

# merbon

## SCADA

**Services migration to a new hardware**

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# 1 Introduction

Migrating of Merbon SCADA services is necessary if the complete installation running at a server/PC shall be moved to another machine while maintaining the current setup and history data.

Before starting the process, please make sure that:

- a) There is admin access to the complete hardware where the Merbon SCADA services are running.
- b) All services at the old hardware are fully functional.
- c) There is admin access to the new hardware.
- d) The credentials for the domain administrator are known, as well as other administrator accounts used for management of the migrated services (Alarm server etc.).
- e) The installer version which shall be used for the installation of Merbon SCADA at the new hardware is equal to the version running on the existing PC/server (If this is not the case, use the „Upgrade“ function from current Merbon SCADA installer at the old machine)
- f) There is enough of free activations of licences for the migrated services (see chapter 2)

Before the Merbon SCADA services are migrated, copies of several files from the old installation must be created.

This is the list of all folders and files, copies of which are essential for a complete migration of services installed using the Merbon SCADA installer:

*In folder C:\Apps\Merbon*

**Merbon Database Warehouse**

**Alarm Server Warehouse**

**Merbon DS2 Database Warehouse**

*In folder C:\Apps\Merbon\Merbon DS2*

file: **appsettings.json**

*From folder C:\Apps\Merbon\Alarm Server Bridge*

file: **ESG.Domain2.Domain1Bridge.Host.exe.config**

*In folder C:\*

**vision\_data**

*In folder RcWare\DATA where RcWare is installed*

**All folders**

Relations between services and folders are described in the respective descriptons of migrations of the services.

## 2 Merbon SCADA installer

First, install all services which have to be migrated to the new machine, using current Merbon SCADA installer. **NOTE!: Before the installation, make sure that there are unused activations of the license available.** The licence tool uses the licence number to create a common footprint of the licence number and the PC hardware, which links the licence number to the PC where it was run. After the footprint is uploaded to the licence activation server „licenses.domat.cz“, one activation of this licence number is subtracted from the amount of allowed activations. With migration to a new hardware, a new footprint of the licence number must be created and activated.

(If you are not sure about the status of your licence(s) or need to increase the amount of allowed activations, please contact support at +420 461 100 823, or e-mail to info@domat.cz.)

When the domain server is installed, the domain admin credentials must be equal to those used at the old installation.

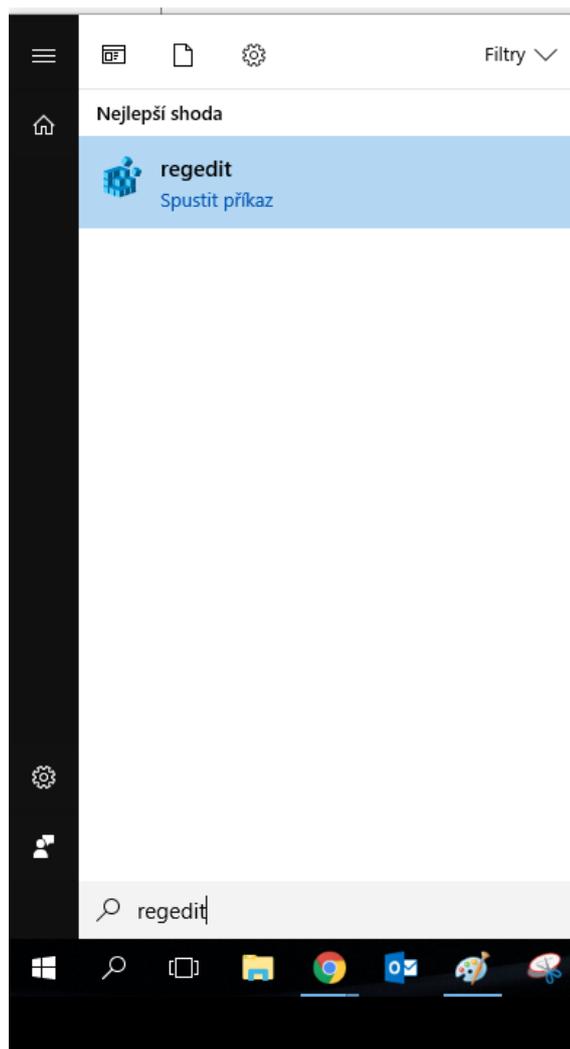
If the amount of unused licence activations is sufficient, it can be proceeded according to the standard installation notes for Merbon SCADA services.

## 3 Domain server

First, replace the *C:\Apps\Merbon\Merbon DS2 Database Warehouse* folder at the new machine by the backup from the old installation.

Second, replace the **appsettings.json** file (*C:\Apps\Merbon\Merbon DS2*) at the new machine by the backup from the old installation.

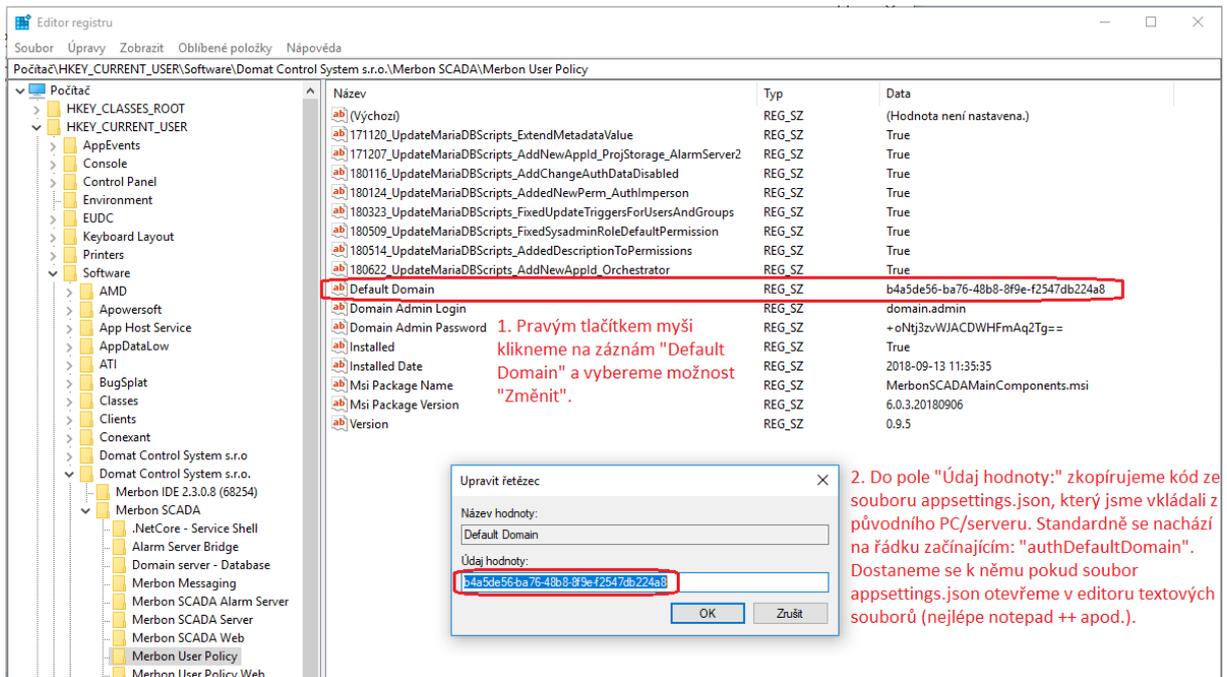
Third, edit the records in registry using Windows Registry editor (regedit). As this function is hidden for a common user, it can be run by entering **regedit** into the searching dialogue window in the stat tab. The function displays only after the whole name has been typed.



**Running of registry editor**

In the Registry editor there is a tree structure in the left part (see figure). Search for the „Merbon User Policy“ folder which can be found at the path  
*Computer\HKEY\_CURRENT\_USER\Software\Domat Control System  
 s.r.o.\Merbon SCADA\Merbon User Policy*

(The *Domat Control system s.r.o.* folder may be used several times here if other Domat products are installed. We need the instance containing „Merbon SCADA“.)



**Editing of the Default Domain registry**

Right click in the Merbon User Policy folder to the record named „Default Domain“ and select „Edit“. A text string edit window appears. In the Value field enter the code which is in the **appsettings.json** file. Open the file in a text editor (preferably notepad++ etc.). The string we search for is at the line beginning "authDefaultDomain" (see screenshot):

```

46 "authConfig": {
47   "authMaxValidTokensPerUser": "100",
48   "authDefaultDomain": "b4a5de56-ba76-48b8-8f9e-f2547db224a8",
49   "authResetPwdSubject": "ESG.Domain2 reset password link",
50   "authResetPwdContentType": "txt",
51   "authResetPwdContentFile": "Resources/ResetPwd_ContentFile.txt",
52   "authResetPwdResetLinkValidity": "120",
53   "authTokenPrefix": "2"
54 },
55 "authModulesConfig": {
56   "authUsrPwdPepper": "3567a856-4975-4e72-b5f4-ef8998722091",
57   "authRfidSimplePepper": "{6B6A0791-7D95-4C37-A4E8-AADD993B3024}",
58   "authServiceAccountUsername": "ds2service",
59   "authServiceAccountPassword": "puS?WQRGn@6q=4fc"
60 },
61 "smtpConfig": {
62   "host": "smtp.gmail.com",
63   "port": "587",
64   "sender": "alarm.server@rcware.eu",
65   "username": "alarm.server@rcware.eu",
66   "password": "alarmy",
67   "secureConnection": "ssl"
68 },
69 "host": {
70   "serverUrl": "http://*:18502"
71 }
72 }
    
```

**Code copied from appsettings.json**

Finally, start all Merbon SCADA stopped services and check the results of your migration in the Domain server editor at the web address *localhost:9696*.

## 4 SCADA server

The Merbon SCADA server service loads files stored at *C:/vision\_data/scada* when started. For its complete migration, it is enough to replace the contents of this folder by the contents of the folder from the old installation. Then restart the service and check the result in your web browser at the web address *localhost*.

## 5 Database

Before the Merbon Database migration, stop the service using the „Services“ panel in Merbon SCADA installer. Then replace the *C:\Apps\Merbon\Merbon Database Warehouse* folder at the new machine by its backup from the old installation. Remember to check the history saving settings in *C:\Apps\Merbon\Web Client\Merbon Scada Web\config.js*: Open the file in a text editor editor (preferably notepad++ etc.) and check if there is a line beginning „ESGVisionConfig.DefaultHistoryProviderId =“ (line 18 by default). If this is the case, comment it out by adding „//“ at the beginning (see screenshot). Then run the service again.

```

1  "use strict";
2
3  angular.module('RcWareVisionAppConfig').
4  run(['ESGVisionConfig', '$log', function (ESGVisionConfig, $log) {
5
6      ESGVisionConfig.AppVersion = "1.3.0";
7      ESGVisionConfig.ApiPrefix = "../api";
8      ESGVisionConfig.SetAppButtonLineWidth = false;
9
10     ESGVisionConfig.schemaTopLineHeight = 114; //80
11     ESGVisionConfig.schemaBorderHeight = 0;
12     ESGVisionConfig.graphTopLineHeight = 114;
13
14     ESGVisionConfig.AppTitle = "Merbon SCADA";
15     ESGVisionConfig.AppMainIconsVisibility.ReportBug = false;
16     ESGVisionConfig.AppReportBugUrl = "http://www.domat.cz";
17     ESGVisionConfig.ShowAcknowledgedAlarmsCount = true;
18     //ESGVisionConfig.DefaultHistoryProviderId = "7fa3f8d7-d73d-4d6f-9e30-e424690a22b4";
19
20     ESGVisionConfig.ProjectNameSliceEnable = true;

```

*Editing of config.js to read data from database*

## 6 Alarm server

When migrating Merbon Alarm Server, locate the *C:\Apps\Merbon\Alarm Server Warehouse* folder at the new machine and replace it by the corresponding folder from the old installation.

Next, in *C:\Apps\Merbon\Alarm Server Bridge* replace the file *ESG.Domain2.Domain1Bridge.Host.exe.config* with the same file from the original installation.

Then open the Alarm server editor, download its settings and click the „Start“ button. If all settings have been done correctly, the Alarm Server tree structure shall be visible.

## 7 RcWare Vision

As RcWare Vision is an editor for Merbon SCADA server and Merbon Alarm server services, for a complete migration of these services also the project folders of RcWare Vision must be transferred. Copy the entire contents of the **RcWare\DATA** folder from the original installation of Merbon SCADA to the same folder at the new machine.