User manual
For VDR Remote Management version 1.2

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Revision record

Version	Date	Description
1.0	October 2015	Original issue of document
1.1	January 2017	Major revision Product name changed to VDR Remote Management
1.2	March 2017	Changes related to VRS

Contents

1   Scope and purpose

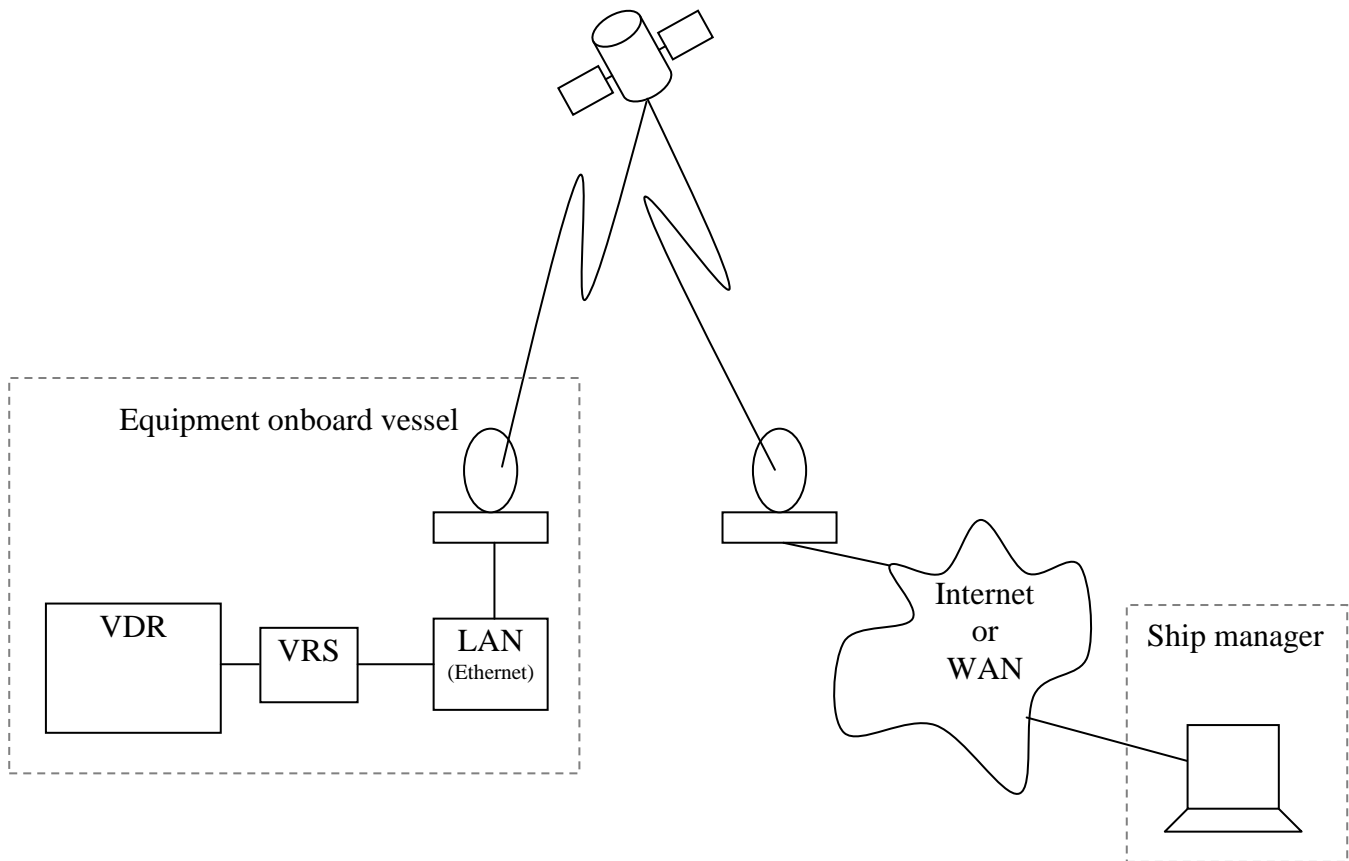User manual for VDR remote management

1.1   References

MAN11841   Installation manual for Vessel Remote Server, VRS 002

1.2   Terms and Abbreviations

VRS   Vessel Remote Server (VRS 002)

2 System overview

VDR remote management is a solution which facilitates access from shore to a VDR onboard a vessel.

For security reasons and for being able to distribute the data to a number of clients without affecting the VDR's performance, the access is established via a small external interface box, called the VRS (Vessel Remote Server).

VDR Remote Management V1.2 includes the following functionality.
- Pre-APT
- Easy transfer of recorded VDR data to shore
- Easy creation of a VDR dump for support
- General access to the VDR if extended mode is enabled

2.1 Pre-APT

Pre-APT enables a ship manager to carry out the automated part of an APT from shore by using the same tool as the service technician uses on board. This means that most problems (if any) will be discovered before the actual APT is carried out. This allows the APT to be properly prepared and reduces the risk of an unsuccessful APT, which may result in a second service visit.

2.2 Easy transfer of recorded VDR data to shore

VDR Remote management allows non-technical staff to initiate a transfer of recorded data to shore – typically following an incident.

2.3 Easy creation of a VDR dump for support

A VDR dump for support contains essential data from the VDR system. This data may be used by Danelec and our service partners for trouble-shooting so a service visit can be better prepared or avoided.

2.4 Alarm Analysis

The alarm analysis will examine the log file of from the VDR and list the alarm generated by the VDR for the last 90 days. The alarm analysis may be used as a supplement to the Pre-APT.

2.5 Access to the VDR configuration interface

Access to the VDR configuration interface is possible when the mode switch on the VRS is set to "Extended access", i.e., the same access as if a PC was connected directly to the VDR.
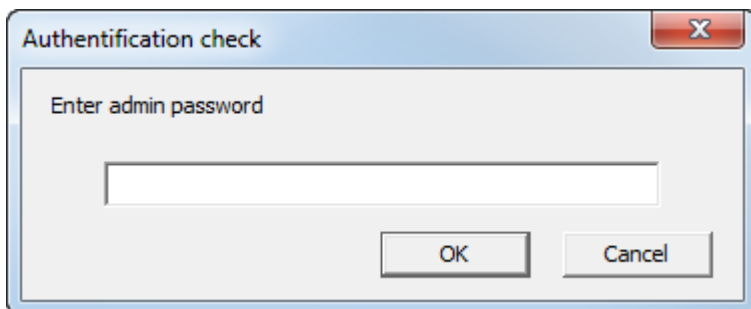
3 Description of the Remote Management Tool

The Remote Management Tool is an application which must be installed on a PC typically on-shore. The program will open several windows. It is a good idea to clear the desktop (show desktop) before the program is started until you are familiar with the program.

Start the program and this window will appear.

Click on "Add new vessel" and enter the password "admin".

Click "OK".

Enter the configuration parameters for the vessel. Leave most of the settings as they are. The vessel name and the VRS IP address must be set to a correct value. The password under VRS Settings must match the password in the configuration for the VRS. See section 5.5.

Vessel parameters:
The name of the vessel and type of VDR installed on the vessel.

VDR Dump for Support:
The destination folder for "Dump for Support" files. The tool will automatically create a folder for each vessel.

Pre-APT:
In "Pre-apt section" contains the default parameters for a Pre-APT.

Duration/offset: Duration of the recording to be analyzed and an offset in time if older data needs to be analyzed.

Destination folder: The destination folder for the Pre-APT data. The tool will automatically create a folder for each vessel.

Audio channel 4 utilized: The Pre-APT skips the analysis of the audio track (and does not generate an annoying error) if the box is left unchecked.

VDR Dump for support: A "Dump for Support" file will automatically be transferred, in addition to the APT data, if this box is checked.

VDR log/Analyze alarms: An extended VDR log will be transferred if the "VDR log" box is checked. The alarm log will be analyzed if the "Analyze alarms" box is checked.

VDR recording media:
The default media is the capsule for S-VDR and older VDRs. On newer VDRs (the DM100 VDR), the default media is the internal SSD disk.

Connection parameters:
The VDR Remote Management Tool program will use these parameters when connecting to the VRS. In addition the VRS need a password for getting read only access to the VDR. The corresponding parameters in the VRS and VDR must match.

VDR data transfer:
This section contains the default parameters related to easy transfer of recorded VDR data to shore.
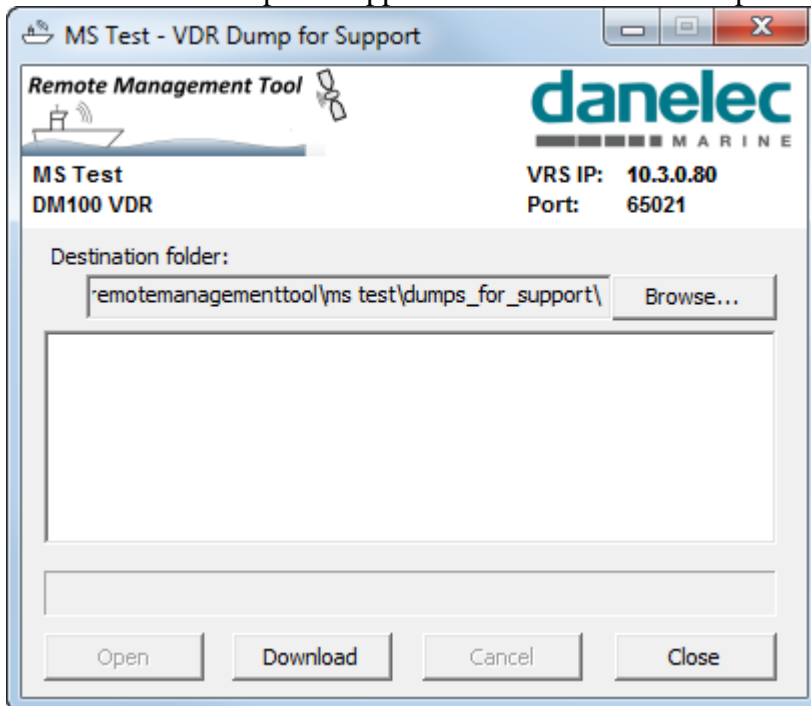
Click on "Save" when the configuration is done and a window specific for the vessel will open.
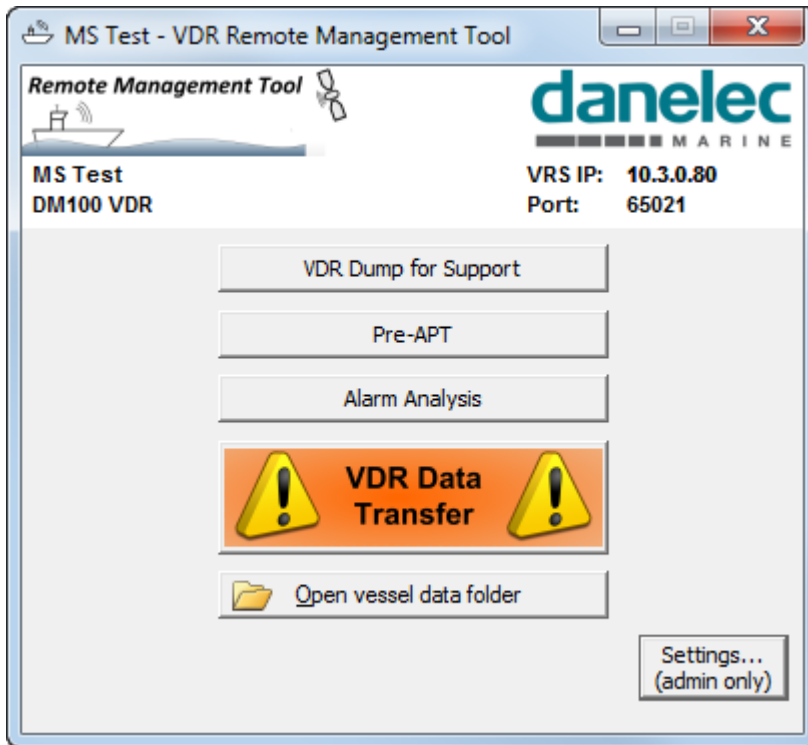
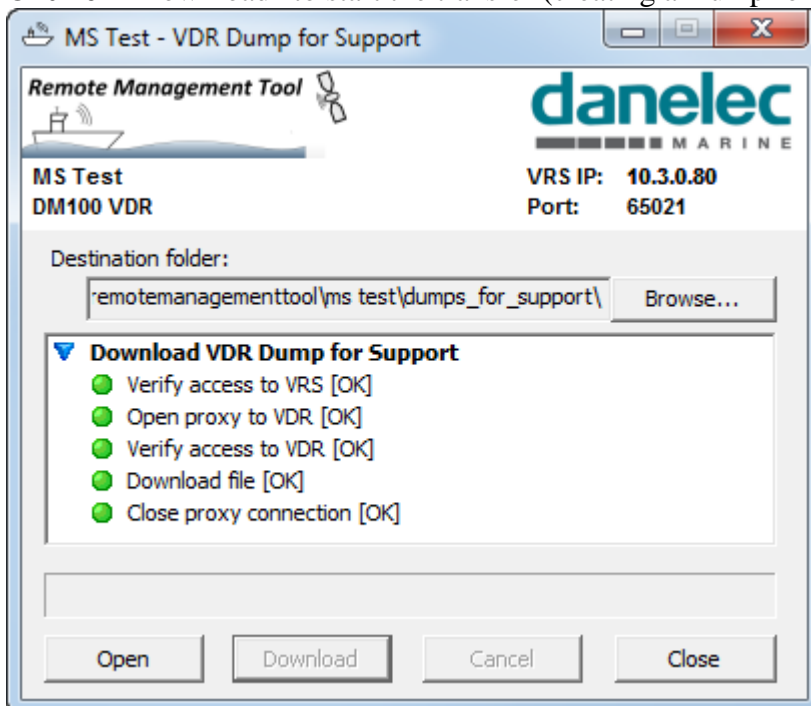From this window a specific action may be started.

3.1 VDR dump for support

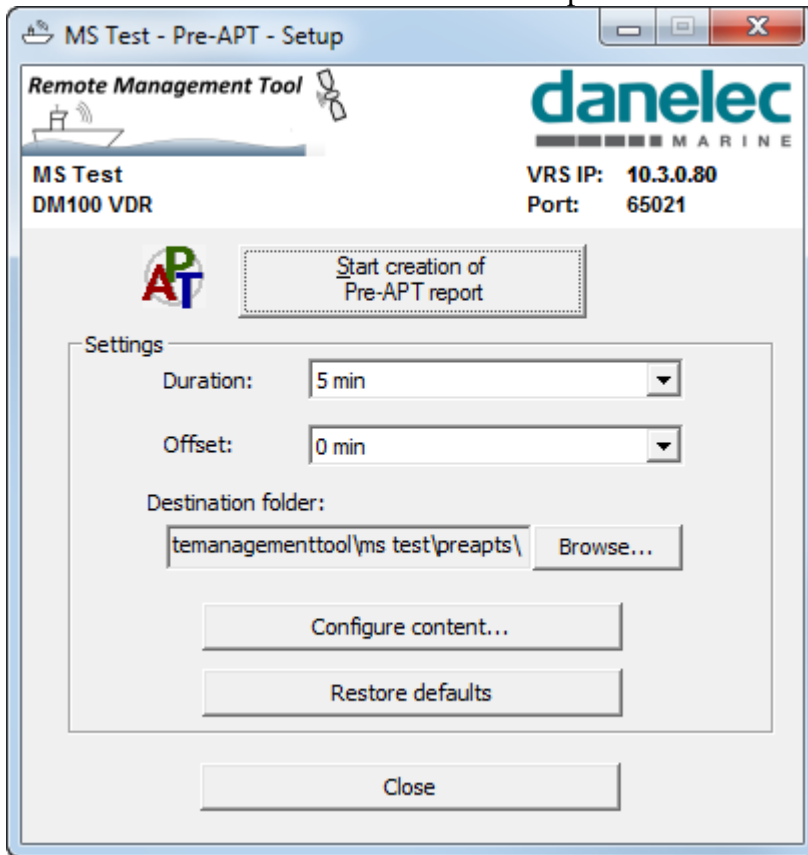Click on VDR Dump for Support and this window will open:

The destination folder for the data file may be set or left at default.

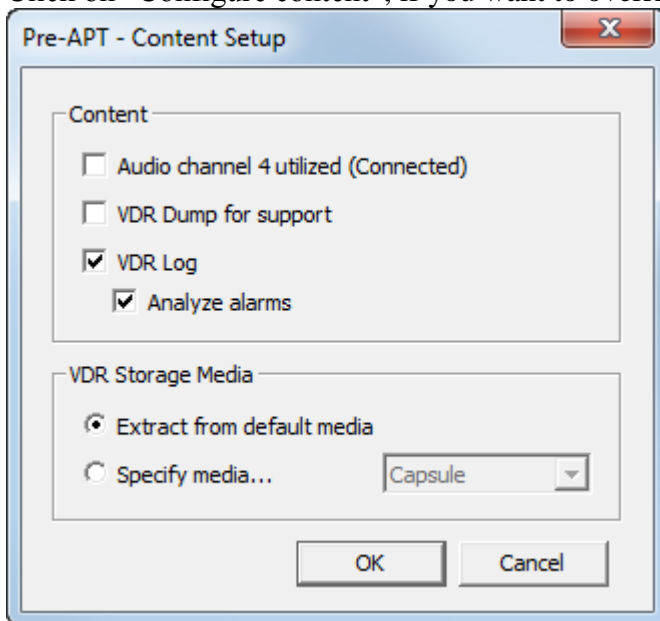Click on "Download" to start the transfer (creating a Dump for Support may take some minutes):
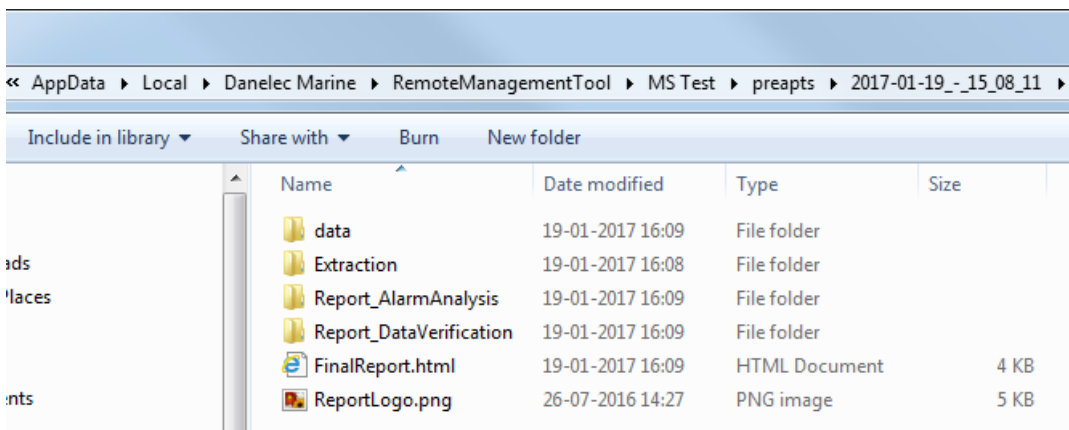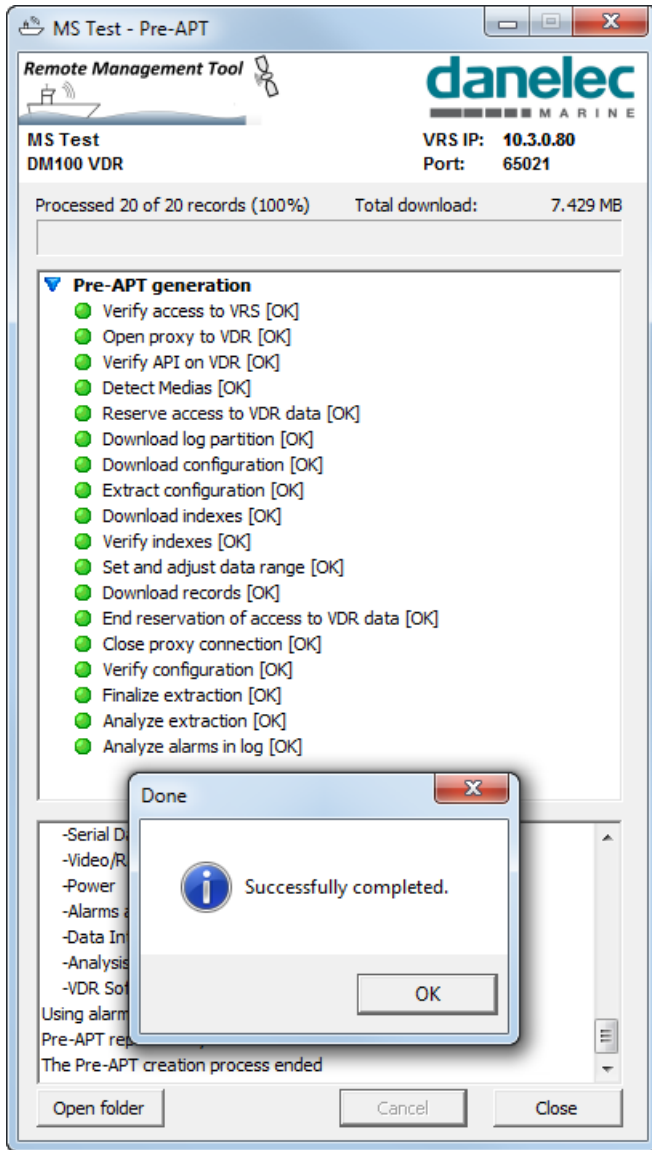
3.2 Pre-APT

Click on "Pre-APT" and this window will open:

Click on "Configure content", if you want to override the default settings.

Click "Start creation of Pre-APT report" and the program will generate an APT report. The report is an HTML document and a browser window should open when the report is ready. If not, click on "Open folder" and double click on "FinalReport.html".

3.2.1 The APT report

Pre-APT Overview Report

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Creation time	2017-01-19 - 15:09:36 UTC (2017-01-19 - 16:09:36 Local time)
Remote Management Tool Version	1.12.05

VDR Model:	DM100 VDR
VDR Software Version:	1.49.81

Vessel Name	M/S test
Vessel Flag	Denmark
IMO:	123456
MMSI:	123456

Data verification: Report

Analog Data	PASSED
Digital Data	PASSED
Audio Data	PASSED
Serial Data	ERROR
Video/Radar Data	ERROR
Power	PASSED
Alarms and Alerts	ERROR
Data Integrity	PASSED
Analysis Length	PASSED
VDR Software	PASSED

Alarm analysis: Report

Range	Alarm count
0 - 24 Hours	20
0 - 7 Days	20
0 - 14 Days	20
0 - 30 Days	20
0 - 90 Days	20

VDR Status:

|		
Index Verification	Ok, no errors found	PASSED
Configuration verification	VDR: OK , Player: OK	PASSED
System Uptime	14 day(s), 23 hours, 05 mins, 21 seconds	PASSED
Media detection	Capsule Present, Floatfree Missing, Longterm Present	WARNING

3.3 VDR data transfer

Click on "VDR data transfer" and this window will open:
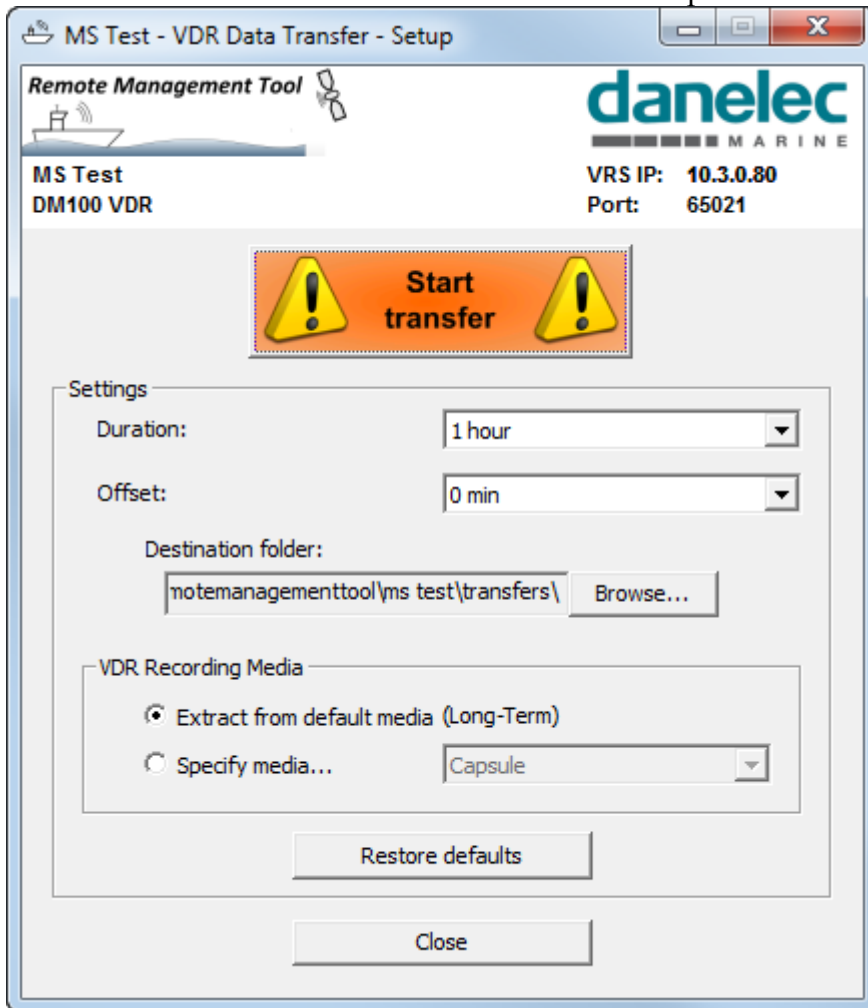
Override the default settings if required and the click on "Start transfer".

Please note that newest data is downloaded first and that the offset is with reference to the present time; i.e., if an incident happened 2 hours and 10 minutes ago, use offset "2 hours" in order to get data related to the incident as fast as possible.
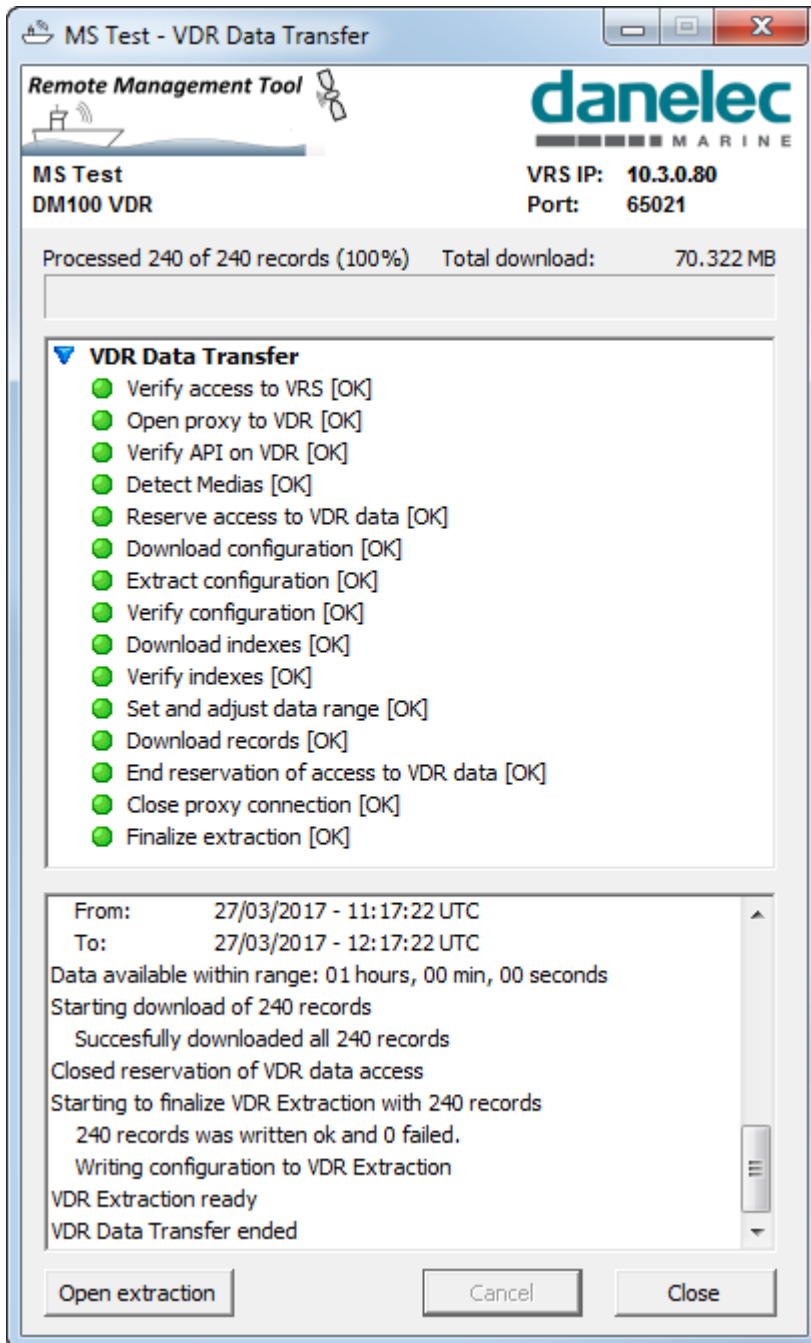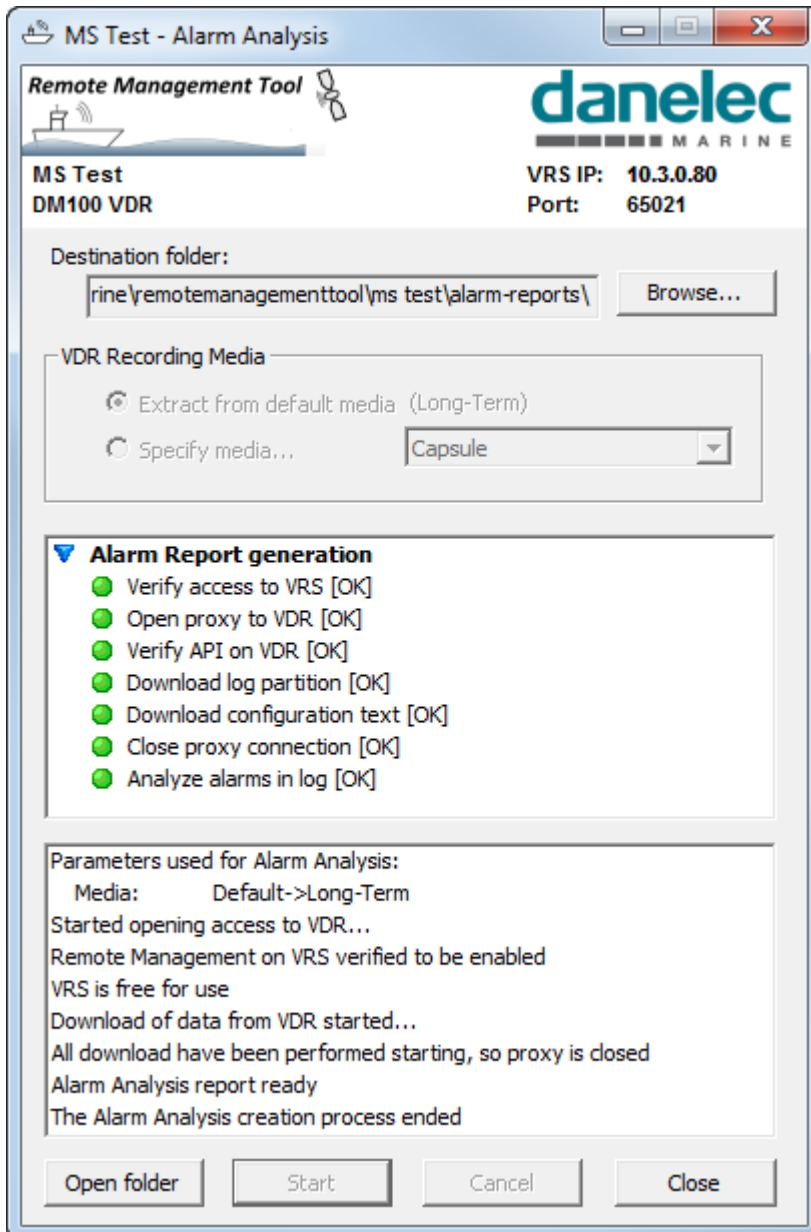
When the data is transferred, you may open the file using the VDR Explorer re-play software, i.e. click on "Open extraction".

3.4 Alarm Analysis

Click on "Alarm analysis" and this window will open:
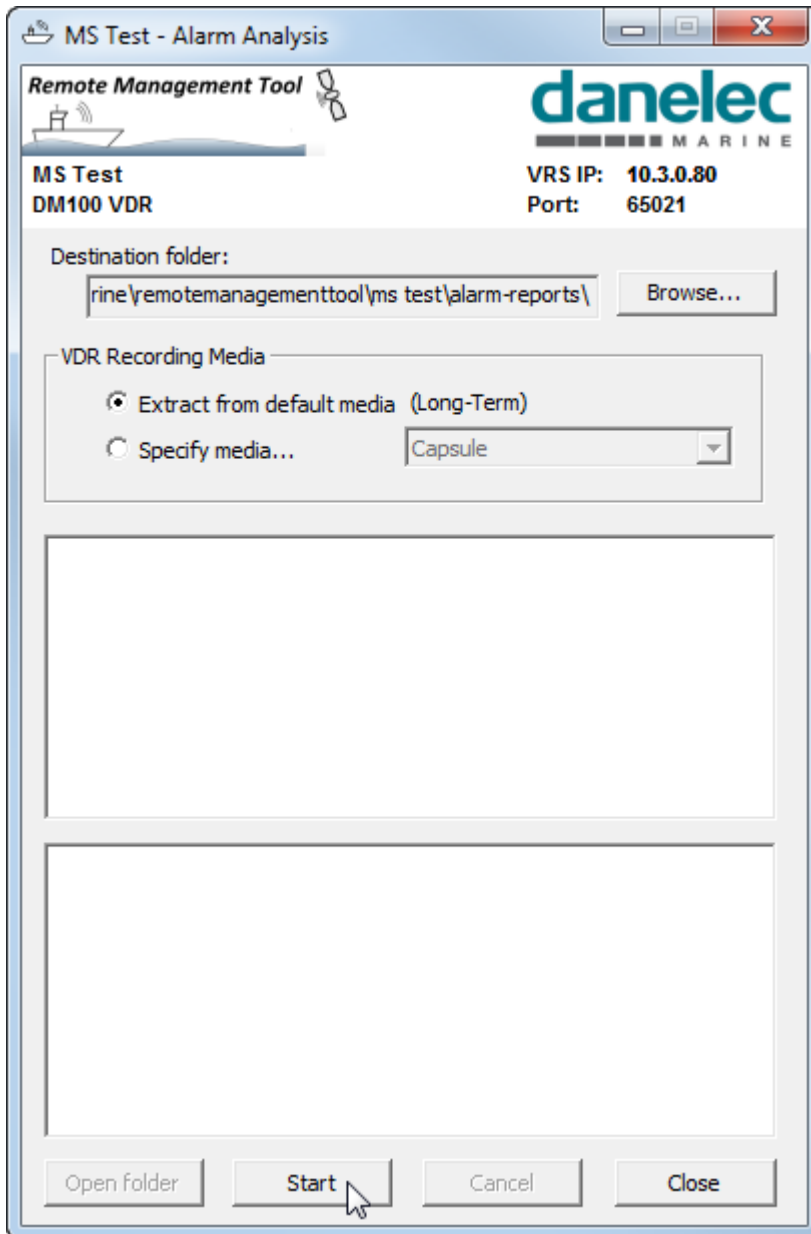
Click on "Start"

The report is an HTML document and a browser window should open when the report is ready. If not, click on "Open folder" and double click on "Alarms.html".

4 Access to the VDR configuration interface

If the mode switch on the VRS is set to "Extended mode", access to the VDR configuration interface is enabled through the VRS. For security reasons the mode switch should be set to "Normal mode" as soon as access to the VDR configuration interface is no longer necessary.

In order to get access, type the IP address of the VRS in the browser's address field. The login page for the VDR's configuration interface will be displayed (if access is possible). Please notice that HTTP must be used for getting access the VDR configuration interface.

This message will be displayed if the mode switch is set to "Normal operation":

No access to VDR

Set the mode switch to extended mode in order to enable access.

Please click here if you want to go to the system configuration site.

5 Configuration of the VRS

The VRS's configuration interface may be accessible from shore. Please notice that HTTPS must be used for getting access the configuration interface.

For more details, see MAN11841 Installation manual for Vessel Remote Server, VRS 002

Some of the parameters for the VRS must match the corresponding parameters in the VDR Remote Management Tool configuration for that vessel. The following steps must be carried out:

- Enabling functionality required for VDR Remote Management Tool in the VRS.
- Setting up the connection parameters from the VRS to the VDR.
- Configuring a network interface on the VRS for the VDR.
- Configuring a network interface on the VRS for the VDR Remote Management Tool.
- Configuring a user account for the VDR Remote Management Tool.

Most the required settings are default settings for a VRS 002.

5.1 Enabling VDR Remote Management in the VRS

Go to "System->Modules" and enable VDR Remote Management.
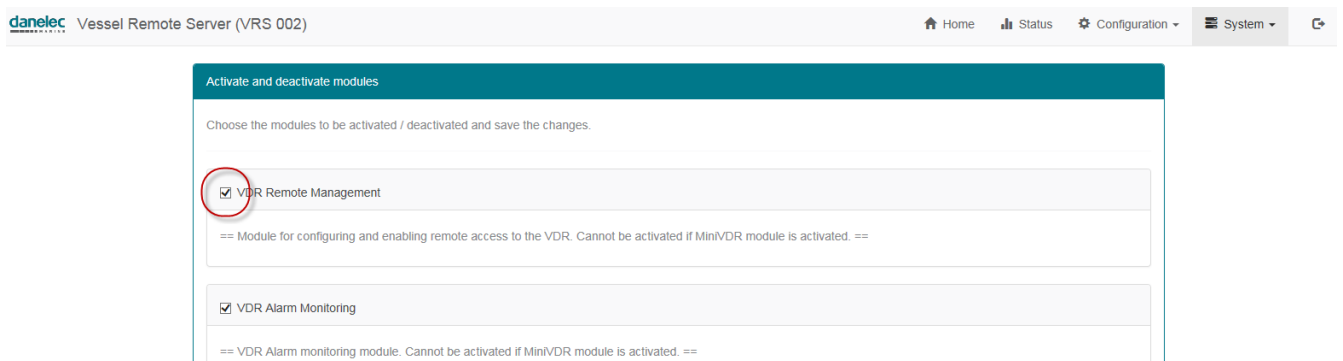
Check that the VDR remote management module is enabled in the VRS.

5.2 Setting up the connection parameters to the VDR

Go to Configuration->VDR connection and enter the IP address of the VDR (default 10.0.0.100)
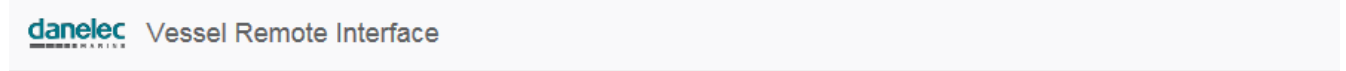
5.3 Configuring a network interface on the VRS for the VDR

On the configuration interface for VRS, go to "Configuration->Network".

Check that a proper network interface for the accessing the VDR exists.

5.4 Configuring a network interface for the VDR Remote Management Tool

The VDR Remote Management Tool requires access to a network interface the VRS.

On the configuration interface for VRS go to "Configuration->Network"

Check that a proper network interface for the VDR Remote Management Tool exists.

Check that VDR Remote Management is enabled using that interface.

5.5 Configuring a user account for the VDR Remote Management Tool

The VDR Remote Management Tool requires a user account in the VRS.
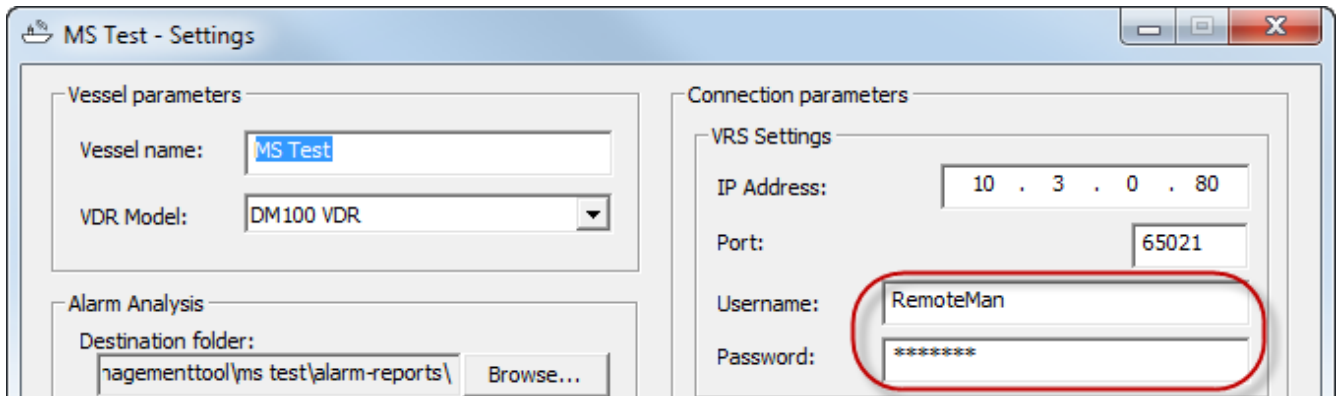
In the configuration interface for VRS go to "System->user"

Check that a "User" with the role "VDR Remote Management" exists and that the user credentials for that user correspond to what is configured for the VDR Remote Management Tool.

6 List of utilized protocols and ports

Firewalls must be open for the following protocols and ports.

6.1.1 Pre-APT

HTTPS, port TCP/443 and one additional configurable port. See section 3 (default TCP/65021)

6.1.2 Transfer VDR data to shore

HTTPs, port TCP/443 and one additional configurable port. See section 3 (default TCP/65021)

6.1.3 VDR dump for support

HTTPs, port TCP/443 and one additional configurable port. See section 3 (default TCP/65021)

6.1.4 General access to the VDR

HTTP, port TCP/80

6.1.5 Configuration of VRS

HTTPS, port TCP/443

7 Typical size of downloaded data set

Pre-APT (5 minutes):   25MB
Dump for support: 2MB
Transfer of VDR data   1.5Mbytes + 5MB/minute of recorded data