

SIP Easy Connect: SIP Trunk Profile Import/Export

This document details the feature "SIP Easy Connect" which permits to manage SIP Trunk profiles in OMC.

Revision History

Edition 01: December 12, 2014	first RCE100 edition released for publication
Edition 02: February 12, 2016	the doc is restructured and also introduces the profile config parameters proper to OXO RCE101 and RCE102
Edition 03: November 15, 2016	Document modification to take into account OXO Connect 2.0

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1 General

"SIP Easy Connect" (SEC) is the user-friendly name given to the Import/Export feature of OMC for the part dedicated to SIP Profiles data. The feature is a configuration helper for SIP Trunk solutions.

This guide focuses the practical usage of SEC for the context of managed public SIP Trunks approved by Alcatel-Lucent Enterprise (ALE). As a secondary usage, SEC can be used for creating and managing "private" SIP profiles (not supported by ALE) for the deployment of private SIP Trunk solutions.

Warning **SIP Easy Connect is available since OmniPCX Office Release 10.0.**

1.1 References

Alcatel-Lucent doc available from the Business Partner portal (<https://businessportal2.alcatel-lucent.com>):

- [1] Alcatel-Lucent OmniPCX Office Communication Server- Expert Documentation
- [2] Alcatel-Lucent OmniPCX Office Technical Bulletin- TC1284 Public SIP Trunking
- [3] Alcatel Lucent OmniPCX Office Technical Bulletin- TCXXXX Configuration Guideline

1.2 Scope of the document

The doc is intended for field engineers who are familiar with OMC and with the basic set up of the OmniPCX Office. For simplification reasons, the OMC menus and screenshots correspond to the English language selected in the application.

2 SEC for the context of ALE-supported SIP Trunk Solutions

Note SEC permits to simplify drastically the SIP configuration task in OMC and also limits the risk of manual errors. For the deployment of approved solutions with a public SIP Provider, the user operation is very basic and is no more than importing the profile file delivered by ALE (operation detailed at Ch.4).

Since OXO R10.0, the delivery of SIP profiles is part of the support service ensured by ALE for approved public SIP Trunk solutions. **The support is based on the reference elements of the process which are published on the ALE Web portal and reminded hereafter:**

- 1) **The bulletin TC1284** (i.e. doc "Public SIP Trunking Interoperability and Technical Support Procedure"): this doc gives the worldwide and up-to-date list of approved solutions in GA or LA support mode and defines the conditions for these two support modes. For GA solutions, the doc reminds the reference of the associated ALE guide.
- 2) **The TCxxxx guides proper to a GA SIP solution** (i.e. doc "SIP Trunk Solution xx Configuration Guideline"): every guide describes its reference OXO configuration and environment plus the list of supported terminals and features. For recent solutions with OXO \geq R10.0, the doc is built on the SEC facility described in the present document.
- 3) **The ALE archive of SIP Trunk profiles** (i.e. archive "ALE_RCE10X_SIP_profiles_edxx.zip" hosting the ".spf" profile files): this archive presents two main sub-directories:
 - The GA folder gathers all approved GA SIP profiles of the different OXO releases \geq R10.0. **The usage of GA SIP profiles is free for the deployment of managed SIP solutions that respect the ALE dedicated guide. The GA support conditions are described in the doc TC1284.**
 - The LA folder contains a batch of LA SIP profiles which are all intended for the last OXO commercial release. **The usage of LA SIP profiles is reserved for Pilot sites and is submitted to the LA support conditions described in TC1284 Ch. 2.2.**

Warning **The current valid edition of these reference elements is found directly on the ALE Web Portal (<https://businessportal2.alcatel-lucent.com>).**

- The Technical Bulletin TC 1284 is located in the section "Customer Support" / "Technical Support" / "Technical Documentation Library".

The "ALE_RCE10X_SIP_Profiles_.." zip file is located in the section "Customer Support" / "Technical Support" / "Software Download" within the directory of last OXO R10.3 commercial Release

Or

The "ALE_CNX2X_SIP_Profiles_.." zip file is located in the section "Customer Support" / "Technical Support" / "Software Download" within the directory of last OXO Connect commercial Release

3 SIP Profile Data

Warning A SIP Trunk Profile is materialized by a ".spf" file and is dedicated to a specific OXO Release (the profile file cannot be imported if the system has another Release version).

The profile data embedded within a .spf file has a binary format and is therefore **not readable with a text editor** application. This data is classified in two different categories (Control data and SIP Trunk configuration data) which are described in the next sections:

3.1 Control Data

This data is used internally by OMC and OXO as control data:

- **OXO firmware version**
- **OMC version**
- **Profile Version Identifier:** the version ID of a spf file is automatically controlled by OMC in regard to the OXO system release it is connected to (in on-line or off-line mode).
- **Profile name:** this is a label defined by the user who creates the SIP profile (see the SEC export operation at Ch. 5). The label is generally assigned the name of the SIP Provider: it is prompted at the beginning of an import operation as a way to confirm the role of the profile loaded (i.e. independently of the name given to the spf file).

3.2 SIP Trunk configuration Data

This data is the useful payload of the SIP profile and corresponds to the **OMC parameters listed as appendix at Ch.6**. These config parameters are not visible directly in the profile file but can only be read after a successful SEC Import. After the import, the parameters can be checked in the related OMC SIP screens (refer to Ch. 6 tables) or more simply from a single text file exported via the OMC menu "Import-Export Data/sip SIP Trunk" (refer to doc TC1945 "OMC Export Of SIP Trunk Data" for more details).

4 SIP Profile Import with RCE 10.3 OMC

SEC Import function is foremost intended to the configuration of ALE-approved SIP Trunk solutions. In such context, the import must be carried out in accordance with the ALE guide dedicated to the solution. That guide also describes the manual OMC tuning which is necessary to complete the configuration of the solution.

4.1 Data management

Warning **Importing a SIP trunk profile is normally intended for “from scratch” configuration of the system otherwise, the user may need to redo part of the overwritten configuration as explained here below.**

The SEC Import can be done in OMC on-line or off-line mode. During the operation, the existing system configuration is altered in the following way:

- The “*VoIP parameters*” and “*Noteworthy addresses*” listed in ch.7 **are overwritten.**
- The “*ARS/Gateway Parameters*” **tables are all deleted.** A new entry table (with index 1) is created from the SIP Profile data.
- The “*ARS/SIP Public Numbering*” **tables are all deleted.** A new entry (with index 1) is created from the SIP Profile data.
- The “*ARS/ Automatic Routing: Prefixes*” entry lines **are all deleted.**
- The “*ARS/ SIP Accounts*” entry lines are maintained. However, for all entries, the value in the column “*Gateway parameters Index*” is cleared (empty value).

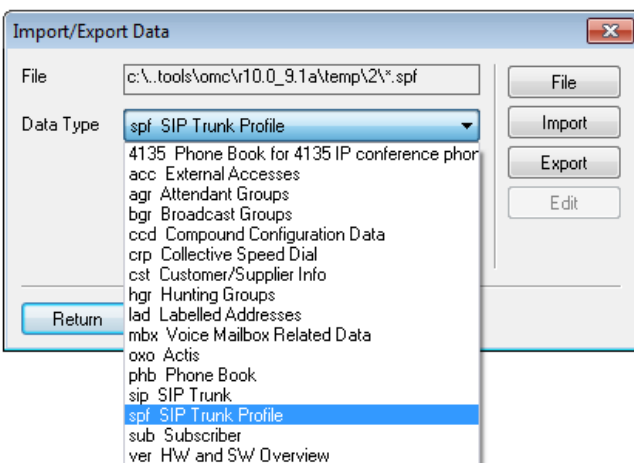
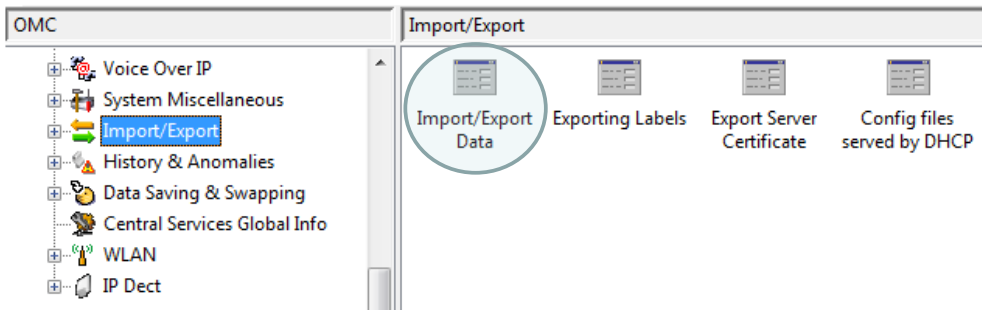
Warning **Once the import is achieved successfully, a manual system reset must be completed: the user is notified for that but can postpone the operation if necessary.**

Warning **When the SIP profile has been imported, there is no mean to automatically rollback the system database to the previous configuration.**

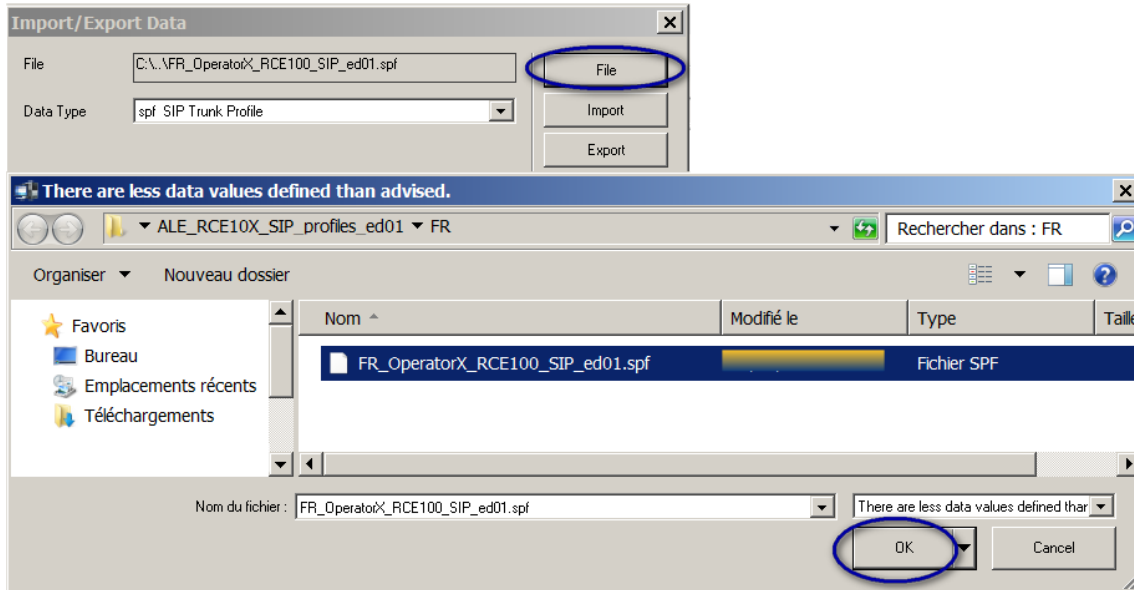
4.2 User Procedure

With OMC R10.3 connected to an OmniPCX Office system = R10.x:

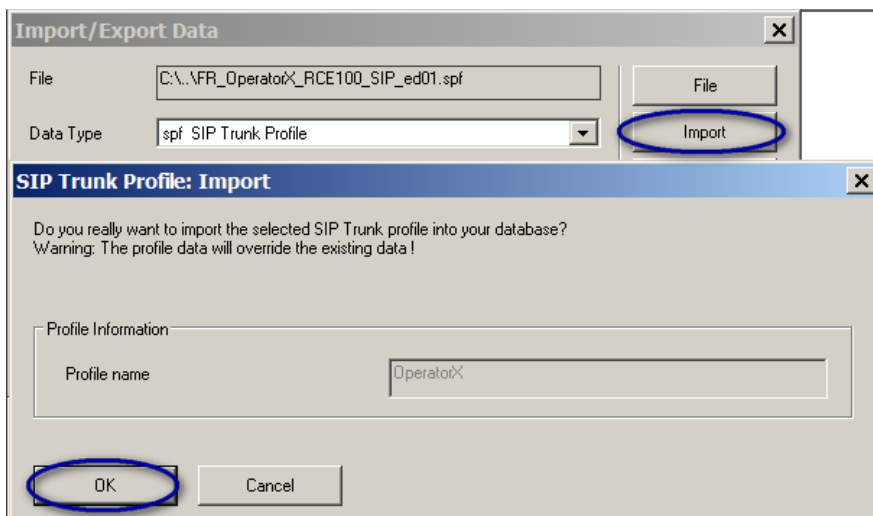
- Select "**Import/Export**" and then "**Import/Export Data**"



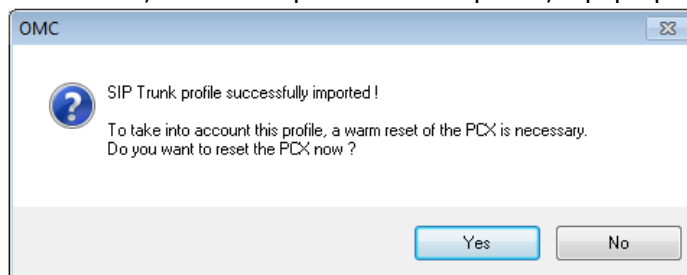
- Select "**spf SIP Tunk Profile**" in the "**Data Type**" pick list
- Push the "**File**" button then, select on your PC location the reference "**.spf**" file of the required public SIP Provider and then, click "**OK**" button.



- Finally, push the **"Import"** button and click **"OK"** to start the import process



After a while, when the operation is completed, a pop-up window is prompted:



5 SIP Profile Import with OXO Connect 2.X OMC

SEC Import function is foremost intended to the configuration of ALE-approved SIP Trunk solutions. In such context, the import must be carried out in accordance with the ALE guide dedicated to the solution. That guide also describes the manual OMC tuning which is necessary to complete the configuration of the solution.

5.1 Data management

The SEC Import can be done in OMC on-line or off-line mode. During the operation, the existing system configuration is altered in the following way:

Note **Since OMC of OXO Connect 2.0, it is possible to select the data management mode (also when connected on RCE10.X system releases).**

5.1.1 Addition mode

This mode allows to import configuration data from the SIP Trunk profile without affecting the existing SIP trunk configuration which will continue to work as before the import operation. The purpose is to create a new SIP Gateway entry and related SIP public numbering entry.

- The **"ARS/ Automatic Routing: Prefixes"** remain **unchanged**.
- The **"ARS/SIP Public Numbering"** tables are kept and updated.
A new entry (with the first free index) is created from the SIP Profile data.
- The **"ARS/Gateway Parameters"** tables are kept and updated.
A new entry (with the first free index) is created from the SIP Profile data.
This entry will be linked to the Public Numbering table previously created
- The **"ARS/ SIP Accounts"** remain **unchanged**.
All table entries having a reference to an existing SIP gateway will keep it.
- The **"VoIP parameters"** and **"Noteworthy addresses"** .
The behavior depends on the "Overwriting of Voip Global Parameters" checkbox value (see in ch.5.1.4).

5.1.2 Replacement mode

This mode allows to import configuration data from the SIP Trunk profile by modifying SIP gateway specified by the installer. The purpose is to update the configuration parameters of a particular SIP Gateway entry and related SIP public numbering data.

- The **"ARS/ Automatic Routing: Prefixes"** remain **unchanged**.
- The **"ARS/SIP Public Numbering"** tables are updated.
If no **"SIP Public Numbering"** entry was associated to the current SIP gateway, an entry will be created in this table .
All other fields will be updated with the values of the data stored in the profile.
- The **"ARS/Gateway Parameters"** tables are kept and the selected entry is updated.
The index of the gateway (*Index* field) is unchanged.

If no “*SIP Public Numbering*” entry was associated to the current SIP gateway, an entry will be created in this table. The index value of this new entry will be stored in the “*SIP Numbers Format Index*” field. All other fields will be updated with the values of the data stored in the profile. This entry will be linked to the Public Numbering table previously created

- The “**ARS/SIP Accounts**” remain **unchanged**.
- All table entries having a reference to the selected SIP gateway will keep it.
- The “**VoIP parameters**” and “**Noteworthy addresses**” . The behavior depends on the “Overwriting of Voip Global Parameters” checkbox value (see in ch.5.1.4).

5.1.3 Start Over mode

The service level is the same as those known and defined from OXO R10.x (see ch.4.1).

- The “**ARS/Automatic Routing: Prefixes**” entry lines **are all deleted**.
- The “**ARS/Gateway Parameters**” tables **are all deleted**. A new entry table (with index 1) is created from the SIP Profile data.
- The “**ARS/SIP Public Numbering**” tables **are all deleted**. A new entry (with index 1) is created from the SIP Profile data.
- The “**ARS/SIP Accounts**” entry lines are maintained. However, for all entries, the value in the column “**Gateway parameters Index**” is cleared (empty value).
- The “**VoIP parameters**” and “**Noteworthy addresses**” . The behavior depends on the “Overwriting of Voip Global Parameters” checkbox value (see in ch.5.1.4).

5.1.4 Field “Overwriting of VoIP parameters”

When activated, the VoIP global parameters present in the SIP profile will overwrite the present values of the OMC database.

The parameters involved are

- The sub-set of the VoIP global parameters as initially defined in Appendix (ch 7) .
The “**Voice Over IP / VoIP:Parameters**”.
- The specific noteworthy addresses as initially defined in Appendix (ch 7)
The “**System Miscellaneous / Memory Read/Write**”.

Clicking on OK button leads to launch the import process; the OMC database will be updated with the configuration parameters present in the SIP profile and in accordance with the import options specified by the installer.

The completion of this operation remains the same as from R10.0 as the installer will be notified thanks to a pop-up window displaying a message according to the final status.

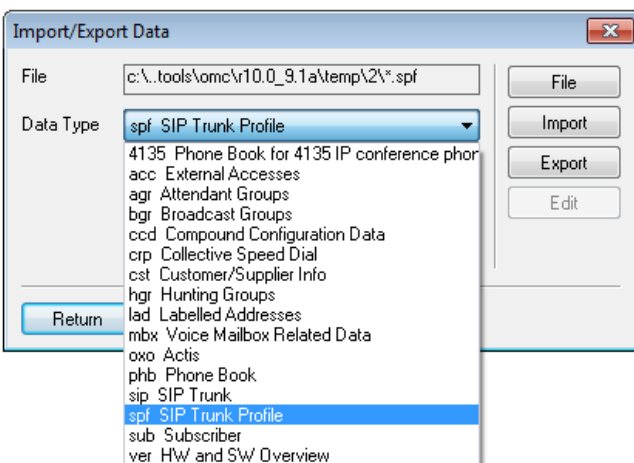
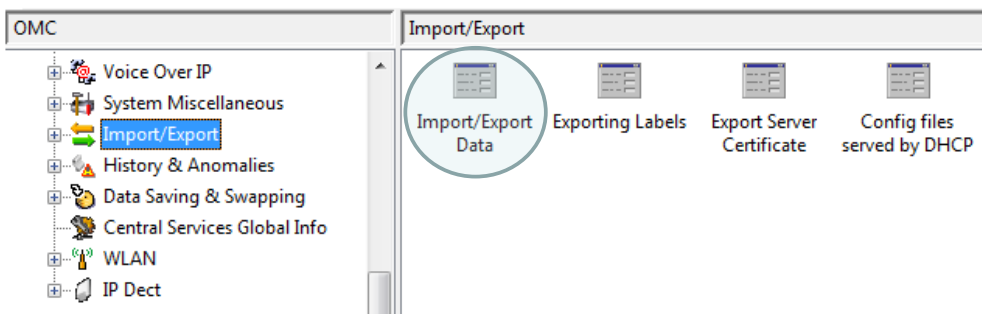
Warning Once the import is achieved successfully, a manual system reset must be completed: the user is notified for that but can postpone the operation if necessary.

Warning When the SIP profile has been imported, there is no mean to automatically rollback the system database to the previous configuration.

5.2 User Procedure

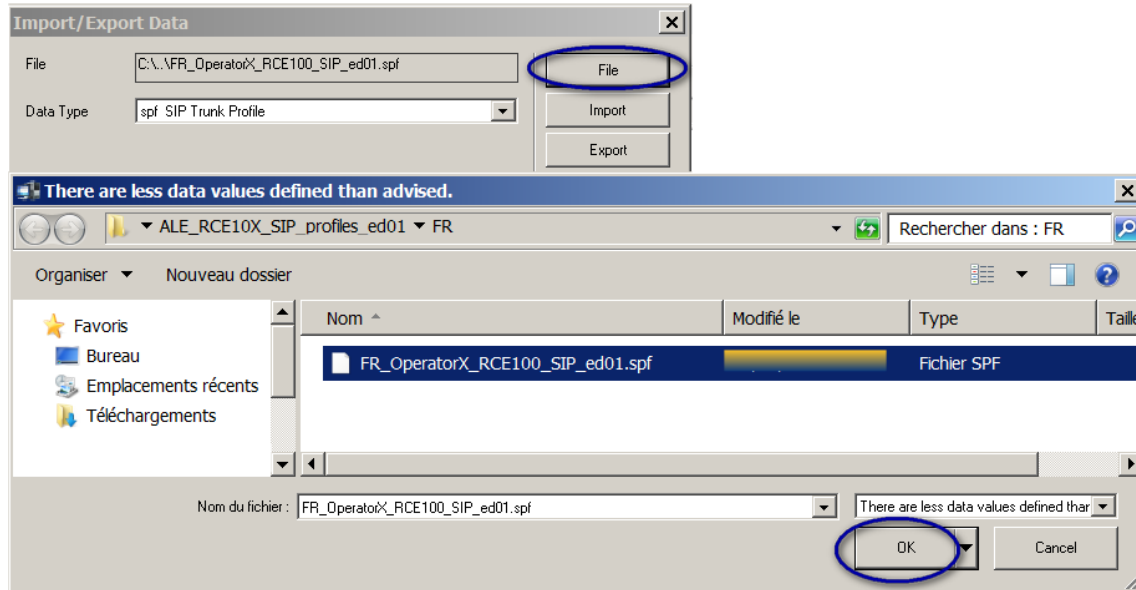
With OMC R10.3 connected to an OmniPCX Office system = R10.x:

- Select "**Import/Export**" and then "**Import/Export Data**"

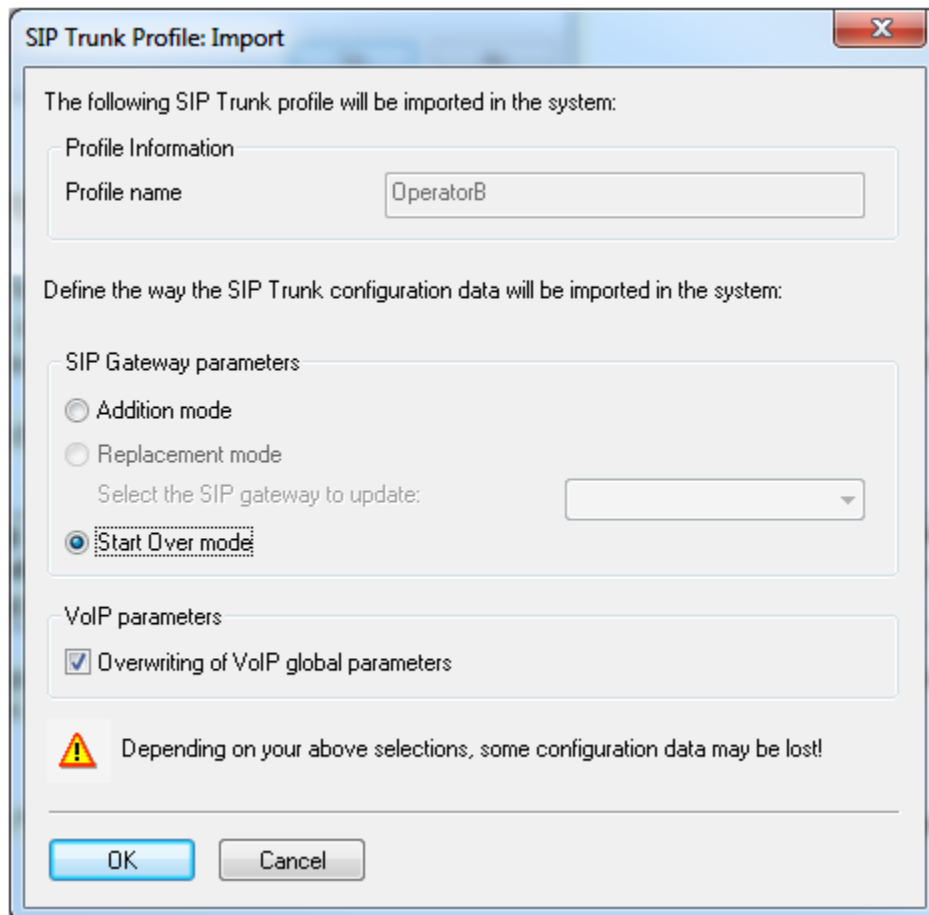


- Select "**spf SIP Tunk Profile**" in the "**Data Type**" pick list

- Push the "**File**" button then, select on your PC location the reference "**.spf**" file of the required public SIP Provider and then, click "**OK**" button.

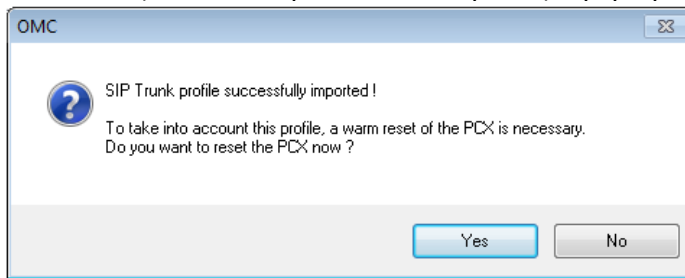


- Finally, push the "**Import**" button, and select the mode and options



and click "**OK**" to start the import process

After a while, when the operation is completed, a pop-up window is prompted:



6 SIP Profile Export

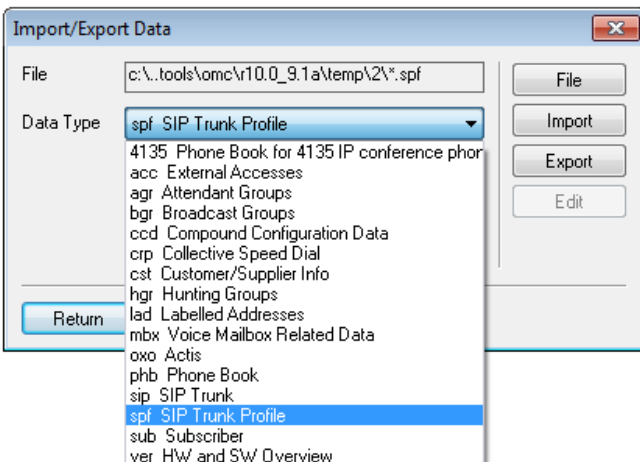
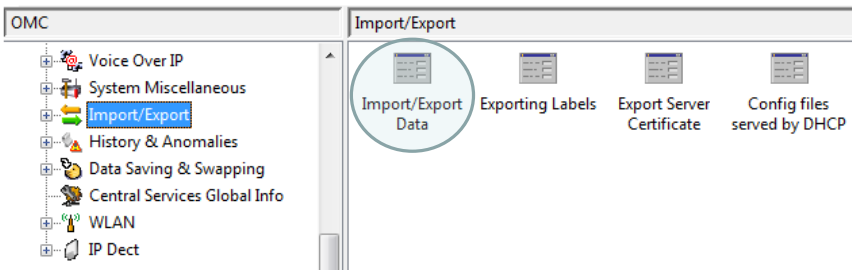
SEC Export function is also helpful for users who want to create and manage their "private" profiles for the deployment of private SIP Trunk solutions.

Warning **Importing a private profile file NOT provided by ALE remains under the sole control and responsibility of the user. ALE will deliver no support in relation with such private profiles.**

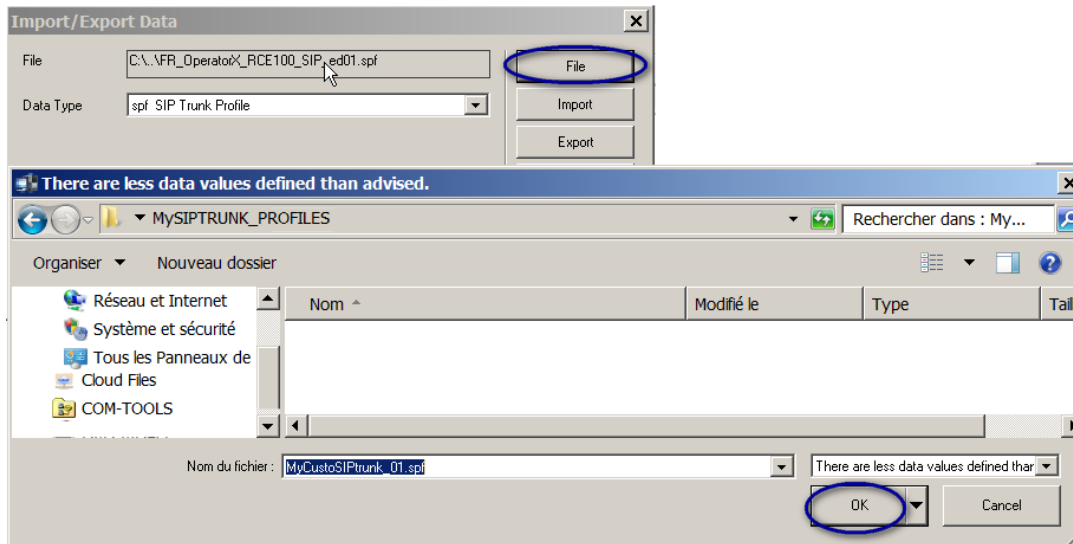
6.1 Procedure

With OMC connected on an OmniPCX Office system >= R10.0, or in off-line mode with a cdb file loaded:

- Select "**Import/Export**" and then "**Import/Export Data**"



- Select "**spf SIP Tunk Profile**" in the "**Data Type**" pick list
- Push the "**File**" button then, select on your PC the name and location of the personal ".spf" file you want to create and then, click "**OK**" button.



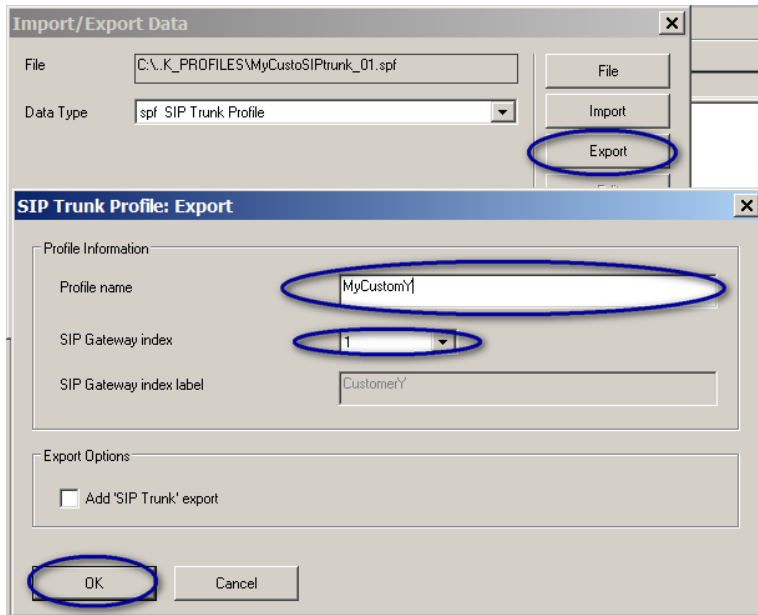
☞ • Push the "**Export**" button and then,

☞ • Select from the pick-list the appropriate "**SIP Gateway index**" of your OMC configuration

Note All ARS Gateway data relevant for the SIP profile (including the SIP Public Numbering entry) will be exported *globally* from the SIP Gateway index selected.

☞ • In the field "**Profile name**", type a personal label: info stored in the profile file and reused during the import process for an easier identification of the profile loaded (see Ch. 3.1)

Note Optionally, you can select "**Add 'SIP Trunk' export**" if you want to export at the same time the .sip text file containing the global configuration parameters of the SIP Gateway selected (refer to doc TC1945 "OMC Export Of SIP Trunk Data")..



- Finally, push the "**OK**" button to start the export process

Note After a short while, when the export operation is achieved, the user gets a message box with a specific status message. In case of failure, additional information may be given to point out the cause of the problem.

7 Appendix: SIP profile config parameters

The following tables list for the different OXO releases, the OMC configuration data stored within a SIP profile (data is grouped by OMC menus).

OMC PARAMETER	SEC R10.0	SEC R10.1	SEC R10.2	SEC R10.2	SEC Connect 2.0	REMARK
/VoIP/VoIP Params/General						
VoIPgen_Trunk_Channels	✓	✓	✓	✓	✓	<i>Value in the profile may need site tuning</i>
VoIPgen_IP_QoS	✓	✓	✓	✓	✓	<i>Value in the profile may need site tuning</i>
VoIPgen_Protocol	✓	✓	✓	✓	✓	
VoIPgen_RTP_Direct	✓	✓	✓	✓	✓	
VoIPgen_Trunk_Codec_Passth	✓	✓	✓	✓	✓	
VoIPgen_Phone_Codec_Passth	✓	✓	✓	✓	✓	
VoIPgen_G711_MOH	✓	✓	✓	✓	✓	
VoIPgen_RTCP_Attribute	✓	✓	✓	✓	✓	
/VoIP/VoIP Params/Gateway						
VoIPgw_SIPSourcePort	✓	✓	✓	✓	✓	
/VoIP/VoIP Params/DSP						
VoIPdsp_DSP_Echo_Cancel	✓	✓	✓	✓	✓	
VoIPdsp_DSP_VAD	✓	✓	✓	✓	✓	
/VoIP/VoIP Params/Fax						
VoIPfax_T38_UDP_Redundanc	✓	✓	✓	✓	✓	
VoIPfax_T38_Fax_Framing	✓	✓	✓	✓	✓	
VoIPfax_T38_ECM	✓	✓	✓	✓	✓	
/VoIP/VoIP Params/SIP Trunk						
VoIPsiptrk_QoS	✓	✓	✓	✓	✓	<i>Value in the profile may need site tuning</i>
VoIPsiptrk_SIP_Timer_T1	✓	✓	✓	✓	✓	
VoIPsiptrk_SIP_Timer_T2	✓	✓	✓	✓	✓	
VoIPsiptrk_SIP_N_Retries	✓	✓	✓	✓	✓	
VoIPsiptrk_UdpToTcp	✓	✓	✓	✓	✓	
VoIPsiptrk_DNS_Auth	✓	✓	✓	✓	✓	
/VoIP/VoIP Params/Codecs						
VoIPcodec_Def_CodecFraming	✓	✓	✓	✓	✓	
VoIPcodec_Def_CodecList	✓	✓	✓	✓	✓	
VoIPcodec_DTMF_Payload	✓	✓	✓	✓	✓	
VoIPcodec_G722.2_Payload	✓	✓	✓	✓	✓	
VoIP/VoIP Params/Topology						
VoIPtopo_SIPport	✓	✓	✓	✓	✓	<i>Value in the profile may need site tuning</i>
VoIPtopo_RTP_Range	✓	✓	✓	✓	✓	<i>Value in the profile may need site tuning</i>
VoIPtopo_T38_Range	✓	✓	✓	✓	✓	<i>Value in the profile may need site tuning</i>

OMC PARAMETER	SEC R10.0	SEC R10.1	SEC R10.2	SEC R10.2	SEC Connect 2.0	REMARK
/Numbering/ARS/GW Params/DNS						
GWdns_DNS_Mode	✓	✓	✓	✓	✓	
GWdns_Prim_DNS	✓	✓	✓	✓	✓	
GWdns_Sec_DNS	✓	✓	✓	✓	✓	
/Numbering/ARS/GW Params/Domain						
GWdom_IP_Type	✓	✓	✓	✓	✓	
GWdom_IP_Address	✓	✓	✓	✓	✓	
GWdom_Def_Transport	✓	✓	✓	✓	✓	
GWdom_Target_Domain	✓	✓	✓	✓	✓	
GWdom_Local_Domain_Name	✓	✓	✓	✓	✓	
GWdom_Realm	✓	✓	✓	✓	✓	
GWdom_Remote_SIP_Port	✓	✓	✓	✓	✓	
GWdom_Outb_Proxy	✓	✓	✓	✓	✓	
/Numbering/ARS/GW Params/Media						
GWmedia_Fax_Mode	✓	✓	✓	✓	✓	
GWmedia_T38_Add_Signal	✓	✓	✓	✓	✓	
GWmedia_T38_CED_Tone	✓	✓	✓	✓	✓	
GWmedia_Codec_Framing	✓	✓	✓	✓	✓	
GWmedia_Bwidth	✓	✓	✓	✓	✓	<i>Value in the profile may need site tuning</i>
GWmedia_DTMF_Mode		✓	✓	✓	✓	
/Numbering/ARS/GW Params/Registration						
GWreg_Reg_Requested	✓	✓	✓	✓	✓	
GWreg_Check_Before_Req	✓	✓	✓	✓	✓	
GWreg_Reg_Name	✓	✓	✓	✓	✓	
GWreg_Reg_IP_Address	✓	✓	✓	✓	✓	
GWreg_Reg_Port	✓	✓	✓	✓	✓	
GWreg_Reg_Expire_Time	✓	✓	✓	✓	✓	
GWreg_Reg_AoR_In_Contact	✓	✓	✓	✓	✓	
GWreg_Reg_AoR_In_From	✓	✓	✓	✓	✓	
GWreg_Reg_AoR_In_PA1	✓	✓	✓	✓	✓	
GWreg_Reg_AoR_In_PPI	✓	✓	✓	✓	✓	
GWreg_Reg_AoR_In_Rsv1/Rsv4	✓	✓	✓	✓	✓	
GWreg_Reg_RFC3327				✓	✓	
/Numbering/ARS/GW Params/Identity						
GWident_RFC3325	✓	✓	✓	✓	✓	
GWident_HistInfo_Enabled	✓	✓	✓	✓	✓	
GWident_Inc_CLI_Headers	✓	✓	✓	✓	✓	
GWident_Out_CLI_PPI_Used	✓	✓	✓	✓	✓	
GWident_Out_CLI_PA1_Used	✓	✓	✓	✓	✓	
GWident_Out_COLP_Headers	✓	✓	✓	✓	✓	
GWident_HistInfo_DivHeader			✓	✓	✓	
GWident_Alternative_CLIP				✓	✓	
GWident_P_Access_Network_Info					✓	
/Numbering/ARS/GW Params/Protocol						
GWprot_SessTimer_Time	✓	✓	✓	✓	✓	
GWprot_PEM_Enabled	✓	✓	✓	✓	✓	
GWprot_UPDATE_Enabled	✓	✓	✓	✓	✓	
GWprot_SNAT_Enabled	✓	✓	✓	✓	✓	
GWprot_PRACK_Enabled	✓	✓	✓	✓	✓	
GWprot_GWalive_Prot	✓	✓	✓	✓	✓	
GWprot_GWalive_Timer	✓	✓	✓	✓	✓	
GWprot_RFC4904_Enabled		✓	✓	✓	✓	
GWprot_RFC4904_Trk_GID		✓	✓	✓	✓	
GWprot_RFC4904_Trk_Context		✓	✓	✓	✓	

OMC PARAMETER	SEC R10.0	SEC R10.1	SEC R10.2	SEC R10.2	SEC Connect 2.0	REMARK
/Numbering/ARS/Public Numbering						
SIPnum_Out_Calling_Format	✓	✓	✓	✓	✓	
SIPnum_Out_Calling_Prefix	✓	✓	✓	✓	✓	
SIPnum_Out_Called_Format	✓	✓	✓	✓	✓	
SIPnum_Out_Called_Prefix	✓	✓	✓	✓	✓	
SIPnum_Out_Called_Short_Prefix	✓	✓	✓	✓	✓	
SIPnum_Inc_Calling_Format	✓	✓	✓	✓	✓	
SIPnum_Inc_Calling_Prefix	✓	✓	✓	✓	✓	
SIPnum_Inc_Called_Format	✓	✓	✓	✓	✓	
SIPnum_Inc_Called_Prefix	✓	✓	✓	✓	✓	
SIPnum_Alt_CLIP_example	✓					<i>Parameter discarded from SEC since</i>
/Misc/Memory Read Write						
Flag_VOIPnwaddr	✓	✓	✓	✓	✓	<i>The full table is managed (see note)</i>
Flag_VipPuNuA	✓	✓	✓	✓	✓	
Flag_ExtNuFoVoi	✓	✓	✓	✓	✓	
Flag_MultAnsRei	✓	✓	✓	✓	✓	
Flag_SimulIpAlt	✓	✓	✓	✓	✓	
Flag_PrefCodec	✓	✓	✓	✓	✓	
Flag_PrefFramin	✓	✓	✓	✓	✓	
Flag_FaxPasCd	✓	✓	✓	✓	✓	
Flag_SIPInDspNm	✓	✓	✓	✓	✓	
Flag_SIPOgDspNm	✓	✓	✓	✓	✓	
Flag_INVwSDPTrk	✓	✓	✓	✓	✓	
Flag_SIPdtmfInB	✓	✓	✓	✓	✓	
Flag_SuprAlerTo	✓	✓	✓	✓	✓	
Flag_MyICaller				✓	✓	
Flag_USalterfro				✓	✓	

Note The "VOIPnwaddr" noteworthy address corresponds to a complex table of VoIP flags: every individual flag is stored at a defined position in the table and may occupy one or several consecutive bytes. SIP Easy Connect does Import/Export the whole table.

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Submitting a Service Request

Please connect to our [eService Request](#) application.

Before submitting a Service Request, please be sure:

- The application has been certified via the AAPP if a third party application is involved.
- You have read the release notes that list new features, system requirements, restrictions, and more, and are available in the [Technical Documentation Library](#).
- You have read through the related troubleshooting guides and technical bulletins available in the [Technical Documentation Library](#).
- You have read through the self-service information on commonly asked support questions and known issues and workarounds available in the [Technical Knowledge Center](#).

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