This Information is classified as Normal Business

Directorate Network Management

EUROCONTROL

CHMI installation guide version 29.0.0

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Document Control

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1.Introduction

1.1 Identification

(1) This document forms part of the "CHMI" documentation.

(2) This document has a document reference of "CHMI/USD/CHMIaoinst".

(3) This document has a Title of "CHMI installation guide version ".

1.2 Scope

(1) This document is intended to technical staff for the installation of the CHMI application.

(2) This software can be used by AO (Aircraft Operator), ANSP (Air Navigation Service Provider) and AMC (Airspace Management Cell) users.

2. Useful documentations and links

(1) Refer to: https://www.eurocontrol.int/library

(2) Release Notes iNM Wave 2.3

(3) jVideo tutorials on youtube.com. Search for "Network Manager Flight Management Zone".

3. Help Desk

(1) If you have any problems, please contact the CSO Help Desk **+ 32 2 745 1997**

(2) You may also forward your questions to nm.cso.help-desk@eurocontrol.int

4. License agreement

4.1 Service Agreements

Access to the NM System is authorised only to those Customers who have signed the relevant Service Agreements with EUROCONTROL.
Email address of Customer Contact: nm.customersupport@eurocontrol.int

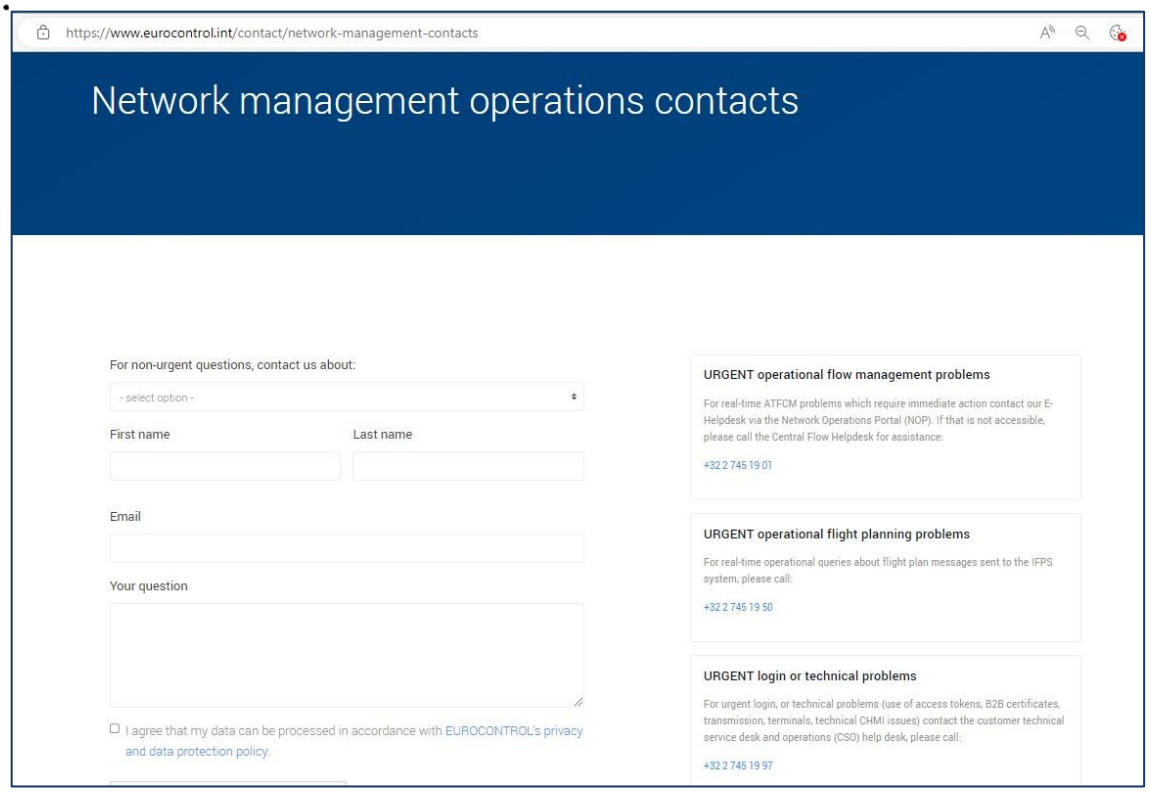
4.2 NM Security Rules

The Customer shall abide by the general security rules issued by EUROCONTROL for the use of the NM Systems as set out in the **NM Security Rules** which is provided to the Customer together with the Agreements for NM System Access.

(1) https://www.eurocontrol.int/info/agreements-rules-and-policies

For other contact names, refer to

(2) https://www.eurocontrol.int/contact/network-management-contacts



5.PC Hardware prerequisite

5.1 Minimum requirements

(1) Memory size: 8 Gigabytes of RAM minimum

5.2 Monitor: minimum screen resolution: 1024*768

5.3 Recommended requirements

(1) **For best performance: 12 or more** Gigabytes of RAM.

(2) PC with dual video outputs: 2 screens are recommended for “power” user of the application (one screen for data input or information display, the second screen to plot maps).

5.4 Supported platforms

(1) **Microsoft Windows 10 (64-bit) and Microsoft Windows 11 (64-bit)**

a) The CHMI development was done and fully tested under Windows 10 Enterprise, 64 bits and Microsoft Windows 11 (64-bit)

6.Connectivity prerequisite for Internet Connection

6.1 Network consideration

(1) The CHMI via Internet application connects to www.nm.eurocontrol.int on ports 80 and 443.

(2) Ensure that your PC can resolve www.nm.eurocontrol.int.and **b2c.nm.eurocontrol.int.**

(3) A CHMI ON-LINE help is also available, at http://www.nm.eurocontrol.int/chmi_apphelp/index.html

(4) To resume:

CHMI PRIMARY SERVER	TCP ports	Comment
www.nm.eurocontrol.int b2c.nm.eurocontrol.int.	80 & 443	Internet server
CHMI contingency SERVER	**TCP ports**	**Comment**
www.contingency.nm.eurocontrol.int b2c.contingency.nm.eurocontrol.int	80 & 443	Internet backup server (only available during contingency).

Table 1: CHMI connection for Internet users

CHMI ONLINE HELP PAGE
http://www.nm.eurocontrol.int/chmi_apphelp/index.html

Table 2: CHMI online help page for Internet users

6.2 Proxy consideration

(1) The CHMI also supports Internet Proxy (also called proxy server). If it is the case, you may specify the name and port number of your internet proxy during the installation phase. If you are unsure please contact your network or PC administrator for more explanation.

(2) If the previous version CHMI 28.0.0 is installed, you may use the same internet proxy **value** for this release CHMI 29.0.0. Refer to Appendix E to determine which value is currently defined.

(3) If you want to increase your security settings, refer to appendix (CHMI Certificate check) during the CHMI authentication start-up session.

7. Connectivity prerequisite for Extranet.

(1) This extranet is also referred as NewPens Connection. Currently our Network provider is BT.

(2) For BT (private network) connected users, it is assumed that the PC is connected and can communicate with the BT network.

(3) This connection is only reserved for ANSP (not for Airlines Organisations).

(4) The **CHMI via Extranet** connects to **harwbs01.nm.eurocontrol.int** on ports 80 & 443.

(5) To find out the current value, use the command "**nslookup" (**nslookup harwbs01.nm.eurocontrol.int) or "**tracert**".

(6) Ensure that DNS and Firewall are correctly updated to allow CHMI traffic.

(7) The ICMP ping command is allowed to reach **harwbs01.nm.eurocontrol.int**.

(8) A fallback site (near Paris) is also foreseen for CHMI, the fallback route is brewbs01.nm.eurocontrol.int on standard ports (80 & 443).

(9) A CHMI ON-LINE help is also available, at http://harwbs01.nm.eurocontrol.int/chmi_apphelp/index.html (primary connection) and http://brewbs01.nm.eurocontrol.int/chmi_apphelp/index.html (fallback site).

(10) To resume:

SERVERS NAME	TCP ports	Comment
harwbs01.nm.eurocontrol.int	80 & 443	Primary Server for NewPens (BT)
brewbs01.nm.eurocontrol.int	80 & 443	Contingency Server for NewPens (BT)
b2c.contingency.nm.eurocontrol.int	80 & 443	Contingency Server for NewPens (BT)

Table 3: CHMI connection for NewPens users

CHMI ONLINE HELP PAGE
URL= http://harwbs01.nm.eurocontrol.int/chmi_apphelp/index.html URL= http://brewbs01.nm.eurocontrol.int/chmi_apphelp/index.html

Table 4: CHMI online help page for NewPens users

(11) Contact your network administrator to ensure that your network configuration is correctly implemented. Refer to appendix A (Network troubleshooting) for further information.

8.Download CHMI software

8.1 Via NM website

(1) This documentation is available at

(2) http://www.nm.eurocontrol.int/chmi_appsoft/NM_29.0/CHMI/chmiaoinst29.0.0.pdf

(3) The software is available when using the following URL:

(4) http://www.nm.eurocontrol.int/chmi_appsoft/NM_29.0/CHMI/chmi2900.msi

(5) The software has been digitally signed. Refer to anex K.

8.2 CHMI software packaging info

(1) The software needs to be installed with PC full administrator rights.

(2) This software package can be used for Internet connection, NewPens connection (also referred as BT network) or both.

(3) The software package can be installed with both types of connections (BT and Internet). This allows some flexibility for network contingency (BT and Internet). NewPens is only available for ANSP users.

(4) The software package has been validated on Windows 10 64 bits and Windows 11 64 bits. The CHMI software is a full 64 bits application.

(5) For 64 bits applications, logically, the path should be c:\Program Files. To stick the previous installation paths, we kept c:\Program Files (x86).

(6) For a new installation, the average size of the application is approximately 500 Mbytes.

(7) During the normal operation of the application, the average program and user data files are approximately 800 Mbytes.

(8) At each start-up, the CHMI software will check for new software version. Once a new software upgrade is available, it will prompt to download new version. Therefore, it is important to ensure that the location where the CHMI software is located has sufficient permissions to overwrite its previous files.

(9) Ensure that the "end-user" permissions are suitable to allow files modification (write/modify access) to the default CHMI folders (normally C:\Program Files\Eurocontrol\NM Applications\xxxx). Otherwise, the automatic CHMI upgrade shall fail.

(10) During the CHMI software upgrade process, some temporary folders will be created. Eg, c:\Program Files\Eurocontrol\NM Applications\29.0.0\download

(11) A small script is available to check whether the Windows folder permissions are correctly set, refer to appendix B.

(12) In addition, in this release, we also added a diagnostic report to be executed if you required NM assistance, please to appendix A.

9. Upgrade information

9.1 Migration information

(1) The date of the CHMI migration will be communicated via AIM (ATFCM Information Message) and via NM Portal (https://www.public.nm.eurocontrol.int/PUBPORTAL/gateway/spec/index.html).

(2) The scheduled date is Tuesday evening 21/04/2026

(3) Prior to this date, only CHMI 28.0.0 version will work correctly.

(4) **After migration date, only CHMI 29.0.0 will operate correctly. CHMI 28.0.0 will not work anymore.**

(5) You will be informed by AIM and NM Portal when the migration is successful.

(6) A few days after the migration, you may remove CHMI 28.0.0

9.2 CHMI 28.0.0 already installed

(1) If CHMI 28.0.0 is already installed, leave the software installed until the migration date.

(2) Once, the version 29.0.0 is operational, version 28.0.0 becomes obsolete.

(3) Refer Appendix D for the removal of this version.

9.3 CHMI 29.0.0 installation

(1) It is recommended to install CHMI 29.0.0 as soon as possible.

(2) Both versions (28.0.0 and 29.0.0) can be installed on the same PC (no conflict).

(3) For testing purposes, after installing the application, launch the application, you should see the NM Welcome window. This means that the CHMI client is communicating correctly with the NM server.

(4) If you try to login prior to the migration date, you will get an authentication error even if your username/passcode is valid.

10. Installation of CHMI software

10.1 Introduction

(1) If you accept all the default settings, the CHMI software will be installed for an Internet Connection.

(2) If you want to use this software only for a NewPens connection, you will have to choose the Custom installation type and select NewPens Connection and unselect Internet connection.

(3) Only enter a valid Internet proxy during the installation. In case of doubt, leave the Internet proxy field blank. If you typed in a wrong value, you must uninstall then re-install the application.

(4) Ensure that you are installing the software with Windows administrator rights.

(5) Whenever it is possible, we recommend that the default settings are used during the installation phase. This will allow our technical staff to better support the application.

10.2 Retrieve internet proxy information.

(1) During the installation you will be prompted to enter your internet proxy information.

(2) The internet proxy information is defined as a system environment variable.

(3) To determine the value of the “CHMI_PROXYHOST_29_0” value, refer to appendix C

10.3 Execute the CHMI software

(1) *Execute the file "**chmi29.0.0ao.msi**"*

(2) You will see the Welcome window

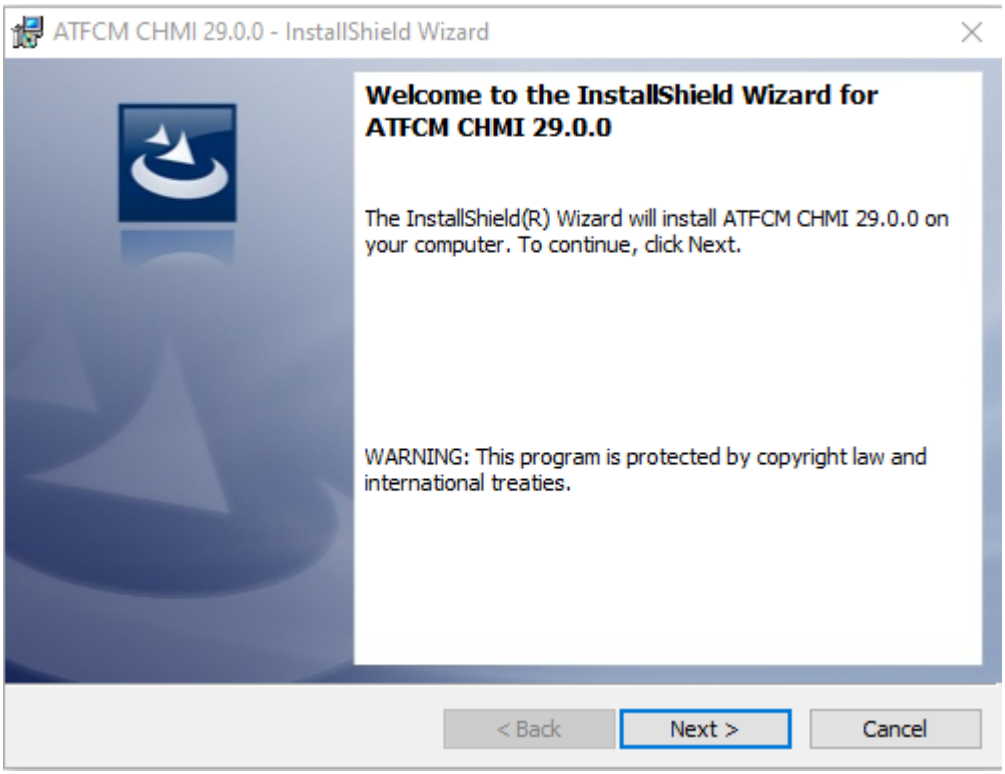


Figure 1: Base - Welcome menu

(3) If you see one of the below window (Windows Installer) it means that the software is already installed (refer to appendix D to remove the **CHMI-29.0.0-AO** software).

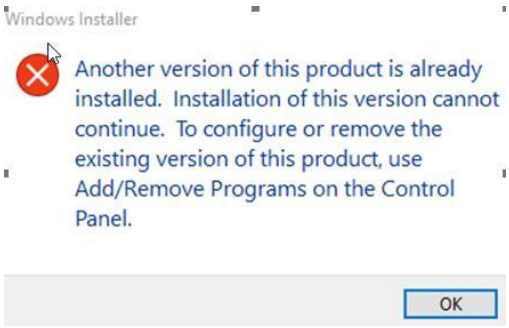


Figure 2: software already installed

(4) Otherwise

(5) Click “Next” button to continue

(6) You will be prompted with the license agreement

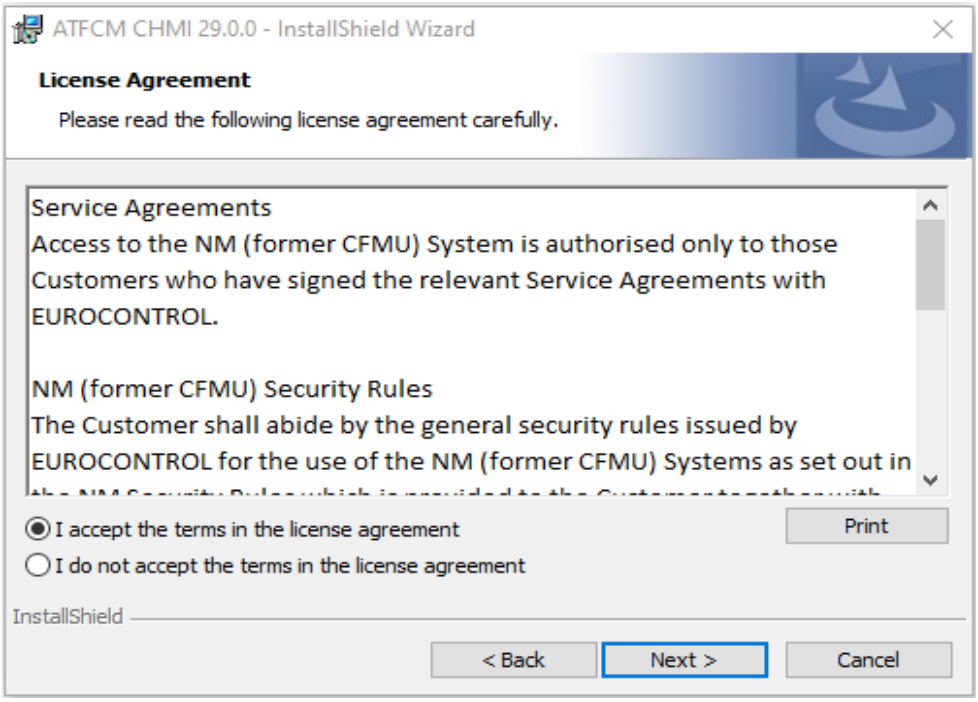


Figure 3: Base - License agreement

(7) If you accept the license agreement, select “I accept the license agreement” then click “Next” to continue

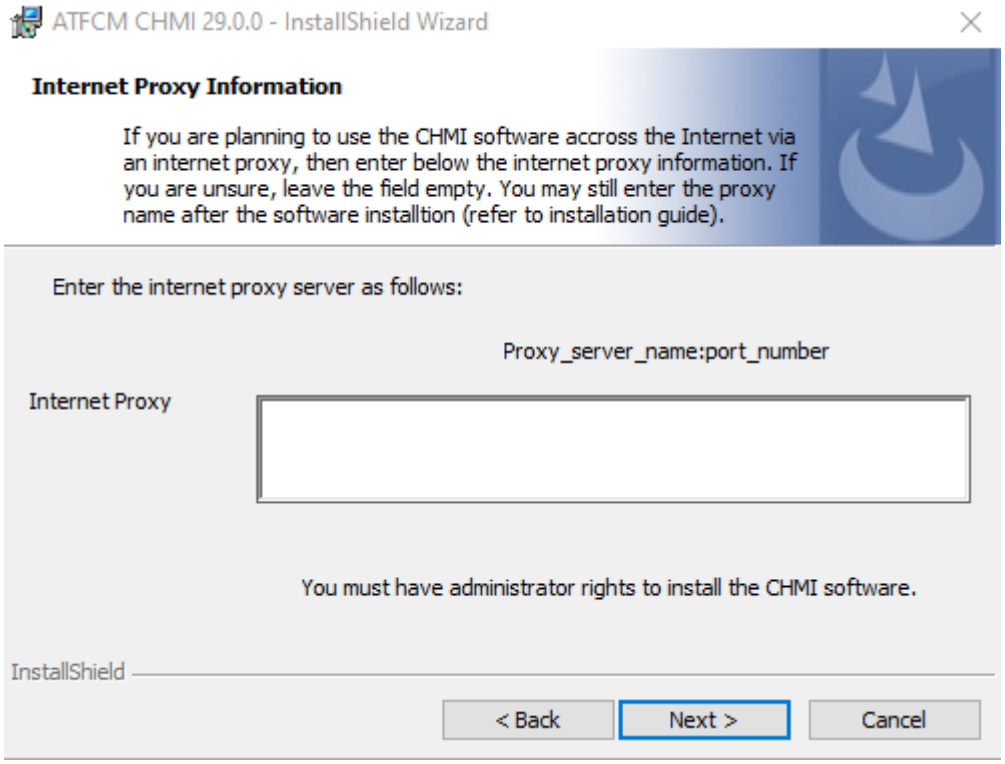


Figure 4: Internet Proxy

(8) If you have an Internet Proxy, type in a valid proxy server name and port number separated by a colon (e.g. server_name:1234), then click the next button.

(9) If CHMI 28.0.0 is already installed, you may use the same value. Refer to Appendix C to display the internet proxy name and port number.

(10) If you are unsure, contact your network administrator.

(11) If you are not using the application via Internet, click “Next” to continue.

10.3.2 Select Installation type

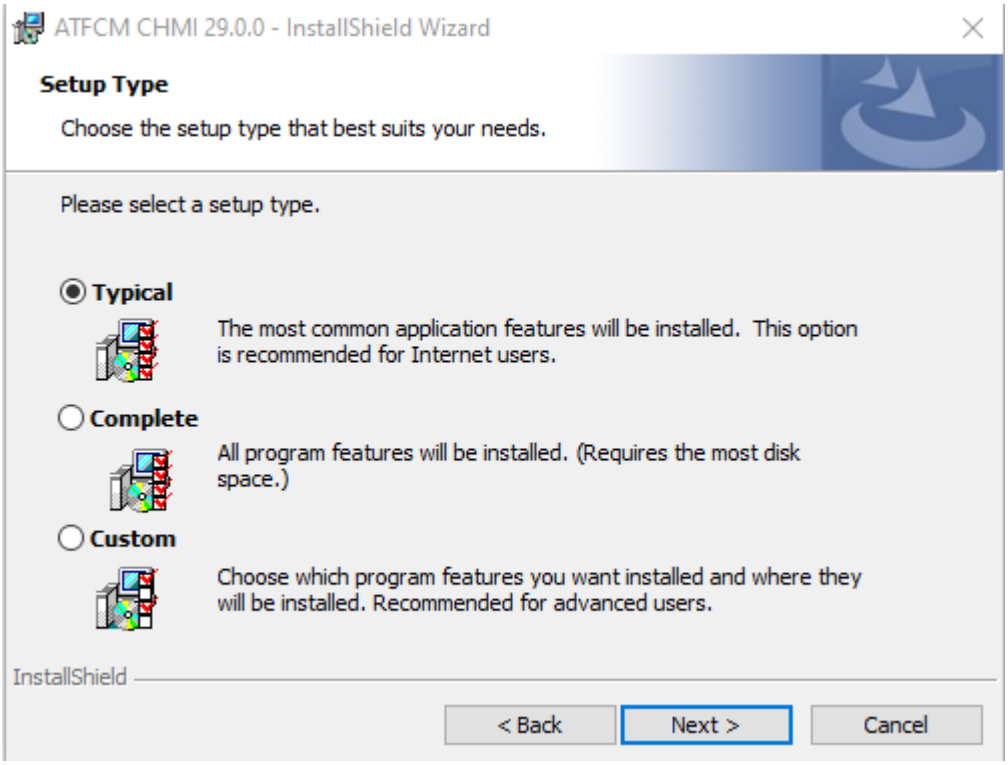


Figure 5: Select Installation type

10.3.2.1 Option 1 Typical : Internet connection

(1) If you only need the Internet connection, select the “Typical”, then click “Next” button to continue. To continue, go to section 0 (page 19).

10.3.2.2 Option 2 Complete : Internet and Extranet connection

(1) If you would like both types of connection, select “Complete”, then click “Next” button to continue. To continue, go to section 0 (page 19).

10.3.2.3 Option 3 Custom

(1) You may use this option to change the default directory.

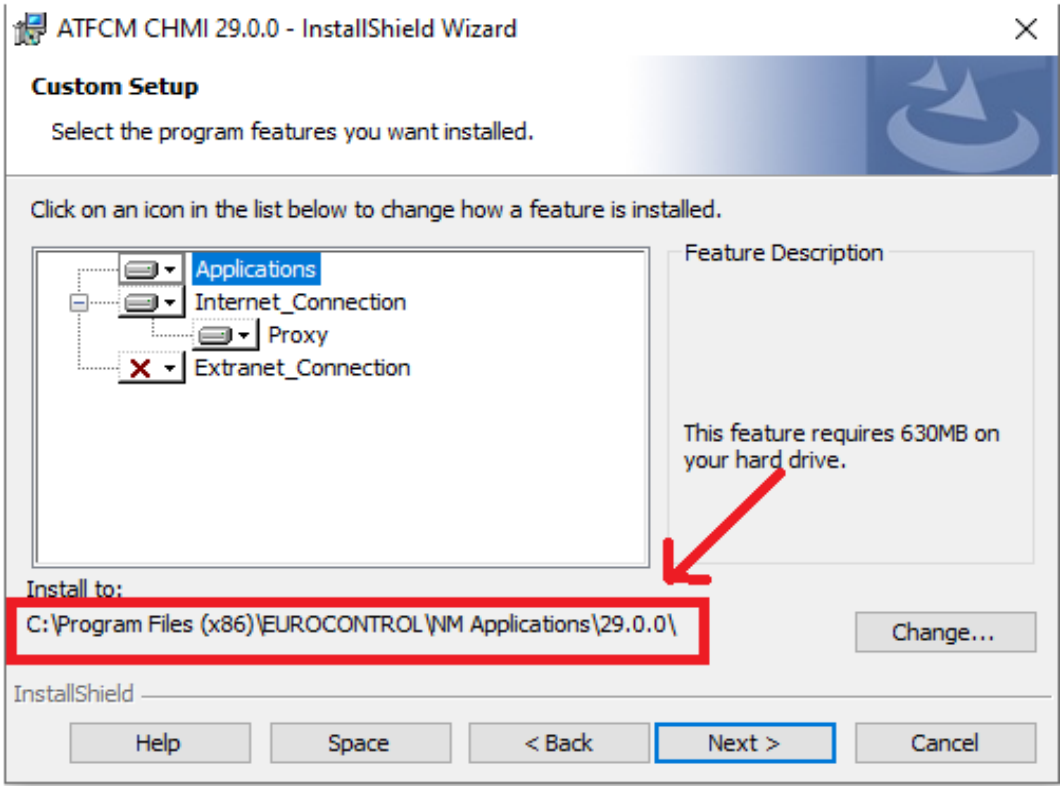


Figure 6: Select directory

(2) So that you can choose a directory which is not under c:\Program File (x86) where write/modify permissions are less strict, eg c:\EUROCONTROL\29.0.0

10.3.3 Ready to install the application

(1) After choosing the appropriate feature, the following window will appear:

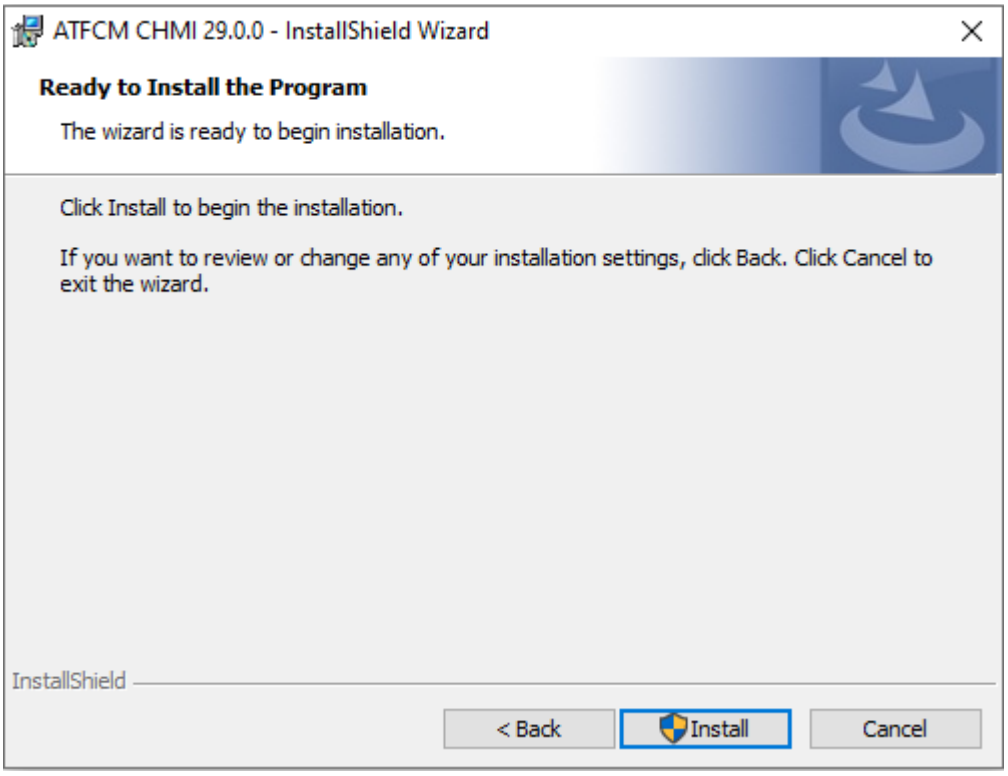


Figure 7: Select ready

(2) Click on the “Install” button, the software will now be installed.

(3) When the installation software is complete, the following screen will appear:

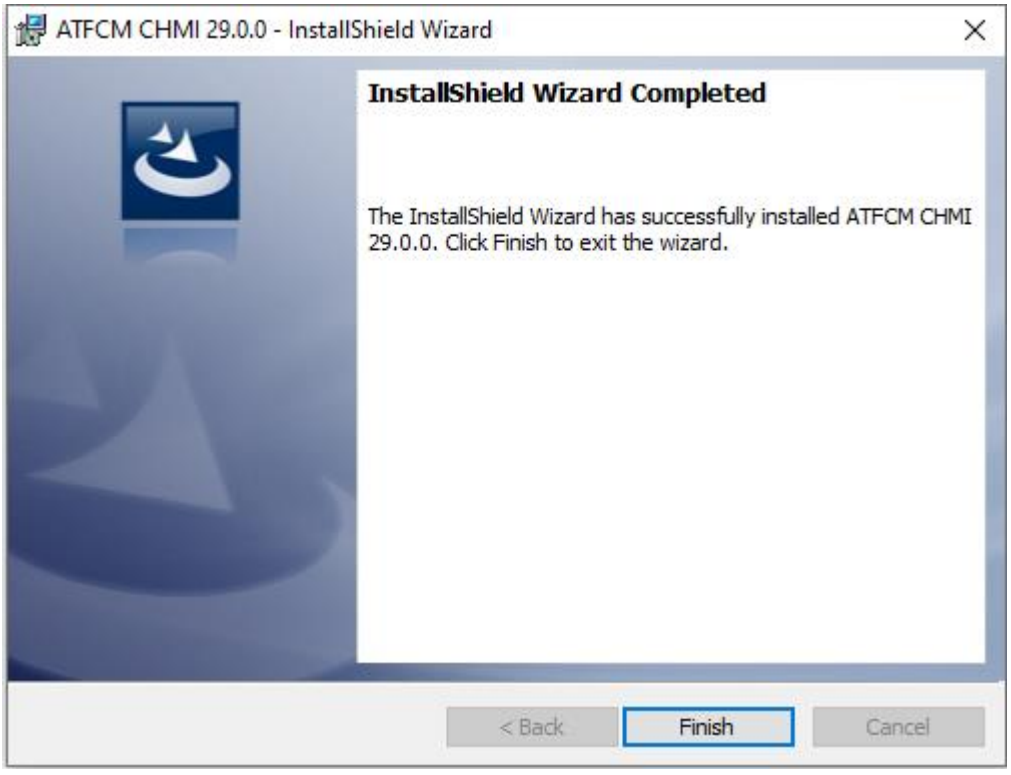


Figure 8: Successfully installed

(4) Click on Finish.

(5) The installation is now complete.

10.3.4 Check Your Files and Folder Permissions

(1) Refer to appendix A & B .

11. Available shortcuts

11.1 Internet Shortcuts

(1) The following Internet shortcuts are available in the start menu:

(2) **Start/Programs/NM Applications/CHMI 29.0.0 via Internet** shortcut which is the main shortcut to start the CHMI application.

(3) **Start/Programs/NM Applications/CHMI 29.0.0 via Internet (contingency)** shortcut. If the Network Manager enters into a contingency situation, the CHMI application is still available but via another remote host site (Paris instead of Brussels).Only use this shortcut when instructed by the NM staff.

11.2 Extranet Shortcuts

(1) The following extranet shortcuts are available in the start menu:

(2) These shortcuts can be used if your PC is connected to the NewPens network currently managed by BT.

(3) **Start/Programs/NM Applications/CHMI 29.0.0 via Extranet** shortcut which is the main shortcut to start the CHMI application.

(4) **Start/Programs/NM Applications/CHMI 29.0.0 via Extranet (contingency)** shortcut: If the Network Manager enters into a contingency situation, the CHMI application is still available but via another remote host site (Paris instead of Brussels).Only use this shortcut when instructed by the NM staff.

11.3 AIRAC Shortcuts

(1) The following AIRAC shortcuts are available in the start menu:

(2) **Start/Programs/NM Applications/CHMI 29.0.0 ENVPREVAL1 (Next AIRAC)** shortcut NM Airspace data available ± 15 days before AIRAC switch is still subject to NM Airspace data changes (Internal NM validation process, Late publication, …);.

(3) **Start/Programs/NM Applications/CHMI 29.0.0 ENVPREVAL1 (Next AIRAC) Extranet** shortcut. Same as the previous one but for NewPens users

(4) **Start/Programs/NM Applications/CHMI 29.0.0 ENVPREVAL3 (Adhoc AIRAC)** shortcut NM Airspace data available for Ad-Hoc AIRAC(s) will be incomplete in NM system. Only required pre validation NM Airspace Data will be available.

(5) **Start/Programs/NM Applications/CHMI 29.0.0 ENVPREVAL3 (Adhoc AIRAC) Extranet** shortcut. Same as previous shortcut but for NewPens users.

(6) **Start/Programs/NM Applications/CHMI 29.0.0 ENVPREVAL5 (Adhoc AIRAC)** shortcut NM Airspace data available for Ad-Hoc AIRAC(s) will be incomplete in NM system. Only required pre validation NM Airspace Data will be available. This is another Airac season. For more information, please contact Flight Data ADS team.

(7) **Start/Programs/NM Applications/CHMI 29.0.0 ENVPREVAL5 (Adhoc AIRAC) Extranet** shortcut. Same as previous shortcut but for NewPens users.

(8) The availability of access to the NM Validation / Pre-validation systems depends on the availability of both back-end servers;

11.4 PREOPS Shortcut

(1) **Start/Programs/NM Applications/CHMI 29.0.0 PREOPS** shortcut: you can use this shortcut if you wish to compare data of the PREOPS chain (eg **B2B PREOPS** and PORTAL PREOPS data).

11.5 Training Shortcut

(1) **Start/Programs/NM Applications/CHMI 29.0.0 TT1** shortcut: use this shortcut during a training course (in coordination with a CHMI instructor).

(2) **Start/Programs/NM Applications/CHMI 29.0.0 TT3** shortcut: use this shortcut during a training course (in coordination with a CHMI instructor).

(3) **Start/Programs/NM Applications/CHMI 29.0.0 TT5** shortcut: use this shortcut during a training course (in coordination with a CHMI instructor).

11.6 Maintenance Shortcuts

(1) **Start/Programs/NM Applications/CHMI 29.0.0 reinitialize_all.lnk** shortcut:

(2) You will need to use this shortcut to remove all traces of software update failure due to CHMI configuration issues (mainly folder permissions).

(3) **Start/Programs/NM Applications/CHMI 29.0.0 reinitialize_map_cache.lnk** shortcut:

(4) this shortcut will delete the CHMI local map cache. If the map cache file is missing, the CHMI will retrieve the LATEST available file from the CHMI server. This could speed up your plot operation. You will need to execute this shortcut when the CHMI is not “running”.

(5) At each AIRAC date (a calendar is available in the CHMI/help/AIRAC cycles menu), the CHMI will download a new Airac map cache file (which contains the latest route/point/restrictions). At each CHMI start up, the local map cache is updating the file with the latest environment live update.

(6) **Start/Programs/NM Applications/CHMI 29.0.0 debug mode.lnk** shortcut:

(7) If you experience any technical problem, you might be instructed by CSO help desk to operate in Debug mode. In this mode, a very detailed log is produced in the ..\log folder. You will need to send these files to NM CSO email address.

12. Operations

12.1 Introduction

(1) After the successful migration of the NM applications, an AIM (ATFCM Information Message) will be distributed and the successful migration will be also published on the NOP portal headline News (https://www.public.nm.eurocontrol.int/PUBPORTAL/gateway/spec/index.html)

(2) When the NM applications are available, the CHMI logon screen will be available.

12.2 Internet Connection

(1) To start CHMI 28.0.0, launch the applications from **Start/Programs/NM Applications/CHMI 29.0.0 via Internet.**

(2) If you have configured the software with an Internet proxy, you will first be prompted with "**NM authentication for Internet Access proxy"** logon screen:

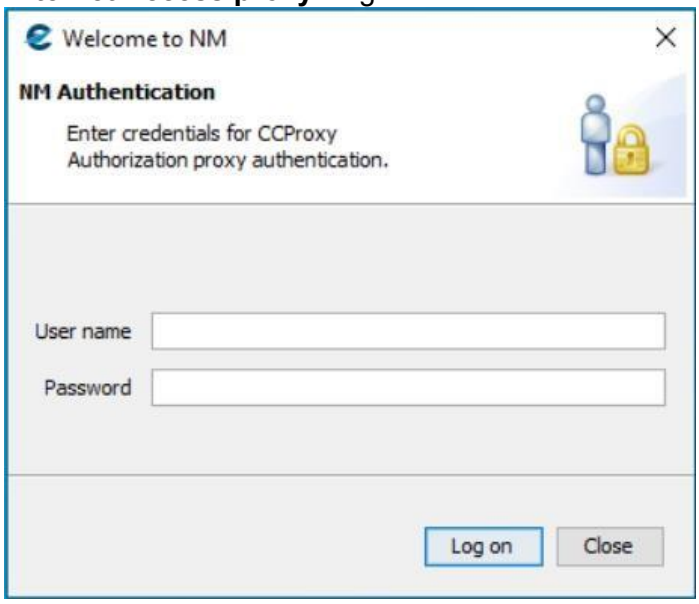


Figure 9: CHMI Internet proxy logon

(3) Enter your company "**Internet Proxy**" user name and password. If you are unsure, please contact your PC or network administrator.

(4) After a successful login, you will be prompted with the "**NM authentication**" logon screen.

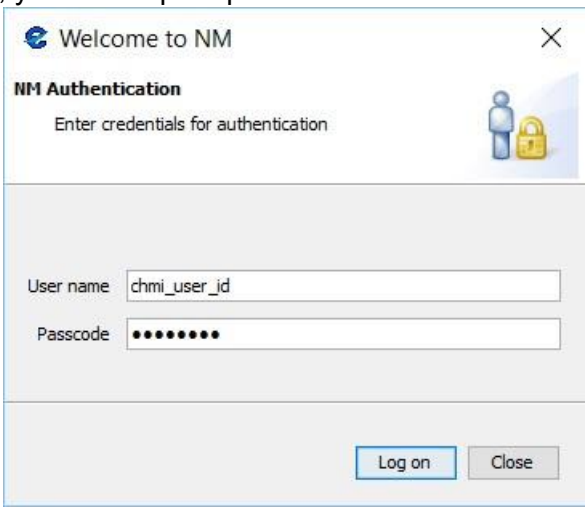


Figure 10: CHMI ACE logon

a) Enter the CHMI user name assigned by the Network Manager Customer Support.

b) Enter the passcode generated with the RSA software token tool.

c) For more information, refer to appendix H

(5) If you tried to login to the application before the NM migration date (normally foreseen on 21/04/2026 in the evening), you will get this error message after a successful login (with your RSA token).

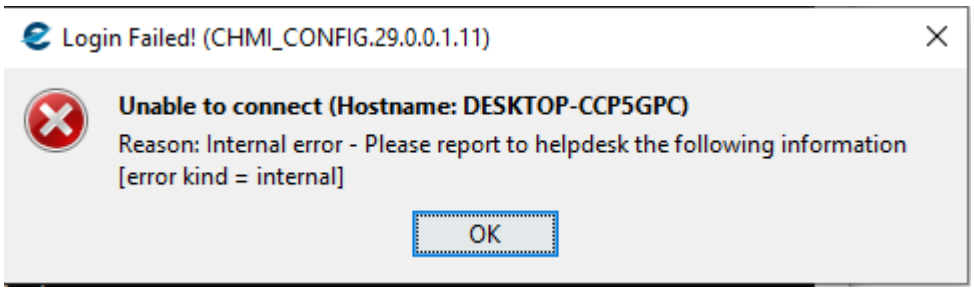


Figure 11: Unable to connect

12.3 Extranet Connection (NewPens).

(1) To start CHMI 29.0.0, launch the applications from **Start/Programs/NM Applications/CHMI 29.0.0 via Extranet.**

(2) After a few seconds, you will be prompted with the "**CFMU authentication**" logon screen. If you do not see this window then refers to the Appendix (Network troubleshooting).

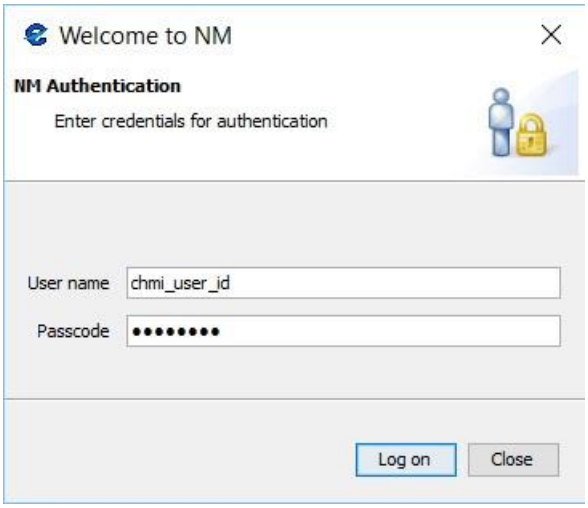


Figure 12: CHMI RSA logon

(3) This CHMI logon window requires that you enter your login.

a) Enter the CHMI user name assigned by the Network Manager.

b) Enter the passcode generated with the RSA software token tool.

c) For more information, refer to appendix "I".

13. Import of CHMI preferences.

13.1 Migration of preference files for Windows 10 – 64 bits.

(1) Ensure that the CHMI application is closed before executing the script.

(2) If you wish to import, CHMI preferences of the previous version (27.2.0), you need to execute the following script:

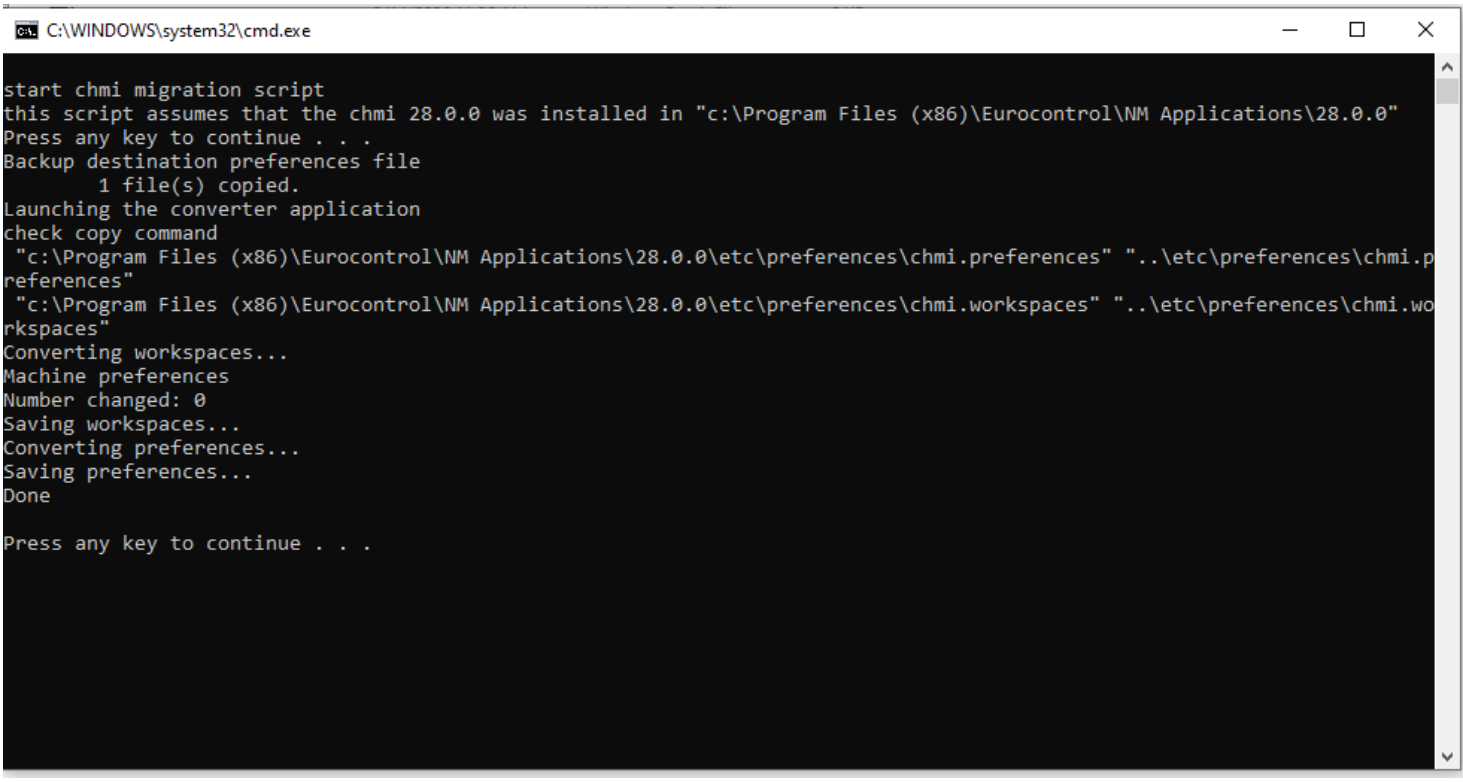
```
c:\Program Files (x86)\Eurocontrol\NM Applications\29.0.0\bin\2026ao-migrate_workspace_and_preference-64BITS.bat
```

(3) The script assumes that the old preference files are located in "c:\Program Files (x86)\Eurocontrol\NM Applications\28.0.0\etc\preferences" and that the new version is located in "c:\Program Files (x86)\Eurocontrol\NM Applications\29.0.0\etc\preferences"

(4) If this is not the case, the script will detect the missing chmi.preferences and you will have the possibility to propose a new location.

(5) If you chmi.preferences is located in C:\NM\CHMI\ETC directory, then enter C:\NM\CHMI\ETC or “C:\NM\CHMI\ETC”

(6) If a valid location is found, you will see the output with the directory command.



(7) Press CTRL-Z if you wish to interrupt the script.

14. Test you application before the migration

(1) If you want to verify, your installation, you can try to connect to our test system.

(2) The test system is available until 20/04/2026.

(3) With Windows Explorer, goto your CHMI directory.

(4) Locate a file named: ..\bin\chmi\CHMI_29.0.0_via_www_test1_nm_eu_int.bat (5)

(5) Execute the batch file

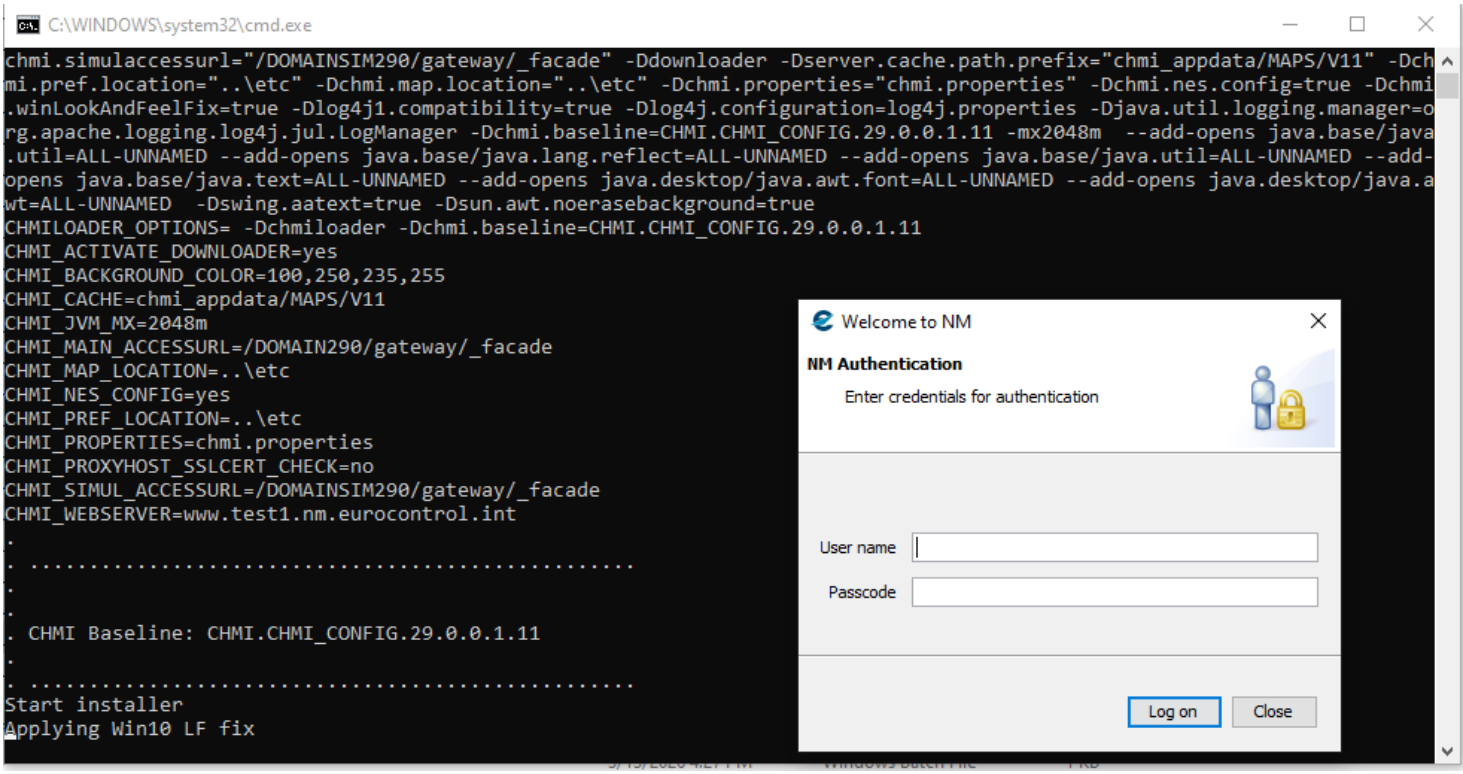


Figure 13: test1

(6) In case of the Internet proxy prompt

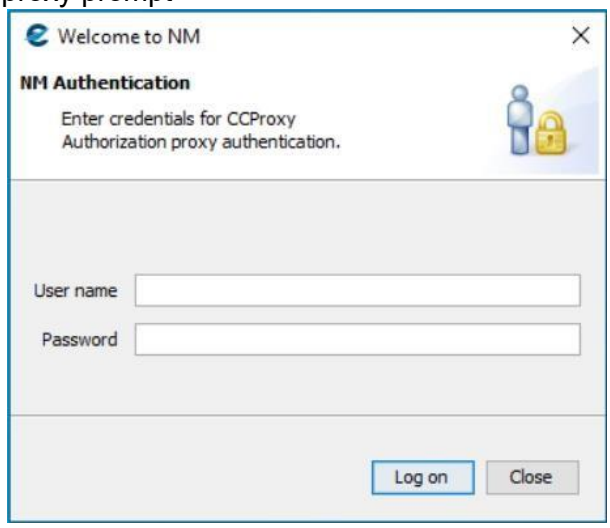


Figure 14: CHMI proxy authentication

(7) Enter your company "**Internet Proxy**" user name and password. If you are unsure, please contact your PC or network administrator.

If your "company" proxy authentication is successful, you will see the NM welcome screen

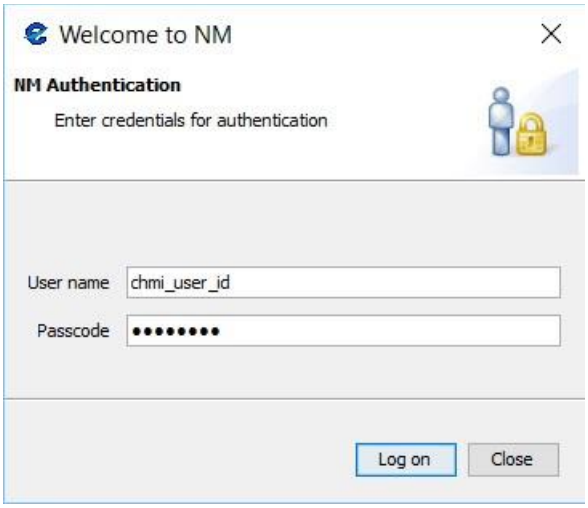


Figure 15: test3

(8) Enter your NM credentials.

(9) In case of multiple profile, select the SATI domain (which is a test domain).

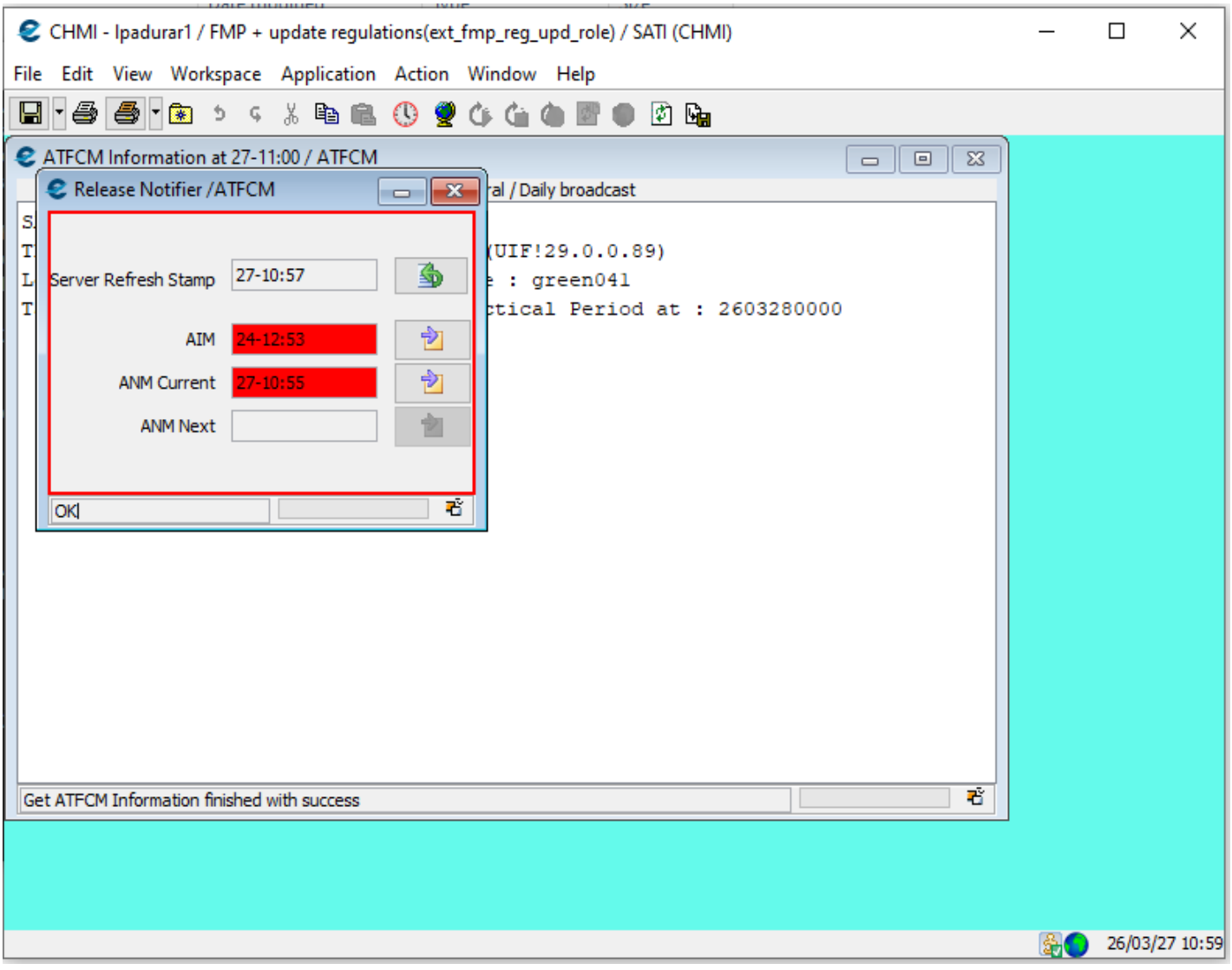


Figure 16: test -connected to SAT_I server

(10) You are now connected successfully to our test system.

(11) At this stage you can disconnect and wait until the migration date.

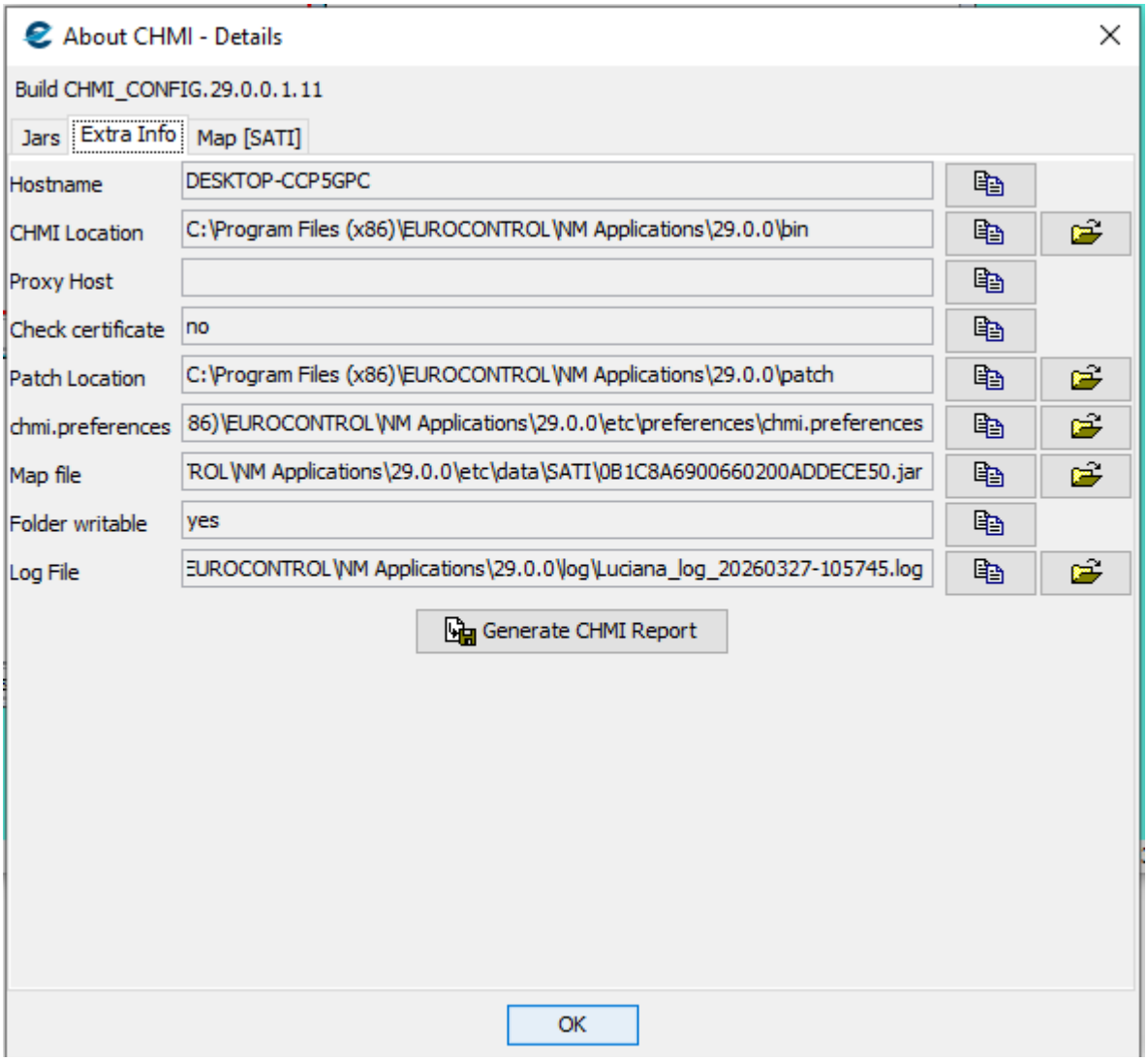
APPENDICES

A New diagnostic tool imbedded in CHMI.

(1) After a successful login, goto Help/About in the Menu line

(2) Click on Details (lower left corner)

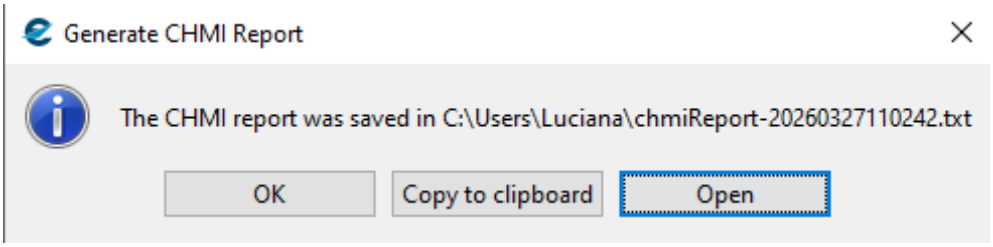
(3) In the Extra Info tab, you will see:



(4) Always ensure that the folder is writable (yes).

(5) If you have defined a proxy variable, it should be visible in the above print screen.

(6) Click on Generate CHMI report



(7) Click on **Copy to clipboard**, this will copy the location of the chmiReport in the clipboard.

(8) Send an email to NM CSO Help Desk team, with the chmiReport as an attachment.

B Chmi folders and files permissions.

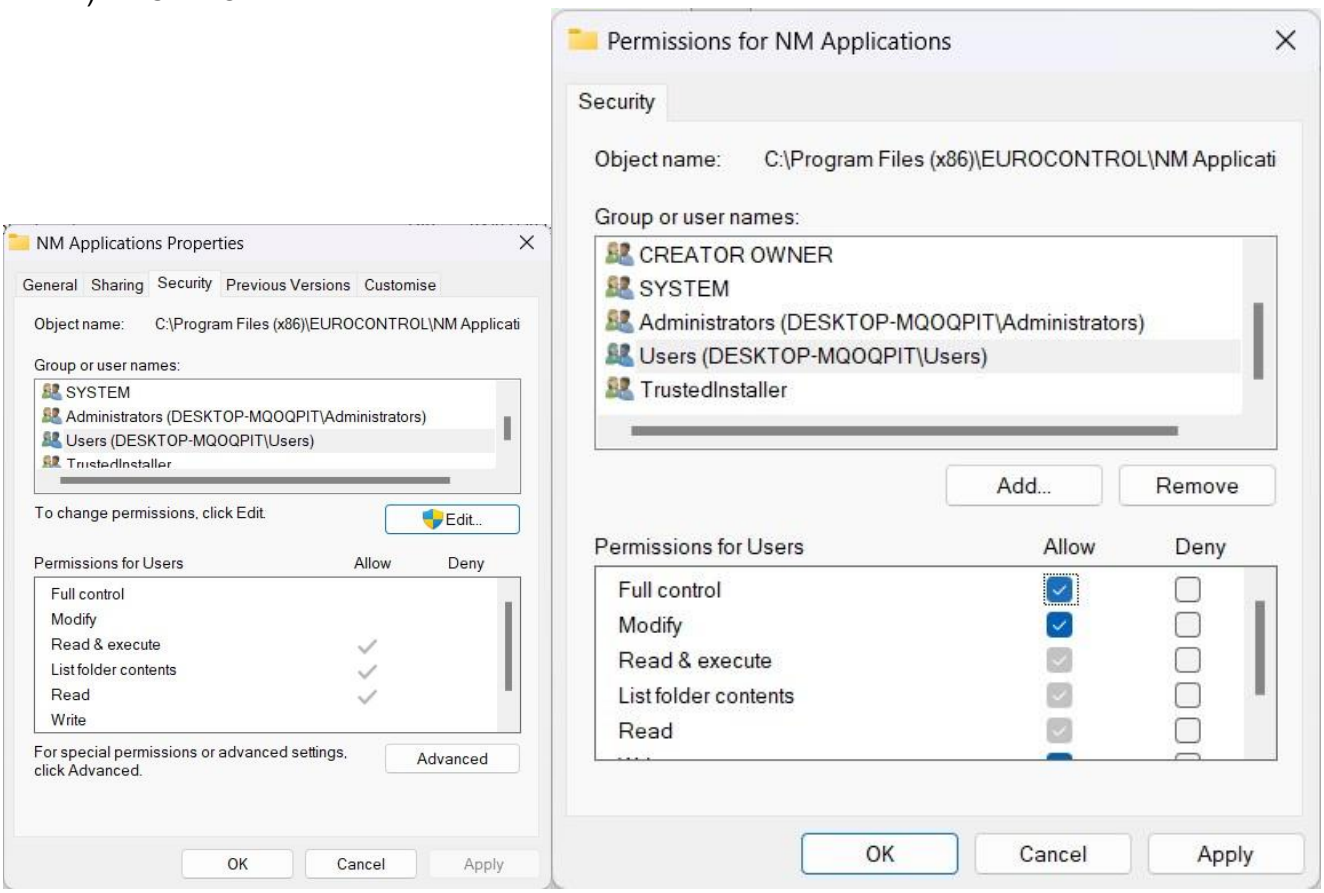
(1) **If the CHMI installation is not correctly configured, at the next CHMI software upgrade, the CHMI shall fail the download operation and will no longer operate.**

(2) We recommend your **local IT/Administrator** to verify the permissions directly on the **CHMI 29.0.0 folder: Ensure "Permissions for Users"**

a) On C:\Program Files (x86)\Eurocontrol\NM Applications\29.0.0

b) Right click with the mouse on the 29.0.0 folder. Choose Properties – on Security tab click on Edit button, select "USERS", grante Full Control.

c) Click OK button



On the left before, on the right side, after changing permissions

Figure 17: Change Users permissions

(3) If you see the below message during the process of the CHMI upgrade and right after the restart, it is likely that your folder needs set to be corrected.

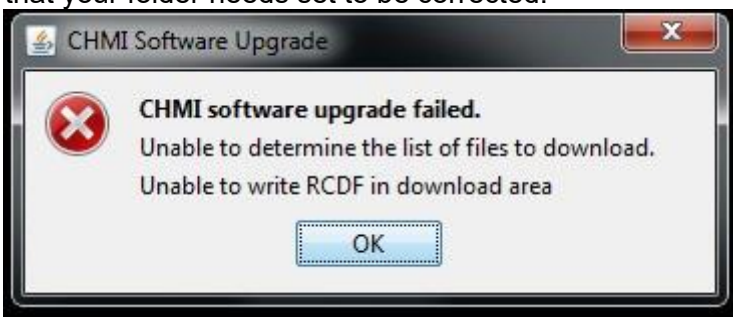


Figure 18: Upgrade failed

(4) CHMI software 2 scripts

a) **Script 1: test_permissions.bat**

b) **Script 2: reinitialize_all.bat**

(5) A small script is available to check your Windows folders/file permissions.

(6) Login to Windows with the end-user profile (used for CHMI operations).

(7) Launch **c:\Program Files (x86)\Eurocontrol\NM Applications\29.0.0\bin\test_permissions.bat**

(8) If you see, the following message

```
************************************************************
TEST OK
TEST OK TEST
OK
folder log2 and file HelpLink.txt exist, thus the test is OK,
CHMI Folder permission looks good
TEST OK
TEST OK
TEST OK
************************************************************
```

(9) Then you may assume that the CHMI can create folders and write files within the CHMI folders.

(10) Then the test is successful.

(11) In case of failure, you will see:

```
File Not Found
Press any key to continue . . .
The system cannot find the path specified.
************************************************************
TEST NOT OK
TEST NOT OK
TEST NOT OK
TEST file is missing after copy operation
Please check CHMI Folder permission with your PC administrator
TEST NOT OK
TEST NOT OK
TEST NOT OK
************************************************************
Press any key to continue . . .
```

(12) There is a second script (..*Eurocontrol\NM Applications\29.0.0\bin\reinitialize_all.bat)which* will allow to “repair” the download and patch directories.

(13) *The repair script is accessible via the start menu **Start/Programs/NM Applications/CHMI Reinitialize All** shortcut should be used when instructed by NM technical staff (eg: problems downloading patches).*

(14) If you still encounter, file permission issues, please try to install in another folder, eg : **c:\EUROCONTROL\CHMI29.0.0**

(15) For ANSP option-2 Pcs, NM services is taking care that the PC is correctly configured.

C Network troubleshooting

C.1 CHMI connected to the NewPens network

(1) If you get this error message (see below) after starting the application, it means that the CHMI application cannot communicate with the CHMI server.

Figure 19: Unable to connect

(2) From the PC, perform the following tests

(3) Test 1 (to ensure that the PC can resolve correctly IP name resolution)
- PING **harwbs01.nm.eurocontrol.int**
- Action: contact your network specialist

(4) Test 2 (to ensure that the PC can resolve correctly IP name resolution)
- PING **brewbs01.nm.eurocontrol.int**
- Action: Contingency site is only available during disaster recovery operations.

(16) Also note, that if the date of the PC is completely wrong (eg, wrong year), you may also get this error.

C.2 CHMI connected to the Internet

(1) Typical error message

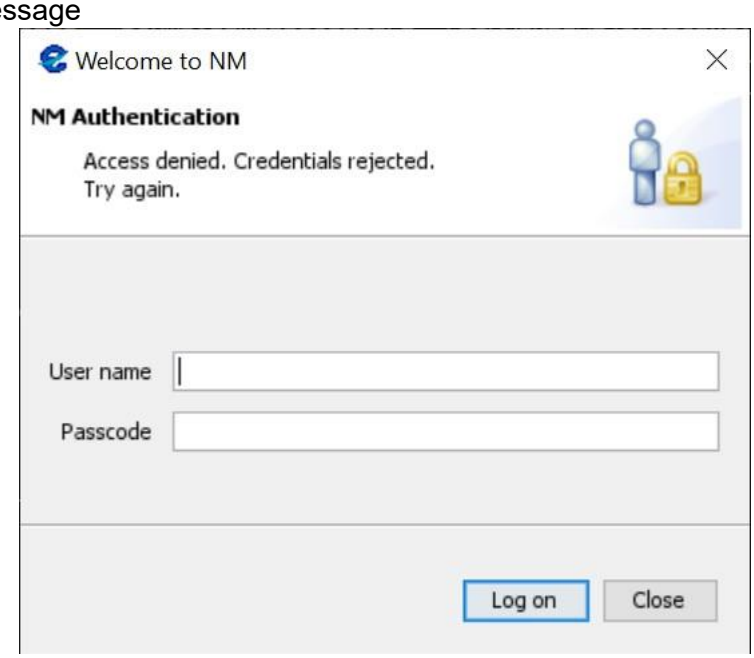


Figure 20 Access denied

(2) After several attempts, the account is locked, contact CSO help desk for assistance.

(1)

D Start the CHMI application in DEBUG mode

If you experience any technical problems with the CHMI (eg network, windows or application problems related to the CHMI application, you might be requested by the NM technical staff to start the CHMI application with extended log files.

(2) Execute the shortcut “start menu\NM Applications\CHMI 29.0.0 debug mode”

(3) Press enter to continue

(4) From now on, every time when you start the CHMI application, every CHMI transactions will be recorded locally in log folder.

(5) Normally the log file is located under “c:\Program Files (x86)\Eurocontrol\NM Applications\29.0.0\log\” folder.

(6) CHMI logs files are kept **60 days** on the PC (file retention date).

(7) In order to allow NM technical staff to analyse the problem, you will have to send these log files (including dir.log.zip) to the help desk.

(8) The above procedure is not available on ANSP option-2 Pcs.

(1)

E To determine CHMI system variables

Press Start, and then choose Run option, type “CMD”.

(2) At the Windows DOS box, type “set CHMI” and then press ENTER button

(3) It will display a similar window:

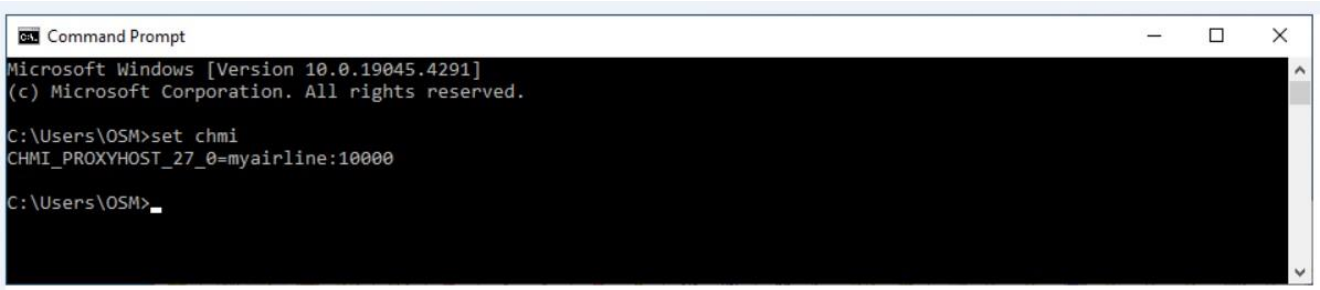


Figure 21: Display CHMI system environment

(4) In the above example, the “**CHMI_PROXYHOST_27_0**” value is “myairline:10000”, where myairline is “your” server name and port number is 10000.

(5) For the CHMI 29.0.0, the system variable is now called **“CHMI_PROXYHOST_29_0”**

(6) Setting up this proxy server is only needed for Internet connection via a corporate internet server.

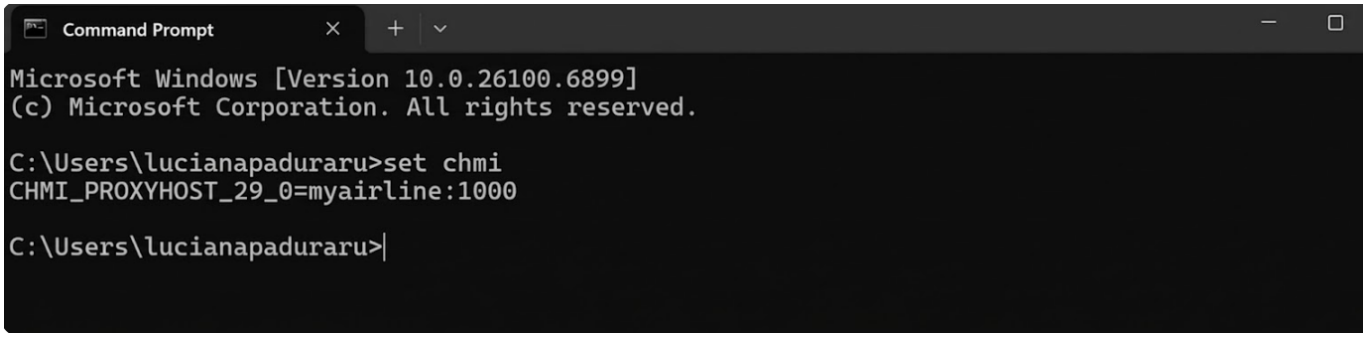


Figure 22: Display CHMI proxy name for CHMI 29.0.0

(7) In the above example, you see the correct CHMI_PROXYHOST_29_0 name.

(8) Contact your PC or network administrator for more information.

F Removal of CHMI software

Ensure that the CHMI application is not running.

(2) Start/Control Panel/Programs and Features/Uninstall or change a program

(1)

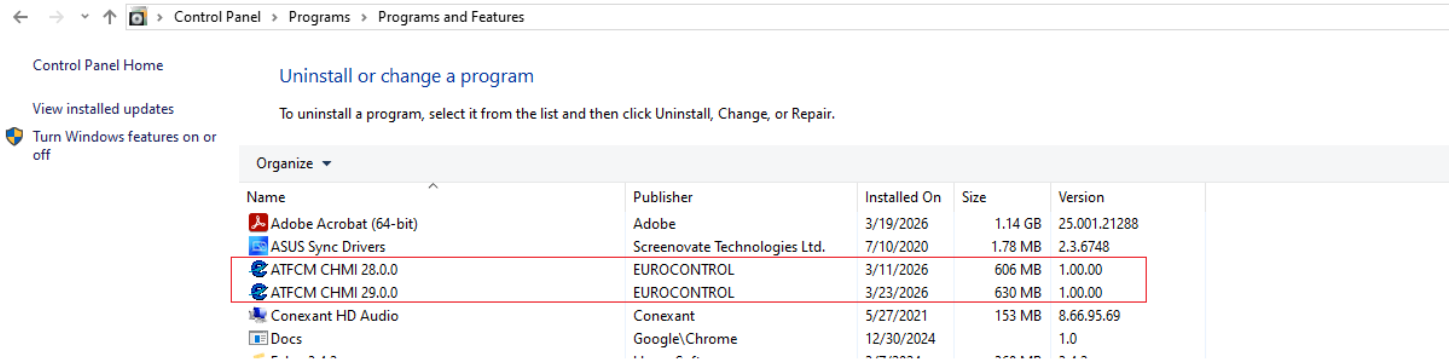


Figure 23: control panel/Program and Features

a) For <u>version 28.0.0</u>

i) To remove the CHMI software, select **ATFCM CHMI-28.0.0** and then right-click on the “uninstall” option.

ii) Click “ok” button when prompted that the setup must update files or services.

iii) Choose “Yes” button.

iv) Click OK if prompted that a reboot will be required to complete the setup.

Also remove the folder : “c:\Program Files\Eurocontrol\NM Applications\28.0.0\” and/or “c:\Program Files(x86)\Eurocontrol\NM Applications\28.0.0\”

G Reset Map errors

(1) In some rare cases, the map does not plot correctly.

(2) Please use the shorcut to remove map files from the CHMI, depending of your Windows 10 configuration, the location may vary:

a) Start Menu\Programs\NM Applications\Tools**CHMI 29.0.0 reinitialize_map_cache**.

b) Start Menu\NM Applications**CHMI 29.0.0 reinitialize_map_cache**.

(3) Or execute the script C:\Program Files (x86)\EUROCONTROL\NM Applications\29.0.0\bin\reinitialize_map_cache.bat

CHMI Certificate check

G.1 Background information

(1) As from CHMI version 10, there is a possibility to **enhance certificate check** during the CHMI authentication start-up session.

(2) By default, the certificate check is disabled **SET CHMI_PROXYHOST_SSLCERT_CHECK=no** (to ensure compatibility with previous CHMI version).

(3) If the variable is set to **yes,** CHMI **will** start-up and check for validity and against the list of trusted certificate issuers.

a) Verify that the certificate is signed by one of the trusted CA's,;

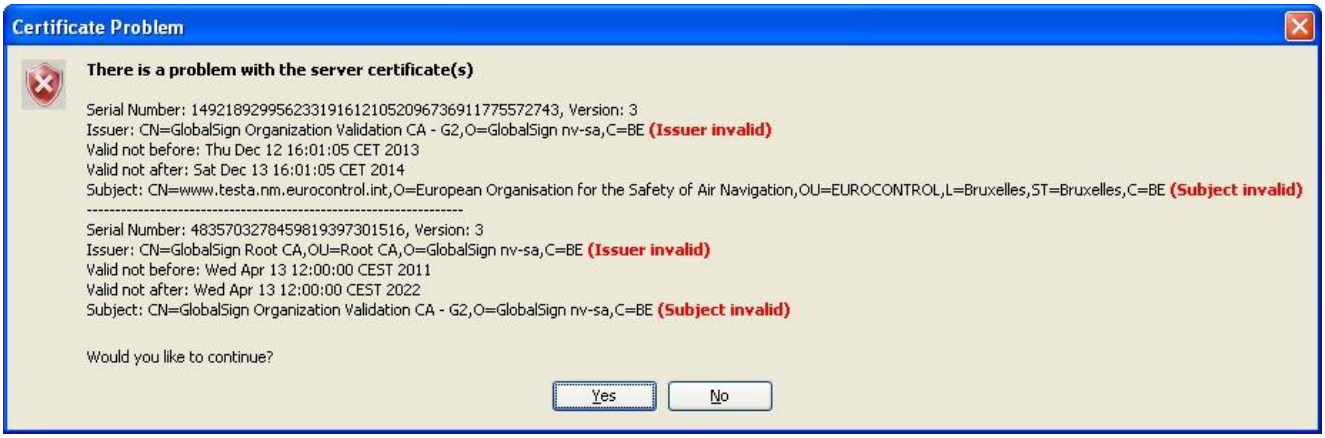
b) Verify that the certificate is valid at the time of testing (validity period);

c) Verify that the certificate is issued for the CFMU SSL server (distinguished name).

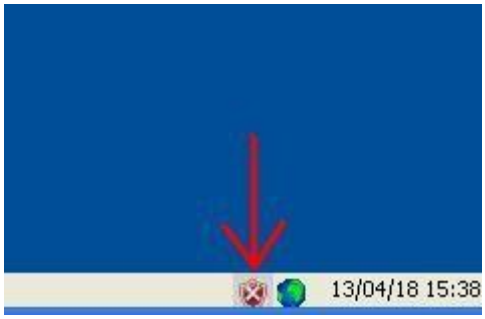
G.2 Certificate errors

(4) If at least one **untrusted** certificate is found, the entire certificate chain is considered **untrusted** and a warning to the user is displayed regarding the invalid certificates.

(5) You will be prompted with a similar "Certificate Problem" popup window:

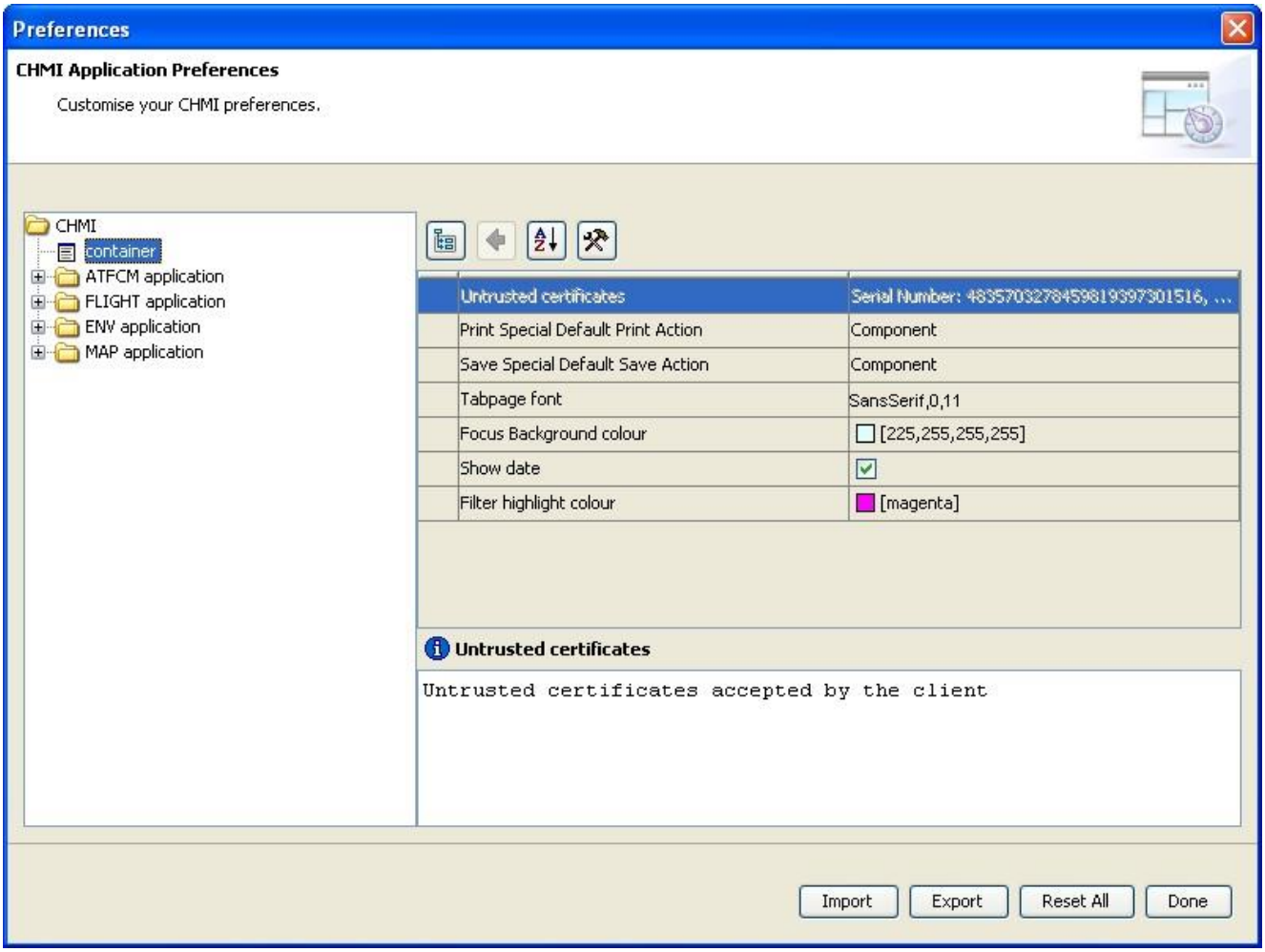


(6) If the CHMI user clicks **No**, CHMI terminates. If the user clicks **Yes**, CHMI continues and a warning icon is displayed at the bottom right side corner:



(7) When the user clicks on the icon, the certificate problem dialog (above) is displayed.

(8) Because it can be annoying to the user to be shown the certificate warning dialog every time he starts CHMI, once the user has approved the invalid certificates, the certificate data is extracted as a string and is added as a read-only Preference value:



(9) Next time when CHMI is started if invalid certificates are found, they are compared with the value stored in the preferences. If all the invalid certificates match the certificate data stored in the Preferences, no warning dialog is displayed and only the warning icon at the bottom is shown.

(10) The CHMI-user can view the data for the certificates that failed the validation check by clicking on the certificate warning icon; the certificate problem dialog with information about the untrusted certificates is shown.

(11) If there is an undesired behaviour of the certificate check functionality, which would inhibit the normal system operation, like for example the user not being able to log on, or being given false warnings, the certificate check can be disabled.

G.3 Enable Certificate check

(12) To enable the certificate check, set the value of **SET CHMI_PROXYHOST_SSLCERT_CHECK to yes**

(13) To do this, edit the file **run_CHMI_29.0.0_via_internet.bat (located in c:\Program Files (x86)\Eurocontrol\NM Applications\29.0.0\bin\chmi)**

SET CHMI_PROXYHOST_SSLCERT_CHECK=yes

G.4 Disable Certificate check

(1) To do this, in the run_CHMI_29.0.0_via_internet.bat (located in c:\Program Files\Eurocontrol\NM Applications\29.0.0\bin\chmi) file that is used to start CHMI include the following line:

SET CHMI_PROXYHOST_SSLCERT_CHECK=no

(14) This will bypass the certificate check and will let the user connect even if there are untrusted certificates. Of course, this has to be used only until the problem is fixed, the value has to be switched to yes, or the above line deleted.

G.5 Remove certificate information from the chmi.preferences file

G.5.1 Certificate cleanup Script

(1) If you have installed the CHMI with all default settings (default destination folder), execute **c:\Program Files\Eurocontrol\NM Applications\29.0.0\bin\remove-certificateinfo-aomigrate_workspace_and_preference.bat**

G.5.2 Manual cleanup

(15) Edit c:\Program Files\Eurocontrol\NM Applications\29.0.0\etc\preferences\chmi.preferences

(16) **delete** the line containing the following sting **: chmi.container.certificateinfo**

H RSA SecurID Software Token for Windows

H.1 RSA software for Windows 10.

(1) Refer to https://www.rsa.com/en-us/products/rsa-securid-suite/rsa-securid-access/securidsoftware-tokens.html

(2) Or https://community.rsa.com/docs/DOC-73395

(3) For your convenience, a copy of the software is available on our Eurocontrol NM web site:

(4) http://www.nm.eurocontrol.int/chmi_appsoft/TOKEN/windows/5.0.3/RSASecurIDSoftwareToken5.0.3x64.zip for Windows - 64 bits

(5) Supported platforms by RSA: Windows 10, 8.1, 7 & Vista

(6) In most cases, the default installation will work, however, we prefer that you use our instructions to install the RSA software (in silent mode and for multiple Windows User accessing the same PC):

a) EUROCONTROL (RSA) Installation Instruction available at http://www.nm.eurocontrol.int/chmi_appsoft/TOKEN/windows/5.0.3/RSA-SecurIDSoftware-v5.0.3-Installation-Procedure_version_for_ALL_USERS.pdf

H.2 RSA software for Windows 11

(1) For your convenience, a copy of the software is available on our Eurocontrol NM web site: https://www.nm.eurocontrol.int/nip/chmi_appsoft/TOKEN/windows/6.2.X/RSA_Authenticator_6.2.2_Microsoft_Windows_Kit.zip for
Windows - 64 bits

(2) Supported platforms by RSA: Windows 10, 11

(3) In most cases, the default installation will work, however, we prefer that you use our instructions to install the RSA software (in silent mode and for multiple Windows User accessing the same PC):

a) EUROCONTROL (RSA) Installation Instruction available at https://www.nm.eurocontrol.int/chmi_appsoft/TOKEN/windows/6.2.X/RSA_Authenticator_v622_Installation_Procedure.pdf

I CHMI software is digitally signed

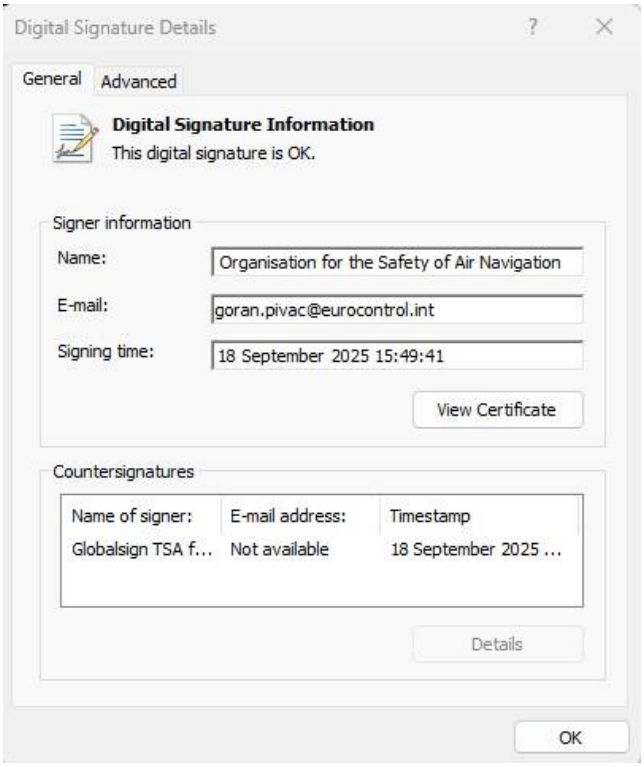
I.1 EUROCONTROL Code Signing

(1) To ensure that the software is issued by EUROCONTROL and has not been tampered by a "third party", the software has been digitally signed.

(2) You may check the property of the ".msi" file).

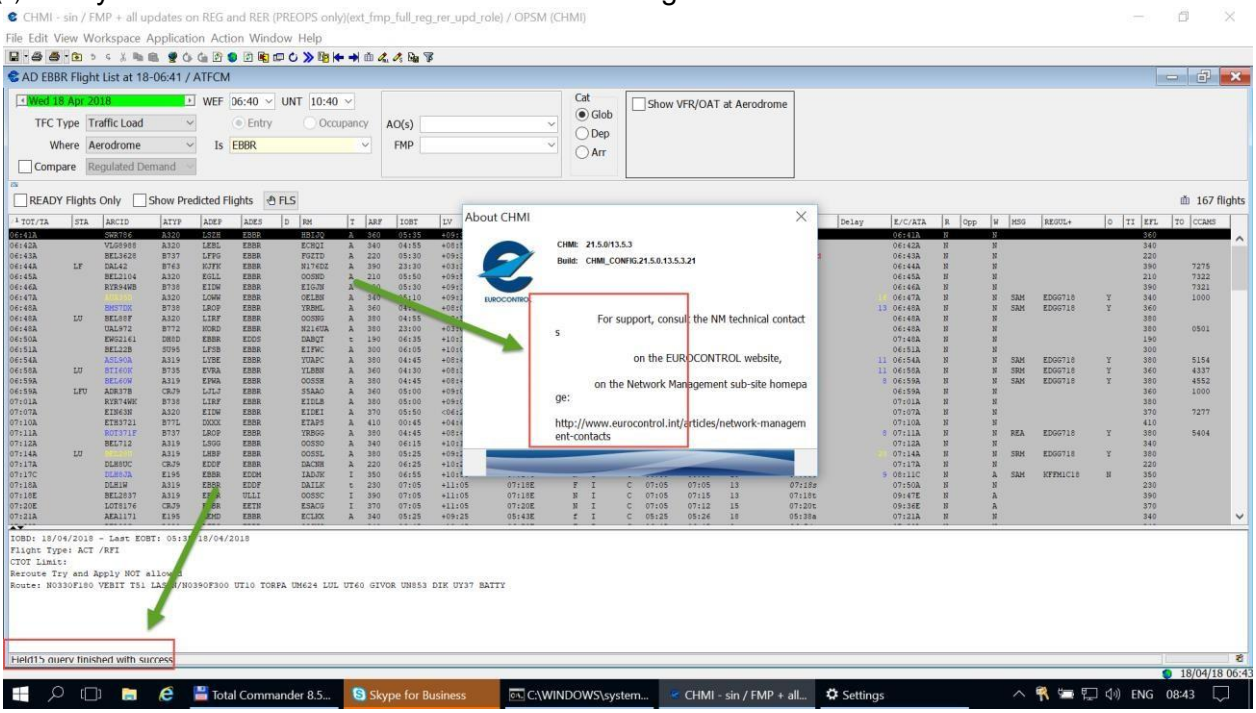
(3) In the properties of the file, you will find the Digital Signatures tab.

(4) In details, you will see that GlobalSign is the Certificate issuer.

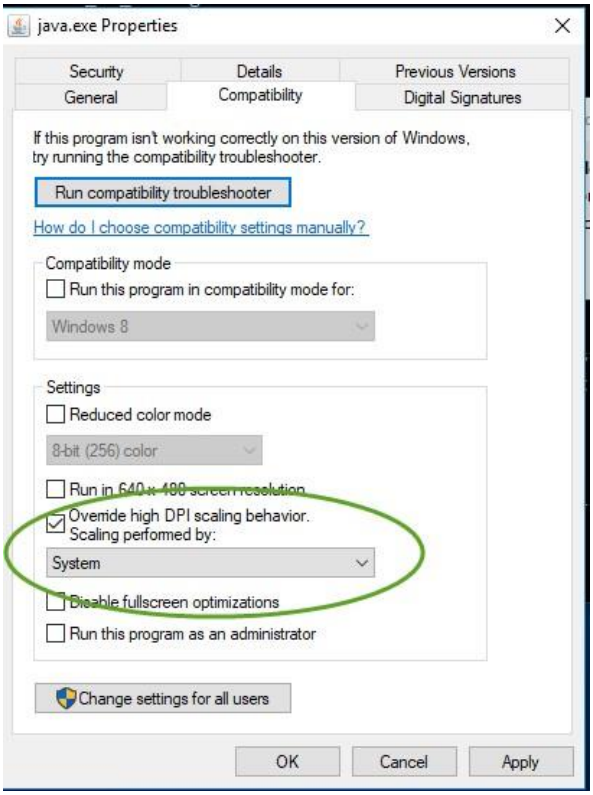


J Windows 10 screen parameter consideration.

(1) If you notice that the chmi text seems miss aligned:



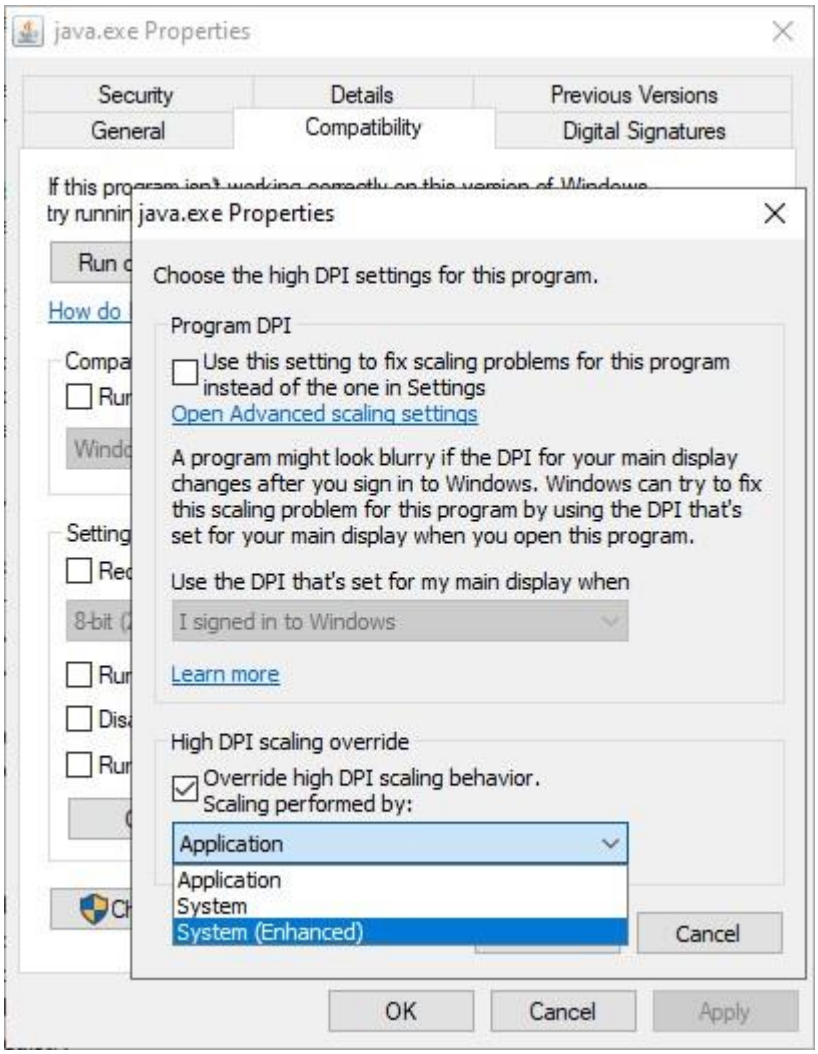
(2) Set your java.exe property to: Override high DPI scaling behaviour: “Scalling performed by System”.



(3) For very **high resolution, 4K** resolution, Set your java.exe property to select System(Enhanced) together with Windows scaling set to 125% provides a fairly good result.

(4) In some cases, changing the font policy also improve readability.

(5)



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