



## **Avaya Solution & Interoperability Test Lab**

---

# **Application Notes for SLIT NovaHotel and Avaya Communication Manager – Issue 1.0**

### **Abstract**

These Application Notes describe the compliance testing of SLIT NovaHotel with Avaya Communication Manager. These Application Notes contain an extensive description of the configurations for both NovaHotel and Avaya Communication Manager which were used for testing. The compliance testing tested the major functions of the NovaHotel 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.

## Table of Contents

1.	Introduction.....	3
1.1.	Interoperability Compliance Testing .....	3
1.2.	Support.....	3
2.	Reference Configuration.....	4
3.	Equipment and Software Validated .....	5
4.	Configuration .....	5
4.1.	Avaya Communication Manager .....	5
4.1.1.	Verify System-Parameters Customer-Options.....	6
4.1.2.	Configure IP Interfaces .....	7
4.1.3.	Configure System-Parameters Hospitality.....	8
4.1.4.	Configure Class of Service .....	10
4.1.5.	Add Stations for DIDs .....	11
4.1.6.	Add Stations for Guest Rooms .....	11
4.1.7.	Configure CDR Interface to NovaHotel .....	12
4.2.	Install and Configure NovaHotel Server.....	14
4.3.	Configure NovaHotel Facility Environment.....	38
5.	General Test Approach and Test Results.....	43
6.	Verification Steps.....	43
6.1.	Verify CDR Link .....	43
6.2.	Verify PMS Link.....	46
7.	Conclusion .....	47
8.	Additional References.....	48

# 1. Introduction

These Application Notes describe the configuration steps required for SLIT NovaHotel to successfully interoperate with Avaya Communication Manager. The NovaHotel software is a PC-based application suite that provides features for facility operators to use Avaya Communication Manager in a hospitality environment. The NovaHotel server provides a web interface, so that administrators can use web browsers to perform administrative actions, such as checkin and checkout.

## 1.1. Interoperability Compliance Testing

The compliance testing included the following test scenarios:

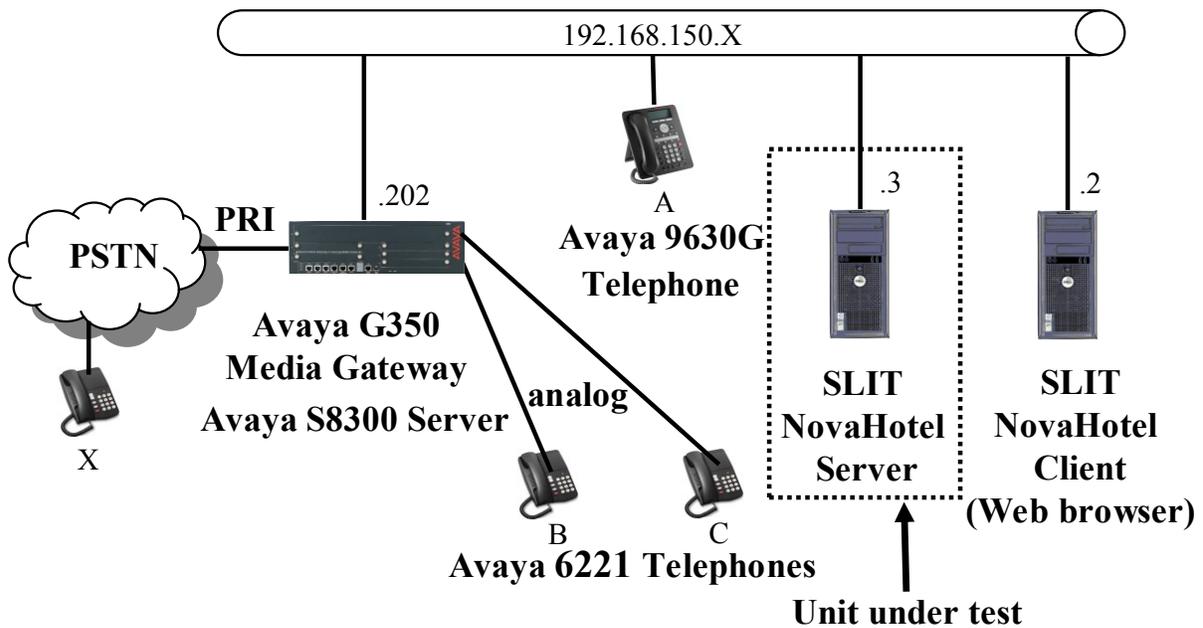
- Verification of client checkin / checkout
- Verification of correct operation of client room transfer
- Verification that client can make extension calls
- Verification that client can make calls to the PSTN
- Verification that a Direct Inward Dialing number (DID) can be allocated to a guest which can be used for direct calls from the PSTN.
- Verification that a DID is redirected after a guest room transfer.
- Verification that a DID is deallocated after a guest checkout.
- Verification that client with insufficient funds cannot make calls
- Verification that client calls to national, international, and mobile parties are billed correctly
- Verification that the NovaHotel 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 NovaHotel Server in the above diagram performs telephony operations via PMS-Link and receives CDR events from Avaya Communication Manager, which is running on the Avaya S8300 Server. The Web browser-based NovaHotel Client communicates with the NovaHotel Server and provides a user interface which allows hotel personnel to administer telephone usage within the hotel. The Avaya 6221 analog telephones are for hotel guests and the Avaya 9630G phone for the hotel administrator.

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

Endpoint	Ext	PSTN Number	Station Type
A	10093	069 xxx39887 10093	9630G
B	10202	069 xxx39887 10202	6221
C	10203	069 xxx39887 10203	6221
DID 1	12001	069 xxx39887 12001	XDIDVIP
DID 2	12002	069 xxx39887 12002	XDIDVIP
X		069 xxx 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 Communication Manager	CM	R015x.01.2.416.4
Avaya G350 Media Gateway	G350	30.10.4
Avaya G350 Analog Module	G350	HW06/FW093
Avaya 9630G IP Telephone	Telephone	S3.002
Avaya 6221 Analog Telephone	Telephone	N.A.
Windows XP Professional	Client	SP 3
Adobe Reader (French Version)	Client	9.0
Microsoft Internet Explorer	Client	6.0.2900.5512
FireBird Database	Server	2.1
SLIT NovaHotel Server	Server	4.1
Windows XP Professional	Server	SP 3
Apache HTTP Server	Server	2.2.4

**Table 2: Equipment and Version Validated**

## 4. Configuration

### 4.1. Configure Avaya Communication Manager

The configuration and verification operations illustrated in this section were performed using the Avaya Communication Manager System Administration Terminal (SAT).

Note that the configuration of the interface to the PSTN is out of the scope of these application notes.

### 4.1.1. Verify System-Parameters Customer-Options

Use the **display system-parameters customer-options** command to verify that Avaya Communication Manager is configured to meet the minimum requirements to support the configuration used for these tests, as shown by the parameter values in **Table 3**. If these are not met in the configuration, please contact an Avaya representative for further assistance.

Parameter	Usage
Maximum Stations (p.1)	The value must be sufficient to allow the number of room stations, admin stations, and DID stations shown in <b>Table 1</b> .
Maximum Concurrently Registered IP Stations (p.2)	The value must be sufficient to allow the number of admin stations shown in <b>Table 1</b>
Hospitality (Basic)? (p.4)	This value must be set to “y”.
Hospitality (G3V3 Enhancements)? (p.4)	This value must be set to “y”.

**Table 3: Configuration Values for System-Parameters Customer-Options**

```

change system-parameters customer-options                               Page 1 of 11
                                OPTIONAL FEATURES

G3 Version: V15                                     Software Package: Standard
Location: 2                                         RFA System ID (SID): 1
Platform: 6                                         RFA Module ID (MID): 1

                                USED
                                Platform Maximum Ports: 44000 500
                                Maximum Stations: 36000 332
                                Maximum XMOBILE Stations: 0 0
Maximum Off-PBX Telephones - EC500: 0 0
Maximum Off-PBX Telephones - OPS: 1000 27
Maximum Off-PBX Telephones - PBFMC: 0 0
Maximum Off-PBX Telephones - PVFMC: 0 0
Maximum Off-PBX Telephones - SCCAN: 0 0

```

**Figure 2: System-Parameters Customer-Options Form, p.1**

```

change system-parameters customer-options                               Page 2 of 11
                                OPTIONAL FEATURES

IP PORT CAPACITIES                                                    USED
      Maximum Administered H.323 Trunks: 1000 50
      Maximum Concurrently Registered IP Stations: 18000 5
      Maximum Administered Remote Office Trunks: 0 0
Maximum Concurrently Registered Remote Office Stations: 0 0
      Maximum Concurrently Registered IP eCons: 0 0
      Max Concur Registered Unauthenticated H.323 Stations: 0 0
      Maximum Video Capable H.323 Stations: 0 0
      Maximum Video Capable IP Softphones: 0 0
      Maximum Administered SIP Trunks: 1000 30
Maximum Administered Ad-hoc Video Conferencing Ports: 0 0
      Maximum Number of DS1 Boards with Echo Cancellation: 0 0
      Maximum TN2501 VAL Boards: 10 1
      Maximum Media Gateway VAL Sources: 0 0
      Maximum TN2602 Boards with 80 VoIP Channels: 128 0
      Maximum TN2602 Boards with 320 VoIP Channels: 128 0
      Maximum Number of Expanded Meet-me Conference Ports: 0 0

```

**Figure 3: System-Parameters Customer-Options Form, p.2**

```

change system-parameters customer-options                               Page 4 of 11
                                OPTIONAL FEATURES

Emergency Access to Attendant? y                                     IP Stations? y
  Enable 'dadmin' Login? y
  Enhanced Conferencing? y                                           ISDN Feature Plus? n
  Enhanced EC500? y                                                  ISDN/SIP Network Call Redirection? y
Enterprise Survivable Server? n                                       ISDN-BRI Trunks? y
  Enterprise Wide Licensing? n                                       ISDN-PRI? y
  ESS Administration? n                                             Local Survivable Processor? n
  Extended Cvg/Fwd Admin? n                                         Malicious Call Trace? n
  External Device Alarm Admin? n                                     Media Encryption Over IP? n
Five Port Networks Max Per MCC? n                                     Mode Code for Centralized Voice Mail? n
  Flexible Billing? n
Forced Entry of Account Codes? n                                     Multifrequency Signaling? y
  Global Call Classification? n                                     Multimedia Call Handling (Basic)? n
  Hospitality (Basic)? y                                           Multimedia Call Handling (Enhanced)? n
Hospitality (G3V3 Enhancements)? y                               Multimedia IP SIP Trunking? n
  IP Trunks? y

IP Attendant Consoles? n

```

**Figure 4: System-Parameters Customer-Options Form, p.4**

### 4.1.2. Configure IP Interfaces

Use the **change node-names ip** command to configure the IP address of the Nova Hotel server.

```

change node-names ip                                                  Page 1 of 2
                                IP NODE NAMES

Name          IP Address
default       0.0.0.0
nova-hotel   192.168.150.3
procr        192.168.150.202

```

**Figure 5: IP Interfaces Form**

### 4.1.3. Configure IP Services

Use the **change ip-services** command to configure the services used by NovaHotel.

```

change ip-services                                     Page 1 of 3

Service      Enabled   Local      IP SERVICES
Type         Node     Port      Local      Remote     Remote
CDR1        procr    0          0          nova-hotel 9001
PMS         procr    0          0          nova-hotel 9002
  
```

**Figure 6: IP-Services Form**

### 4.1.4. Configure System-Parameters Hospitality

Use the **change system-parameters hospitality** command to configure the features required by NovaHotel, as shown by the parameter values in the following table.

Parameter	Usage
Message Waiting Configuration (p.1)	Set this parameter to “act-pms”.
Controlled Restrictions Configuration (p.1)	Set this parameter to “act-pms”.
Housekeeper Information Configuration (p.1)	Set this parameter to “act-pms”.
Client Room Coverage Path Configuration (p.1)	Set this parameter to “act-pms”.
PMS Endpoint (p.1)	Set this parameter to “PMS”.
PMS Protocol Mode: transparent ASCII mode? (p.1)	Set this parameter to “y”.
Display Room Information in Call Display? (p.2)	Set this parameter to “y”.
Automatic Selection of DID Numbers? (p.2)	Set this parameter to “y”.
Custom Selection of VIP DID Numbers? (p.2)	Set this parameter to “y”.
Number of Digits from PMS (p.2)	Set this parameter to “5”.

**Table 4: Configuration Values for System-Parameters Hospitality**

```

change system-parameters hospitality                               Page 1 of 3
                        HOSPITALITY

      Message Waiting Configuration: act-pms
      Controlled Restrictions Configuration: act-pms
      Housekeeper Information Configuration: act-pms
        Number of Housekeeper ID Digits: 0
        PMS Log Endpoint:
        Journal/Schedule Endpoint:
      Client Room Coverage Path Configuration: act-pms
        Default Coverage Path for Client Rooms:
        Forward PMS Messages to Intuity Lodging? n

                        PMS LINK PARAMETERS
        PMS Endpoint: PMS
        PMS Protocol Mode: transparent ASCII mode? y
        Seconds before PMS Link Idle Timeout: 20
        Milliseconds before PMS Link Acknowledgement Timeout: 1500
        PMS Link Maximum Retransmissions: 3
        PMS Link Maximum Retransmission Requests: 3
        Take Down Link for Lost Messages? y

```

**Figure 7: System-Parameters Hospitality Form, p. 1**

```

change system-parameters hospitality                               Page 2 of 3
                        HOSPITALITY

      Dual Wakeups? n      Daily Wakeup? n      VIP Wakeup? n

        Room Activated Wakeup With Tones? n
        Time of Scheduled Wakeup Activity Report:
        Time of Scheduled Wakeup Summary Report:
        Time of Scheduled Emergency Access Summary Report:
        Announcement Type: silence

      Length of Time to Remain Connected to Announcement: 30
      Extension to Receive Failed Wakeup LWC Messages:
      Routing Extension on Unavailable Voice Synthesis:
        Display Room Information in Call Display? y
        Automatic Selection of DID Numbers? y
        Custom Selection of VIP DID Numbers? y
        Number of Digits from PMS: 5
        PMS Sends Prefix? n
        Number of Digits in PMS Coverage Path: 3
        Digit to Insert/Delete:

```

**Figure 8: System-Parameters Hospitality Form, p. 2**

### 4.1.5. Configure Class of Service

Use the **change cos** command to configure the class of service for room extensions as well as XDIDVIP stations. COS 1 is used for guest rooms and COS 2 for XDIDVIP stations.

change cos		Page 1 of 2														
CLASS OF SERVICE																
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Auto Callback	n	y	y	n	y	n	y	n	y	n	y	n	y	n	y	n
Call Fwd-All Calls	n	y	n	y	y	n	n	y	y	n	n	y	y	n	n	y
Data Privacy	n	y	n	n	n	y	y	y	y	n	n	n	n	y	y	y
Priority Calling	n	y	n	n	n	n	n	n	n	y	y	y	y	y	y	y
Console Permissions	n	y	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Off-hook Alert	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
<b>Client Room</b>	n	<b>y</b>	<b>n</b>	n	n	n	n	n	n	n	n	n	n	n	n	n
Restrict Call Fwd-Off Net	y	y	y	y	y	y	y	y	y	y	y	y	y	y	y	y
Call Forwarding Busy/DA	n	y	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Personal Station Access (PSA)	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Extended Forwarding All	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Extended Forwarding B/DA	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Trk-to-Trk Transfer Override	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
QSIG Call Offer Originations	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Contact Closure Activation	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n

**Figure 9: Class of Service Form**

#### 4.1.6. Add Stations for DIDs

Use the **add station** command to add an XDIDVIP station for each of the DIDs which can be allocated for guests to receive calls directly from PSTN callers for each of the DID items listed in **Table 1**, using the parameters shown in the following table.

Parameter	Usage
Type	Enter “XDIDVIP”
COS	Assign the COS (as configured in <b>Figure 9</b> ) which does not have “Client Room” assigned.

**Table 5: XDIDVIP Station Parameters**

```

add station 12001                                     Page 1 of 1
                                                    STATION
Extension: 12001                                     BCC: 0
  Type: XDIDVIP                                       TN: 1
Name:                                                Coverage Path 1:  COR: 1
                                                    Coverage Path 2:  COS: 2
                                                    Hunt-to Station:
                                                    Time of Day Lock Table:

Survivable COR: internal
Survivable Trunk Dest? y
  
```

**Figure 10: XDIDVIP Station Form**

#### 4.1.7. Add Stations for Guest Rooms

Use the **add station** command to add an extension for each of the room extensions listed in **Table 1** using the parameters shown in the following table.

Parameter	Usage
Type	Enter “2500” for an analog telephone.
Port	Enter the address of the port to which the telephone is attached.
COS	Assign the COS (as configured in <b>Figure 9</b> ) which has “Client Room” assigned.

**Table 6: Guest Room Station Parameters**

```

add station 10202                                     Page 1 of 4
                                                    STATION
Extension: 10202                                     Lock Messages? n          BCC: 0
  Type: 2500                                         Security Code:            TN: 1
  Port: 001V702                                     Coverage Path 1:         COR: 1
  Name:                                             Coverage Path 2:         COS: 1
                                                    Hunt-to Station:         Tests? y

STATION OPTIONS
  XOIP Endpoint type: auto                         Time of Day Lock Table:
  Loss Group: 1                                    Message Waiting Indicator: none
  Off Premises Station? n

Survivable COR: internal
Survivable Trunk Dest? y

```

**Figure 11: Guest Room Station Form**

#### 4.1.8. Configure CDR Interface to NovaHotel

Use the **change system-parameters cdr** command to configure the Avaya S8300 Server to send CDR records using the format required by NovaHotel. Set the parameters on page 1 of this form as show in the following table. Note that the configuration values for the “Secondary Output” were included to cause CDR records to be written to a test tool, and are not required for normal operation.

Parameter	Usage
Primary Output Format	Set this field to “customized” so that CDR records can be generated using the format required by NovaHotel.
Primary Output Endpoint	Set this field to “CDR1” to use the CDR IP output device (see <b>Figure 6</b> ) which is configured in <b>Figure 13</b> .

**Table 7: Values Used for System-Parameters CDR, Page 1**

```

change system-parameters cdr                         Page 1 of 2
                                                    CDR SYSTEM PARAMETERS

Node Number (Local PBX ID): 1                       CDR Date Format: month/day
  Primary Output Format: customized                 Primary Output Endpoint: CDR1
Secondary Output Format:
  Use ISDN Layouts? y                             Enable CDR Storage on Disk? y
  Use Enhanced Formats? n                         Condition Code 'T' For Redirected Calls? n
  Use Legacy CDR Formats? y                       Remove # From Called Number? n
Modified Circuit ID Display? n                     Intra-switch CDR? n
  Record Outgoing Calls Only? n                   Outg Trk Call Splitting? y
  Suppress CDR for Ineffective Call Attempts? n   Outg Attd Call Record? y
  Disconnect Information in Place of FRL? n       Interworking Feat-flag? n
  Force Entry of Acct Code for Calls Marked on Toll Analysis Form? n
                                                    Calls to Hunt Group - Record: member-ext
Record Called Vector Directory Number Instead of Group or Member? n
Record Agent ID on Incoming? n                    Record Agent ID on Outgoing? y
  Inc Trk Call Splitting? y                       Inc Attd Call Record? y
Record Non-Call-Assoc TSC? n                      Call Record Handling Option: warning
  Record Call-Assoc TSC? n                       Digits to Record for Outgoing Calls: dialed
  Privacy - Digits to Hide: 0                     CDR Account Code Length: 2

```

**Figure 12: System-Parameters CDR Form, Page 1**

The parameters on page 2 of the **system-parameters cdr** form define the format of the CDR record which is sent to NovaHotel. Set the parameters on this form as shown in the following screen. Additional information on this subject is contained in [2].

```

change system-parameters cdr                                     Page 2 of 2
                                CDR SYSTEM PARAMETERS

    Data Item - Length      Data Item - Length      Data Item - Length
1: date                    - 6    17: isdn-cc                - 11   33: clg-num/in-tac        - 10
2: space                   - 1    18: space                  - 1    34: space                 - 1
3: time                   - 4    19: cond-code              - 1    35: in-crt-id            - 3
4: space                   - 1    20: space                  - 1    36: space                 - 1
5: out-crt-id             - 3    21: auth-code              - 7    37: in-trk-code          - 4
6: space                   - 1    22: space                  - 1    38: space                 - 1
7: code-used              - 4    23: acct-code              - 15   39: ppm                   - 5
8: space                   - 1    24: space                  - 1    40: return                - 1
9: code-dial              - 4    25: attd-console           - 2    41: line-feed            - 1
10: space                  - 1    26: space                  - 1    42:                       -
11: calling-num           - 10   27: vdn                    - 5    43:                       -
12: space                  - 1    28: space                  - 1    44:                       -
13: dialed-num            - 18   29: frl                    - 1    45:                       -
14: space                  - 1    30: space                  - 1    46:                       -
15: sec-dur                - 5    31: node-num               - 1    47:                       -
16: space                  - 1    32: space                  - 1    48:                       -

                                Record length = 140

```

**Figure 13: System-Parameters CDR Form, Page 2**

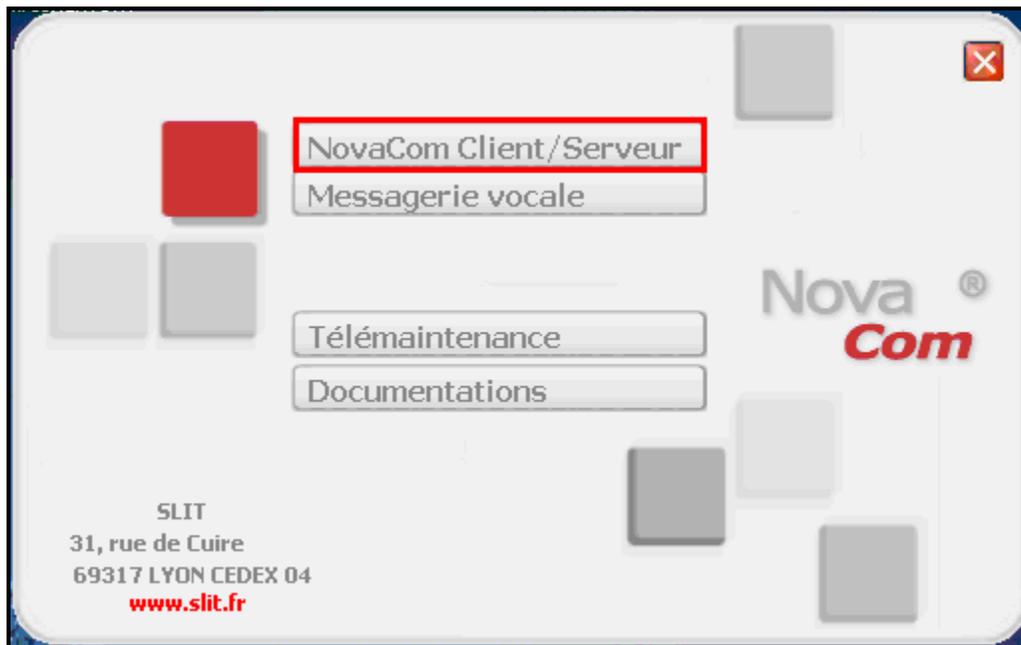
## 4.2. Install and Configure NovaHotel Server

The screenshots and much of the corresponding installation instructions in this section are in French. The following table lists the French to English text mappings for UI constructs shown in the screenshots:

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		

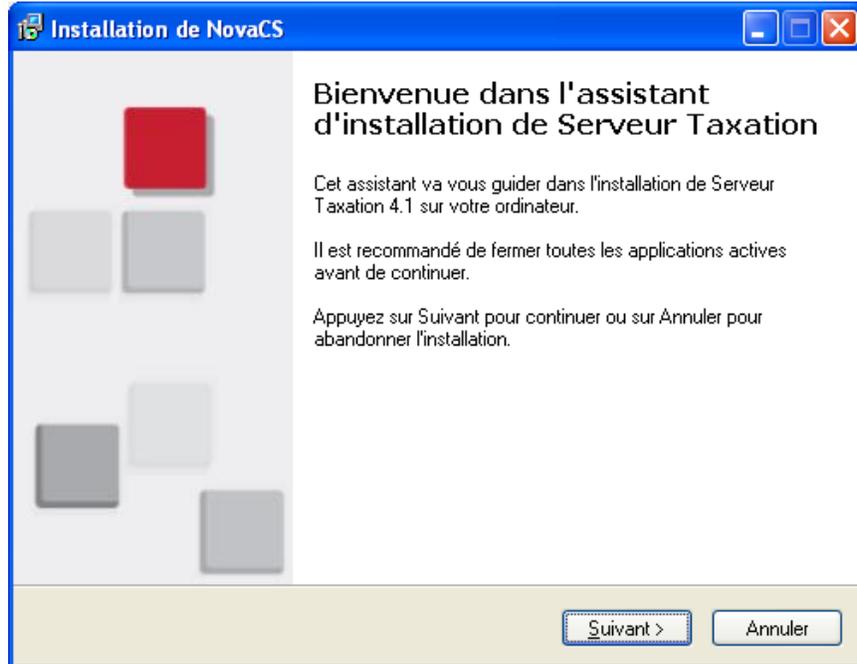
**Table 8: French / English Translation**

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



**Figure 14: NovaCom Autostart Greeting Screen**

Click “Suivant”.



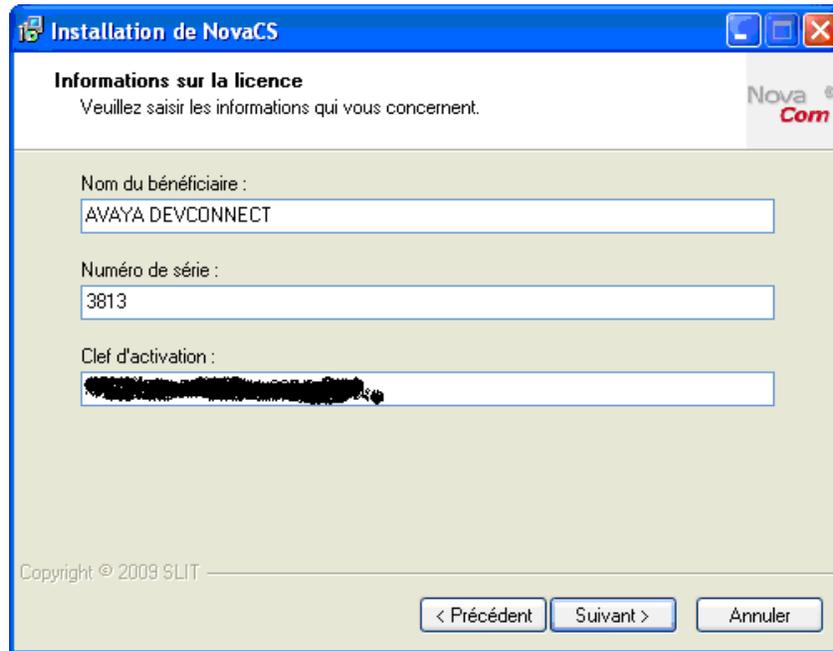
**Figure 15: NovaCom Server Installation Wizard Greeting Screen**

Select the first radio button to accept the license conditions and Click “Suivant”.



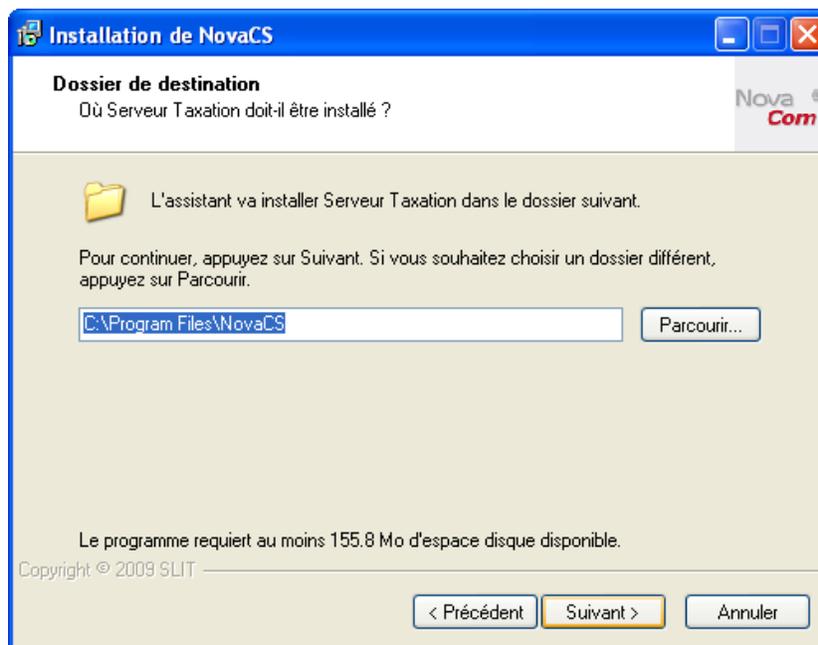
**Figure 16: NovaCom License Acceptance Screen**

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



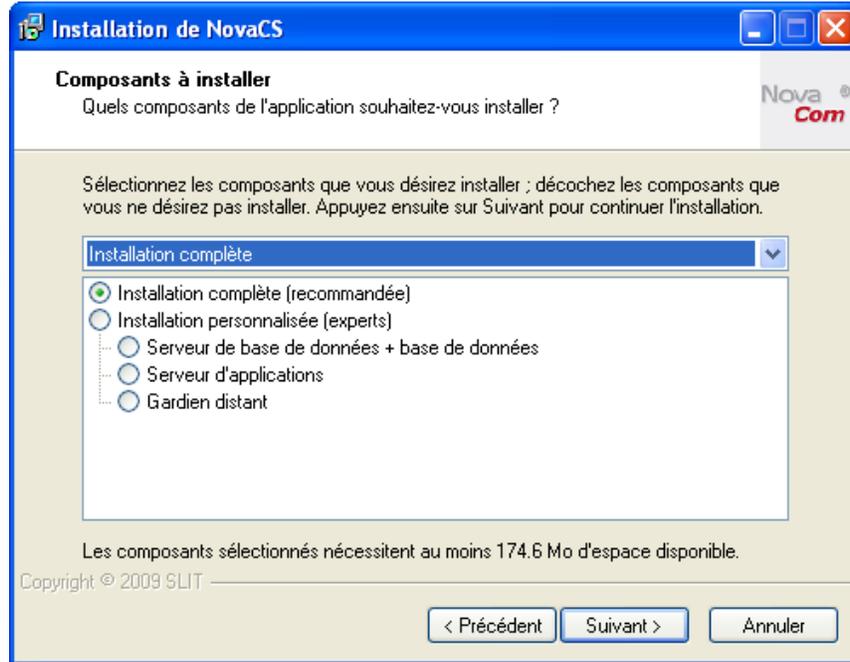
**Figure 17: NovaCom License Key Entry Screen**

Retain the default installation path and click “Suivant”.



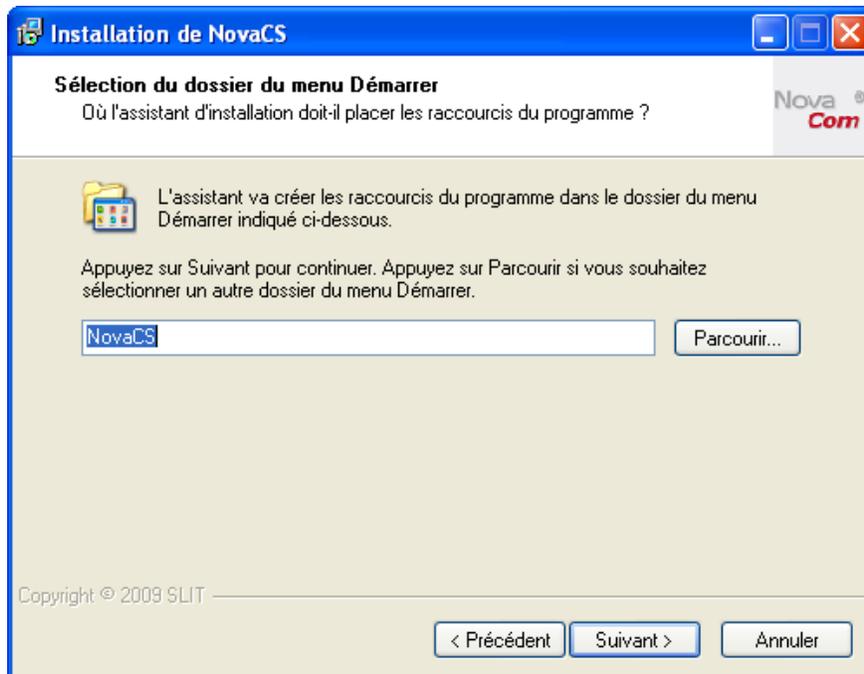
**Figure 18: NovaCom Data Directory Selection Screen**

Click “Suivant”.



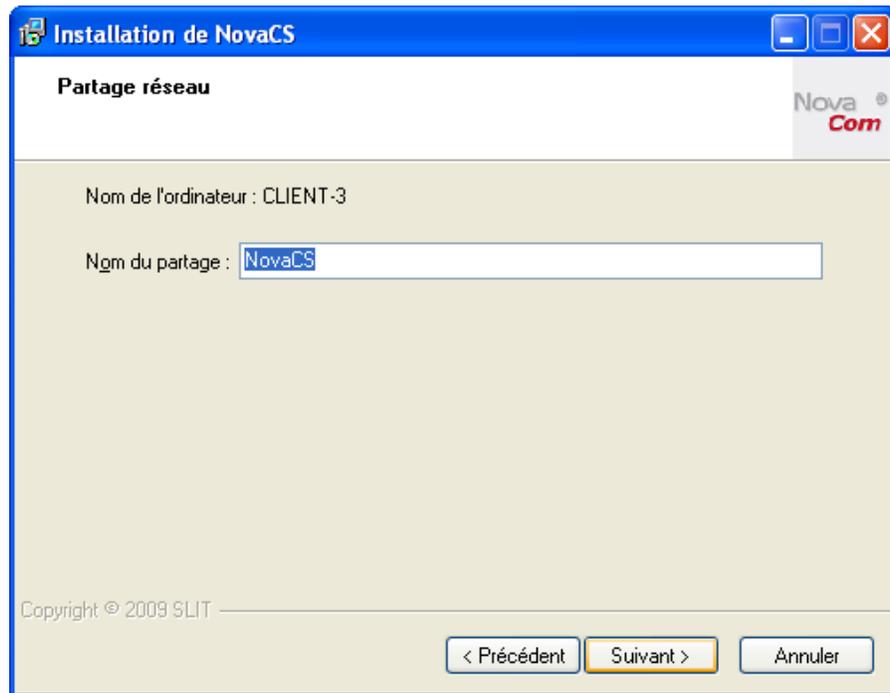
**Figure 19: NovaCom Component Selection Screen**

Click “Suivant”.



**Figure 20: NovaCom Program Directory Selection Screen**

Click “Suivant”.



**Figure 21: NovaCom Client Directory Selection Screen**

Click “Suivant”.

**Licences**

Licence globale de la suite logicielle

Bénéficiaire : AVAYA DEVCONNECT

Clef : [REDACTED] - [REDACTED] - [REDACTED] - [REDACTED] - [REDACTED] - [REDACTED]

Licences des modules

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

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

Suivant >>

<< Précédent

Figure 22: NovaCom License Confirmation Screen

Click “Suivant”.

**Paramètres généraux**

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

**Paramétrage monétaire**

Symbole :

1<sup>ère</sup> monnaie : €

2<sup>ème</sup> 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  
Kleyerstr. 94  
D-60326 Frankfurt

**Couleurs**

Champs obligatoires :  Modifier

Zones d'information :  Modifier

Zones de rappel :  Modifier

**Séparateurs critères de recherche**

Intervalles : (deux points) ▼

Valeurs : (point virgule) ▼

**Coûts**

Taux de la T.V.A. : 19.6 %

Coût de la taxe (HT) : 0.09375 €

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

Suivant >>

<< Précédent

**Figure 23: General Parameters Screen**

Click “Suivant”.

The screenshot shows a software interface titled "Historiques / Journaux". It contains several sections with retention period settings:

- Communications:** 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 évènements 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 24: Operational Period Selection Screen**

Click “Suivant”.

The screenshot shows a web application window titled "Utilisateurs et profils". It has three tabs: "Gestion des utilisateurs", "Gestion des profils", and "Gestion des formats". The "Gestion des utilisateurs" tab is active. Below the tabs are three buttons: "Tous les utilisateurs", "Droits par modules", and "Utilisateurs connectés". The "Tous les utilisateurs" button is selected. Below these buttons is a search area with the text "Rechercher par : Nom utilisateur" and a dropdown menu. To the right of the search area is a "Critère :" field and a "Grille..." button. Below the search area is a table with the following data:

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

At the bottom of the window are four buttons: "Créer...", "Modifier...", "Supprimer", and "Import ...". On the right side of the window, there is a yellow box with the text: "Cette page affiche la liste des utilisateurs, et permet d'ajouter, de modifier ou de supprimer des utilisateurs." Below this box are two buttons: "Suivant >>" and "<< Précédent".

Figure 25: 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.
Nombre de chiffres...	Enter the minimum number of digits used to dial an external number.

**Table 9: Annuaire Numérotation Configuration Parameters**

The screenshot shows the 'Annuaire' configuration window with the 'Numérotation' tab selected. The 'Poste obligatoire pour les abonnés' checkbox is checked. The 'Préfixe pour' section has two entries: '- La numérotation externe' with a value of '0' and '- La numérotation abrégée' with a value of '2'. The field 'Nombre de chiffres validant l'ajout du préfixe pour la numérotation externe' is highlighted with a red border and contains the value '7'. On the right side, there is a yellow informational box and two navigation buttons: 'Suivant >>' and '<< Précédent'.

**Figure 26: 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 “DHM sans attente” radio button.
Gestion des sorties permissionnaires	Check this box.

**Table 10: Hôtel: Chambres Configuration Parameters**

**Hôtel**

**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

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 27: Hôtel: Chambres Configuration Screen**

For the “Comptes” tab, check the “Lors de l’arrivée d’un patient, le compte téléphonique s’ouvre automatiquement” box and click “Suivant”.

**Hôtel**

**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

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

**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

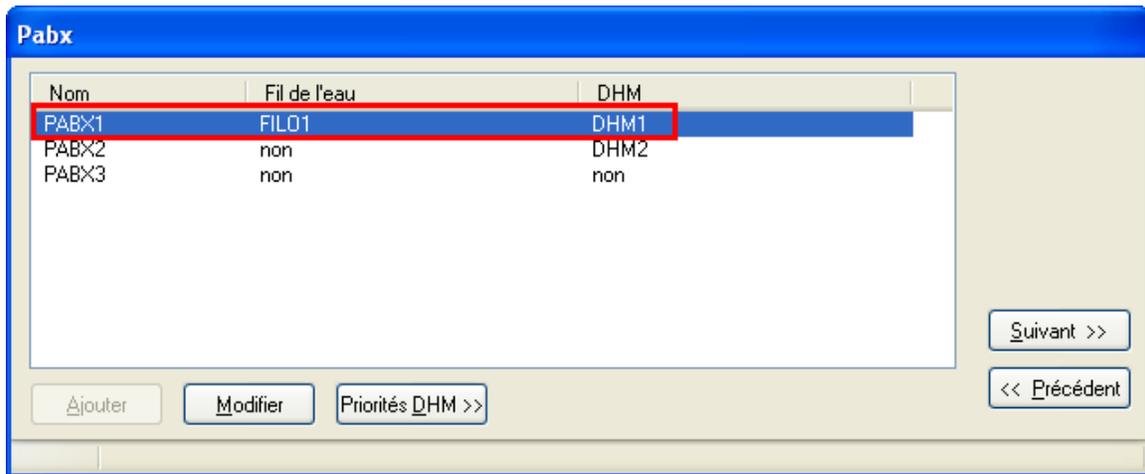
Suivant >>

<< Précédent

Modifié

**Figure 28: Hôtel: Comptes Configuration Screen**

Double click on the first entry.



**Figure 29: 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 : 0049 (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

Topologie

Pabx gérés par le fil de l'eau courant :

Nom
-----

Pabx du site :

Nom
PABX2
PABX3

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

Modifié

Modifier Annuler Aide

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

Figure 30: PBX Configuration Screen

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

<b>Parameter</b>	<b>Usage</b>
Type de liaison	Select “TCP/IP” from the drop-down menu.
Lancement	Select “Automatique” from the drop-down menu.
Modèle de Pabx	Select “COMMANAGER” from the drop-down menu.
Address IP	Leave the value at the default of “0.0.0.0”. When running as a server, SLIT NovaHotel does not need to know the address of Avaya Communication Manager.
Protocole réseau	Select “tcp” from the drop-down menu.
N° du port	Enter the port number assigned to CDR in <b>Figure 6</b> .
Mode serveur	Click this box.

**Table 11: CDR Connexion Configuration Parameters**

**Modification d'une liaison**

Type de liaison : TCP/IP

Poste : 5

Alphanumérique :

Declenchement de l'alarme : 0 minutes

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 : COMMMANAGER

Paramétrer les variables ...

Marque : AVAYA

Modèle : Communication Manager

Version : 1

Commentaire : Format CM114 et CM140

Liaison :

Rattachement à : Aucun

TCP / IP

Adresse IP : 0 . 0 . 0 . 0

N° du port : 9001

Time out réseau : 0 minutes

Mode serveur :

Protocole réseau : tcp

Mode parano :

Connexions multiples :

Modifier

Annuler

Aide

Avancé...

Modifié

**Figure 31: Connection Configuration Screen**

Verify that the “Fil de l’eau” Liaison is “TCP/IP”. Enter the international dial code for country in which the server is located and click “Modifier”. Click “Liaison” under the “DHM” heading.

**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

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

Nom
-----

Pabx du site :

Nom
PABX2
PABX3

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

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

Modifier

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

Modifier Annuler Aide

**Figure 32: PBX Configuration after Connection Selection Screen**

Select the fields as shown and click “Paramétrer le DHM”:

The screenshot shows a software window titled "Modification d'une liaison". It contains several configuration fields:

- Type de liaison:** A dropdown menu set to "Eclateur".
- Lancement:** A dropdown menu set to "Automatique".
- Modèle de Pabx:** A dropdown menu set to "AVAYA PMS".
- Transparence DHM:** A section with an "Archivage" checkbox and a "conservation de 30 jours" spinner.
- Gestion des films vocaux:** Three checkboxes for "Poste", "Clef localisée", and "Clef généralisée", all of which are unchecked.
- À partir d'un serveur distant:** A text input field with a browse button "...".
- Paramètres supplémentaires:** A text input field.
- Modèle de Pabx details:** A list of fields: "Marque: AVAYA", "Modèle: PMS LINK", "Version: 1", "Commentaire: SDA (5 chiffres)", and "Liaison:".
- TCP / IP section:** Contains a sub-section for "TCP/IP" with:
  - Adresse IP:** A text input field containing "127.0.0.1".
  - N° du port:** A text input field containing "9002".
  - Time out réseau:** A spinner set to "0" minutes.

On the right side of the window, there are three buttons: "Modifier", "Annuler", and "Aide". A "Paramétrer le DHM" button is located below the "Modèle de Pabx" dropdown.

Figure 33: Protocol Configuration Screen

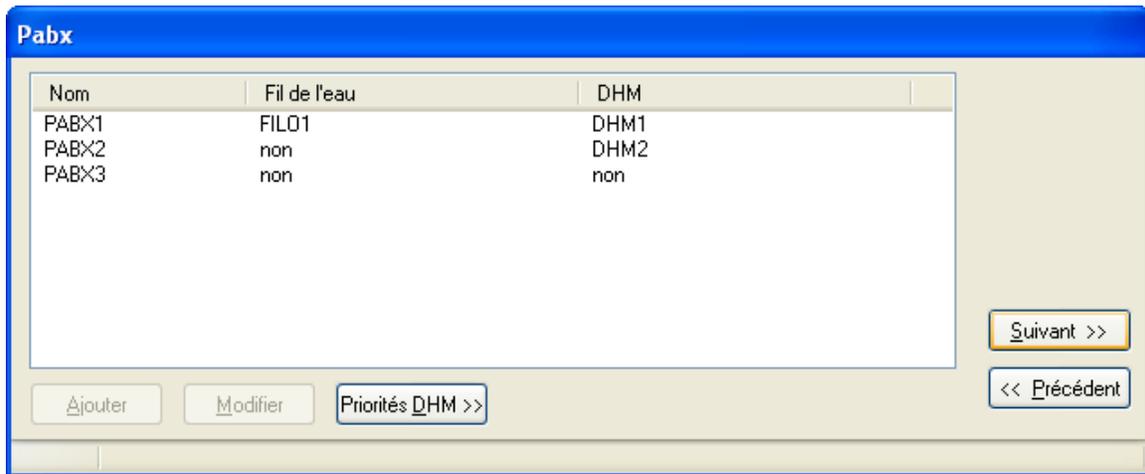
Click “Valider” without entering a password.

The screenshot shows a small dialog box titled "Mot de passe PABX". It contains a "Sécurité" section with a padlock icon and a "Mot de passe" input field. Below the input field are two buttons: "Valider" and "Annuler".

Figure 34: Additional Parameters Screen

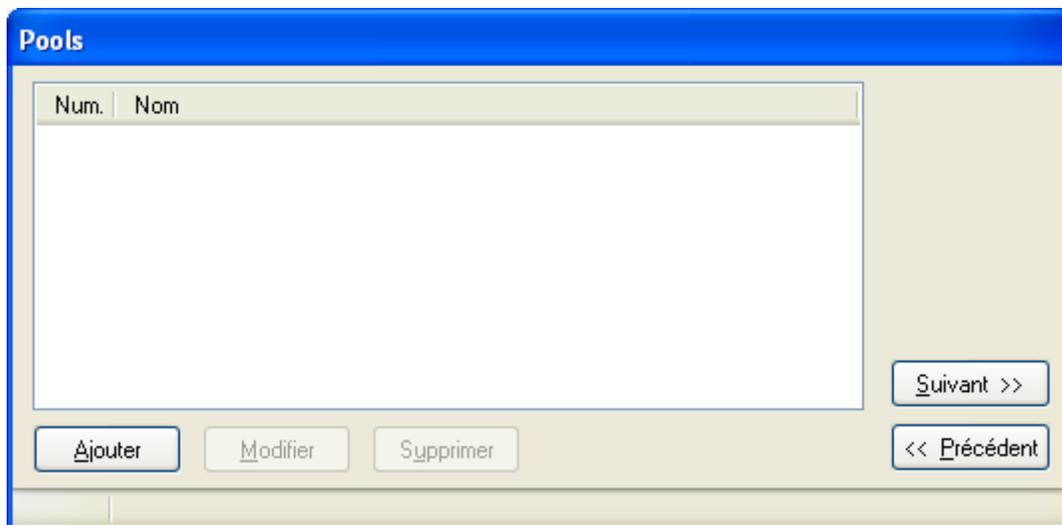


Click “Suivant”.



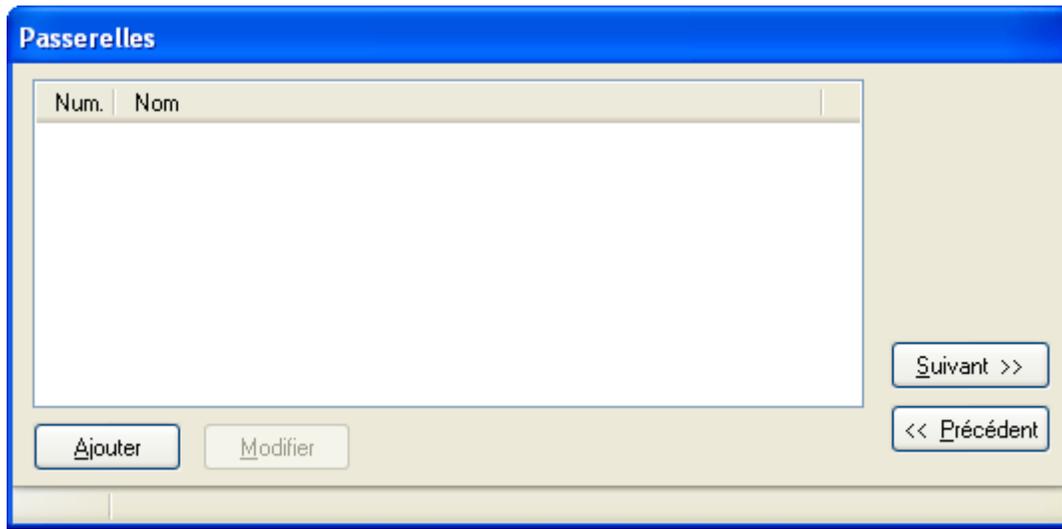
**Figure 36: PBX Selection Screen**

Click “Suivant”.



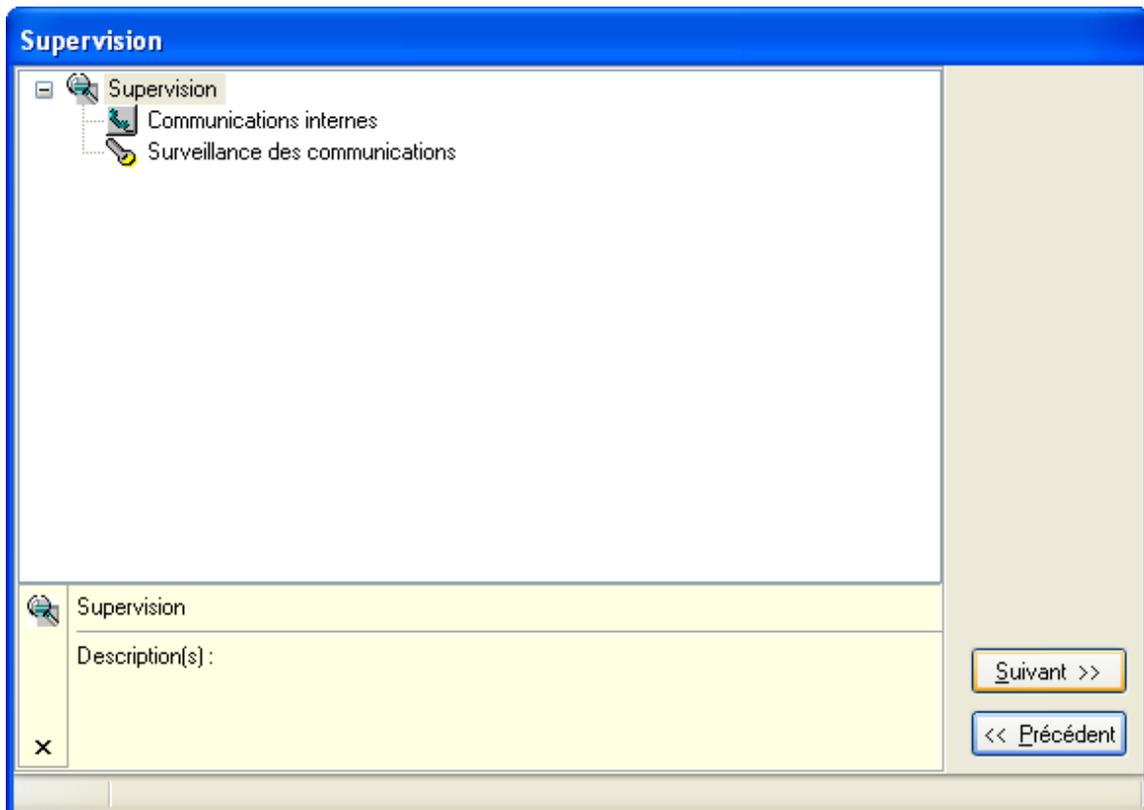
**Figure 37: PBX Pools Screen**

Click “Suivant”.



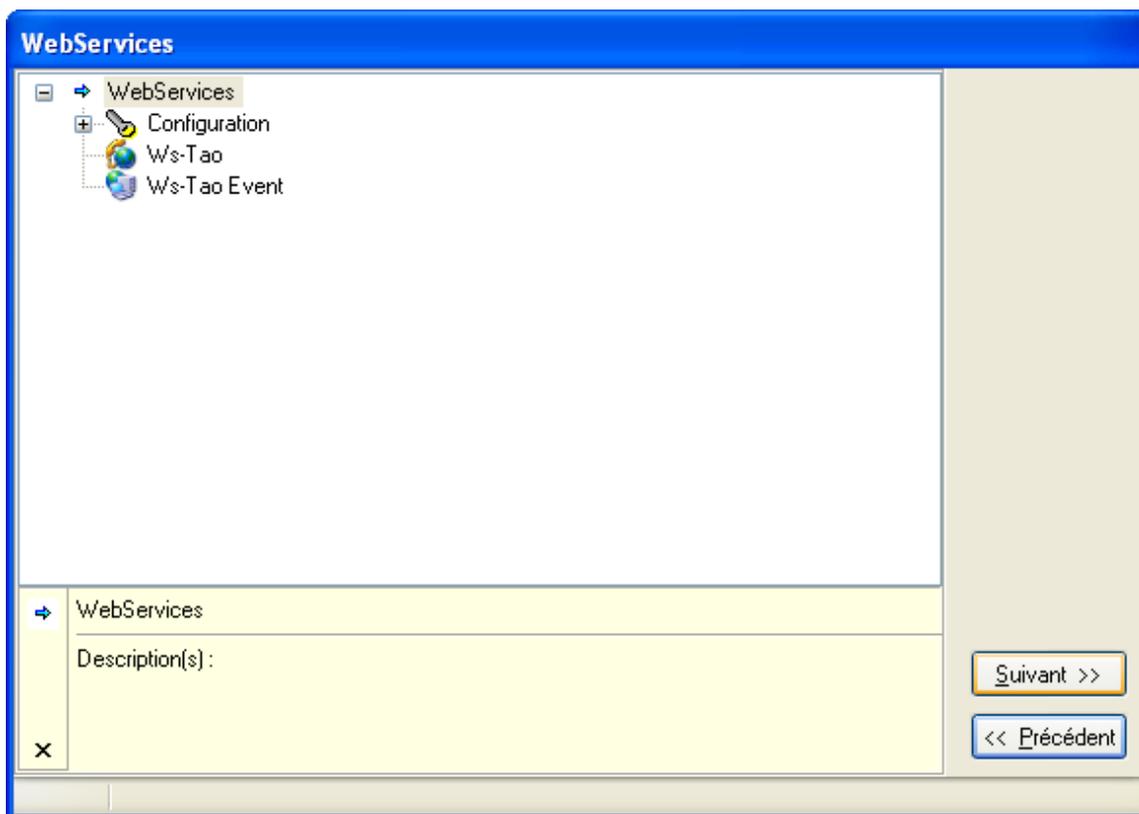
**Figure 38: Bridge Selection Screen**

Click “Suivant”.



**Figure 39: Supervision Screen**

Click “Suivant”.



**Figure 40: Web Services Screen**

Click “Suivant”.

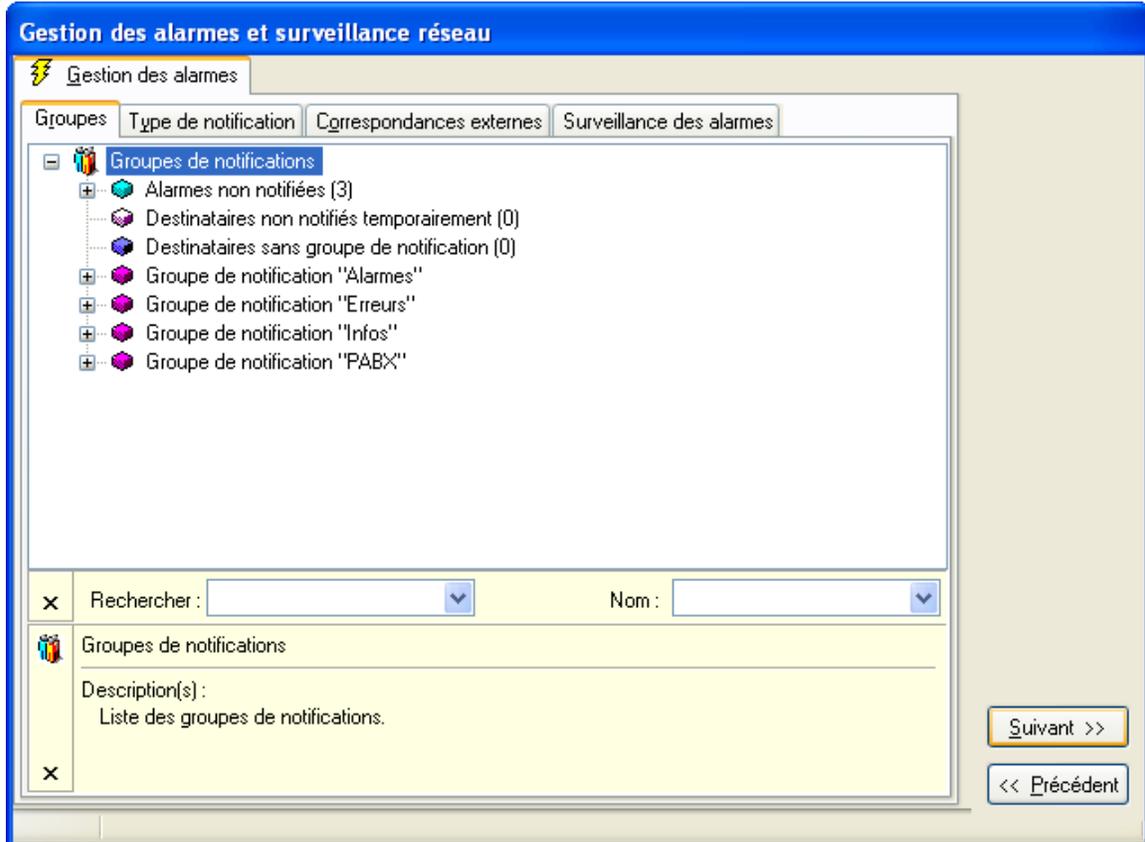


Figure 41: Alarm Screen

Click “Suivant”.

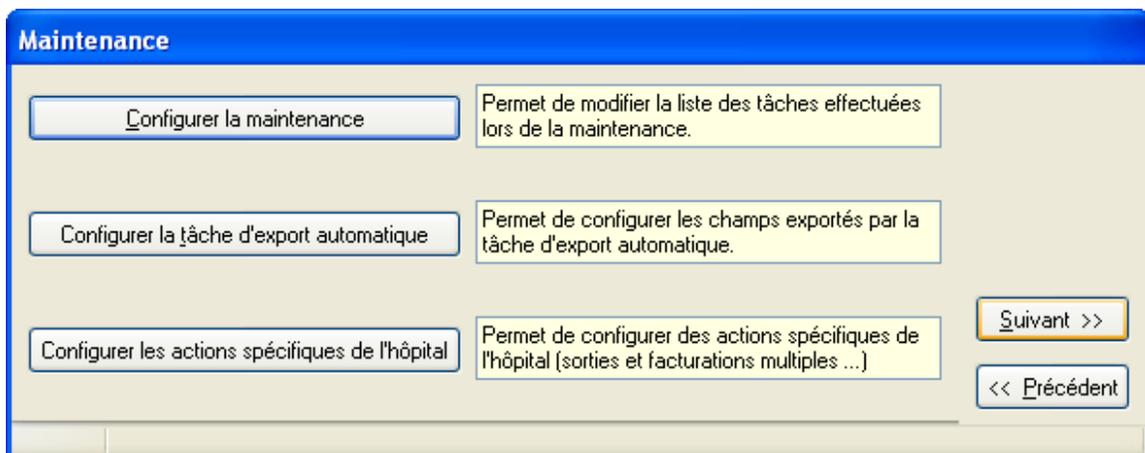
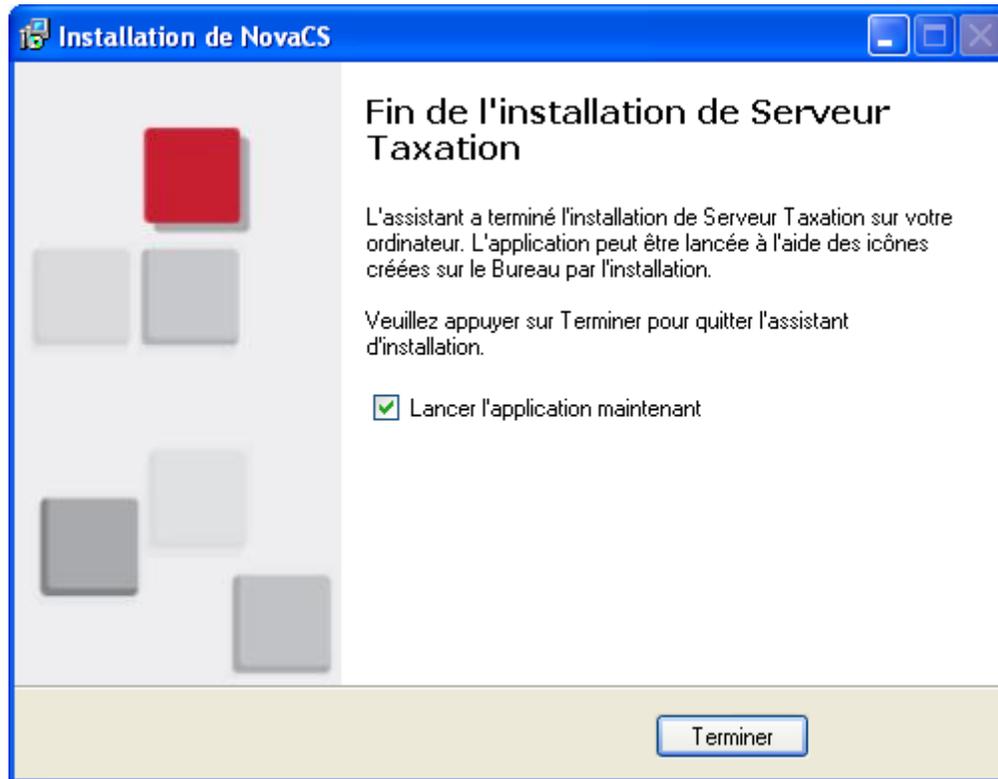


Figure 42: Maintenance Screen

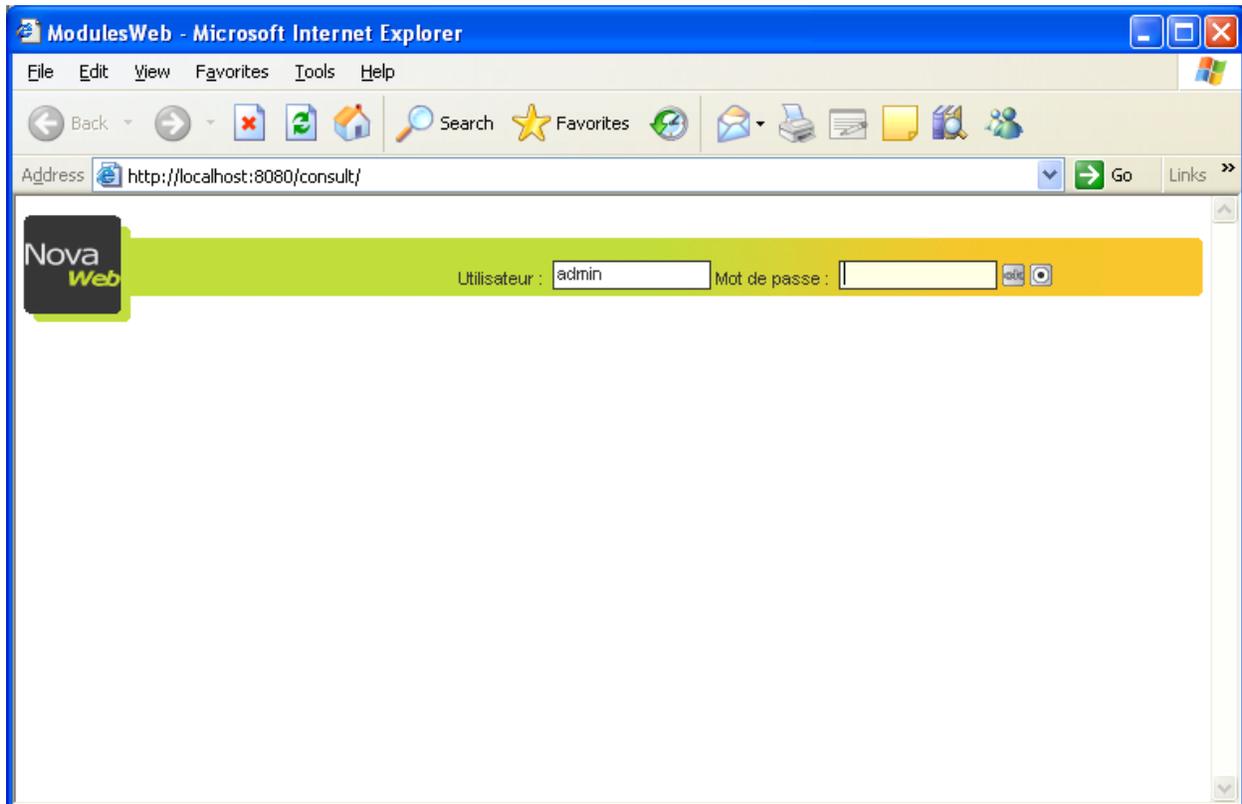
Click “Terminer”.



**Figure 43: Completion Confirmation Screen**

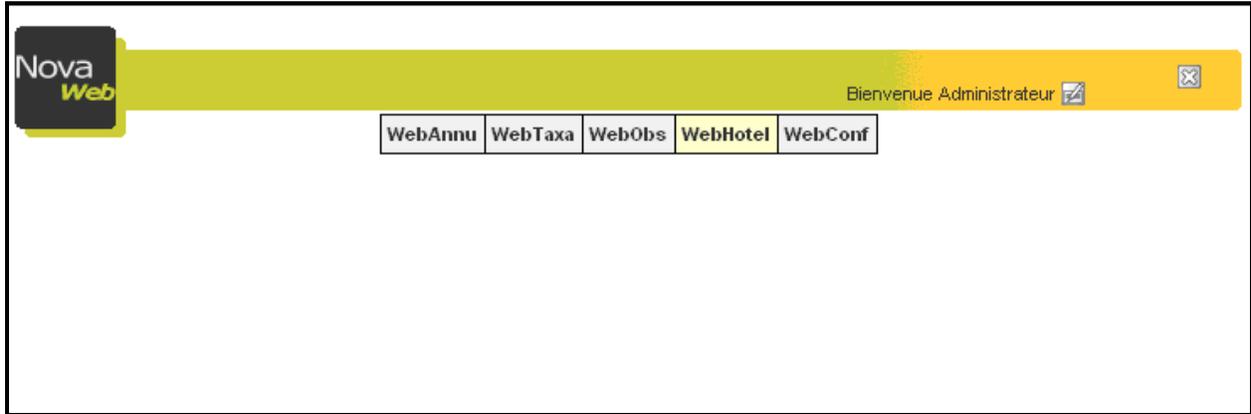
### 4.3. Configure NovaHotel Facility Environment

This section describes the adaptation of NovaHotel to the endpoint/room environment of specific hotel setting. The NovaHotel client is a web-based application which can be run from any web browser with connectivity to the NovaHotel server. The NovaHotel client does not need to be configured. Browse to the NovaHotel server at <http://<NovaHotel Server IP Address>>. Enter the appropriate credentials and click “Valider”.



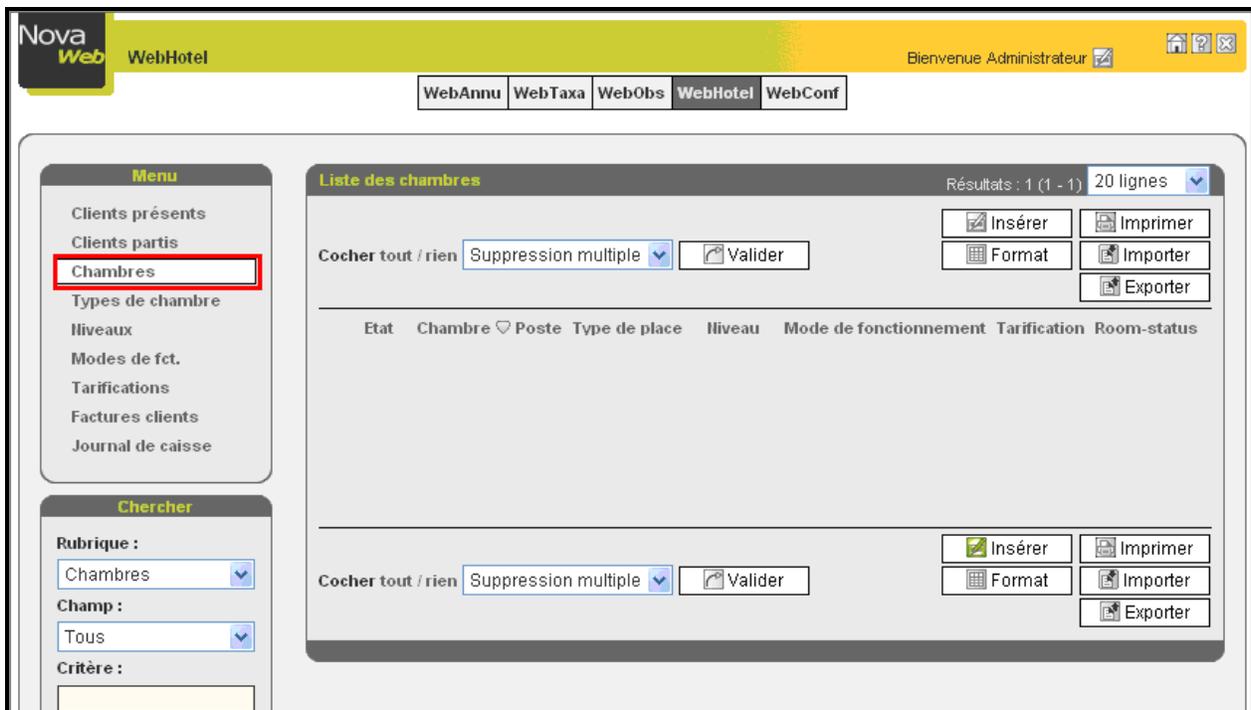
**Figure 44: NovaHotel Client Login Screen**

Click “WebHotel”.



**Figure 45: Application Selection Screen**

Click “Chambres” (Rooms) to view the rooms allocated to the hotel.



**Figure 46: Hotel Room List Screen**

Enter the room number for the endpoints in **Table 1** and click “Insérer”.

The screenshot shows the 'Création d'une chambre' form with the following data:

- Chambre : Room 10202 \*
- Niveau : DevConnect \*
- Mode de fonctionnement : extension \*
- Poste : 10202
- Type de place : Chambre \*
- Tarification : Standard \*

Buttons: **Insérer** (highlighted), Répéter insérer, Fermer.

**Figure 47: Hotel Room Allocation Screen**

The room is now shown in the list of “Chambres” (rooms).

The screenshot shows the 'Liste des chambres' table with the following data:

Etat	Chambre	Poste	Type de place	Niveau	Mode de fonctionnement	Tarification	Room-status
<input type="checkbox"/>	Room 10202	10202	Chambre	DevConnect	extension	Standard	

Buttons: **Insérer** (highlighted), Imprimer, Format, Importer, Exporter.

**Figure 48: Hotel Room List after Initial Room Allocation Screen**

Repeat the previous steps for the remaining rooms in **Table 1**.

Insertion de la chambre «Room 10203» effectuée.

**Liste des chambres** Résultats : 2 (1 - 2) 20 lignes

Cocher tout / rien  Suppression multiple  Valider  Insérer  Imprimer  Format  Importer  Exporter

	Etat	Chambre	Poste	Type de place	Niveau	Mode de fonctionnement	Tarification	Room-status
<input type="checkbox"/>		Room 10202	10202	Chambre	DevConnect	extension	Standard	
<input type="checkbox"/>		Room 10203	10203	Chambre	DevConnect	extension	Standard	

Cocher tout / rien  Suppression multiple  Valider  Insérer  Imprimer  Format  Importer

**Figure 49: Hotel Room List after All Rooms Allocated Screen**

To check in a guest, click “Clients presents” followed by “Arrivee”, and enter the name, and initial telephone account balance followed by clicking “Arrivee” again.

The screenshot shows the 'Arrivée d'un client' (Guest Checkin) screen in the Nova WebHotel system. The interface is divided into several sections:

- Top Bar:** Nova WebHotel logo and navigation tabs: WebAnnu, WebTaxa, WebObs, WebHotel (selected), WebConf. User: Bienvenue Administrateur.
- Left Sidebar:**
  - Menu:** Clients présents (highlighted), Clients partis, Chambres, Types de chambre, Niveaux, Modes de fct., Tarifications, Factures clients, Journal de caisse.
  - Chercher:** Rubrique: Clients présents, Champ: Tous, Critère: (empty).
- Main Content Area:**
  - Identification:** Genre: M., Groupe: (empty), Nom: Simpson, Confidentialité: Liste blanche, Prénom: Marge, Commentaire: (empty).
  - Localisation:** Chambre: Room 10202.
  - Compte téléphonique:**  Compte téléphonique, Solde téléphonique T.T.C. (€): 10.00.
  - Versement:** Mode de paiement: Autres.
- Bottom Buttons:** Arrivée, Répéter arrivée, Fermer.

Figure 50: Guest Checkin Screen

## 5. General Test Approach and Test Results

The compliance testing on SLIT NovaHotel interoperating with Communication Manager was performed manually. The tests were functional in nature, and no performance testing was done. One problem was encountered when testing with CM 5.2.1: it is not possible to call a station via an XDID: the caller hears ringback, however the “hunt-to” station assigned to the XDID does not alert. This problem does not occur with CM 5.1.2, which was used to retest the NovaHotel application. This problem has been reported to the Communication Manager development team with MR defsw093811.

With the exception of the above-described problem, all tests which were performed produced the expected result. **Section 1.1** contains a list of tests which were performed.

## 6. Verification Steps

The correct installation and configuration of NovaHotel server can be verified by performing the steps shown below.

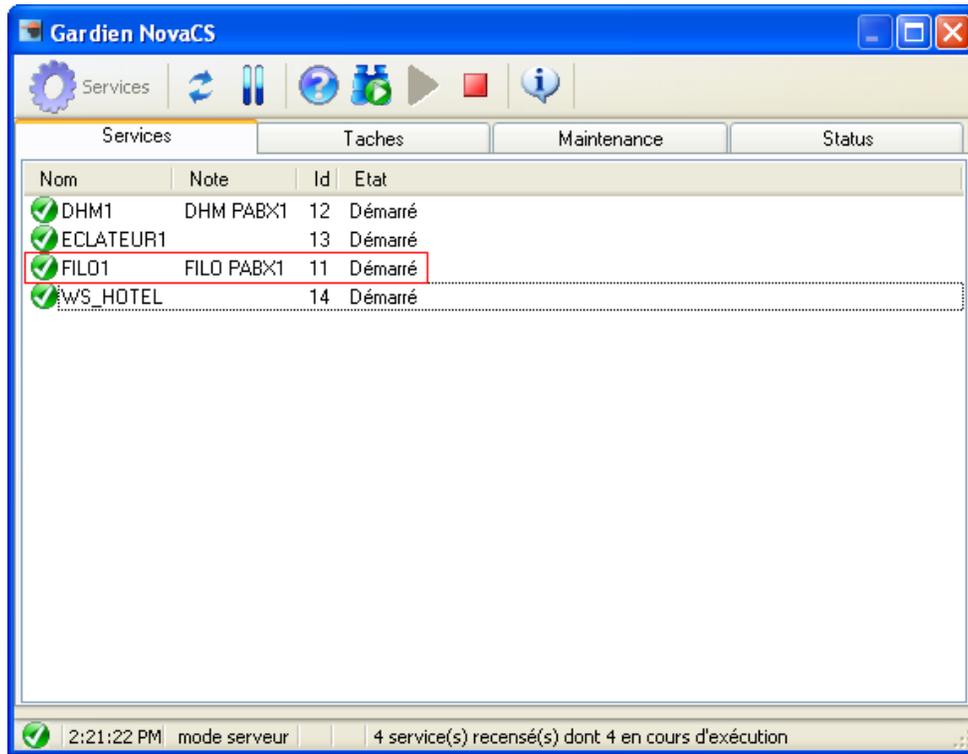
### 6.1. Verify CDR Link

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



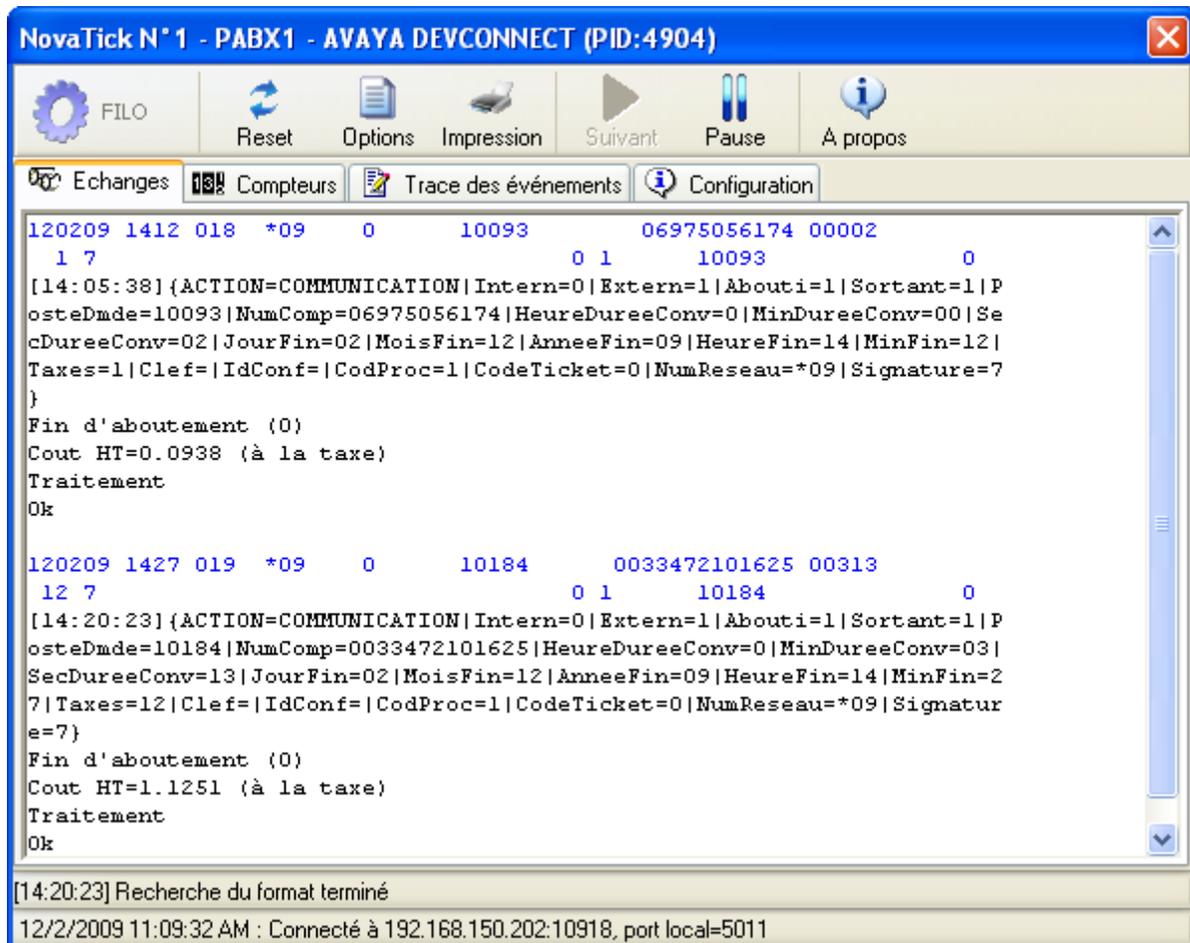
**Figure 51: Man with Red Cap Icon in Systray**

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



**Figure 52: NovaTick FIL01 Selection Screen**

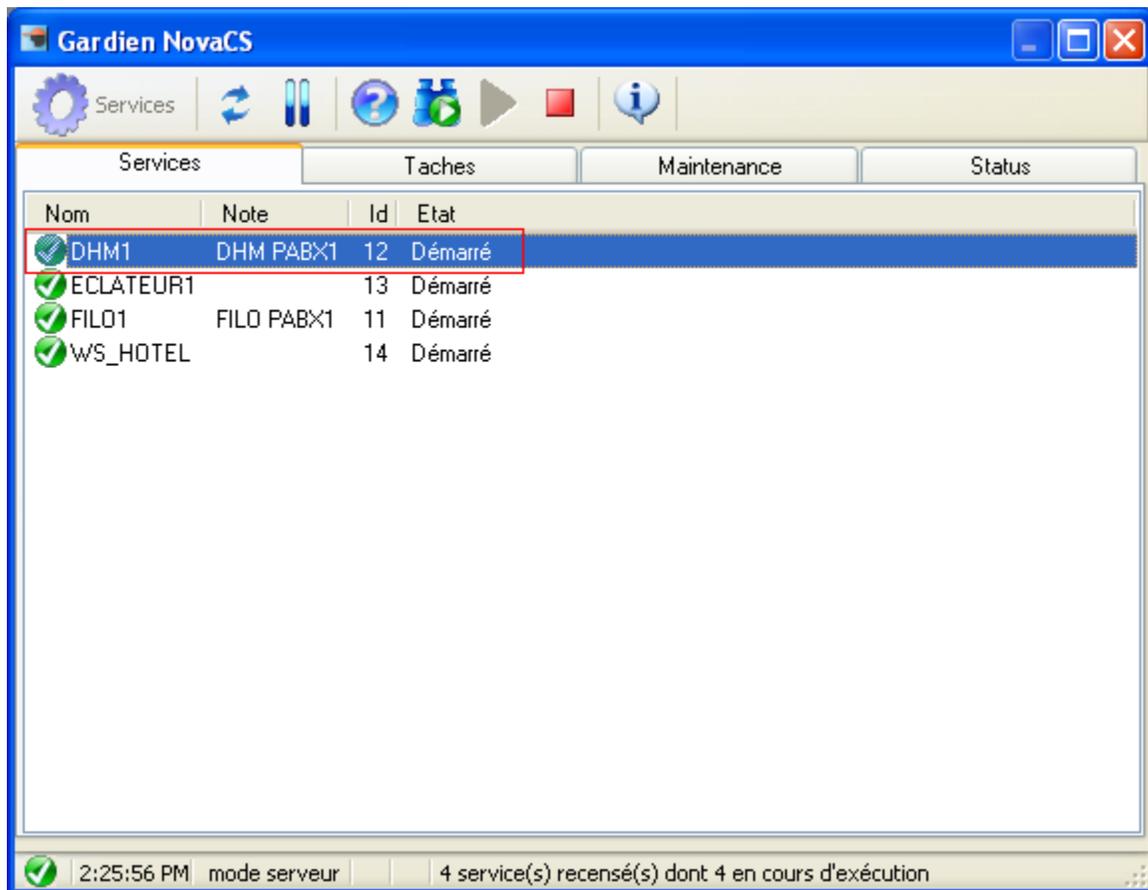
Make a call. If everything is set up correctly, blue text should scroll on the screen (CDR received from the PBX) followed by text in black (interpretation of the CDR). In addition, the bottom window border shows the IP address of the connected PBX.



**Figure 53: NovaTick CDR Trace Screen**

## 6.2. Verify PMS Link

1. Double click on the “man with a red cap” icon in Systray (shown in **Figure 51**) to view the “Gardien NovaCS” window.
2. Double click on the DHMx entry in the screen (the number after DHM may vary depending on the number of PBX) in order to view the "NovaDHM" window



**Figure 54: NovaTick DHM1 Selection Screen**



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

---

**©2010 Avaya Inc. All Rights Reserved.**

Avaya and the Avaya Logo are trademarks of Avaya Inc. All trademarks identified by ® and ™ are registered trademarks or trademarks, respectively, of Avaya Inc. All other trademarks are the property of their respective owners. The information provided in these Application Notes is subject to change without notice. The configurations, technical data, and recommendations provided in these Application Notes are believed to be accurate and dependable, but are presented without express or implied warranty. Users are responsible for their application of any products specified in these Application Notes.

Please e-mail any questions or comments pertaining to these Application Notes along with the full title name and filename, located in the lower right corner, directly to the Avaya DevConnect Program at [devconnect@avaya.com](mailto:devconnect@avaya.com).