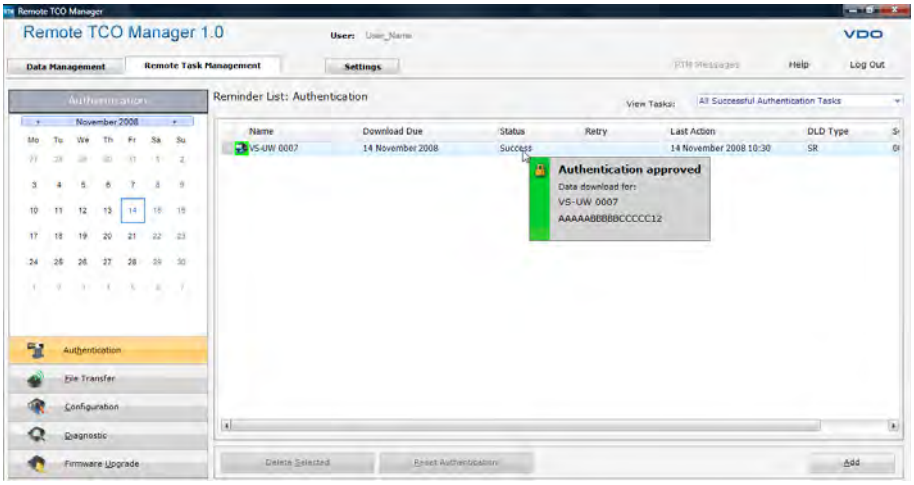
The **Data Management** tab and the **RTM Messages** dialogue box (where applicable) are displayed.

Authentications

2 **Go to the “Remote Task Management” tab.**

The tab opens with the **Authentication** module.

The status of all the authentication tasks and all other open tasks is displayed in the Display area, e.g. the status of a driver card.



Tip

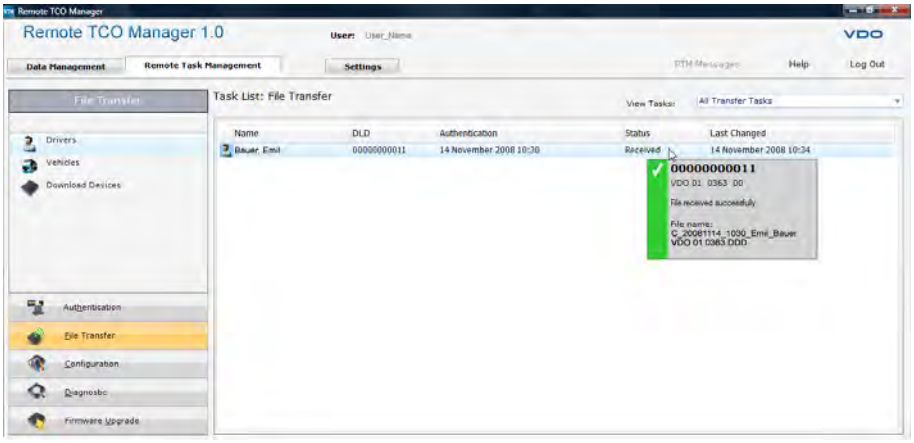
If you move your mouse pointer over a list entry, more details will be displayed in a dialogue box.◄

Download files - Drivers

3 **Click on [File Transfer].**

The tab opens with the **Drivers** option selected.

The download status of all driver card files is displayed in the Display area.



Download files - Vehicles

4 Click on [Vehicles] if you want to check the download status of your vehicles equipped with a DLD Short Range.

The download status of all mass memory files is displayed in the Display area.

Download files - Download Devices

5 Click on [Download Devices] if you want to check the download status of all DLD Short Range devices.

The download status of all DLDs is displayed in the Display area.

- **Go to a different tab of your choice, e.g. to Data Management, or end the Remote TCO Manager program via “Log Out”.**

! Important

The other functions are for logging configuration tasks, performing diagnostics and for firmware upgrades of the Download Devices. Please refer to the Remote TCO Manager Help for detailed information about the above topics.◄

Downloading data with the DLD Wide Range

If the DLD is ready for operation, you can read out driver cards and the mass memory of the DTCO 1381, or you can transfer the DLD Wide Range's temporarily saved data to your computer or the TIS-Web Server.

Data download is documented in the Remote TCO Manager; see the *Chapter entitled "Documenting downloads"*.

Downloading data

Condition

The following requirements must be fulfilled:

- A DTCO 1381 Rel 1.3 is installed in the vehicle and the front interface has been updated.
- The vehicle is stationary.
- The ignition is switched on.
- The computer is switched on and the Remote TCO Manager is running.
- The chip card reader is connected to the computer on which the Remote TCO Manager is installed (stand-alone or server) and the company card is inserted.
- A current task for authentication or data downloading is available.

The download procedure is ready to go!◄

Important

If various company cards are used within the company and if one or more of these cards has been logged on to one or more DTCO 1381 devices, each company card must be inserted into the corresponding DTCO device.◄

To download data using a DLD Wide Range:

Driver card

1 **Make sure that the driver card is inserted in the DTCO 1381 before you start the driver card download procedure.**

Important

You only have to carry out *Steps 2* and *3* if the DLD is not used as a fixed installation.

If the DLD is connected to the DTCO 1381 via the CAN interface (i.e. with a permanent power source), continue after carrying out *Step 3.*◄

Wireless link

2 Insert the wireless link into the front interface of the DTCO 1381.

The wireless link's LEDs flash red and green alternately. After roughly 5 seconds only the power supply LED flashes green.

The *Chapter entitled "Assigning a new wireless link"* has more information on correcting pairings.

Connecting the power supply

3 Connect the power supply cable to the DLD Wide Range and to the vehicle cigarette lighter.

The power supply LED turns red.

After roughly 5 seconds all LEDs flash green. The power supply LED flashes green.

Important

A list of deadline-related tasks is saved in the DLD Wide Range memory. The DLD Wide Range uses this list to check whether or not a data download is planned for the particular vehicle and/or inserted driver card.

If no download deadline is due, the DLD Wide Range continues according to the configuration; see the *Chapter entitled "Registering and configuring a DLD Wide Range"*.

Download deadlines are updated after each data download.◄

The connection status LED flashes green. The DLD Wide Range (DTCO) and the Remote TCO Manager (company card) are now connected.

- **If the fleet office sends a direct order (e.g. by mobile telephone) to download the data, press the Remote button.**

If a deadline is due, or if the Remote button has been pressed, the data transfer LED flashes green. The files are downloaded.

The download process can take a few minutes. When the download process is finished, the middle LED will turn green for roughly 5 minutes and the data transfer LED stops flashing.

Important

You only have to carry out *Steps 4* and *5* if the DLD is not used as a fixed installation.◄

4 Remove the power supply cable from the vehicle cigarette lighter and - if required - from the DLD Wide Range.

5 Remove the wireless link from the front interface of the DTCO 1381.

Important

Ensure that the wireless link is not inserted while the vehicle is being driven,

otherwise the view of the DTCO 1381's display could be restricted - and the wireless link itself could be damaged if a collision occurs, or if it is accidentally struck.◄

Documenting downloads

There are three ways of checking whether or not authentication and the transfer of mass memory and driver card files has been successful:

- The download data is available in TIS-Web (current download) or in TIS-Office (import of files).
- Authentication has been logged in the Remote TCO Manager.
- The successful download is logged in the DLD Remote Service and users of TIS-Office and other archiving solutions can download the data immediately.

Documentation in the DLD Remote Service

In the DLD Remote Service,

- all data communication with the DLD Wide Range is logged (status message),
- every download file is forwarded to the TIS-Web Server (for authorised TIS-Web users) and
- every downloaded mass memory and driver card file is made available for download, e.g. to archive them in TIS-Office.

Download status messages

To check the status of a DLD Wide Range in the DLD Remote Service:

1 **If you have not done so already, start Microsoft® Internet Explorer®, and enter the following address in the address text box:**
http://196.14.132.43/DLDWeb

The page for entering DLD Remote Service access data opens.

2 **Log on to the DLD Remote Service using your access data:**

The DLD Remote Service now starts at the tab which was last opened.

3 **Select the “DLD Status” tab.**

The tab opens.

A list with the current status of every DLD Wide Range device is displayed in the Display and Editing area.

In addition to DLD information, the list also has information about vehicles and drivers, whether

- a connection to the DLD currently exists, which would enable you to e.g. download data.
- data is currently being downloaded from the DTCO, or whether this process has already finished (status: Ready).
- an error has occurred, e.g. if a connection has been terminated.

  Here you should also check whether or not the company card has been authenticated; see the *Chapter entitled "Documentation in the Remote TCO Manager"*. If necessary, this must be reactivated by creating a new task; also see the *Chapter entitled "Managing deadline-related tasks"*.

- **Determine what to do next by**
  - **changing to the "DTCO Files" tab, for example; here you can download mass memory and /or driver card files to your computer, after they have been successfully downloaded.**

    See the following *Chapter entitled "Downloading data"*.
  - **ending the DLD Remote Service via Logout.**

Downloading data

Condition

The download of mass memory and/or driver card files via the DLD Wide Range is listed in the **DLD Status** tab as **Ready**.◄

Important

The mass memory and/or driver card files downloaded to the DLD Remote Server are retained for downloading for **four weeks** (from the date they were downloaded).

When the four-week period has expired, the files are deleted!◄

Tip

During these four weeks, you can download the files as often as you wish from the DLD Remote Server - irrespective of whether you use TIS-Web, TIS-Office or a different archiving solution.◄

To transfer download files from the DLD Remote Service:

1 **If you have not done so already, start Microsoft® Internet Explorer®, and enter the following address in the address text box:**
http://196.14.132.43/DLDWeb

The page for entering DLD Remote Service access data opens.

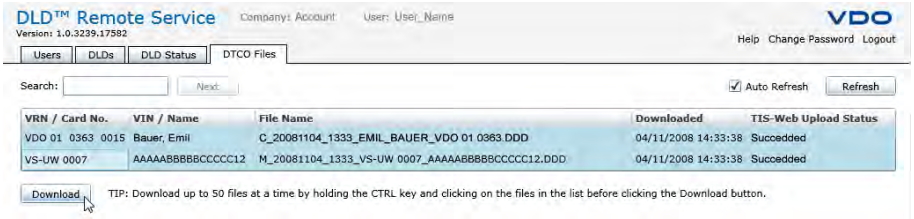
2 **Log on to the DLD Remote Service using your access data.**

The DLD Remote Service now starts at the tab which was last opened.

3 **Click on the “DTCO Files” tab.**

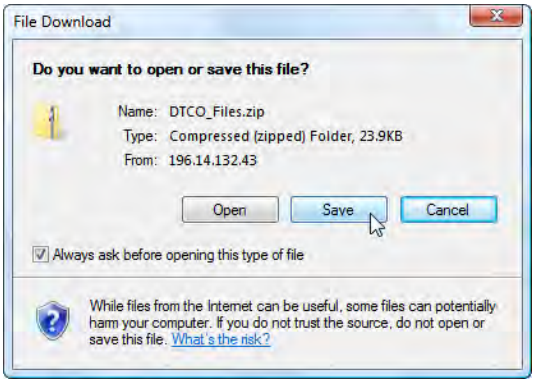
The tab opens.

A list of all the download files stored on the DLD Remote Server is shown in the Display and Editing area (i.e. only the files for which your account is authorised)



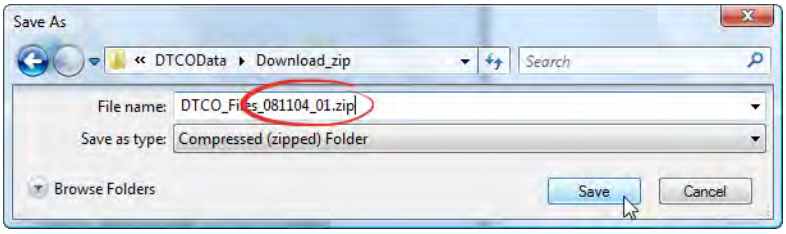
4 **In the list, select a file you want to download to your computer and click on [Download].**

The **File Download** dialogue box opens.



5 Click on [Save] to download the file to your computer.

The **Save As** dialogue box opens.



Caution

Bear in mind that all the ZIP files you download from the DLD Remote Server have the same file name.

To avoid overwriting ZIP files which have been downloaded but not yet processed, change the name of the individual ZIP file, e.g. you could add the current date and a consecutive number to the file name.

Don't change the ".zip" file extension - if you do, you won't be able to unzip the file!◀

Tip

Select the YY/MM/DD date format - this ensures that the files will be properly sorted, even over a longer period of time.◀

- **Rename each file before saving it if you**
  - **do not wish to process the files right away or**
  - **want to download several files.**

6 Click on

– **[Browse Folders] if you want to select a different folder in which to save the ZIP files.**

  Before saving the file(s), you can select your preferred folder or create a new folder in one of your directories.

– **[Save] if you want to save the file in the displayed folder.**

  After the progress display has closed, the download process is ended with the **Download complete** dialogue box.

7 Now click on [Close] to end the download process.

- **To unzip the file in the download folder of your archiving solution, for instance,**
  – **open Microsoft® Explorer,**
  – **open the folder in which the ZIP file is saved,**
  – **select the file, click on [Extract all files] and**
  – **specify your preferred file folder in the "Extract Compressed (Zipped) Folders" dialogue, e.g. "C:\Program Files\...\TIS-Office\Download".**

You can now import the mass memory or driver card data into your archiving solution.

Documentation in the Remote TCO Manager

You can only verify the successful transfer of your mass memory and driver card files in the DLD Remote Service - this web-based application manages and logs all data communication via GPRS; see the *Chapter entitled "Documentation in the DLD Remote Service"*.

In Remote TCO Manager, you can only verify that an authentication took place during a DLD Wide Range data download process.

To check an authentication with the Remote TCO Manager:

1 Start the Remote TCO Manager (if not already started).

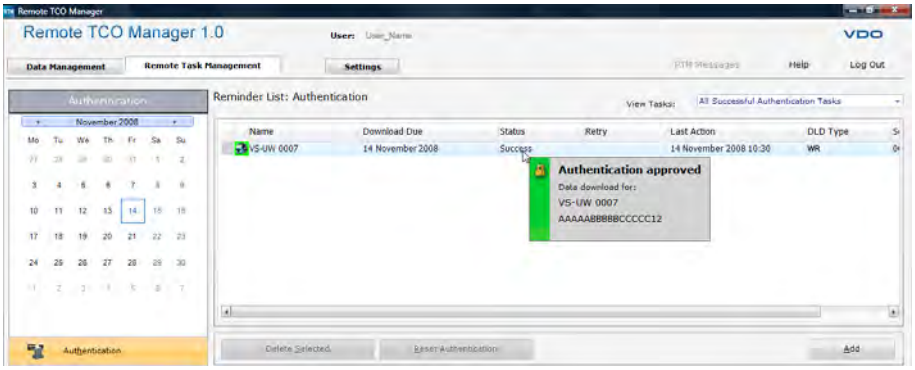
The **Data Management** tab and the **RTM Messages** dialogue box (where applicable) are displayed.

Authentications

2 Go to the "Remote Task Management" tab.

The tab opens with the **Authentication** module.

The status of all the authentication tasks and all other open tasks is displayed in the Display area, e.g. the status of a driver card.



Tip

If you move your mouse pointer over a list entry, more details will be displayed in a dialogue box.◄

- **Go to a different tab of your choice, e.g. to Data Management, or end the Remote TCO Manager program via “Log Out”.**

DLD inspection and maintenance

When a Download Device is ready for use in a vehicle, (e.g. SIM card inserted), configured and given to your driver, or already mounted in the vehicle as a fixed installation, you're ready to start downloading mass memory and driver card data - because DLDs are essentially maintenance-free.

Nevertheless, on very rare occasions, it could be that data communication via WLAN or GPRS does not take place as expected. And every product is subject to further development, which in turn results in new and enhanced firmware (functions for controlling the device).

This Chapter describes the options

- you have for performing data communication diagnostics and
- transferring a new firmware.

Performing DLD diagnostics

Depending of course on the Download Device used, you can

- via the Remote TCO Manager
  - perform DLD Short Range data communication diagnostics.

    The selected DLD Short Range also lists all the status messages which occurred during the selected period; see the *Chapter entitled "Performing DLD Short Range diagnostics"*.
  - download files directly from the cache of the DLD Short Range.

    Use the mini-USB cable to connect the selected DLD Short Range to the computer; see the *Chapter entitled "Transferring download files"*.
- via the DLD Remote Service
  - in addition to performing DLD Wide Range data communication diagnostics,
  - obtain information about the firmware version and configuration of a DLD Wide Range.

    See the *Chapter entitled "Performing DLD Wide Range diagnostics"*.

Performing DLD Short Range diagnostics

To check DLD Short Range data communication:

1 **Start the Remote TCO Manager (if not already started).**

The **Data Management** tab and the **RTM Messages** dialogue box (where applicable) are displayed.

2 **Select the DLD Short Range device the data communication of which you want to check.**

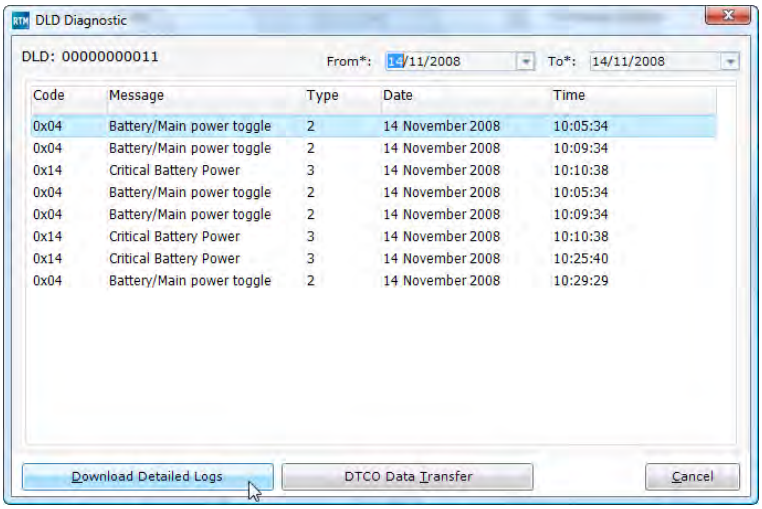
The configuration data of the selected DLD Short Range is displayed.

Status messages

3 **Click on [Diagnostic] to display the data communication status messages for a selectable period.**

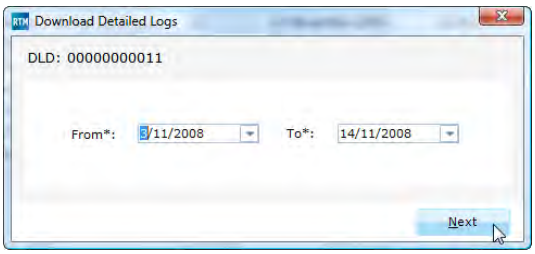
The **[DLD Diagnostic]** dialogue box is displayed with the last status messages pertaining to the DLD Short Range in question.

These messages are updated every time a connection is established.



Creating a log file

4 **Click on [Download Detailed Logs] if you want to create a log file with the current status of the DLD Short Range.**



5 **Specify the period during which status messages are to be downloaded from the DLD Short Range and click on [Next].**

If a wireless connection exists, the task will be transferred immediately.

If no wireless connection currently exists, use the displayed dialogue box to specify whether the status messages should be transferred by mini-USB cable, or the next time contact with the DLD takes place.

- **Connect the DLD Short Range to the computer using the mini-USB cable.**

  See the *Chapter entitled "Registering and configuring a DLD Short Range"*.

6 **Select**

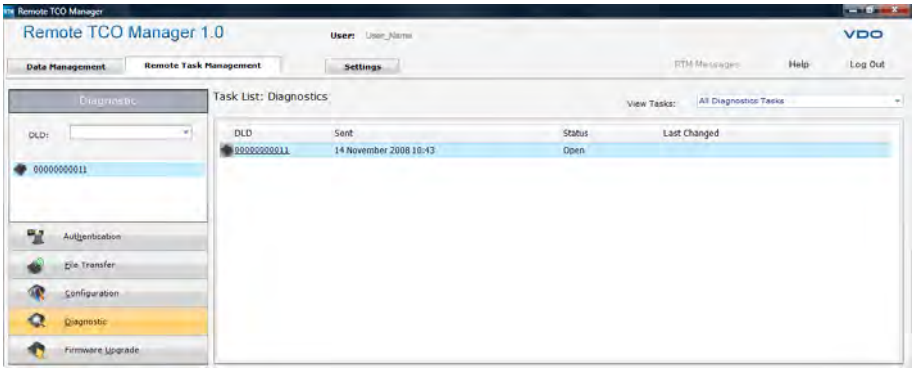
– **[Via USB] if the status messages are to be transferred to the DLD Short Range via the mini-USB cable.**

  A dialogue box with the ongoing status of the data transfer is displayed. When transfer is complete, the display will change accordingly.

  In this case, continue with *Step 7*.

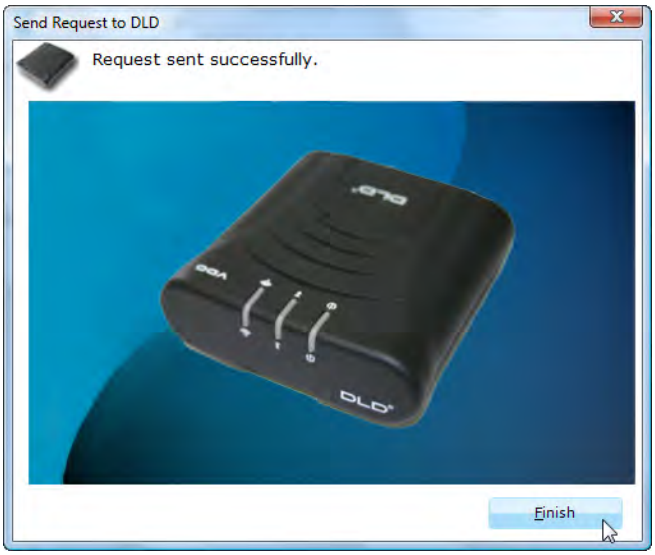
– **[Send] if you want to create a task in the Remote TCO Manager to transfer the configuration.**

  Click on **Remote Task Management** > **Diagnostic** to display a new task for that particular DLD. The task will be carried out the next time contact is made with the DLD Short Range.



- **Verify that the task has been correctly carried out when the relevant vehicle comes in.**

  If the task has been carried out correctly, **Processed** is displayed (under Status). The status messages for the selected period are transferred.



7 **Now click on [Finish] to close the dialogue box.**

The task for the requested status messages has now been created - the status messages will be saved in a log file when the task is carried out, or when it is transferred via the mini-USB cable.

To find the log file, click on **Programs** > **RTMServer** > **Common** > **Diagnostics** (e.g. DLDlog_serial number).

- **Remove the connection between the DLD Short Range and the computer by**
  - **removing the mini-USB cable from the computer and the DLD Short Range.**
  - **removing the power supply connection from the DLD Short Range and (if you do not wish to add any more DLDs) the power supply adapter.**
  - **replacing the mini-USB interface cover.**

! Important

If faults occur often, or if WLAN connections are not functioning properly, the entries in the log file can hold the solution to the problem.◄

Transferring download files

Important

The transfer (where applicable) of temporarily-stored download files from a DLD Short Range via mini-USB cable is only necessary if no communication with the DLD Short Range can be established, even after all WLAN communication components have been thoroughly checked; also see the *Chapter entitled "Performing DLD Short Range diagnostics"*.◀

To download files via the mini-USB cable:

1 **Start the Remote TCO Manager (if not already started).**

The **Data Management** tab and the **RTM Messages** dialogue box (where applicable) are displayed.

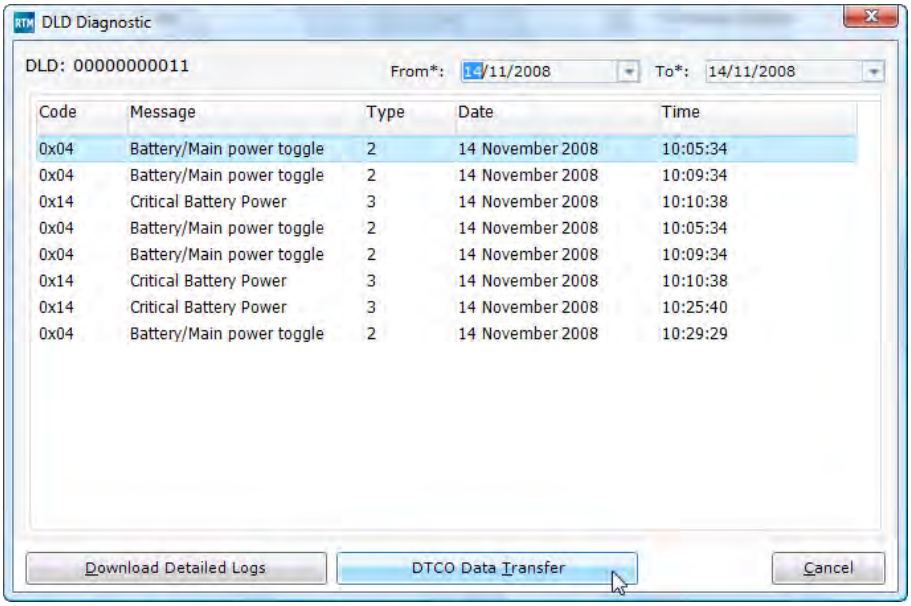
2 **In the list, select the relevant DLD Short Range which has the temporarily-stored download files you want to check.**

The configuration data of the selected DLD Short Range is displayed.

Status messages

3 **Click on [Diagnostic] to start transferring the download files.**

The **[DLD Diagnostic]** dialogue box is displayed with the last status messages pertaining to the DLD Short Range in question.



Connecting the DLD Short Range

4 **Connect the DLD Short Range to the computer by**

- **connecting the power supply adapter (from the DLD Parameterization Kit) to the power supply and the DLD Short Range.**

  The LEDs now light up briefly. The power supply LED turns green. The power supply has now been installed.

- **removing the cover of the mini-USB interface.**

  Gently press the cover down to the housing edge and carefully lever off the cover.

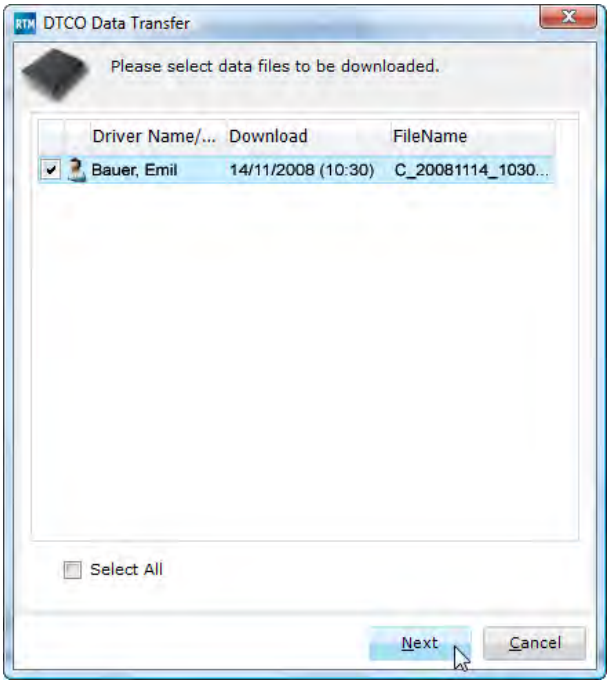
- **connecting the mini-USB cable (from the DLD Parameterization Kit) to the USB port of your computer and to the mini-USB interface of the DLD Short Range.**

  The connection status LED flashes green. The DLD Short Range and the Remote TCO Manager are now connected.

Starting the transfer

5 **Click on [DTCO Data Transfer] to transfer the mass memory and driver card data available in the cache of the DLD Short Range.**

A dialogue box with information about the available download files is displayed.



Important

Bear in mind that only download files are still in the cache of the DLD Short Range - although DTCO data has been read out after successful authentication, it could not be transferred by WLAN, perhaps due to a fault in the WLAN network.

If no data is available in the cache, the **There is no data file existing in DLD.** message is displayed; in this case, continue with *Step 7.*◄

Selecting files

6 Select the check box beside the desired file(s) and click on [Next].

The DLD Short Range transfers the selected files to the default download folder, e.g. “C:\Program Files\Remote TCO Manager\RTMServer\Common\DTCOData”.

A dialogue box indicating a successful file transfer is displayed.

Ending file transfer

7 End file transfer by confirming all the dialogue boxes which are still open.

8 Remove the connection between the DLD Short Range and the computer by

- **removing the mini-USB cable from the computer and the DLD Short Range.**
- **removing the power supply connection from the DLD Short Range and (if you do not wish to add any more DLDs) the power supply adapter.**
- **replacing the mini-USB interface cover.**

! Important

If the DLD Short Range is defective, contact your service partner who will tell you what to do.◄

Performing DLD Wide Range diagnostics

✓ Condition

To perform DLD Wide Range diagnostics, you must log on to the DLD Remote Service as an “Administrator”.◄

To check DLD Wide Range data communication:

1 If you have not done so already, log on to the DLD Remote Service as an “Administrator”.

The DLD Remote Service now starts at the tab which was last opened.

2 Go to the “DLDs” tab.

A list of paired DLDs is displayed.

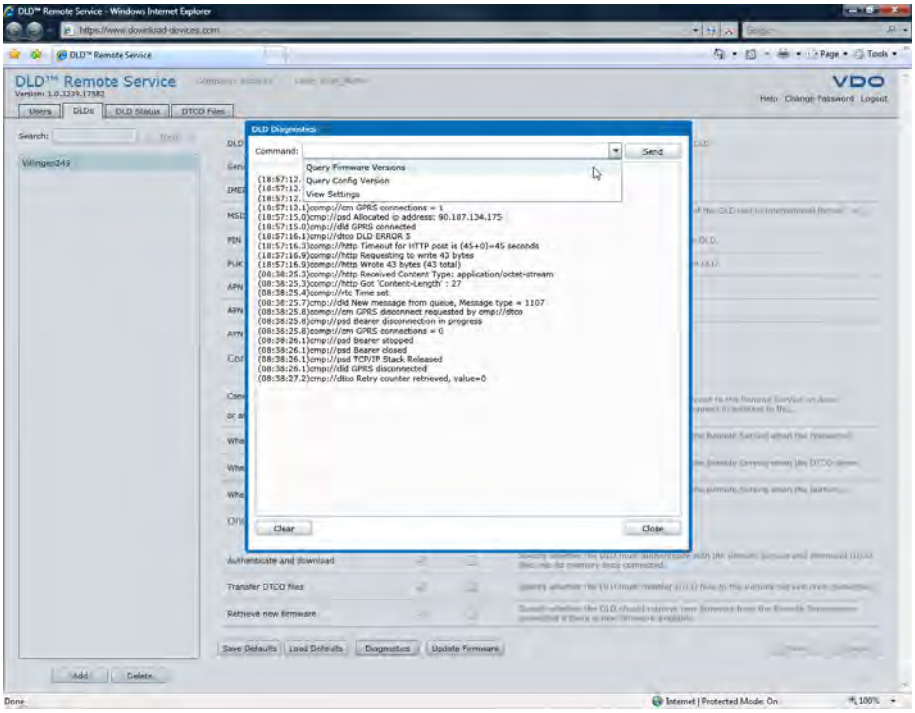
3 Select the DLD Wide Range device the data communication of which you want to check.

The configuration data of the selected DLD Wide Range is displayed.

Status messages

4 Click on [Diagnostics] to display the data communication status messages for a selectable period.

The **DLD Diagnostics** dialogue box is displayed.



Version queries

- **In the list, select**
  - **“Query Firmware Versions” to obtain information about the current firmware version of the DLD Wide Range.**
  - **“Query Config Version” to obtain information about the current configuration version.**
  - **“View Settings” if you want to obtain a list of the current valid DLD Wide Range settings.**
- **Click on [Send] to obtain your information from the DLD Wide Range.**

  The relevant details about the DLD Wide Range (after it has responded) are displayed in the dialogue box.

5 **Click on**

- **[Clear] if you want to delete the listing of one status message.**

  The displayed status message is deleted.
- **[Close] to close the dialogue box with the listed status messages.**

  The dialogue box is closed.

! Important

If faults occur often, or if GPRS connections are not functioning properly, inform your service partner - he will then inspect your diagnostic data to find and solve the problem.◄

Firmware upgrade

Both software products are required to carry out a firmware upgrade which has the elementary functions for controlling a DLD.

To upgrade the firmware for the

- DLD Short Range via the Remote TCO Manager; see the *Chapter entitled "Upgrading the firmware of a DLD Short Range"*.
- DLD Wide Range via the DLD Remote Service; see the *Chapter entitled "Upgrading the firmware of a DLD Wide Range"*.

Caution

Firmware upgrades may be necessary for technical reasons (because new functions are available, for example) - and they change the elementary functions of device control. If a fault occurs during the upgrade, the DLD may completely malfunction,

although the DLD only carries out an upgrade after the upgrade file has been completely downloaded, minimising the chance of a possible interruption in the wireless connection leading to total DLD failure. Nevertheless, you should make sure that all the requirements for trouble-free WLAN/GPRS data communication are fully met. This minimises possible operational faults and helps prevent device failure.

See the requirements for DLD Short Range data download in the *Chapter entitled "Downloading data with the DLD Short Range"* and for DLD Wide Range data download in the *Chapter entitled "Downloading data with the DLD Wide Range"*.◄

Important

Bear in mind that different firmware versions can lead to malfunctions in DLDs the firmware of which has not yet been updated to the latest version.

So please make a note of any DLD which you have already upgraded with the new firmware upgrade. This will provide you with an overview of due upgrades.◄

Upgrading the firmware of a DLD Short Range

Condition

The following requirements must be fulfilled:

- Your service partner has informed you (e.g. by e-mail) that you have an upgrade file available.
- The upgrade file is saved in the folder at “C:\Program Files\Remote TCO Manager\RTMServer\Common\SoftwarePatches”.

  The default name of the firmware upgrade file is “DLDAPPVxxx.bin” - the three “X's” denote the consecutive version number.◀

To transfer a firmware upgrade to a DLD Short Range:

Selecting an upgrade

1 **Start the Remote TCO Manager (if not already started).**

The **Data Management** tab and the **RTM Messages** dialogue box (where applicable) are displayed.

2 **In the list, select the DLD Short Range which you want to upgrade with the latest firmware version.**

The configuration data of the selected DLD Short Range is displayed.

3 **Click on**

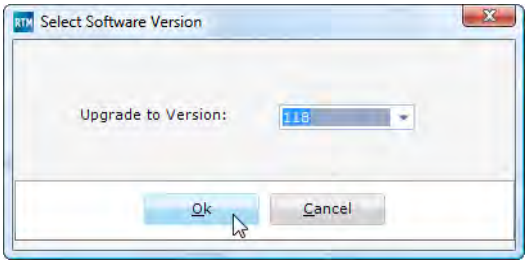
– **[Upgrade All] to transfer the new firmware to all DLD Short Range devices.**

  You should only do this if you want to transfer the firmware upgrade by WLAN.

– **[Upgrade] to transfer the new firmware to the selected DLD Short Range device.**

  In this case, you can transfer the upgrade by WLAN or USB.

The **Select Software Version** dialogue box is displayed - the most current version of the files saved in the “SoftwarePatches” folder is shown in the list.



- **Connect the DLD Short Range to the computer using the mini-USB cable.**

  See the *Chapter entitled "Registering and configuring a DLD Short Range"*.

Starting an upgrade

4 **Click on [OK] to start data transfer.**

The **Send Request to DLD** dialogue box is displayed

- with a message indicating successful planning, if a WLAN connection with the DLD (via the access point) exists; now continue with *Step 5*.
- with a message prompting you to select data transfer if no WLAN connection with the DLD currently exists.

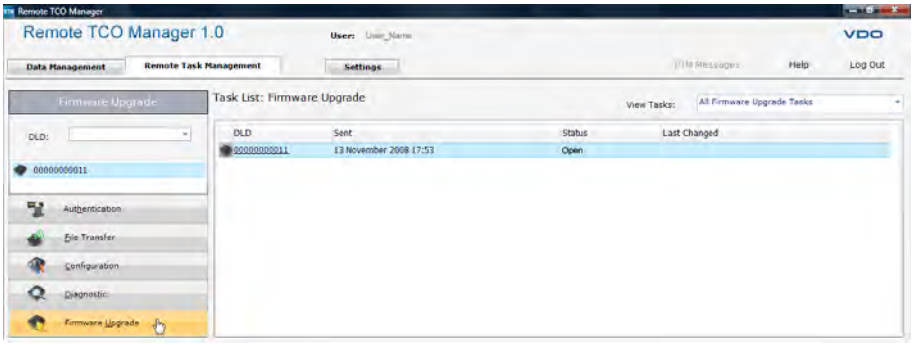
Selecting a transfer method

- **Select**
  - **[Via USB] if the firmware upgrade is to be transferred to the DLD Short Range via the mini-USB cable.**

    A dialogue box with the ongoing status of the data transfer is displayed. When transfer is complete, the display will change accordingly.

    In this case, continue with *Step 5*.
  - **[Send] if you want to create a task in the Remote TCO Manager to transfer the configuration.**

    Click on **Remote Task Management** > **Firmware Upgrade** to display a new task for the DLD in question - the task will be carried out the next time contact is made with the DLD Short Range.



- **Verify that the task has been correctly carried out when the relevant vehicle comes in.**

  If the task has been carried out correctly, **Processed** is displayed (under Status). The status messages for the selected period are transferred.

5 **Now click on [Finish] to close the dialogue box.**

The task for the transfer of the firmware upgrade has now been created - the upgrade will be carried out in the DLD Short Range when the task is carried out, or when it is transferred via the mini-USB cable.

LEDs

During WLAN data transfer, the middle data transfer LED flashes for 4 to 5 minutes (only WLAN, not USB).

When the upgrade finishes, all three LEDs go out briefly.

When the internal restart finishes, the two outer LEDs light up (power supply LED and connection status LED).

! Important

Do **NOT** interrupt the power supply of the DLD Short Range during the firmware upgrade, even if all three LEDs go out for a few moments.◄

- **Remove the connection between the DLD Short Range and the computer by**
  - **removing the mini-USB cable from the computer and the DLD Short Range.**
  - **removing the power supply connection from the DLD Short Range and (if you do not wish to add any more DLDs) the power supply adapter.**
  - **replacing the mini-USB interface cover.**

6 **Repeat steps 2 to 6 until all your DLD Short Range devices have been upgraded with the new firmware version.**

Upgrading the firmware of a DLD Wide Range

Condition

To carry out a firmware upgrade for the DLD Wide Range, you must log on to the DLD Remote Service as an “Administrator”.◄

Important

All DLD Wide Range devices managed via the DLD Remote Service are automatically updated with the latest firmware by default; you do not have to carry out this upgrade manually, under normal circumstances.

However, there may be occasions when this upgrade must be carried out manually for one device, e.g. devices in the warehouse.◄

To transfer a firmware upgrade to a DLD Wide Range:

1 **If you have not done so already, log on to the DLD Remote Service as an “Administrator”.**

The DLD Remote Service now starts at the tab which was last opened.

2 **Go to the “DLDs” tab.**

A list of paired DLDs is displayed.

3 **In the list, select the DLD Wide Range which you want to upgrade with the latest firmware version.**

The configuration data of the selected DLD Wide Range is displayed.

Connecting the DLD Wide Range

- **Connect the DLD Wide Range to the computer.**

  See the *Chapter entitled “Registering and configuring a DLD Wide Range”*.

Starting an upgrade

4 **Click on [Firmware Upgrade] to start data transfer.**

This is now carried out in accordance with your selected connection.

Important

The next time a connection is established with the DLD Remote Service in the home network, the new firmware update will be transferred to the DLD Wide Range.

If roaming is involved, the time at which the new upgrade is transferred depends on the configuration.◄

LEDs

- **The data transfer of the firmware can last for up to 6 minutes.**

  When the firmware update has finished, the left power supply LED flashes.

- **Remove the connection between the DLD Wide Range and the computer by removing the mini-USB cable from the computer and the DLD Wide Range.**

  The DLD Wide Range is now equipped with the latest firmware and can be returned to your driver (mobile use).

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