Backup and restore on new hardware

XProtect® Professional VMS Products 2014:
XProtect® Enterprise 2014, XProtect® Professional 2014,
XProtect® Express 2014, XProtect® Essential 2014

The open platform company

Introduction

This document is intended to be a description of what to do when moving the full configuration of an existing system to a new server. The move can either be part of a server replacement alone, or in combination with an upgrade of your system. If this is a part of an upgrade, please perform backup and restore first, then end by upgrading your VMS on the new server. The information currently available in the documentation is not sufficient for a successful move.

There are several bits of information that must be moved:

- Recording Server configuration
- Event Server configuration – either full or partial backup
- Mobile Server configuration
- XProtect® Smart Client(s) configuration, including view definitions
- Camera settings

It is assumed that the reader knows and understand

- Windows services, particularly the Milestone services, and how to shut them down and start them
- Microsoft SQL Server, and how to work with a database and its tables

Prerequisites

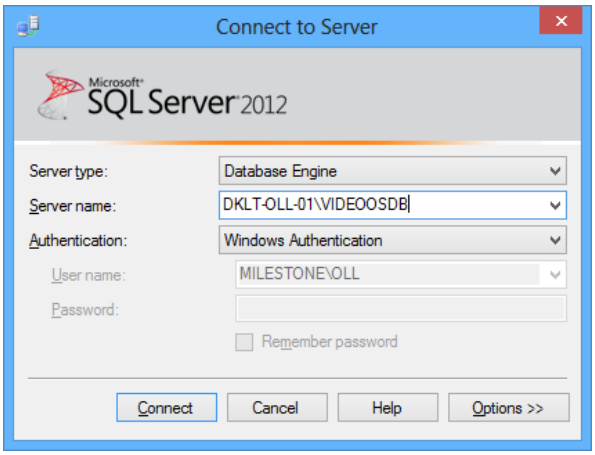
The first step in moving the configuration of the existing system to a new server is to install the software on the new server. Please install the same version and the same components (Recording Server, Mobile Server, etc.) as on the existing system. When the install is done, do the following:

1. Add a single camera to the system (this camera will be removed when you copy the Recording Server configuration to the new system – but without this step, you will not be able to copy the camera settings devices.ini file to the new server)
2. Stop all the Milestone services on the new server.

Event Server configuration – full backup

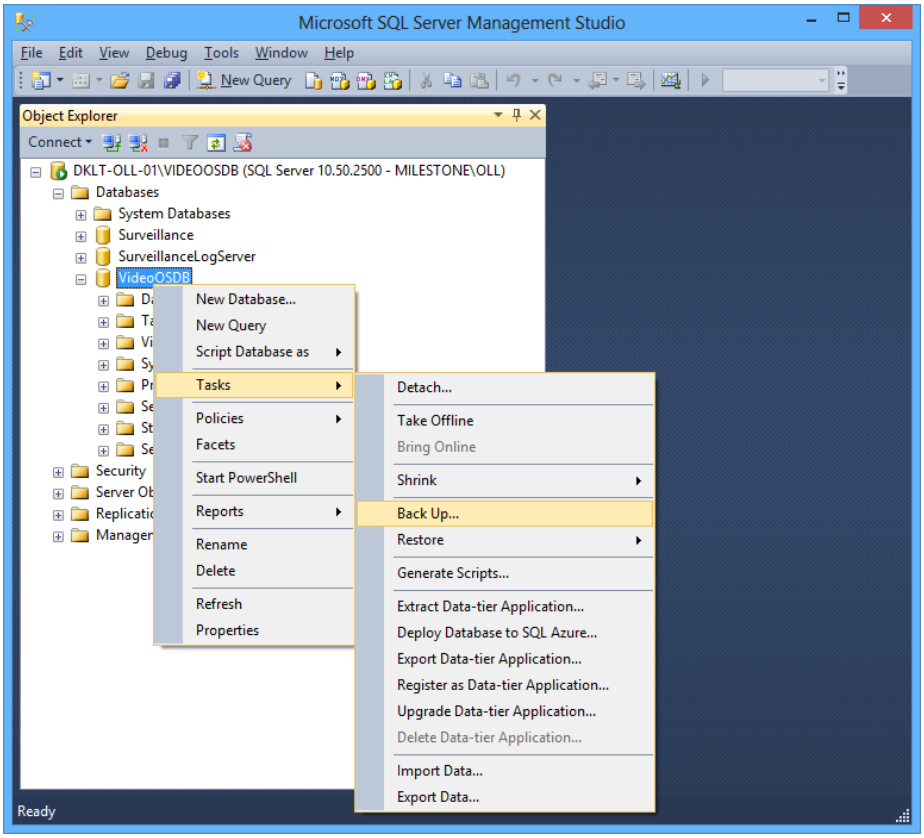
This step is optional. If you don't use events, alarms and maps, you don't have to do this (because then you're not using the Event Server functionality).

There are two approaches for copying the Event Server configuration from the existing system to the new server. Both require that you take a database backup of the existing system, and restore it on the new server. Please ensure that the Event Server is not running on the existing system when you create the backup, and that the Event Server is not running on the new server when you restore the backup.

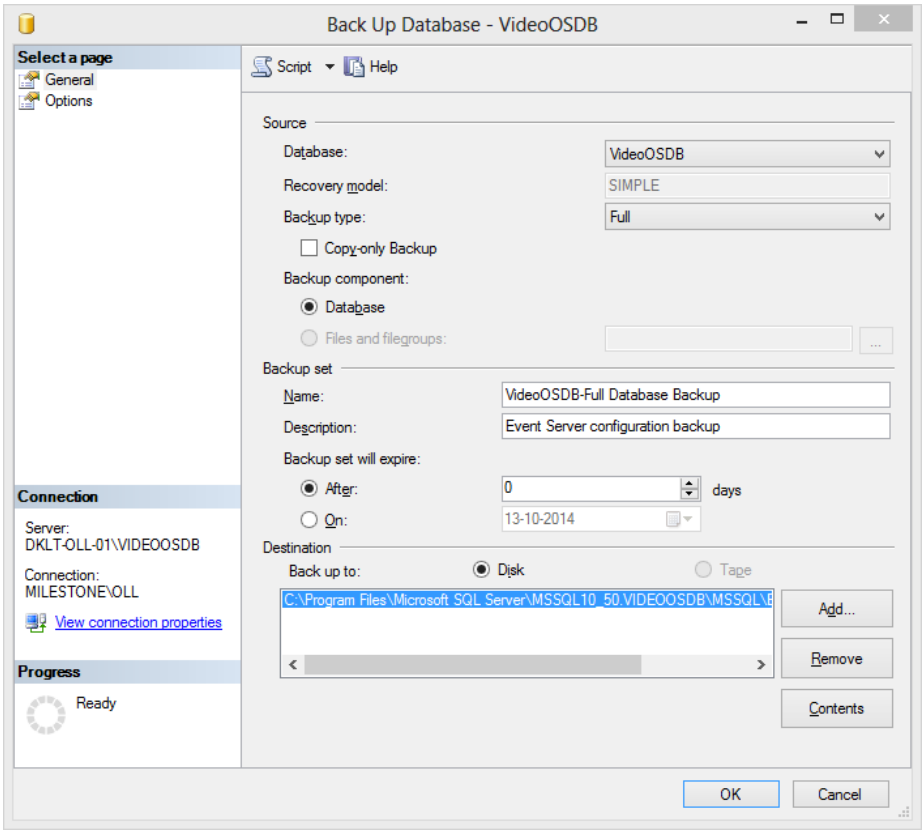


No matter which of the two methods you use, you must use a tool such as SQL Server 2012 Management Studio to connect to the database. In the example above, the existing system is running on the server DKLT-OLL-01, and the SQL Server instance has the default name of VideoOSDB – replace with the correct server instance name and SQL Server instance name (if you've changed either as a part of the installation).

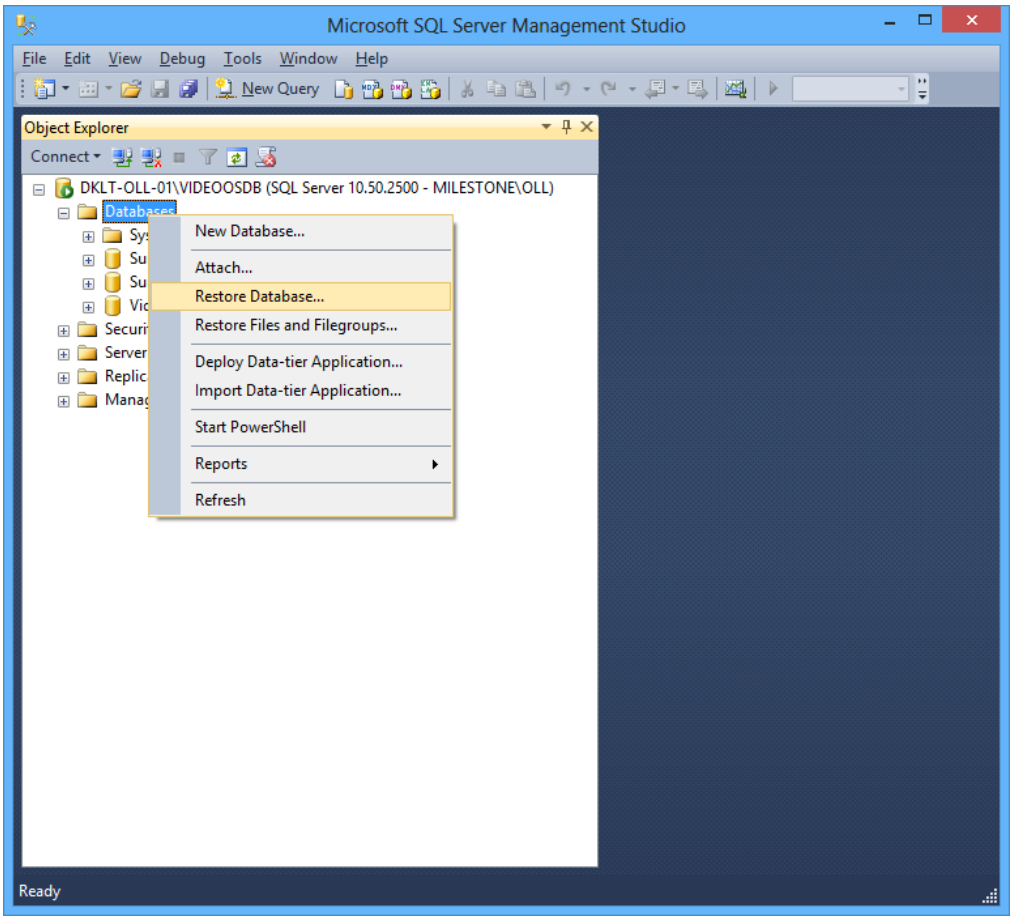
The simplest approach is to take a full backup (although, if you have lots of events and alarms in the database, it may result in a large backup file). Open the list of databases, select the VideoOSDB database instance (replace with the correct database instance name if you've changed it), right click on it, select Tasks and finally select Back Up…:



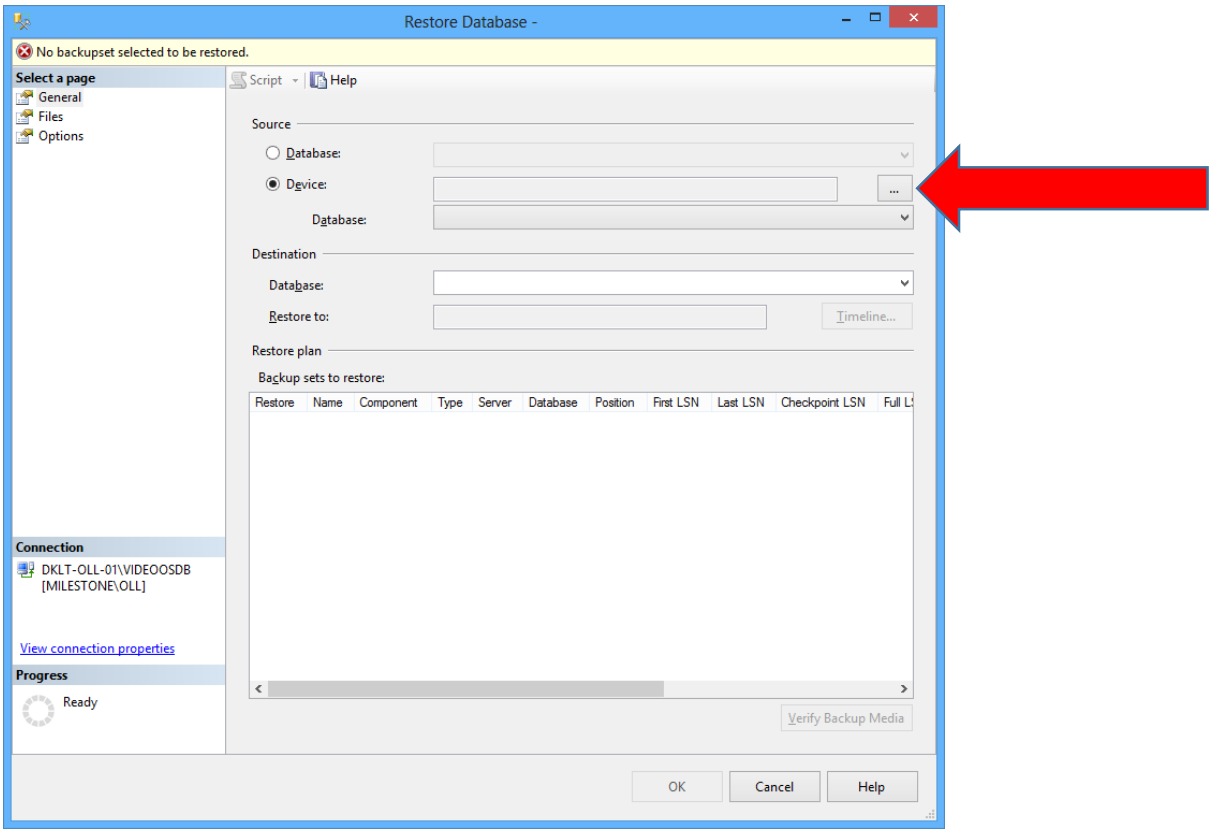
Enter the description, and click on OK:



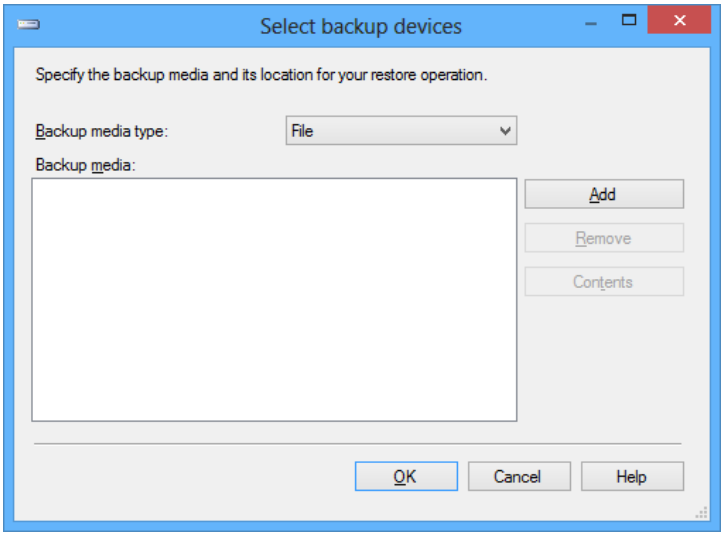
Copy the backup file to a location where you can reach it from the new server. Open SQL Server Management Studio on the new server, and delete the existing VideoOSDB database. Then select Databases, right click on Databases, and click on Restore Database:



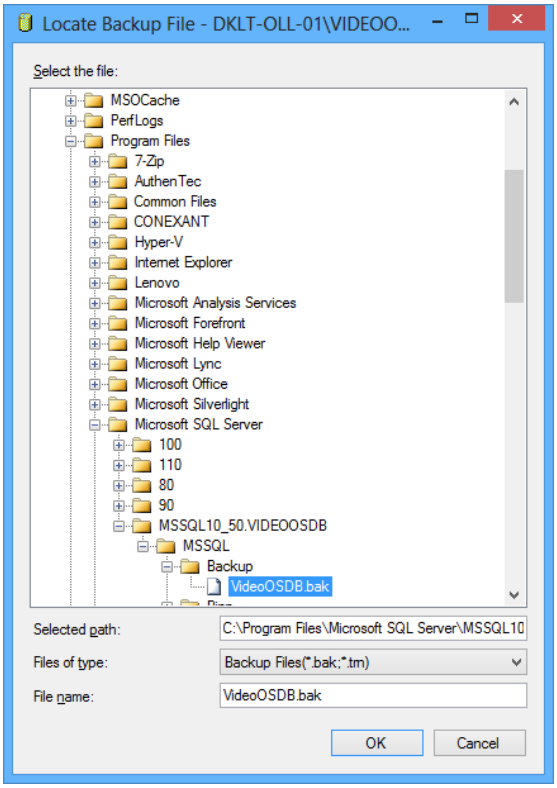
This opens the restore dialog:



Select Device, and click on the "…" button:



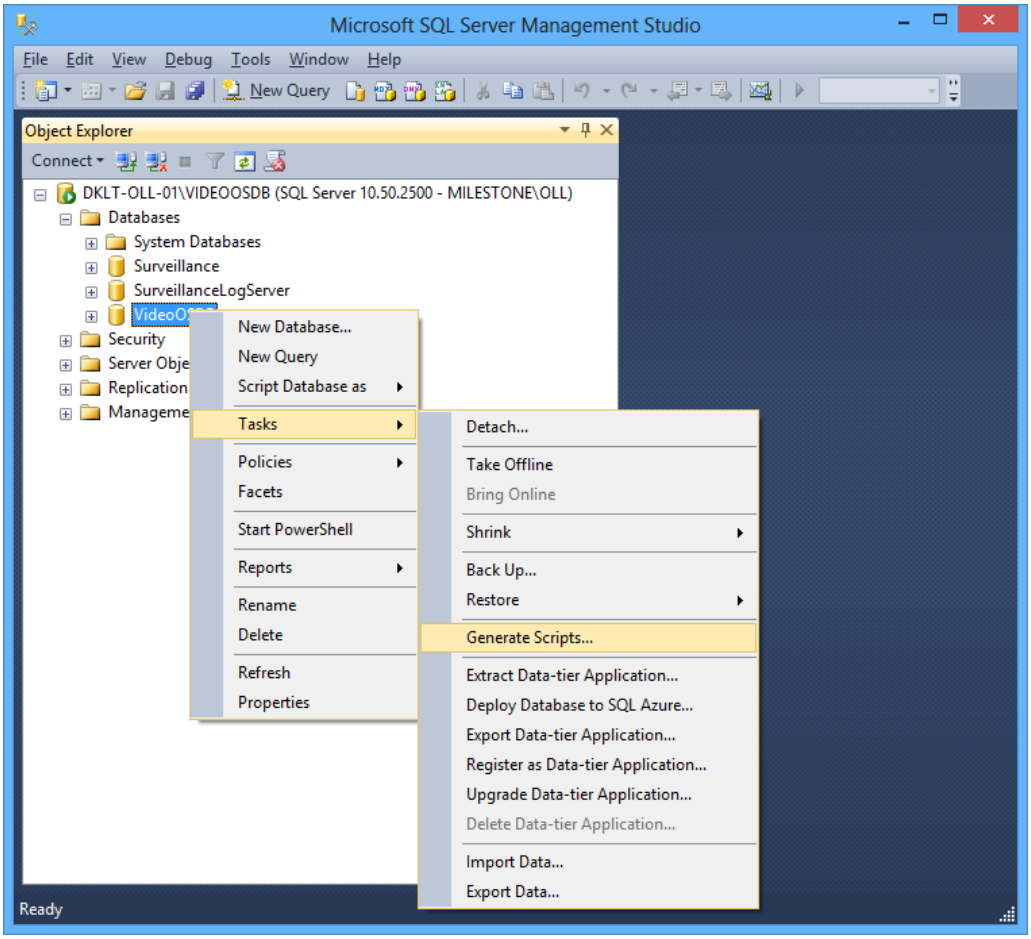
Select File as Backup media type, and click on the Add button. Navigate to the backup file, select the backup file, and click on OK:



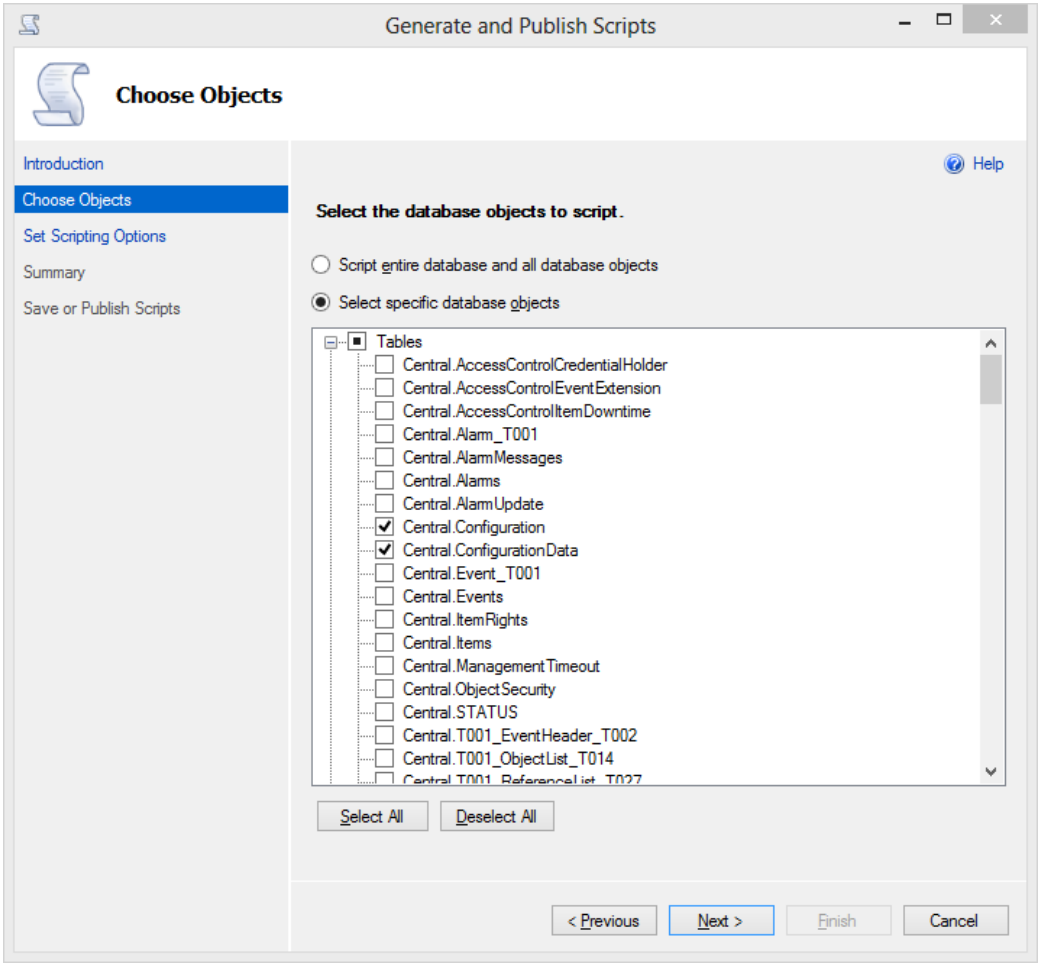
Back in the Select backup devices dialog, click on OK again. Back in the Restore database dialog, wait for the backup file to be processed, and then click OK. You have now copied all Event Server data (including configuration) from the existing system to the new server.

Event Server configuration – partial backup

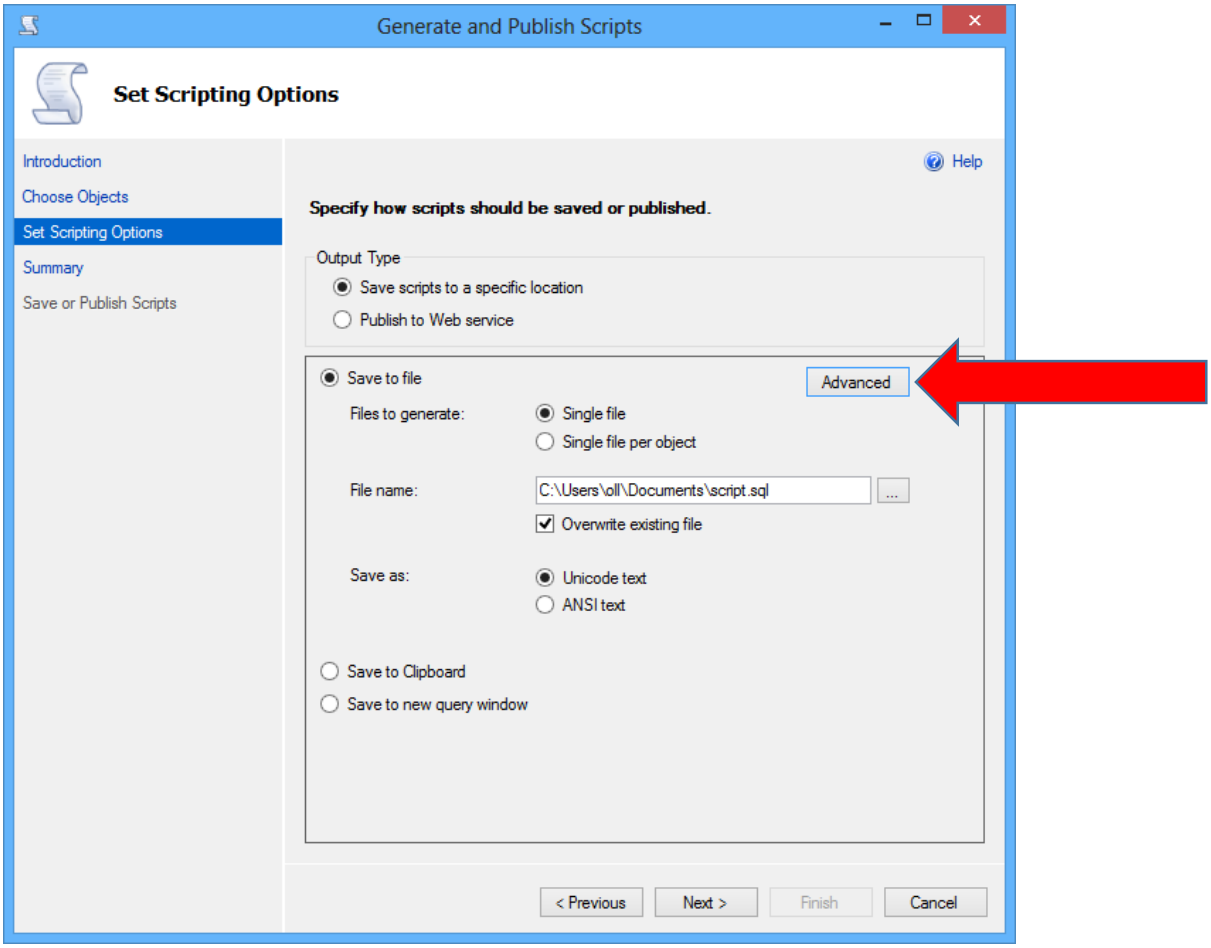
If you have lots of events and alarms, the backup could be rather large. In that case, you could consider the alternative approach, just backing up the tables that contain the actual Event Server configuration. As before, open the SQL Server Management Studio on the existing system, and connect to the correct server instance (default is VideoOSDB). Select the correct database (default is VideoOSDB), right click on it, and select Generate Scripts… from the Tasks menu:



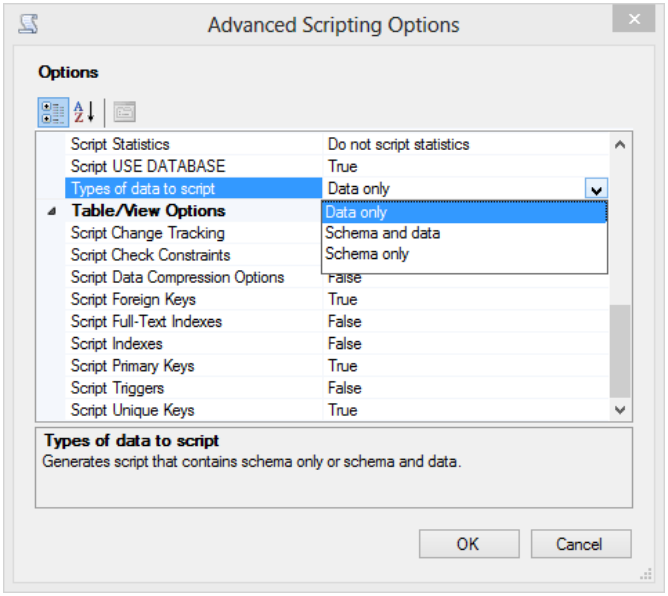
If your SQL Server Management Studio now display the first page of the Generate and Publish Scripts wizard (describing that there are four steps to complete the wizard), simply click Next, and you get:



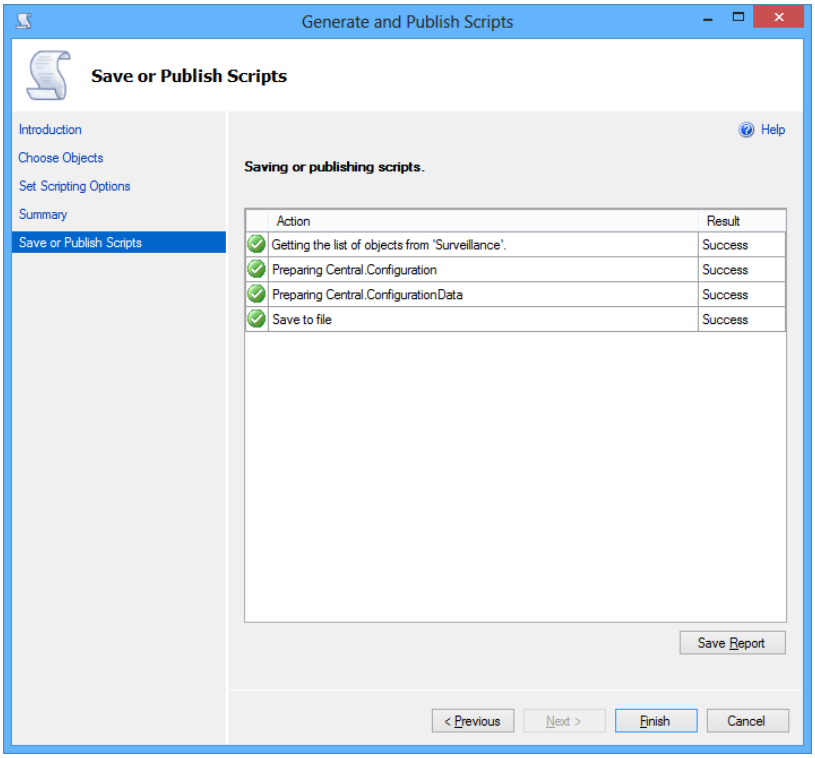
As on the screenshot above, make sure that you have selected Select specific database objects, and has set check marks on Central.Configuration and Central.ConfigurationData. Click on Next:



Click on Advanced:



Please make sure that the option Types of data to script is set to Data only. Click on OK. Click on Next, and the summary is displayed. If you want, you can take the opportunity to check that the selected objects are the tables Central.Configuration and Central.ConfigurationData, and that General under Options has Types of data to script set to Data only. Click on Next, and finally verify that all the operations listed on the last page has Success as Result:

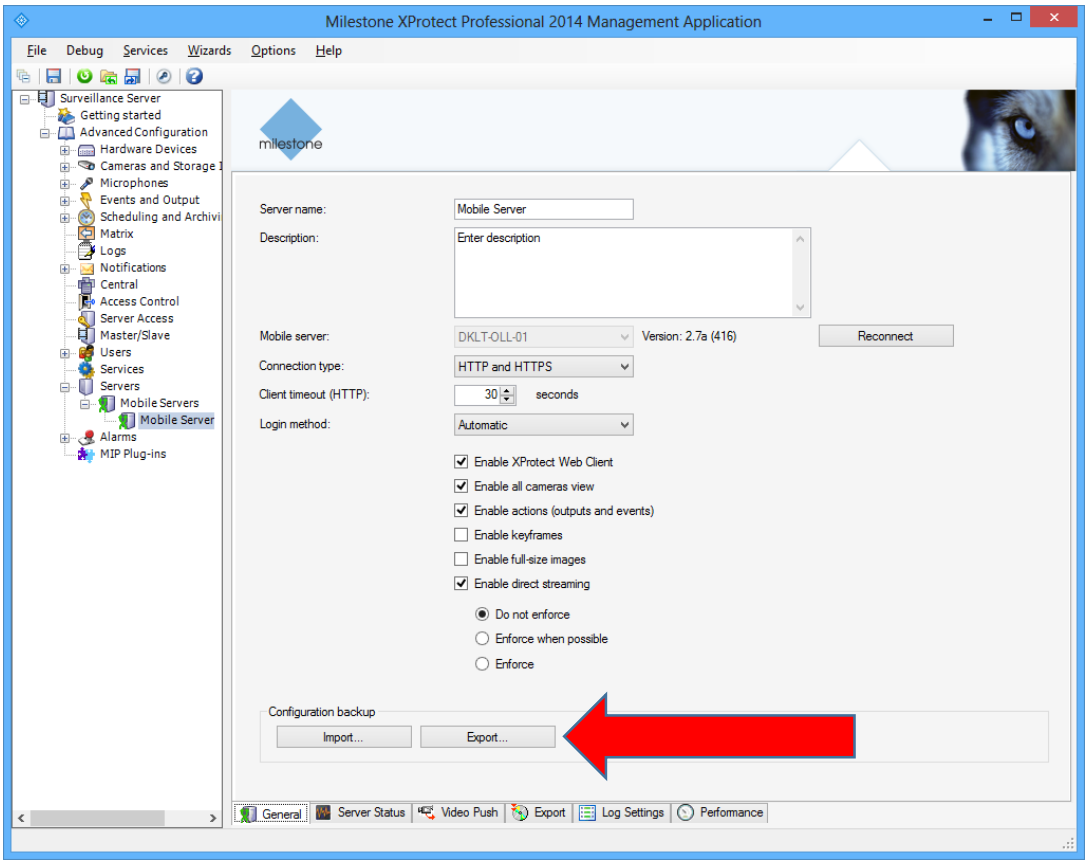


Click on Finish. Copy the generated script to a location where you can reach it from the new server. Open SQL Server Management Studio on the new server, delete all existing rows from the two tables (Central.Configuration and Central.ConfigurationData), load the script, and run it. You have now copied the Event Server configuration from the existing system to the new server.

Mobile Server configuration

There are two aspects of the Mobile Server configuration that must be copied from the existing system to the new server. The configuration controlled by the Management Application, and the configuration controlled by the tray icon.

To copy the Management Application Mobile Server configuration, open the Management Application on the existing system, and find the Mobile Server in the navigation tree:

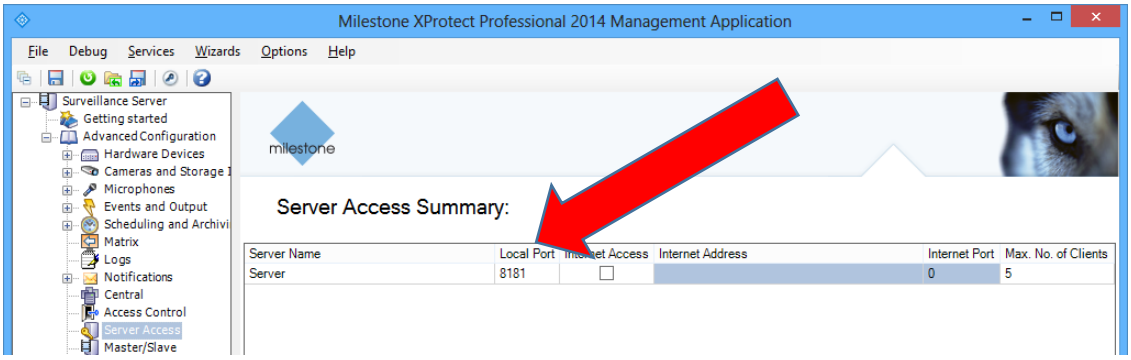


Click on Export…, and save the Mobile Server configuration settings. Copy the saved configuration file to a location where you can reach it from the new server. On the new server, open the Management Application, and find the Mobile Server in the navigation tree (the image above). This time, click on the Import… button, navigate to the saved configuration file, select the saved configuration file, and click on Open. You have now copied the Management Application controlled Mobile Server settings from the existing system to the new server.

However, you also have to ensure that some registry keys are transferred. The root path of these registry keys is `HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Milestone\XProtect Mobile Server`. Under this root path, you need to export the following registry keys (and only the following registry keys) from the existing system:

```
CERTFILE
CERTIFICATE
EXPORTFOLDER
LOGFOLDER
PORTHTTP
PORTHTTPSECURED
PORTHTTPWCF
SURVEILLANCENAME
SURVEILLANCEPASSWORD
SURVEILLANCEPORT
SURVEILLANCEUSERNAME
```

You should verify that the values of at least EXPORTFOLDER, LOGFOLDER and SURVEILLANCEPORT makes sense on the new server (consider comparing with the values set during the installation of the software on the new server). In particular, SURVEILLANCEPORT must match the Local Port of the Server Access Summary in the Management Application on the new server, in the example below it is 8181, although the default value is 80:



Copy the file(s) with the exported registry keys to a location where you can reach it from the new server. Now access the new server. Shut down the Mobile Server, open a File Explorer, and navigate to the exported registry file. Double click on the exported registry file, and the registry settings from the existing system are copied to the new server. Finish by starting the Mobile Server. You have now copied the Mobile Server settings from the existing system to the new server.

Recording Server configuration

Copy the directory %ProgramData%\Milestone from the existing system to the new server (so everything from %ProgramData%\Milestone on the existing system is copied to %ProgramData%\Milestone on the new server).

Smart Client(s) configuration

All Smart Client configuration is in the %ProgramData%\Milestone directory, so backup and restore of the Recording Server settings will take care of the Smart Client configuration also.

Camera settings

The overwhelming majority of camera settings are stored in the cameras themselves. A few settings which are not stored in the cameras are copied to the new server as a part of the Recording Server configuration. But to get everything, you must copy a file from the existing system to the new server. The filename is devices.ini, and the path starts with %ProgramData%\VideoDeviceDrivers\ - the rest of the path depends on where you installed the VMS. You could go to the partial path, and search for devices.ini. The default install path would result in %ProgramData%\ VideoDeviceDrivers\C_\Program Files (x86)\Milestone\DevicePack\devices\devices.ini.

Final step

Please start all the Milestone services on the new server.