



Avaya Solution & Interoperability Test Lab

Application Notes for SLIT NovaHop IPO-VMPRO and Avaya IP Office – Issue 1.0

Abstract

These Application Notes describe the compliance testing of the healthcare application SLIT NovaHop IPO-VMPRO with Avaya IP Office and Avaya Voicemail PRO. These Application Notes contain an extensive description of the configurations for NovaHop IPO-VMPRO, Avaya IP Office, and Avaya Voicemail PRO which were used for testing. The testing which was performed tested the major functions of the NovaHop IPO-VMPRO product.

Information in these Application Notes has been obtained through DevConnect compliance testing and additional technical discussions. Testing was conducted via the DevConnect Program at the Avaya Solution and Interoperability Test Lab.

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1. Introduction

These Application Notes describe the configuration steps required for SLIT NovaHop IPO-VMPRO to successfully interoperate with Avaya IP Office and Avaya Voicemail PRO.

NovaHop IPO-VMPRO software is a PC-based application suite that provides an end user interface with Avaya IP Office in a healthcare environment. The suite is able to manage one or several Avaya IP Offices, and works as a client/server application to meet the requirements of hospitals or retirement homes. It is widely used in hospitals and retirement homes in France.

External callers to the healthcare facility are greeted with an announcement prompting them to enter the extension to which they wish to be connected, which they subsequently enter via their telephone keypad. External calls made by patients are authenticated via a PIN code.

NovaHop IPO-TAPI is a similar hospital solution for Avaya IP Office from SLIT which provides a restricted feature set, but uses Avaya TAPI as an interface to Avaya IP Office instead of Avaya Voicemail PRO. This application is not covered by these application notes.

1.1. Interoperability Compliance Testing

The compliance testing included the following test scenarios:

- Verification of patient checkin / checkout
- Verification of correct operation of patient room transfer
- Verification that patients can make local calls
- Verification that patients can make calls via the PSTN
- Verification that patients with insufficient funds cannot make calls
- Verification that patient calls to national, international, and mobile parties are billed correctly
- Verification that incoming PSTN calls are routed to the proper patient by Voicemail PRO
- Verification that patient PSTN calls are correctly authenticated via patient PIN code
- Verification that the NovaHop IPO-VMPRO server recovers from network interruptions and unexpected power failures

1.2. Support

Support from Avaya is available at <http://support.avaya.com/>.

Support from SLIT is available at: <http://www.slit.fr/support> and +33(0)4.72.10.16.20

2. Reference Configuration

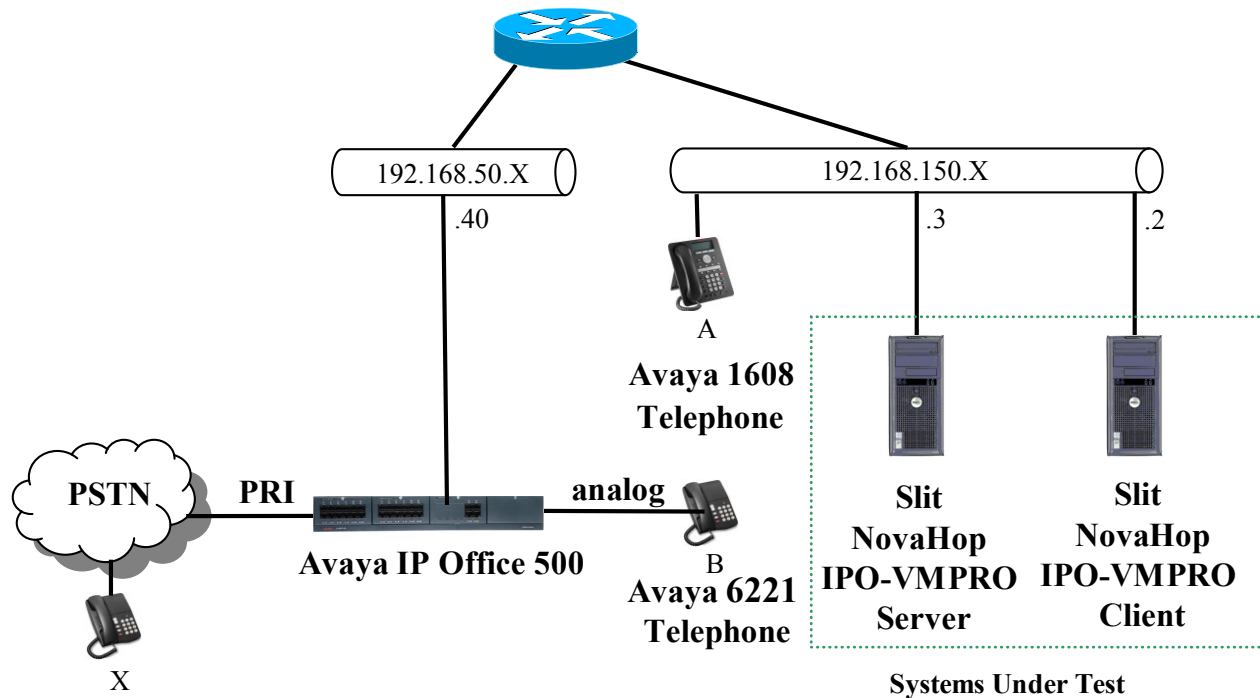


Figure 1: Test System Configuration

The SLIT NovaHop IPO-VMPRO Server in the above diagram performs telephony operations and receives events from the Avaya IP Office via Avaya Voicemail Pro. The NovaHop IPO-VMPRO Client communicates with the NovaHop IPO-VMPRO Server and provides a user interface which allows hospital personnel to administer telephone usage within the hospital.

The following table contains additional information about how each of the telephones contained in the above diagram are configured in Avaya IP Office:

Endpoint	Ext	PSTN Number	Station Type
A	50062	069 90739887 50062	1608
B	50072	069 90739887 50072	6221
X		069 7505 6174	

Table 1: Extensions Used for Testing

3. Equipment and Software Validated

The following equipment and software were used for the sample configuration provided:

Software Component	Component	Version
Avaya IP Office 500	IPO	4.2 (11)
Avaya IP POTS8V2 Analog Gateway	IPO	6.2
Avaya 1608 IP Telephone	Telephone	030
Avaya 6221 Analog Telephone	Telephone	N.A.
Windows XP Professional	Client	SP 3
SLIT NovaHop IPO-VMPRO Client	Client	4.1
Avaya Voicemail Pro	Server	4.2 (24)
Avaya IP Office Manager	Server	6.2.11
FireBird Database	Server	2.1
SLIT NovaHop IPO-VMPRO Server	Server	4.1
Windows XP Professional	Server	SP 3
Java Virtual Machine	Server	6.0
Apache HTTP Server	Server	2.2.4

Table 2: Equipment and Version Validated

4. Configuration

4.1. Avaya IP Office

All configuration steps for Avaya IP Office were performed using the IP Office Manager program.

4.1.1. Licenses

The following table contains a list of licenses which are required for the Avaya IP Office. Available licenses can be confirmed by selecting the “Licenses” icon.

License
VMPro Database Interface
Voicemail Pro (4 Ports)

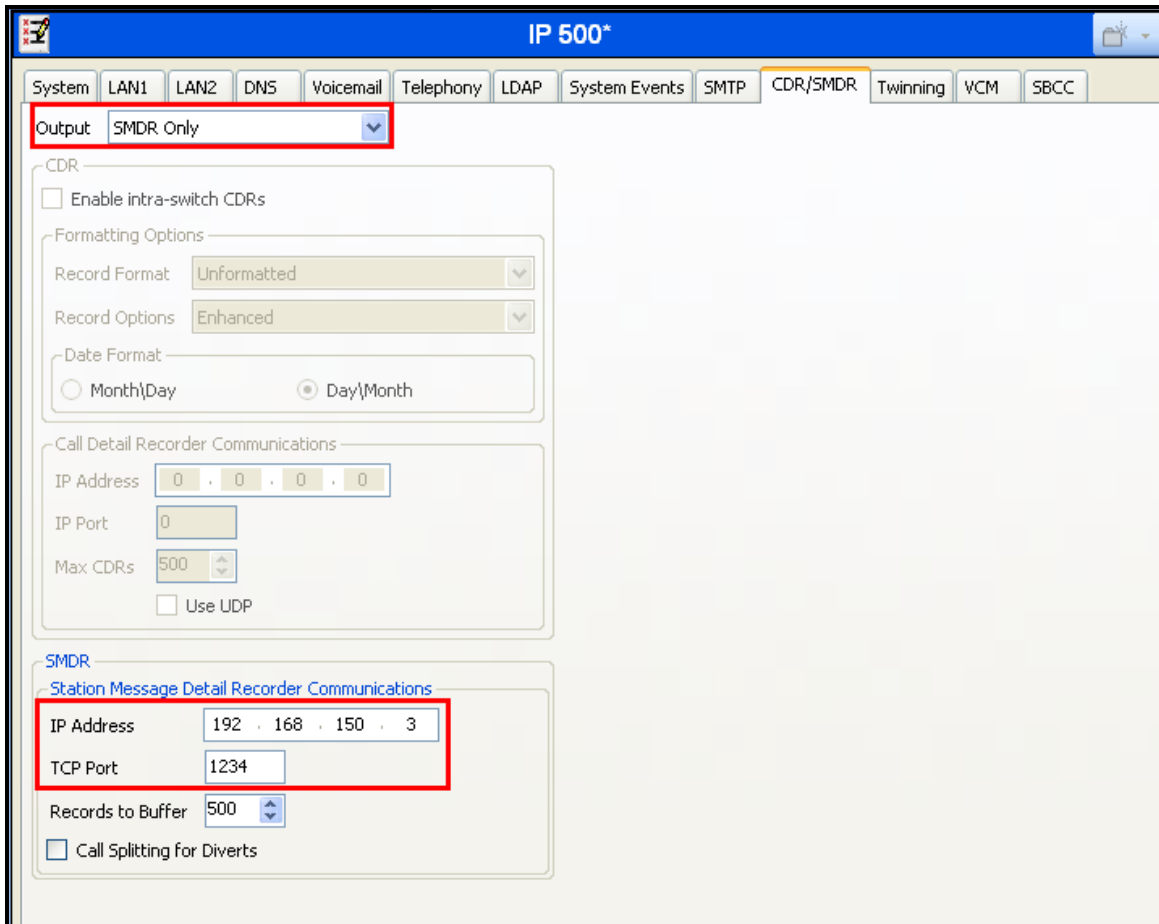
Table 3: License Requirements

4.1.2. System

Select the “System” icon and enter the parameters shown in the following table.

Tab	Parameter	Usage
CDR/SMDR	Output	Select “SMDR Only” from the drop-down menu.
	IP Address	Enter the IP address of the NovaHop IPO-VMPRO server.
	TCP Port	Enter the port read by the NovaHop IPO-VMPRO server.
Voicemail	Voicemail Type	Select “Voicemail Lite/Pro” from the drop-down menu.
	Voicemail IP Address	Enter the IP address of the “NovaHop IPO-VMPRO” server which also runs Avaya Voicemail Pro.

Table 4: IP Office System Parameters



IP 500*

System LAN1 LAN2 DNS Voicemail Telephony LDAP System Events SMTP CDR/SMDR Twinning VCM SBCC

Output: SMDR Only

CDR

☐ Enable intra-switch CDRs

Formatting Options

Record Format: Unformatted

Record Options: Enhanced

Date Format

☐ Month\Day ☒ Day\Month

Call Detail Recorder Communications

IP Address: 0 . 0 . 0 . 0

IP Port: 0

Max CDRs: 500

☐ Use UDP

SMDR

Station Message Detail Recorder Communications

IP Address: 192 . 168 . 150 . 3

TCP Port: 1234

Records to Buffer: 500

☐ Call Splitting for Diverts

Figure 2: IP Office System: CDR/SMDR Tab



IP 500

System LAN1 LAN2 DNS Voicemail Telephony LDAP System Events SMTP CDR/SMDR Twinning

Voicemail Type: Voicemail Lite/Pro

☐ Messages Button Goes To Visual

Voicemail Destination:

Voicemail IP Address: 192 . 168 . 150 . 3

Voicemail Channel Reservation

Unreserved Channels: 259

Auto-Attendant: 0

Voice Recording: 0

Mandatory Voice Recording: 0

Announcements: 0

Mailbox Access: 0

Figure 3: IP Office System: Voicemail Tab

4.1.3. User Rights

Select the “User Rights” icon and create a User Rights entity “Hotel VM PRO” which is assigned to checkout extensions. The “Outgoing Call Bar” should be enabled to prevent patients who are not checked in from making calls.

The screenshot shows the 'Hotel VM Pro' application window with the 'User Rights membership' tab selected. The 'Name' field is set to 'Hotel VM Pro'. Below this, several settings are listed, each with a checkbox and a dropdown menu. The 'Outgoing call bar' setting is checked and highlighted with a red box, and its dropdown menu is set to 'Apply User Rights value'. Other settings like 'Locale', 'Priority', 'Voicemail on', 'Voicemail ring back', and 'Do not disturb' are not checked and have dropdown menus set to 'Not part of User Rights'.

Setting	Value
Name	Hotel VM Pro
Locale	Not part of User Rights
Priority	5
Voicemail on	Not part of User Rights
Voicemail ring back	Not part of User Rights
Do not disturb	Not part of User Rights
Outgoing call bar	Apply User Rights value

Figure 4: User Rights

A short code is required to allow Voicemail PRO to solicit a PIN code from patients who wish to place external calls.

The screenshot displays the 'Hotel VM Pro*' application window. The 'ShortCodes' tab is selected, showing a table with the following data:

Code	Telephone Number	Feature	Line Group Id
ON	"SLIT_Clef"	Voicemail Collect	0

Below the table is the 'Edit Short Code' form, which contains the following fields:

- Code: ON
- Feature: Voicemail Collect (dropdown menu)
- Telephone Number: "SLIT_Clef"
- Line Group Id: 0 (dropdown menu)

The fields in the 'Edit Short Code' form are highlighted with a red rectangular box.

Figure 5: User Rights Shortcode Screen

In addition, the extensions for hospital rooms must initially be set to the “checked-out” state by including them as members of “checkout” User Rights.

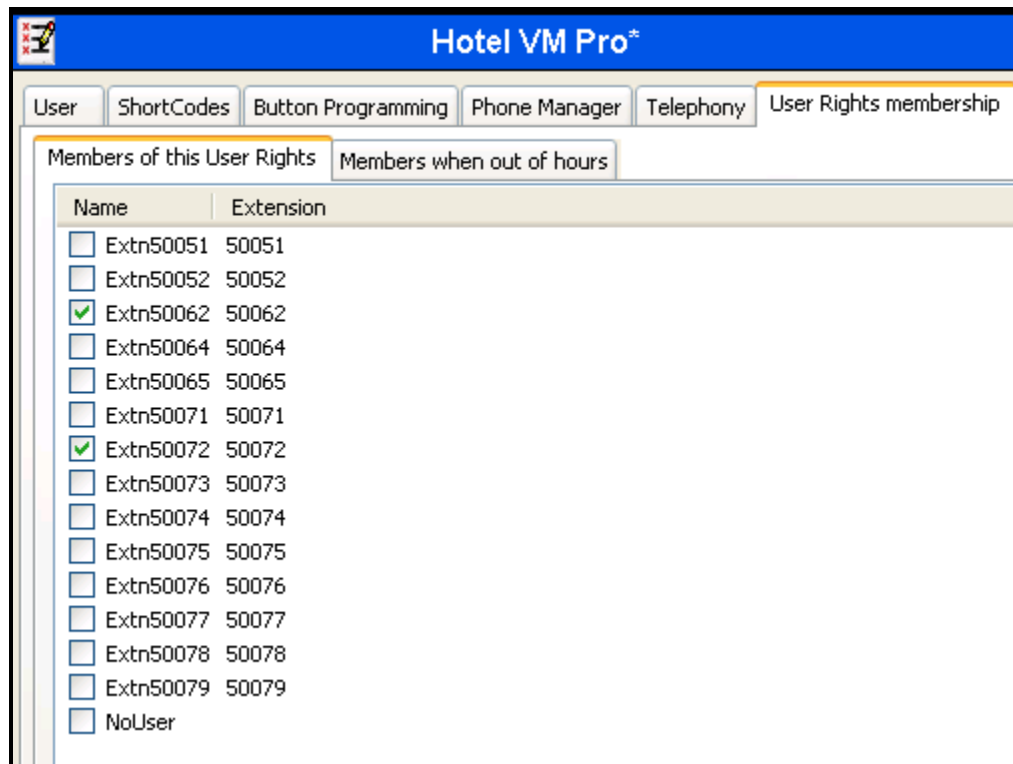


Figure 6: User Rights Membership

4.1.4. PRI Line

Select the “IP-Route” icon and create a route with the parameters shown in the following table.

Tab	Parameter	Value
PRI Line	Line Subtype	Select “ETSI” from the drop-down menu.
	Incoming Group ID	Assign an otherwise unused group ID.
	Outgoing Group ID	Assign the same value as for the “Incoming Group ID”.
	Channels	Assign all channel count values to the maximum value of 30.
	Cost Per Charging Unit	Enter the communication unit cost multiplied by 10000: €0.0618 x 10000 = 618.

Table 5: PRI Line Parameters

The screenshot shows the 'PRI 30 - Line 13' configuration window. The 'Standard' tab is selected. The following parameters are visible and highlighted with red boxes:

- Line SubType:** ETSI (dropdown menu)
- Incoming Group ID:** 5
- Outgoing Group ID:** 5
- Number of Channels:** 30
- Outgoing Channels:** 30
- Voice Channels:** 30
- Data Channels:** 30
- Cost Per Charging Unit:** 618

Other visible parameters include:

- Line Number: 13
- Card: 4
- Port: P1
- TEI: 0
- Prefix: 0
- National Prefix: 00
- International Prefix: 000
- CRC Checking: ☒
- Clock Quality: Network (dropdown)
- Line Signalling: CPE (dropdown)
- Add 'Not end-to-end ISDN' Information Element: Never (dropdown)
- Supports Partial Rerouting: ☐
- Force Number Plan to ISDN: ☐
- Support Call Tracing: ☐
- Active CCBS Support: ☐
- Passive CCBS Support: ☐

Figure 7: PRI Line: Standard Tab

4.1.5. Incoming Call Route

Create a Call Route to route calls which are dialed to extension “0” to Voicemail Pro. Select the “IP-Route” icon and create a route with the parameters shown in the following table.

Tab	Parameter	Value
Standard	Line Group ID	Select the group number assigned to the PRI line.
	Incoming Number	Enter the number assigned to the PRI line.
Destinations	Destination	Enter the short code which is used to route the call to Voicemail Pro, which is defined in Figure 10 .

Table 6: Incoming Call Route Parameters

5 069907398870

Standard Voice Recording Destinations

Bearer Capability Any Voice

Line Group Id 5

Incoming Number 069907398870

Incoming Sub Address

Incoming CLI

Locale

Priority 1 - Low

Tag

Hold Music Source System Source

Figure 8: Incoming Call Route: Standard Tab

Figure 9: Incoming Call Route: Destinations Tab

4.1.6. Shortcodes

Select the “Short Code” icon and create a shortcode to route incoming calls to Voicemail Pro.

Parameter	Usage
Code	Enter *6. The Incoming Route defined in Figure 9 uses this shortcode to route incoming calls to Voicemail Pro.
Feature	Select “Voicemail Collect” from the drop-down menu.
Telephone Number	Enter “SLIT_Fausse_SDA” which is defined in the call flow file which is imported to Avaya Voicemail PRO in Figure 13 .

Table 7: Diversion Shortcode Parameters

Figure 10: Voicemail Shortcode Screen

Create a shortcode to route outgoing calls to the PRI line. Suppress the calling party number to prevent the called party from attempting to call back to the calling extension. Calls to the hospital should be made to the main hospital number, and not patient extensions.

Parameter	Usage
Code	Enter “0N”.
Feature	Select “Dial” from the drop-down menu.
Telephone Number	Enter “NW”, which suppresses the calling party number.
Line Group Id	Enter the line group number assigned to the PRI line, which is defined in Figure 7 .

Table 8: Voicemail Shortcode Parameters

The screenshot shows a web-based configuration interface titled "ON: Dial". Below the title is a tab labeled "Short Code". The form contains several input fields: "Code" with the value "0N", "Feature" with a dropdown menu showing "Dial", "Telephone Number" with the value "NW", "Line Group Id" with a dropdown menu showing "5", "Locale" with a dropdown menu, and "Force Account Code" with an unchecked checkbox. A red rectangular box is drawn around the "Code", "Feature", "Telephone Number", and "Line Group Id" fields.

Figure 11: Outgoing Call Shortcode Screen

4.2. Configure Avaya Voicemail Pro

Install Avaya Voicemail Pro on the NovaHop IPO-VMPRO Server from the Avaya IP Office “User” CD. After completion of installation, mount the SLIT install medium in the CD drive. On the NovaHop IPO-VMPRO Server run “IP Office” → “Voicemail Pro Client”. Select “File” → “Import or Export”. Select “Import call flows”, then click “Next”.

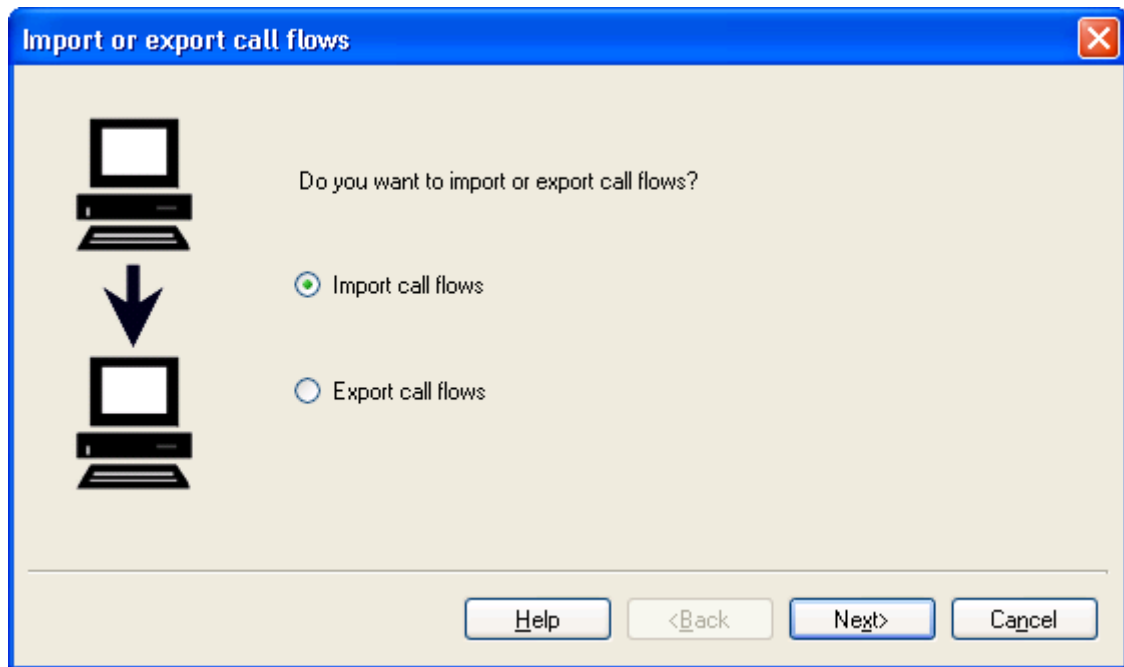


Figure 12: Voicemail Pro Import / Export Screen

Enter the path of the SLIT Voicemail modules as shown in the following screen and click “Next”.

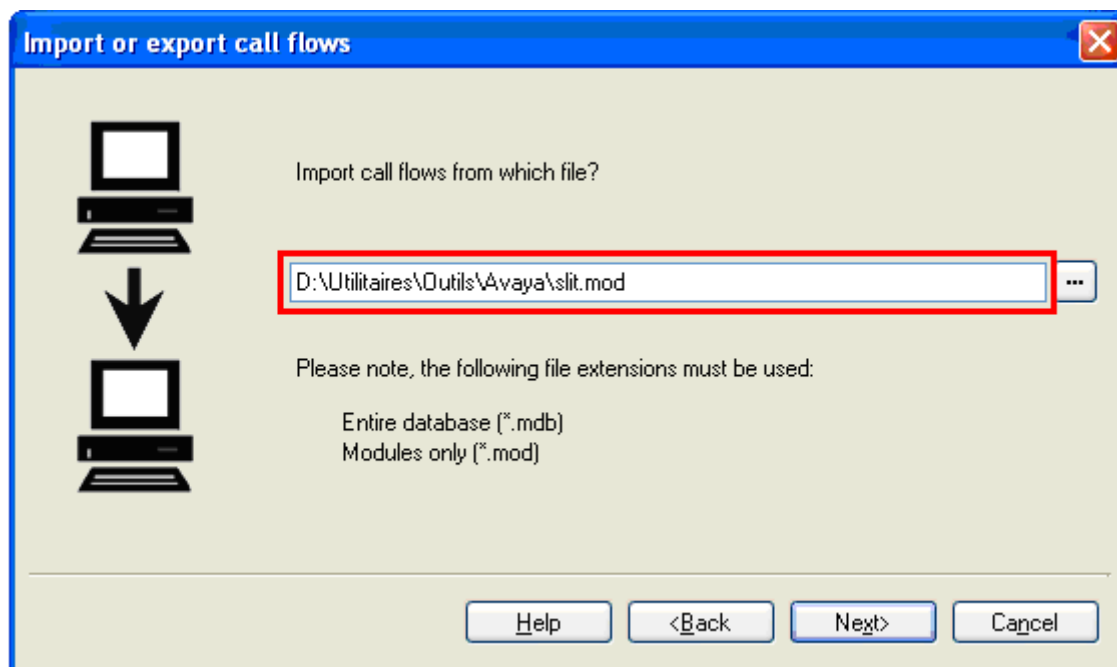


Figure 13: Voicemail Pro Import File Selection Screen

4.2.1. Create Voicemail Pro Conditions

Using the Voicemail Pro Condition Editor, create the tests shown in the following table, as described in the SLIT Documentation for use with Voicemail Pro.

Parameter	Usage
[SLIT] test etat reveil \$DBD[1] Egale à 1	
[SLIT] test FRA \$DBD[1] Egale à FRA	
[SLIT] test DEU \$DBD[1] Egale à DEU	
[SLIT] test compte tv \$DBD[3] Supérieur à 0	
[SLIT] test compte tve \$DBD[4] Supérieur à 0	
[SLIT] test compte tel \$DBD[0] Inférieur à 0	
[SLIT] test compte tel	
cents	
\$DBD[2] Egale à	
0	

Table 9: Voicemail Pro Condition Parameters

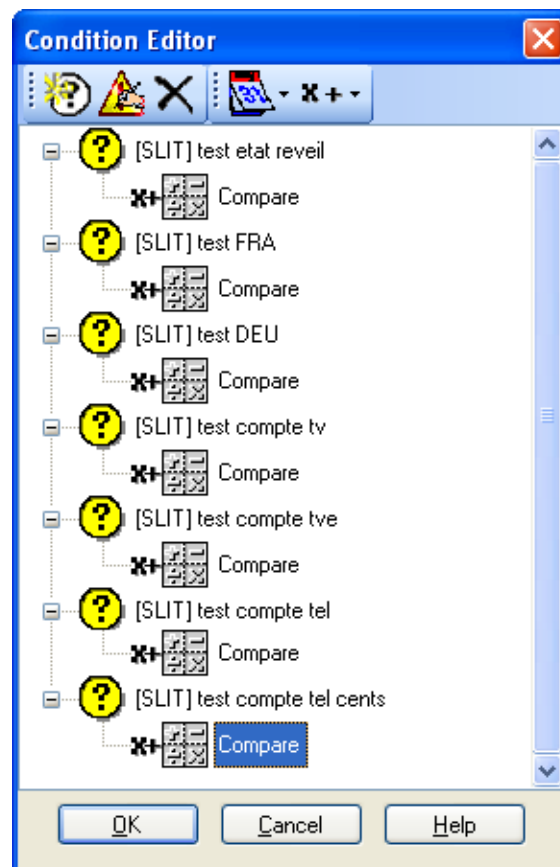


Figure 14: Voicemail Pro Condition Screen

4.2.2. Copy Speech Files to Voicemail Pro

Copy the directory “D:\Utilitaires\Outils\Avaya\slit” from the SLIT CD to “C:\Program Files\Avaya\IP Office\Voicemail Pro\VM\WAVS” (replace the “D” CD drive designation with the proper value, as required).

4.3. Install and Configure NovaHop IPO-VMPRO Server

The screen shots and much of the corresponding installation instructions in this section are in French. The following is a (very) brief refresher course for those who may have forgotten their French:

Function Keys		Fields	
French	English	French	English
Annuler	Cancel	Chambre	Room
Aide	Help	Clef	Key
Créer	Create	Lancement	Launch
Installer	Install	Liaison	Connection
Modifier	Modify	Lits	Beds
Suivant	Next	Nom	Name
Parcourir	Browse	Place	Location
Précédent	Previous	Poste	Extension
Valider	Validate	Tarif	Price
Quitter	Quit		
Terminer	Finish		

Table 10: French / English Translation

Insert the NovaCom install media and let it auto start the install tool. Click “NovaCom Client/Serveur”.

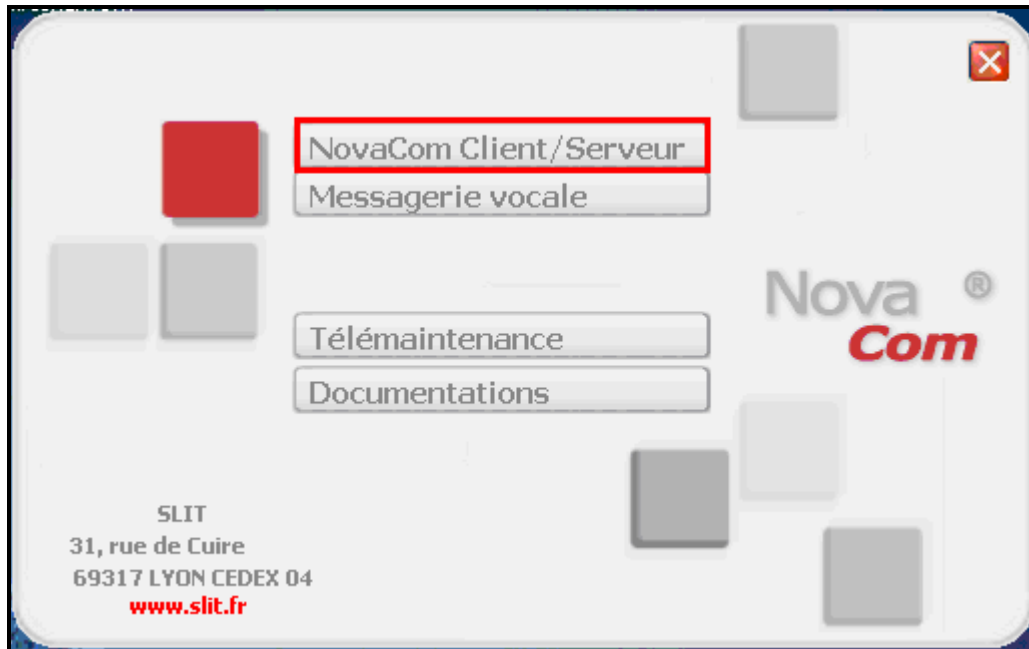


Figure 15: NovaCom Autostart Greeting Screen

Click “Suivant”.



Figure 16: NovaCom Server Installation Wizard Greeting Screen

Select the first radio button if the license conditions are acceptable and Click “Suivant”.

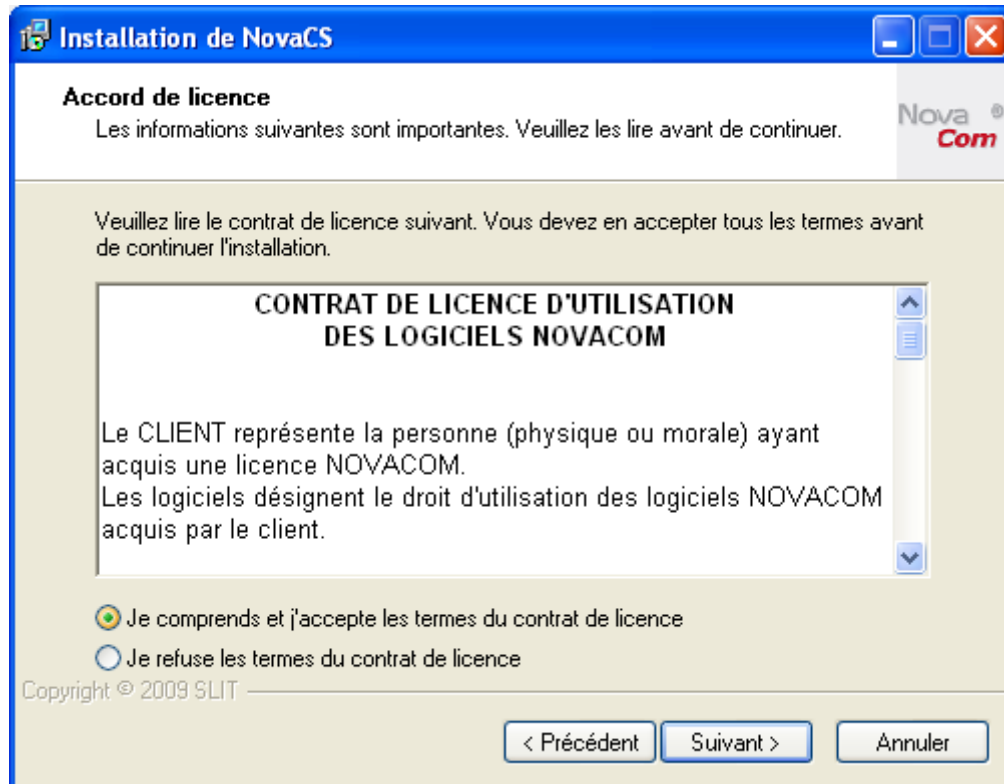
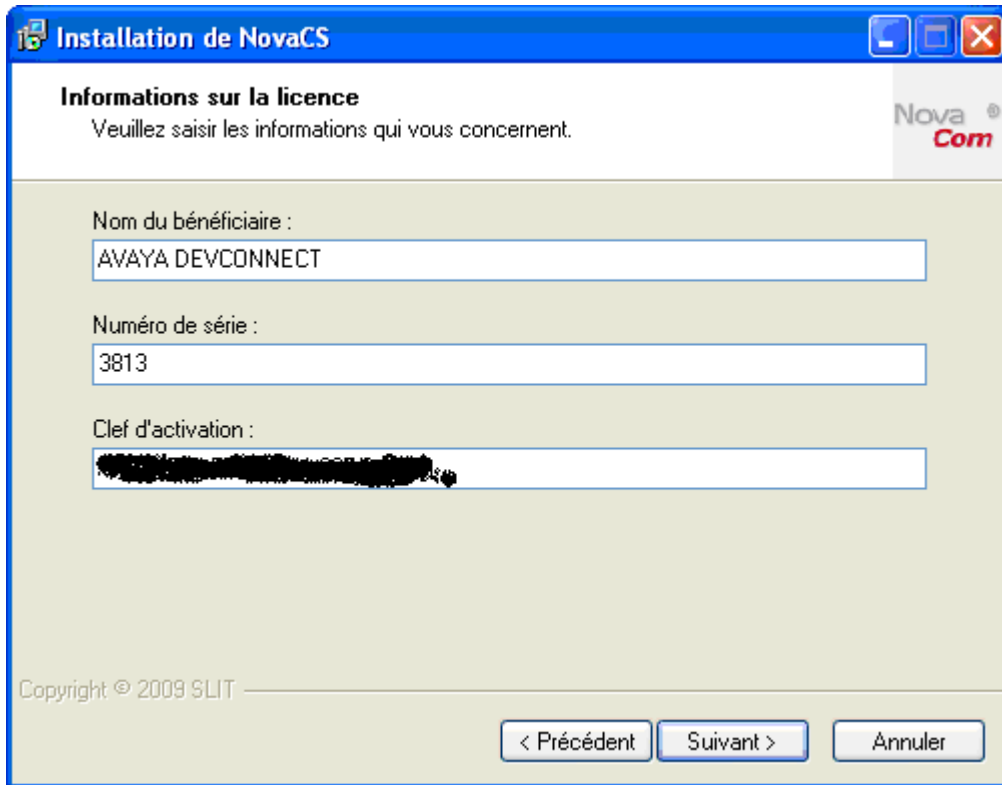


Figure 17: NovaCom License Acceptance Screen

Enter a user name in the first field and an activation code in the “Clef d’activation” field and click “Suivant”.



The screenshot shows a Windows-style window titled "Installation de NovaCS". The window has a blue title bar with standard minimize, maximize, and close buttons. The main content area has a light beige background. At the top, there's a section titled "Informations sur la licence" with the instruction "Veuillez saisir les informations qui vous concernent." and the NovaCom logo. Below this, there are three text input fields: "Nom du bénéficiaire :" containing "AVAYA DEVCONNECT", "Numéro de série :" containing "3813", and "Clef d'activation :" which is filled with blacked-out characters. At the bottom, there's a copyright notice "Copyright © 2009 SLIT" and three buttons: "< Précédent", "Suivant >", and "Annuler".

Installation de NovaCS

Informations sur la licence
Veuillez saisir les informations qui vous concernent.

Nom du bénéficiaire :
AVAYA DEVCONNECT

Numéro de série :
3813

Clef d'activation :
[Redacted]

Copyright © 2009 SLIT

< Précédent Suivant > Annuler

Figure 18: NovaCom License Key Entry Screen

Retain the default installation path and click “Suivant”.

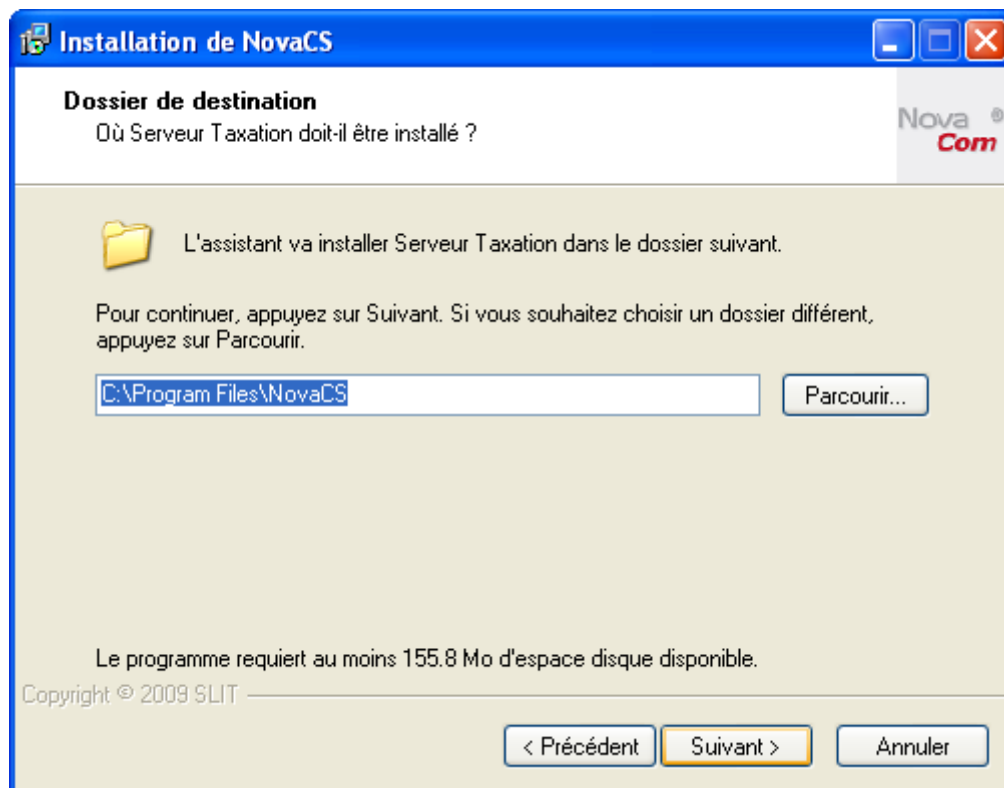


Figure 19: NovaCom Data Directory Selection Screen

Click “Suivant”.

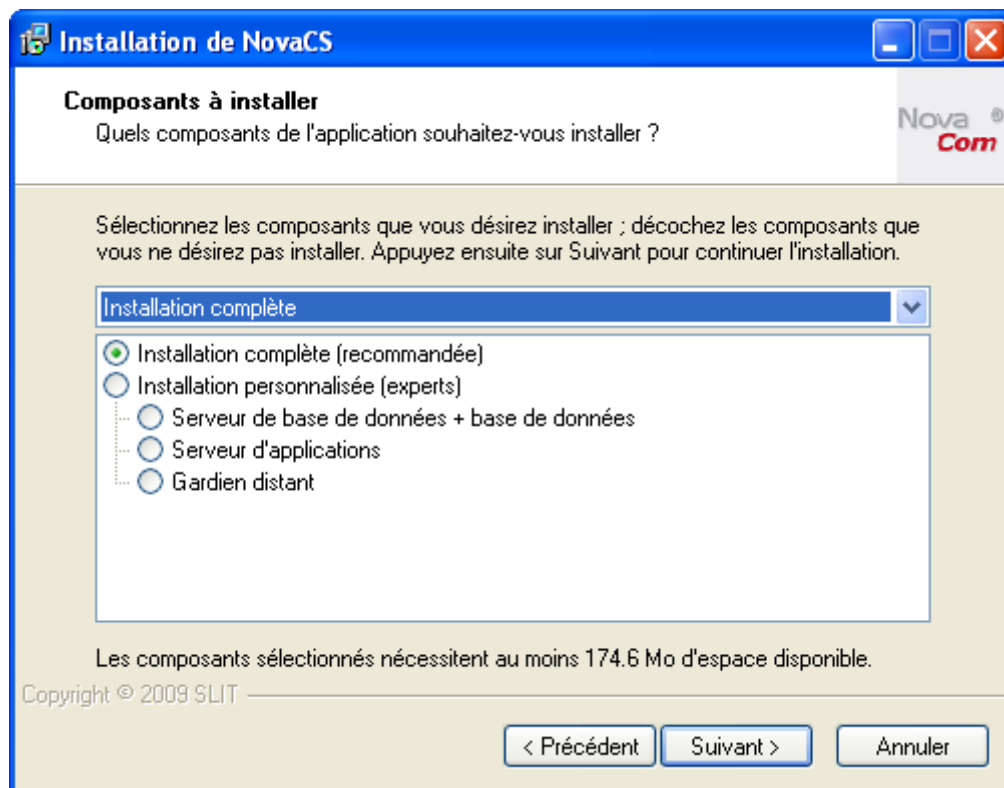


Figure 20: NovaCom Component Selection Screen

Click “Suivant”.

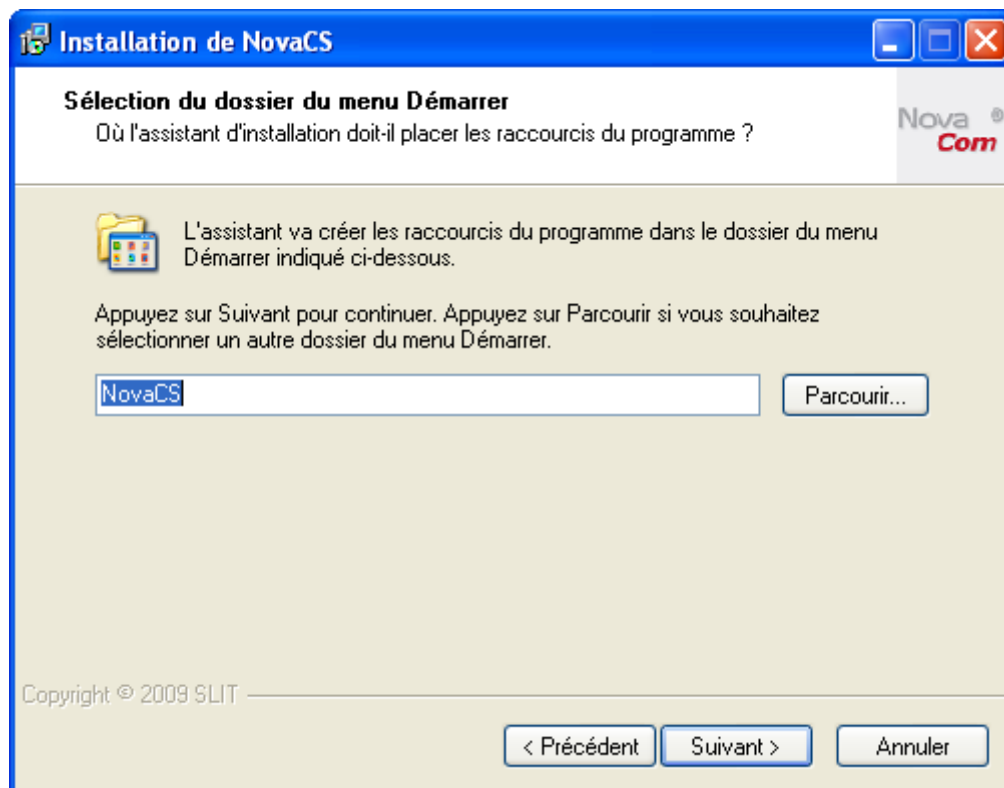


Figure 21: NovaCom Program Directory Selection Screen

Click “Suivant”.

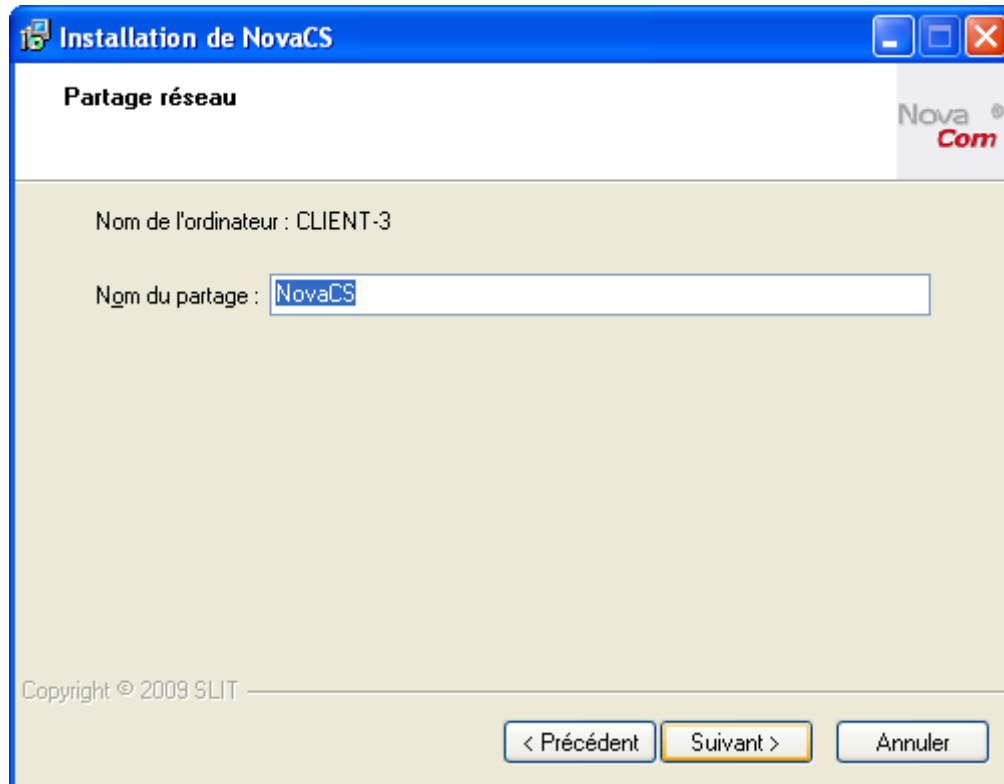


Figure 22: NovaCom Client Directory Selection Screen

Click “Suivant”.

Licences

Licence globale de la suite logicielle

Bénéficiaire : AVAYA DEVCONNECT

Cléf : [redacted] - [redacted] - [redacted] - [redacted] - [redacted] - [redacted]

Licences des modules

Module	Licence	Connex.	Expiration
A.I.C.	[redacted]		
Annuaire	[redacted]	1	Jamais
Annuaire non-voyant	[redacted]		
Annuaire P.O	[redacted]		
Archivage	[redacted]		
Coupure communications	[redacted]		
DHM	[redacted]	2	Jamais
Editeur de tarifs opérateurs	[redacted]		
Facturation	[redacted]		
Fil de l'eau	[redacted]	1	Jamais
Hôpital	[redacted]	1	Jamais
MajCom	[redacted]		
Manager	[redacted]		
Messagerie vocale admin.	[redacted]		
Messagerie vocale client	[redacted]		

Cette page permet la saisie des licences d'utilisation correspondant aux différents modules achetés.

Suivant >>

<< Précédent

Figure 23: NovaCom License Confirmation Screen

Click “Suivant”.

Paramètres généraux

Paramètres généraux | Utilisateurs systèmes et mot de passe | Serveur Sntp de mail

Paramétrage monétaire

Symbole :

1^{ère} monnaie : €

2^{ème} monnaie : F

Parité : 1 F = 0.15245 €

Nombre de décimales : 2

Position du symbole : ☐ Avant ☒ Après

Double saisie : ☐ Double affichage : ☐

Exemple : 3524.12 €

En-tête des éditions

AVAYA DEVCONNECT
Kleyerstrasse 94
60236 Frankfurt

Couleurs

Champs obligatoires :

Zones d'information :

Zones de rappel :

Séparateurs critères de recherche

Intervalles : : (deux points)

Valeurs : : (point virgule)

Cette page permet de régler les paramètres de la Suite s'appliquant à tous les modules.

Modifié

Figure 24: General Parameters Screen

Click “Suivant”.

The screenshot shows a software interface titled "Historiques / Journaux". It contains several sections for setting retention periods in days (jour(s)).

- Communications**
 - Les communications sont conservées pendant : Externes 365 jour(s)
 - Internes 62 jour(s)
- Abonnés internes et contacts externes**
 - Les abonnés et contacts supprimés sont conservés pendant : 31 jour(s)
- Journaux et alarmes**
 - Les événements des journaux sont conservés pendant : 31 jour(s)
- Hôpital**
 - Les occupants sortis sont conservés pendant : 365 jour(s)
 - Les occupants sortis débiteurs sont conservés pendant : 365 jour(s)
 - Les écritures du journal de caisse sont conservées pendant : 365 jour(s)

On the right side, there is a yellow box with the text: "Cette page permet de saisir les différentes périodes de conservation des communications, des journaux ...". Below this box are two buttons: "Suivant >>" and "<< Précédent".

Figure 25: Operational Period Selection Screen

Click “Suivant”.

Utilisateurs et profils

Gestion des utilisateurs | Gestion des profils | Gestion des formats

Tous les utilisateurs | Droits par modules | Utilisateurs connectés

Rechercher par : Nom utilisateur ▼ Critère : [] [] Grille...

Nom utilisateur	Nom détaillé	Administrateur	Confidentialité
ADMIN	Administrateur	x	1
TAXATION	Utilisateur taxation	-	0

Imprimer...

Cette page affiche la liste des utilisateurs, et permet d'ajouter, de modifier ou de supprimer des utilisateurs.

Créer... Modifier... Supprimer Import ...

Suivant >> << Précédent

Figure 26: User Profile Screen

For the “Numérotation” tab, enter the parameters shown in the following table and click “Suivant”.

Parameter	Usage
La numérotation externe	Enter the prefix used to dial external calls.
La numérotation abrégée	Enter the leading digit of local extensions.
Nombre de chiffres...	Enter the number of digits used to dial an external number.

Table 11: Annuaire Numérotation Configuration Parameters

Annuaire

Hiérarchies et champs **Numérotation**

Poste obligatoire pour les abonnés : ☒

Préfixe pour :

- La numérotation externe :
- La numérotation abrégée :

Nombre de chiffres validant l'ajout du préfixe pour la numérotation externe :

Cette page permet le paramétrage de tous les champs de l'annuaire ainsi que les niveaux hiérarchiques de la suite.

[Suivant >>](#)

[<< Précédent](#)

Figure 27: Annuaire Numérotation Screen

For the “Chambres” tab, set the parameters as shown in the following table.

Parameter	Usage
Compte téléphonique	Check this box.
DHM	Select the “Pas de DHM” radio button.
Gestion des sorties permissionnaires	Check this box.

Table 12: Hôpital: Chambres Configuration Parameters

Hôpital

Comptes gérés

Compte téléphonique : ☒ **DHM**

Compte télévision : ☐ ☒ Pas de DHM

Compte divers : ☐ ☐ DHM avec attente

☐ DHM sans attente

Mode de fonctionnement

Chambres Comptes Factures Forfait SDA Télévision Dates

Si chambre occupée, le nouveau patient chasse l'occupant actuel : ☐

Si chambre occupée, le nouveau patient sort l'occupant actuel : ☐

Si chambre occupée, le nouveau patient est mis dans le couloir : ☐

Si chambre inconnue, alors arrivée ou mouvement impossible (erreur) : ☐

Possibilité de saisir directement le nom du lit lors de l'arrivée d'un patient : ☐

Gestion des sorties permissionnaires : ☒

Type de champs

Champs clients Champs lits

Fixes Libres Libres

Libellé	Obligatoire	Visibilité	Nb de caractères
Genre	Non	Géré	0
I.E.P.	Oui	Géré / Visible	0
I.P.P.	Oui	Géré / Visible	0
Prénom	Oui	Géré	0

Modifier

Suivant >>

<< Précédent

Modifié

Cette page permet de configurer le fonctionnement ainsi que les champs du module Hôpital.

Figure 28: Hôpital: Chambres Configuration Screen

For the “Comptes” tab, check the “Lors de l’arrivée d’un ...” box and click “Suivant”.

Hôpital

Comptes gérés

Compte téléphonique : ☒

Compte télévision : ☐

Compte divers : ☐

DHM

☒ Pas de DHM

☐ DHM avec attente

☐ DHM sans attente

Mode de fonctionnement

Chambres **Comptes** Factures Forfait SDA Télévision Dates

Lors du départ d'un patient, le solde de son compte téléphonique est supprimé : ☐

Lors de l'arrivée d'un patient, le solde de son compte général est supprimé : ☐

même si le solde de son compte est négatif : ☐

Mouvement autorisé même si le tarif du nouveau lit est différent de l'ancien : ☐

Lors de l'arrivée d'un patient, le compte téléphonique s'ouvre automatiquement : ☒

Le coût de la dernière communication avant coupure est celui du seuil de coupure ☐

Type de champs

Champs clients Champs lits

Fixes Libres Libres

Libellé	Obligatoire	Visibilité	Nb de caractères
Genre	Non	Géré	0
I.E.P.	Non	Non géré	0
I.P.P.	Non	Non géré	0
Prénom	Oui	Géré	0

Modifier

Suivant >>

<< Précédent

Cette page permet de configurer le fonctionnement ainsi que les champs du module Hôpital.

Figure 29: Hôpital: Comptes Configuration Screen

Double click on the first entry.

The screenshot shows a software window titled "Pabx". Inside, there is a table with three columns: "Nom", "Fil de l'eau", and "DHM". The first row of the table is highlighted with a red border. Below the table, there are several buttons: "Ajouter", "Modifier", "Priorités DHM >>", "<< Précédent", and "Suivant >>".

Nom	Fil de l'eau	DHM
PABX1	FIL01	DHM1
PABX2	non	DHM2
PABX3	non	non

Figure 30: PBX Selection Screen

Click “Liaison” under “Fil de l’eau”.

Modification d'un Pabx

Nom : **PABX1** Rattaché au niveau hiérarchique : **Site** ... Eff.
Code pays où se situe le pabx : **0033** (France = 0033)

☒ Fil de l'eau

Liaison ... (Liaison "BT direct")

Opérateurs | Fonctionnement | Coût minimal

Taxation à la durée : ☐

Répertoire : Répertoire ... Opérateurs ...

Reconnaissance des opérateurs :

Opérateur	Identifiant	Valeur
-----------	-------------	--------

Ajouter Modifier Supprimer

☐ DHM

Liaison ... (Liaison "Série directe")

Mise à jour des noms : administratifs ☐ dans le pabx.
hospitaliers ☐

Topologie

Pabx gérés par le fil de l'eau courant :

Nom

Pabx du site :

Nom
PABX2
PABX3

Cette page permet le paramétrage du Fil de l'Eau, des opérateurs, de la topologie de Fil de l'Eau, du DHM.

Modifié

Figure 31: PBX Configuration Screen

Set the fields as shown in the following table and click “Modifier”.

Parameter	Usage
Type de liaison	Select “TCP/IP” from the drop-down menu.
Lancement	Select “Automatique” from the drop-down menu.
Modèle de Pabx	Select “IP_OFFICE” from the drop-down menu.
Address IP	Leave the value at the default of “0.0.0.0”. When running as a server, SLIT NovaHop IPO-VMPRO does not need to know the address of Avaya IP Office.
Protocole réseau	Select “tcp” from the drop-down menu.
N° du port	Enter an otherwise unused port number. This must match the value used in Figure 2 .
Mode serveur	Click this box.

Table 13: CDR Connection Client Configuration Parameters

Modification d'une liaison

Type de liaison : **TCP/IP**

Déclenchement de l'alarme : 0 minutes

Poste Longueur : 5 Alphanumérique : ☐

Taille du fichier capture du dialogue : 1500 Ko

Temps d'attente sur trame incomplète : 0 secondes

Type de connexion

☒ Connexion permanente ☐ Connexion périodique

Durée entre deux connexions : 10 min. Durée de la connexion (max) : 10 min.

Lancement : **Automatique**

A partir d'un serveur distant :

Paramètres supplémentaires :

ID du Pabx :

Création automatique des postes : ☒

Modèle de Pabx : **IP_OFFICE**

Paramétrer les variables ...

Marque : Avaya

Modèle : IP OFFICE

Version : 1.0

Commentaire : Ticket pour l'IP Office Avaya

Liaison : 9600 bauds, bits de données = 8, parité = N, bits de stop = 1

TCP / IP

TCP/IP

Adresse IP : 0 . 0 . 0 . 0

N° du port : 1234

Time out réseau : 0 minutes

Mode serveur : ☒

Protocole réseau : **tcp**

Mode pagano : ☐ Connexions multiples : ☐

Avancé...

Modifié

Figure 32: Connection Configuration Screen

Modification d'un Pabx

Nom : PABX1 Rattaché au niveau hiérarchique : Site Eff.

Code pays où se situe le pabx : 0049 (France = 0033)

☒ Fil de l'eau
 Liaison ... (Liaison "TCP/IP")

Opérateurs Fonctionnement Coût minimal

Taxation à la durée : ☐

Répertoire : Répertoire ... Opérateurs ...

Reconnaissance des opérateurs :

Opérateur	Identifiant	Valeur

Ajouter Modifier Supprimer

☐ DHM
 Liaison ... (Liaison "Série directe")

Mise à jour des noms : administratifs ☐ dans le pabx.
 hospitaliers ☐

Modifié

Topologie
 Pabx gérés par le fil de l'eau courant :

Nom

Pabx du site :

Nom
PABX2
PABX3

Cette page permet le paramétrage du Fil de l'Eau, des opérateurs, de la topologie de Fil de l'Eau, du DHM.

MRR; Reviewed:
SPOC 3/24/2009

Click “Suivant”.

Nom	Fil de l'eau	DHM
PABX1	FIL01	DHM1
PABX2	non	DHM2
PABX3	non	non

Figure 34: PBX Selection Screen

Click “Suivant”.

Num.	Nom
------	-----

Figure 35: PBX Pools Screen

Click “Suivant”.

The image shows a software window titled "Passerelles" with a blue header bar. Inside the window, there is a table with two columns: "Num." and "Nom". The table is currently empty. Below the table, there are four buttons: "Ajouter" (Add), "Modifier" (Modify), "Suivant >>" (Next), and "<< Précédent" (Previous). The "Ajouter" and "Modifier" buttons are on the left, and the "Suivant >>" and "<< Précédent" buttons are on the right.

Figure 36: Bridge Selection Screen

Click “Suivant”.

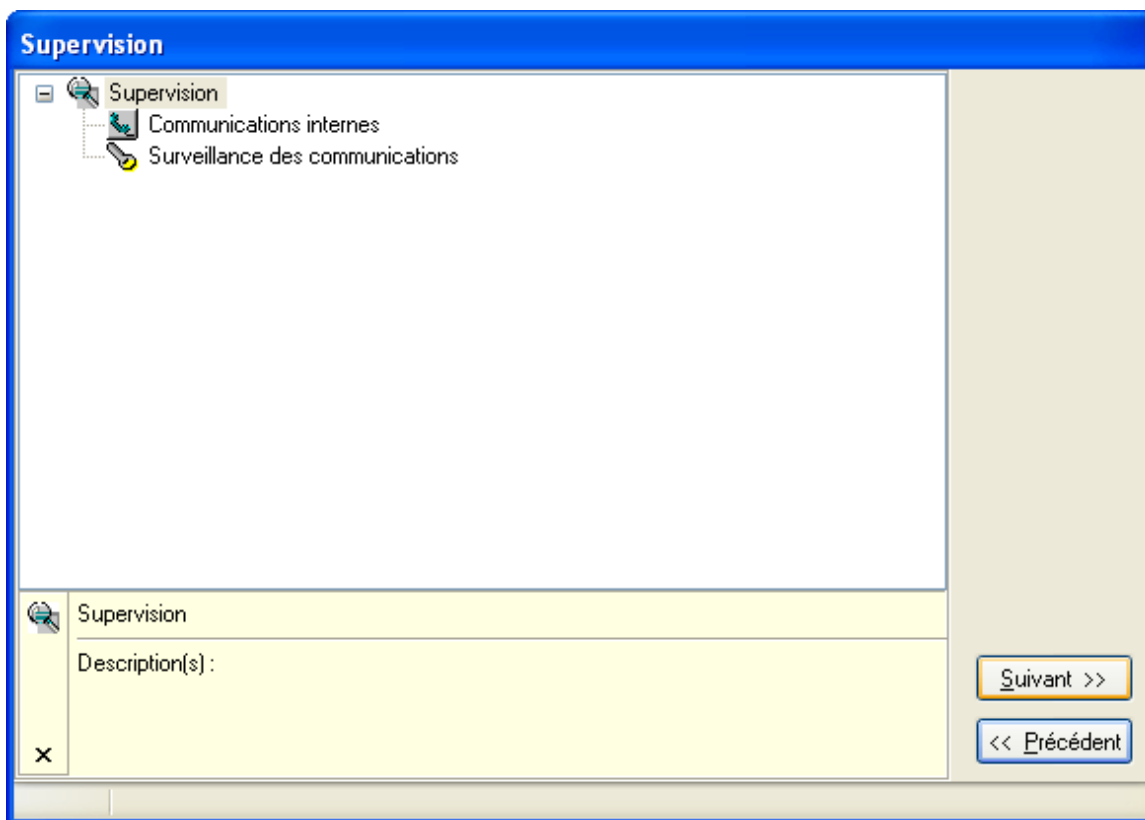


Figure 37: Supervision Screen

Click “Suivant”.

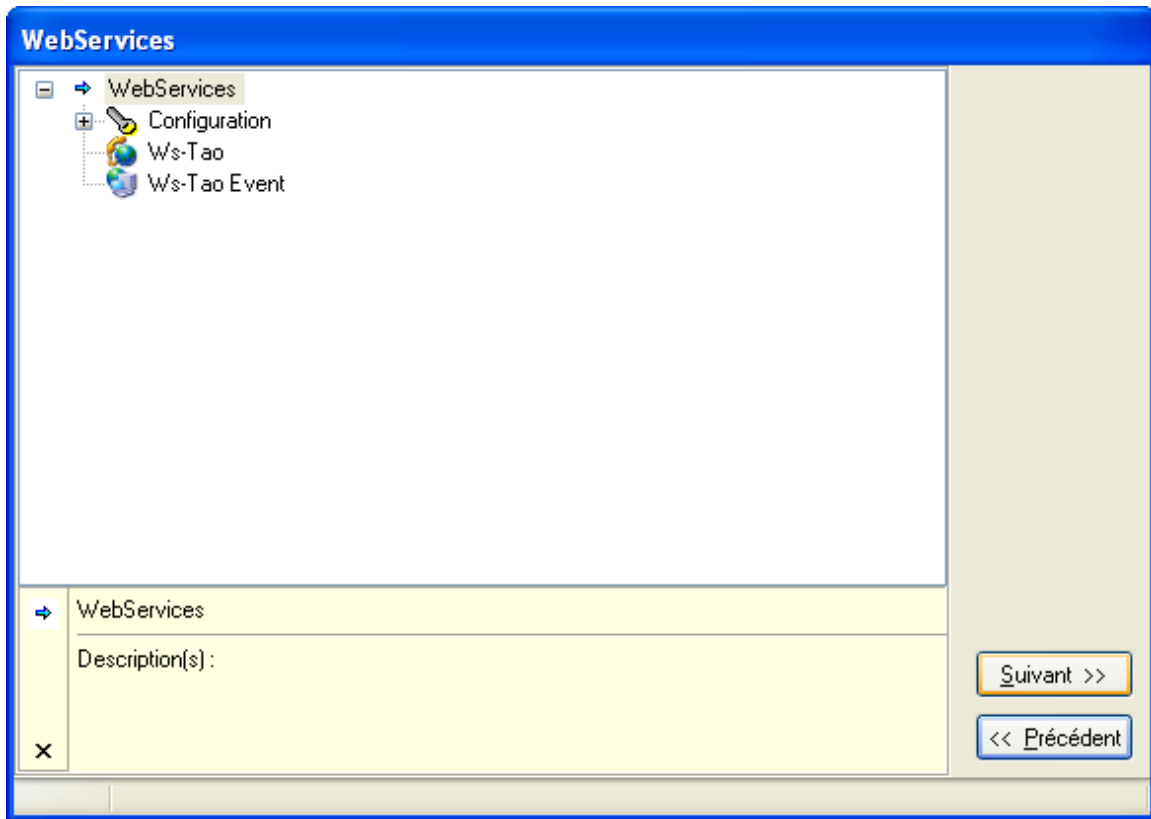


Figure 38: Web Services Screen

Click “Suivant”.

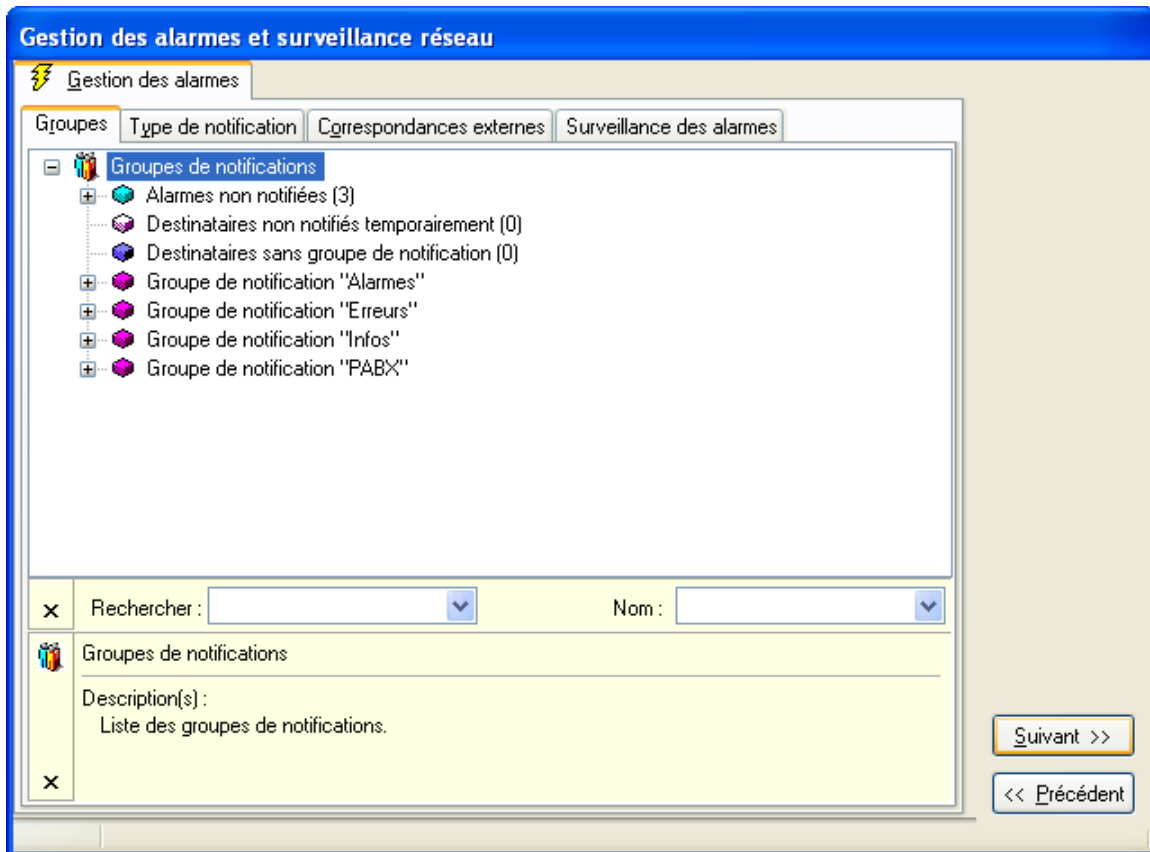


Figure 39: AlarmScreen

Click “Suivant”.

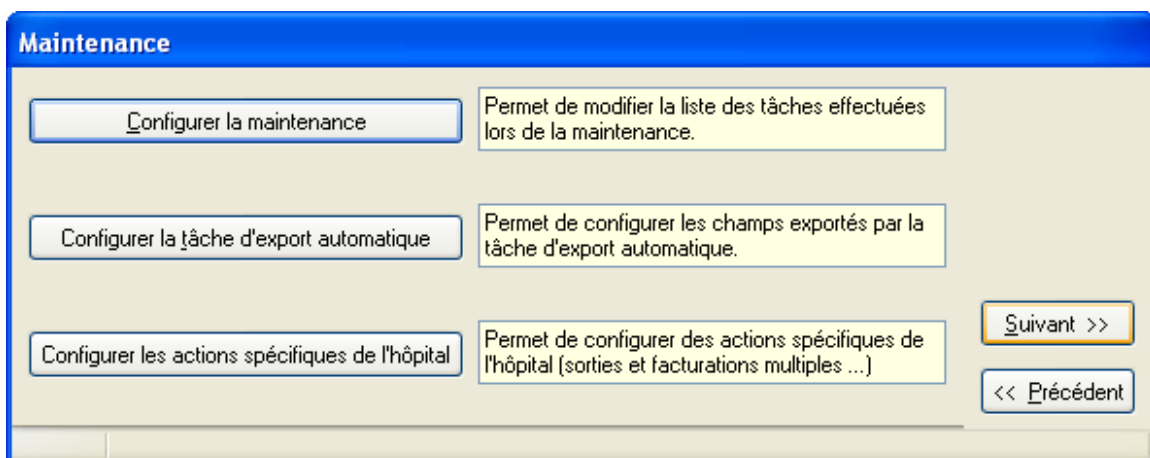


Figure 40: Maintenance Screen

Click “Terminer”.

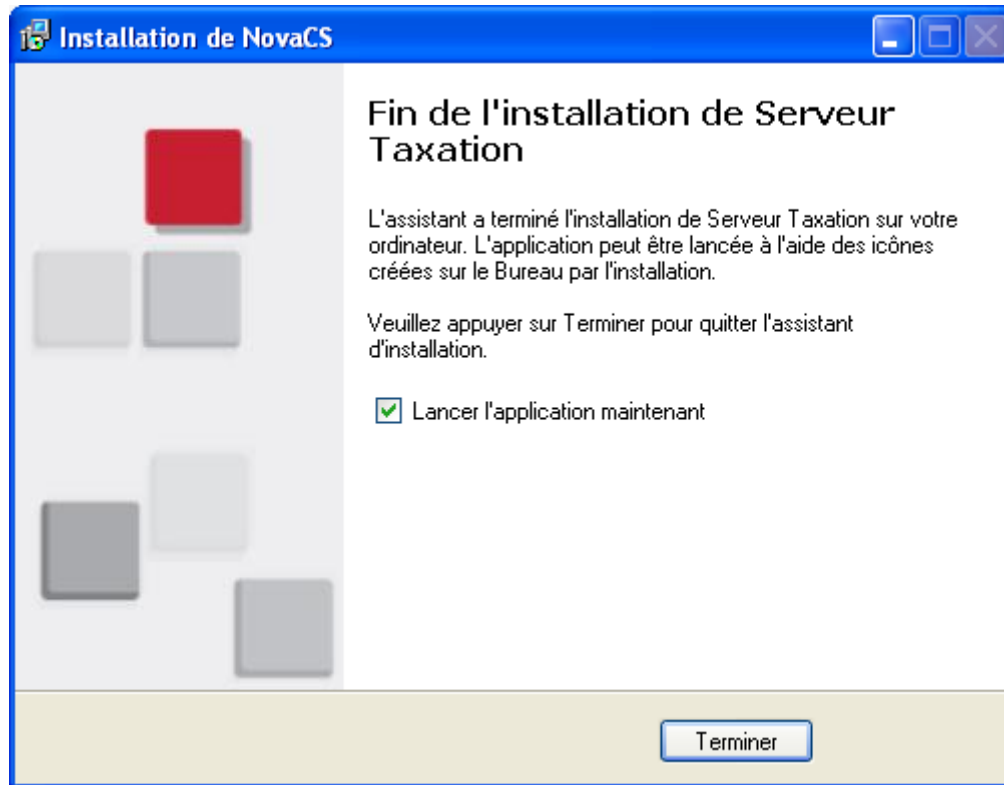


Figure 41: Completion Confirmation Screen

Start the “Lanceur” program from the command line, and select “NovaAnnu.”.

4.4. Install and Configure NovaHop IPO-VMPRO Client

External callers to the hospital are greeted with an announcement prompting them to enter the number of the room to which they wish to be connected, which they subsequently enter via their telephone keypad. NovaHop IPO-VMPRO Client uses Avaya Voicemail PRO to communicate with the Avaya IP Office. For the test configuration, the Client and Server are installed on separate PCs. However, the Client and Server can be installed on the same PC if desired. To install the Client software, the system boot volume of the Server PC should be mounted as a network drive from the Client. The Client software can then be installed by executing \\<SERVER>\NovaCS\Setup client\Setup.exe, where <SERVER> is the network name or IP address of the server.

After installing the client software, start the “Lanceur” program from the Windows Notification Area, and select “NovaAnnu.”.

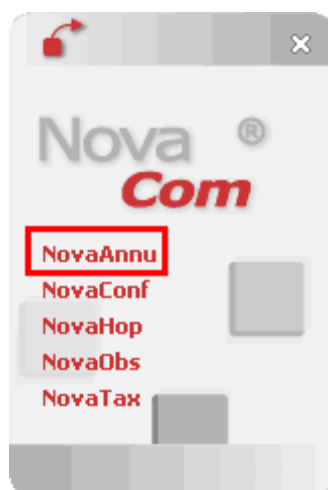


Figure 42: NovaAnnu Launch Screen

From the “Hiérarchie technique” tab, double click “Technique”, and click “Créer”.

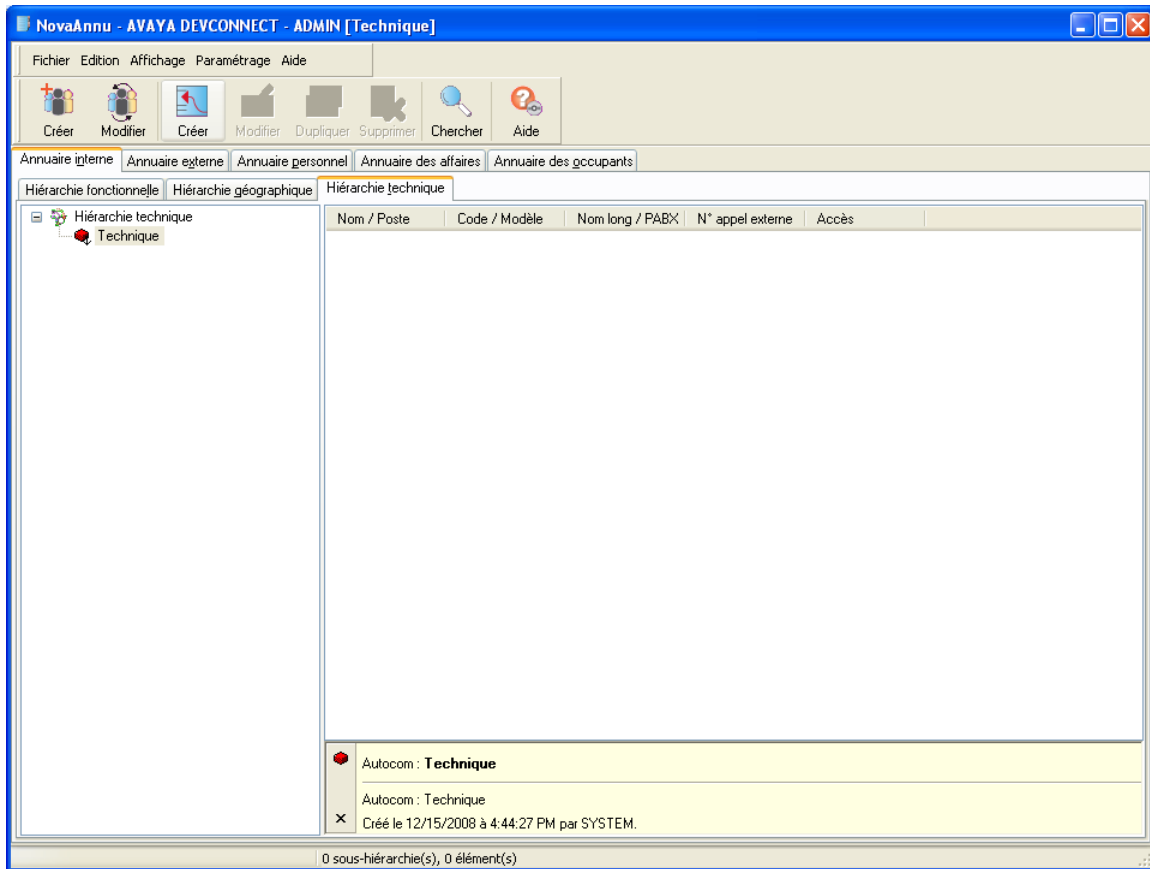


Figure 43: NovaAnnu Hiérarchie Technique Screen

Enter an extension to be created from **Table 1** in the “Poste” and “au poste” fields and click “Créer”.

The screenshot shows a software window titled "Poste" with a blue title bar. Inside, there are two tabs: "Propriétés" (selected) and "Éléments associés".

Propriétés tab:

- A red box highlights the "Poste" field with the value "50062" and the "au poste" field with the value "50062".
- "Masquage particulier du n° composé" is set to "0" with a dropdown arrow, and a link "Utilisation du masquage de l'utilisateur" is visible.
- "Niveau de confidentialité" is set to "0" with a dropdown arrow, and a link "Liste blanche" is visible.
- "N° appel externe" is a text field containing "\$POSTE".
- "Notes" is a text area.
- "Autocom" is a dropdown menu showing "Technique".
- "PABX" is a dropdown menu showing "PABX1".
- "Modèle" is a dropdown menu.

Éléments associés tab:

- It shows a table with columns: "Principal", "Nom", "Hiérarchie fonctionnelle", and "Hiérarchie g".
- The table is currently empty.

Buttons:

- "Créer" (Create)
- "Quitter" (Quit)
- "Aide" (Help)

Figure 44: NovaAnnu Extension Screen

Repeat this for the other extensions from **Table 1** to be configured.

Start the “Lanceur” program from the command line, and select “NovaHop”.

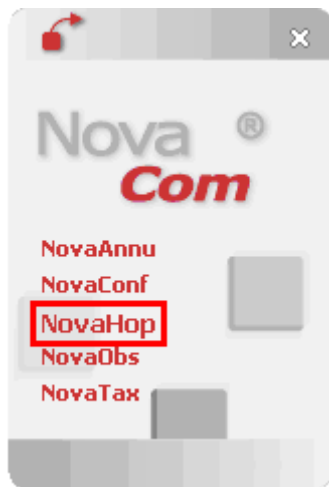


Figure 45: NovaHop Launch Screen

Select the “Modes de fonctionnements” tab. Click “Créer” (create) on the tool bar.

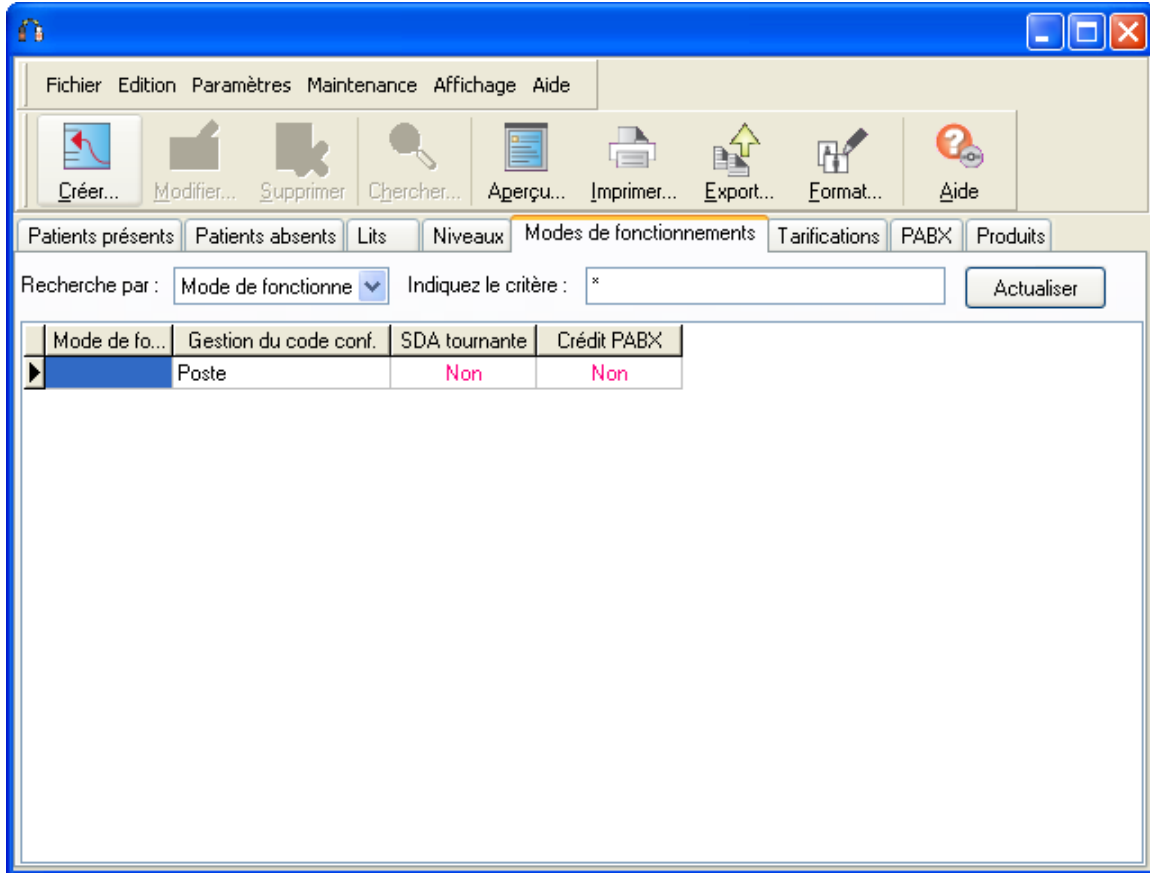


Figure 46: Client Modes de Fonctionnements Screen

Enter “extension” in the “Intitulé” field, and check “SDA tournante” and click “Créer”.

The screenshot shows a window titled "Mode de fonctionnement" with a blue header bar and a red close button. Inside the window, there is a gear icon on the left. A red rectangle highlights the "Intitulé : extension" text field. To the right of this field are three buttons: "Créer", "Quitter", and "Aide". Below the text field, another red rectangle highlights the "SDA tournante" checkbox, which is checked. To the left of this checkbox are three radio buttons: "Attribution automatique" (selected), "Attribution manuelle", and "Attribution non sélectionnée". To the right of the "SDA tournante" checkbox is a section titled "Fonctionnement" containing three radio buttons: "par poste" (selected), "par code confidentiel localisé au poste", and "par code confidentiel généralisé". Below these sections is a section titled "Gestion de la coupure" containing two radio buttons: "Coupure au rattaché (par le fil de l'eau)" (selected) and "Coupure par le PABX (crédit dans le meuble)".

Figure 47: Functional Mode Confirmation Screen

Select the “Tarifications” tab, and click “Créer”.

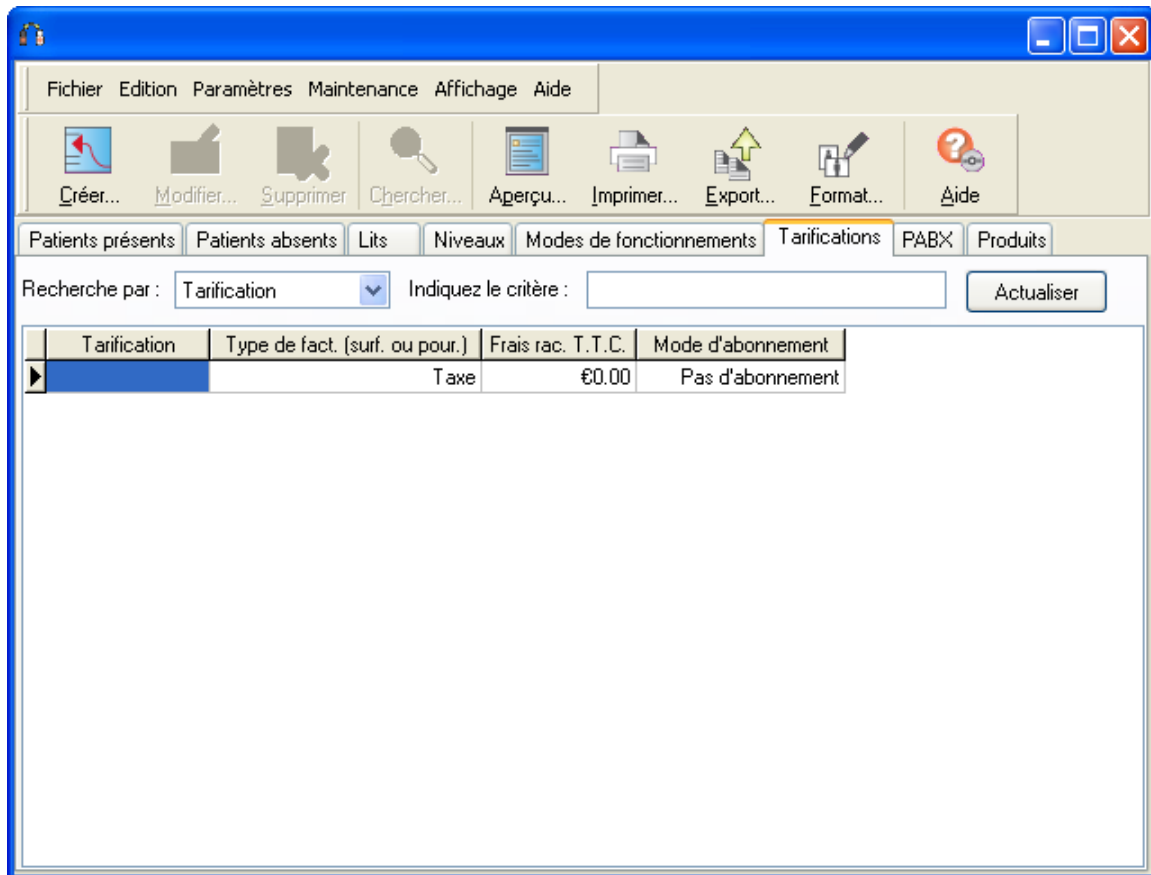


Figure 48: PBX Modification Confirmation Screen

Enter “Standard” in the “Intitulé” field and click “Créer”.

Tarification

Intitulé : Standard

Créer
Quitter
Aide

Tarification Abonnement Remboursement Classes dynamiques

Surfacturation par appel
☒ Coût d'une taxe
☐ Pourcentage sur le coût réel H.T.

Expression des coûts pour les taxes
☒ H.T.
☐ T.T.C.

Frais de raccord. T.T.C. : 0.00 €

Première taxe H.T. : 0.093756 €

Valeur d'une taxe : 0.093756 €

Acompte par défaut : 0.00 €

Coût min. d'une comm. : 0.00 €

Autorisation de découvert
☒ Par défaut : 0.00 €
☐ Illimitée

Figure 49: Tarif Creation Screen

Select the “Niveaux” tab and click “Créer”.

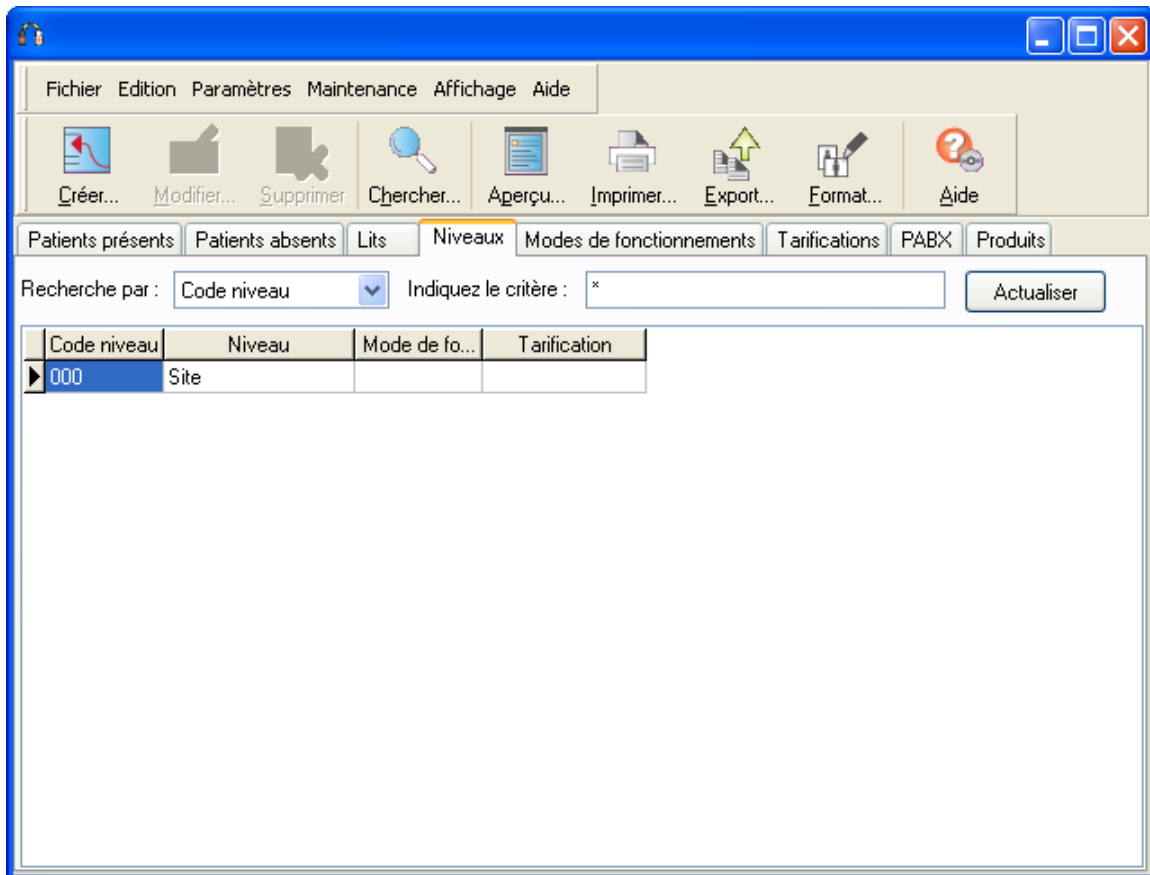


Figure 50: Client Niveaux Tab Screen

Enter the parameters shown in the following table and click “Créer”.

Parameter	Value
Nom	Enter a name to identify the level.
Code	Enter a code to identify the level.
Tarification	Select “Standard” from the drop-down menu.
Mode de fonctionnement	Select “extension” from the drop-down menu.
PABX	Select “PABX1” from the drop-down menu.

Table 14: Niveau Parameters

Niveaux

Caractéristiques générales

Nom : DevConnect

Code : DevConnect

Nom long : DevConnect

Nom du couloir: Couloir DevConnect

Niveau parent choisi :

Imprimante du niveau :

Hiérarchie fonctionnelle

- Site

Caractéristiques du niveau

Niveau Hospitalier

Téléphonie Formulaire et factures

Tarification : Standard

Mode de fonctionnement : extension

PABX : PABX1

Créer

Effacer

Quitter

Aide

Figure 51: Client Niveaux Screen

Select the “Lits” tab, and click “Créer”.

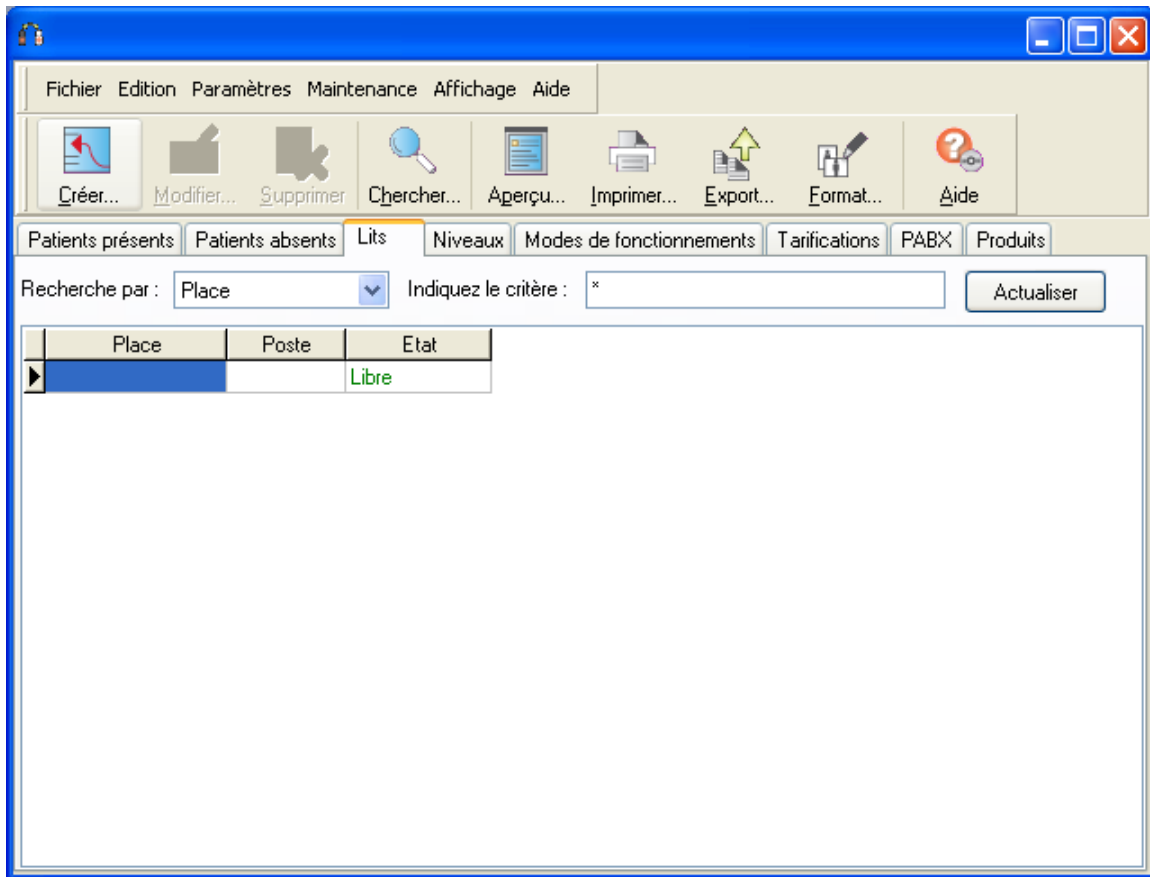


Figure 52: Client Lits Tab Screen

Enter the parameters shown in the following table and select the “DevConnect” Hierarchy key. The Tariff and mode are selected automatically. Enter the Extension in the “Poste” field, and click “Créer”.

Parameter	Value
Intitulé	Enter a name to identify the room.
Tarification	Select “Standard” from the drop-down menu.
Mode de fonctionnement	Select “extension” from the drop-down menu.
Poste	Enter telephone extension which is to be assigned to the room, from Table 1

Table 15: Lits Parameters

Figure 53: Client Lits Creation Screen

Repeat this for the remaining rooms. Upon completion, the rooms are shown in the “Lits” tab.

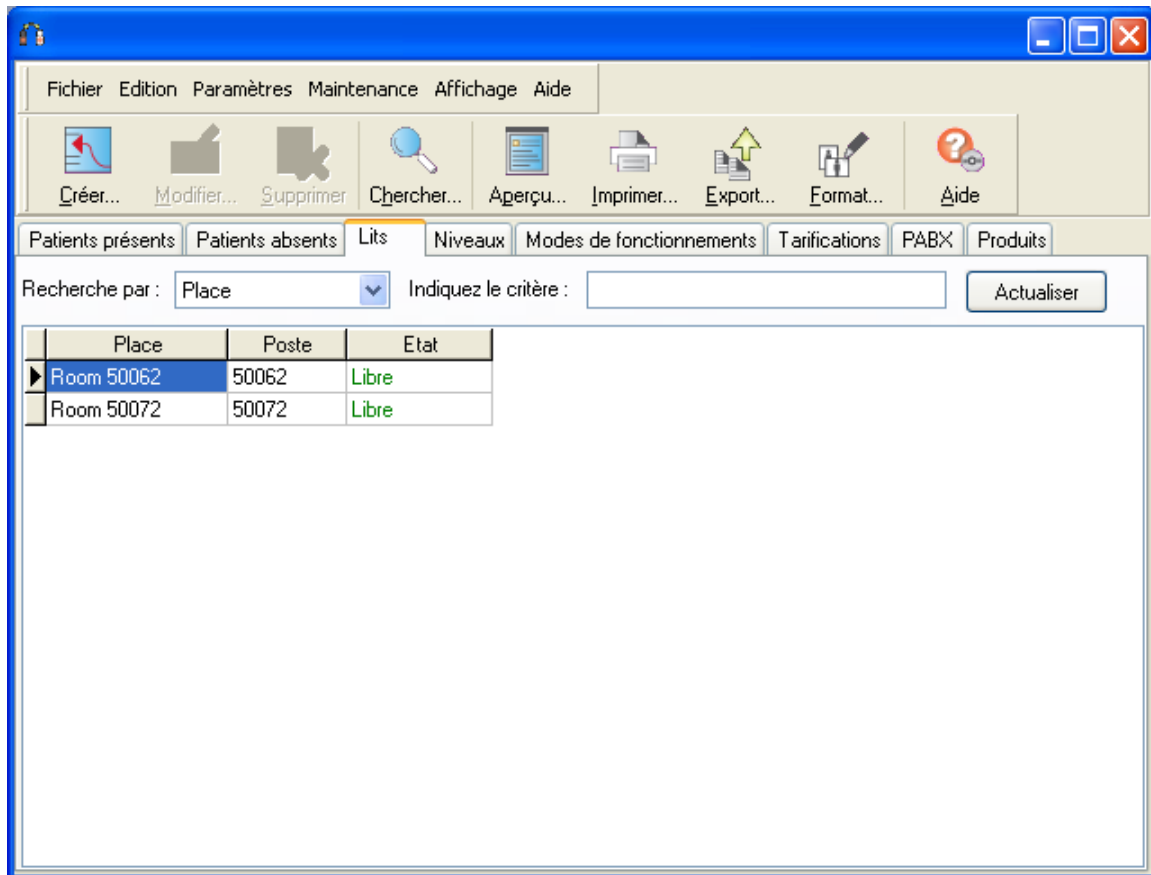


Figure 54: Client Lits Tab after Rooms are Configured

5. General Test Approach and Test Results

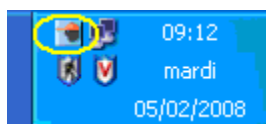
The compliance testing done between SLIT NovaHop IPO-VMPRO and Avaya IP Office was performed manually. The tests were all functional in nature, and no performance testing was done. All tests which were performed yielded the expected result. **Section Error!** Reference source not found. contains a list of tests which were performed.

6. Verification Steps

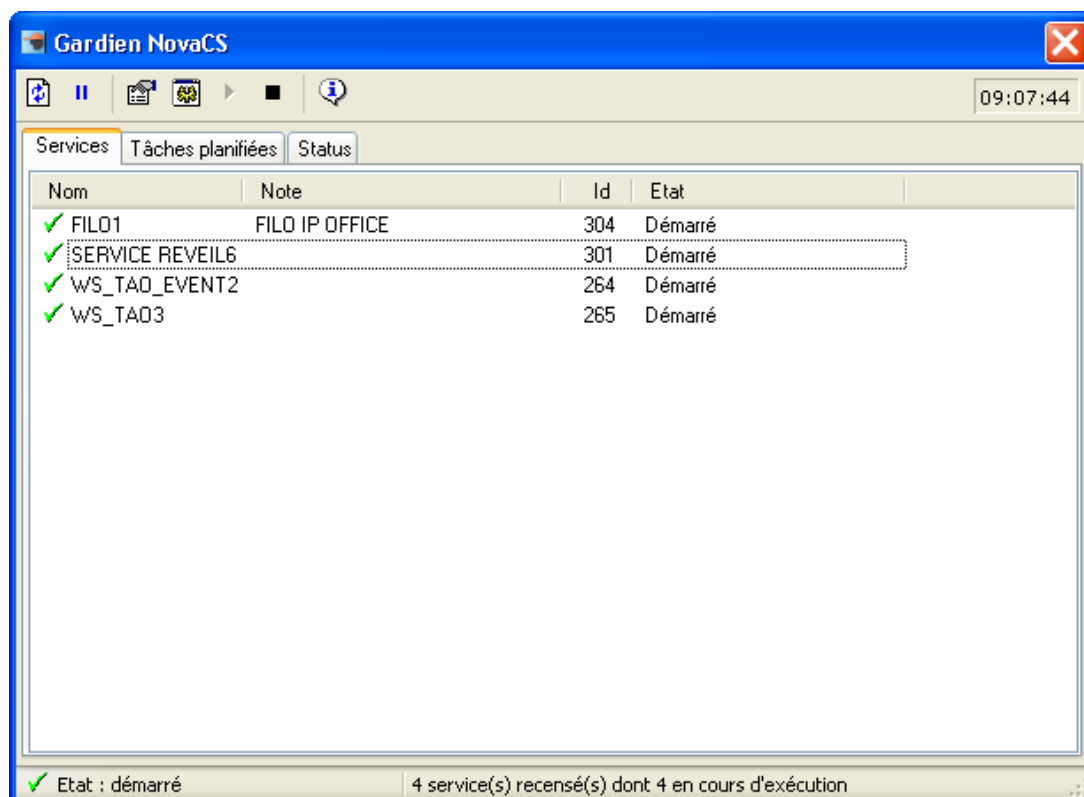
The correct installation and configuration of NovaHop IPO-VMPRO can be verified by performing the steps shown below.

6.1. Verify CDR Link

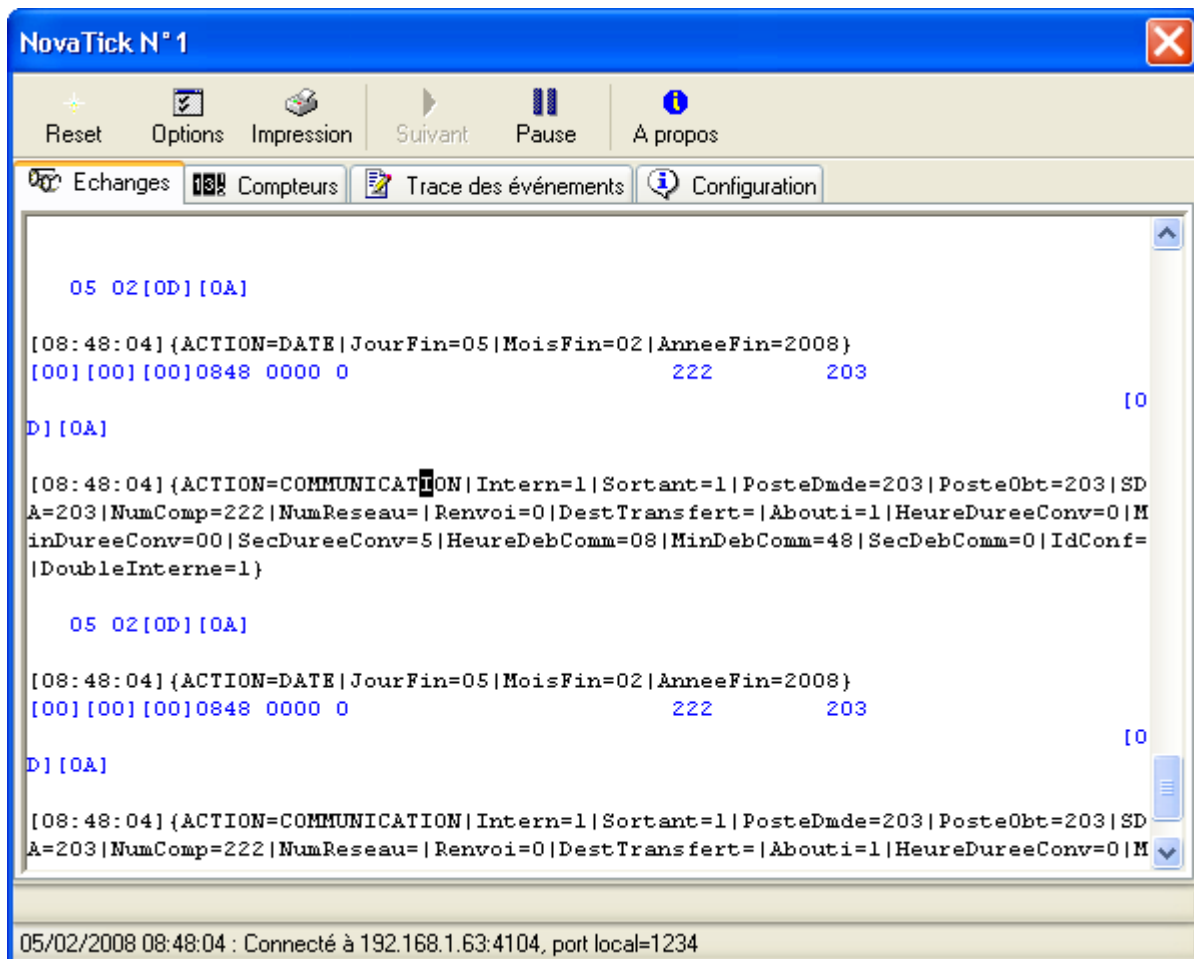
1. Double click on the “man with a red cap” icon in the Systray (highlighted by oval) in order to view the “Gardien NovaCS” window.



2. Double click on the FILOx entry in the screen (the number after FILO may vary depending on the number of the PBX) in order to view the “Novatick” window.



3. Make a call. If everything is set up correctly, blue text should scroll on the screen (CDR received from the PBX) followed by text in black (Interpretation of the CDR). In addition, the bottom window border shows the IP address of the connected PBX.



7. Conclusion

These Application Notes contain instructions for configuring Avaya IP Office to connect to the NovaHop IPO-VMPRO. A list of instructions is provided to enable the user to verify that the various components have been correctly configured.

8. Additional References

This section references documentation relevant to these Application Notes. The Avaya product documentation is available at <http://support.avaya.com>.

- [1] *Administrator Guide for Avaya IP Office*, January 2008, Issue 4.0, Document Number 03-300509.
- [2] *Feature Description and Implementation for Avaya IP Office*, January 2008, Issue 6, Document Number 555-245-205.
- [3] NovaHop Product Description: NovaHop.pdf v4.1 delivered with the NOVA CD

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