



Hospitality Service Center V2.6

Application Notes – Innovaphone IPVA Interface

Application Notes for configuring Innovaphone IPVA with HSC Connect/Entry

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Abstract

These Application Notes describe the configuration steps required for Innovaphone IPVA with HSC Connect/Entry.

Reference Configuration

This document was created using the Innovaphone IPVA virtual appliance version 12r2 sr22 and HSC Connect version 2.6.1.428.2

The following main features are provided by HSC system:

- **Check-in/check-out with class-of-service changeover**
All guest data is sent from the front office to HSC Connect when guests check in/out, then stored in the check-in file and transferred to IP Office. The guest telephone is automatically enabled when this is done and all relevant call data (date, time, destination number and cost of each call) is logged for invoicing purposes whenever calls are made.
- **Entry of name for caller identification**
The guest's name is also stored in the system on check-in and is displayed on digital telephones when the guest calls reception, for instance. The guest's name is deleted on checkout.
- **Determining call costs**
Call costs are calculated in HSC Connect using configurable charge rate tables, time tariffs, and tariff assignments. The call costs are determined on the basis of the destination number, call duration, and time of day, and transferred to the front office system.
- **Do-not-disturb**
This room telephone class-of-service can be preconfigured in IP Office and set by the front office personnel as and when required.
- **Message waiting**
Messages that arrive during a guest's absence can be signaled over the front office system by "setting" the Message Waiting lamp on the guest telephone.
- **Room status**
Room status entries from the guest room telephone are supported by voice prompting. The VoiceMail system then forwards the entries to the front office system
- **Minibar Posting**
If items are found to have been consumed from the minibar in a guest's room, the room staff

can enter the details directly on the guest telephone. Minibar entries from the guest telephone are supported by voice prompting

- **Hotel Voicemail**

HSC Connect has an optional VoiceMail module specifically tailored to hotel applications. Since this VoiceMail module supports several languages (Arabic, Chinese, English, French, German, Greek, Italian, Polish, Portuguese, Russian, Slovenian, Spanish, Swedish and Turkish) in parallel it can be tailored to each hotel's individual requirements. When a guest checks in, "his/her" language is registered at reception by the front office system and forwarded to HSC Connect.

- **Wakeup system**

To carry out the wake-up orders, HSC Connect constantly checks its internal wake-up order file and calls the guest when they entered wake-up time has been reached. If a guest does not lift the handset after a certain number of wake-up calls, renewed ringing is activated after a time that can be set. All wake-up attempts, whether positive or negative, are transmitted to the front office system and logged. Any still active wake-up orders will be cancelled when the guest checks out.

Innovaphone IPVA Configuration

Configuration and verification operations on the Innovaphone IPVA are all performed using web configuration interface. The information provided in this section describes the configuration of the Innovaphone IPVA for HSC Connect/Entry connectivity. It is implied a working system is already in place and all Users/Extensions are configured, including (HSC Messaging System Extensions). For all other provisioning information such as initial installation and configuration, please refer to the respective product installation and administration documentation. The configuration operations described in this section can be summarized as follows:

- Innovaphone IPVA configuration
- Modify User Dialing Rights (Call Filter / Class of Service)
- Configure SIP Users for Advanced Messaging System (used for Wakeup, Voicemail, Room status, Minibar Posting ...)
- Configure Hunt groups for call distribution
- Enable CDR output for call accounting
- Configure Message Waiting Indicator (MWI)
- HSC PBX Interface configuration

Innovaphone IPVA configuration

Navigate web browser to Innovaphone IPVA web configuration IP address. (Default login is admin/ipva) The IP address for web configuration is usually the same as the assigned IP address of the PBX.

Modify User Dialing Rights (Call Filter / Class of Service)

Create call filters, to control what numbers users are allowed to call. This filter (by its name) will be applied by HSC, based on the check-in / check-out state of the guest rooms.

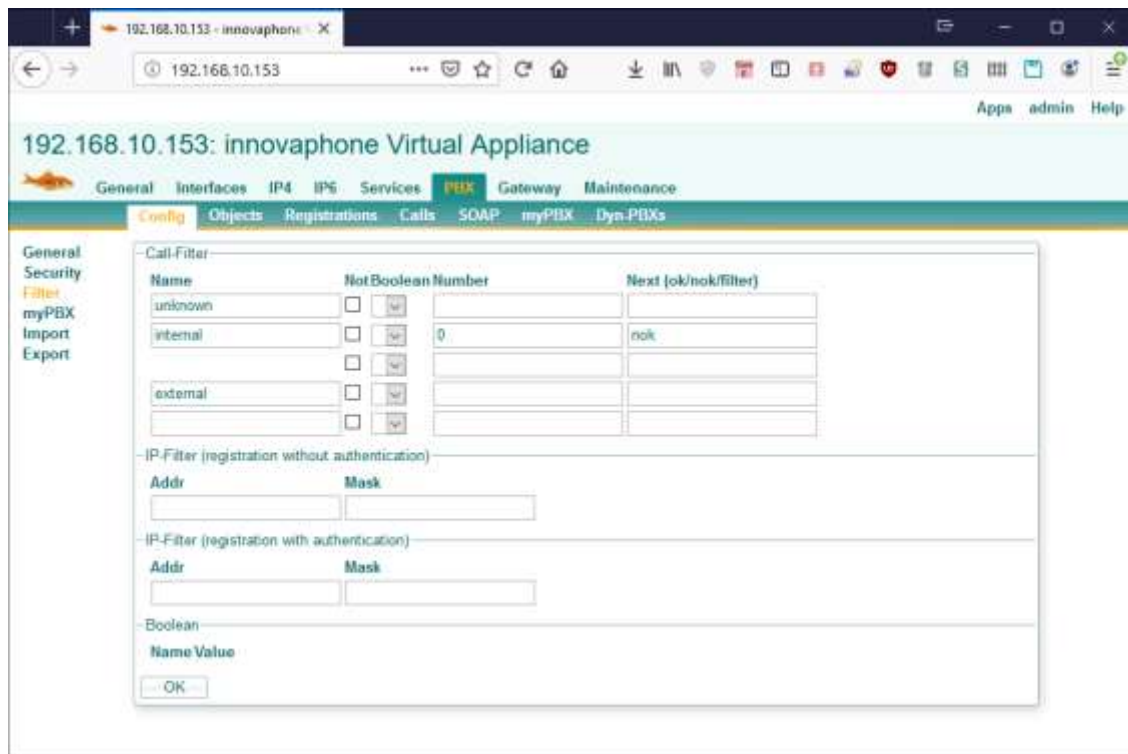


Figure 1

Configure SIP Extensions for Advanced Messaging

A SIP user object for each extension/line needs to be configured to use HSC Advanced Messaging System. For this, a standard SIP user object is created on the PBX. Multiple SIP user objects can be created for use with HSC Advanced Messaging System. Figure below show the example of User01 configuration:

Select PBX -> Objects, then on the left side select “User” in the dropdown field and click “show”, to display the list of existing user objects. Click on “new” to create a new SIP User Object.

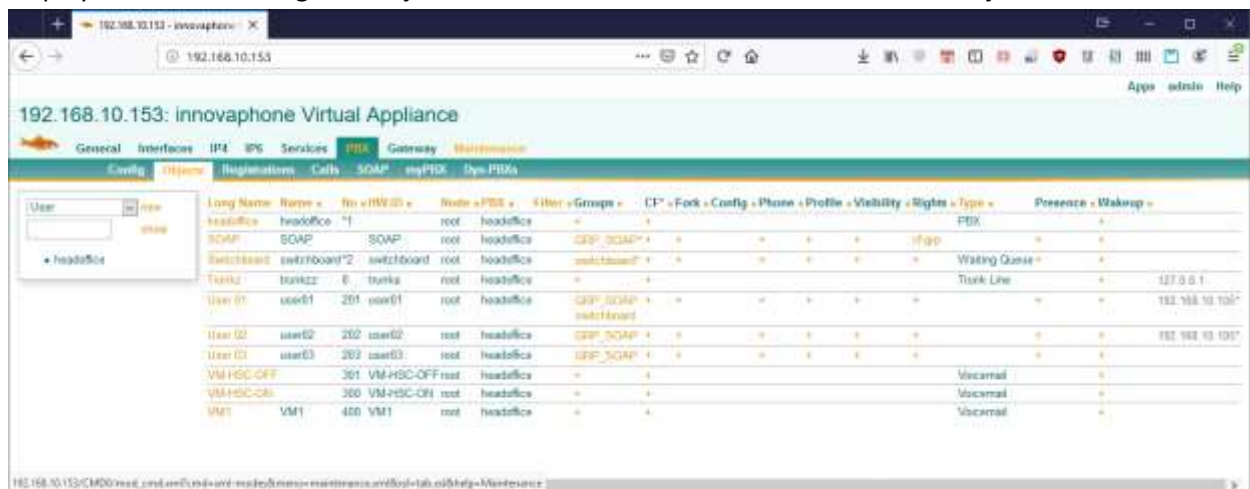


Figure 2

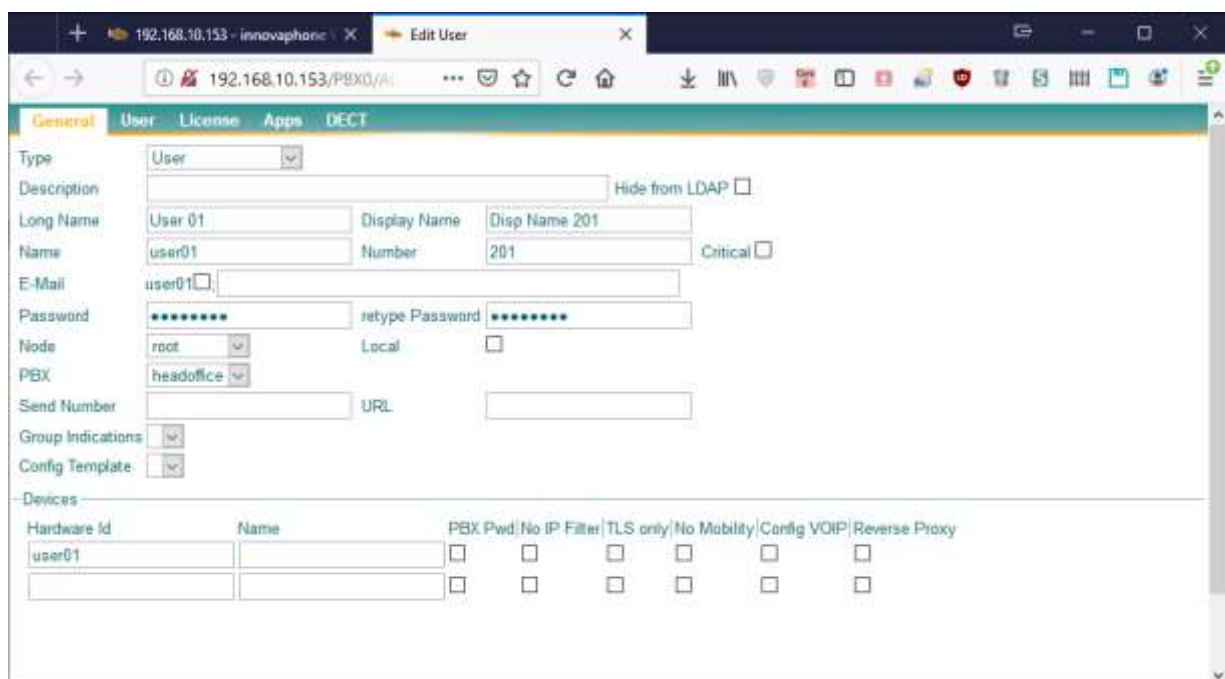


Figure 3

Configure Hunt Groups for call distribution

SIP users for use with HSC Advanced Messaging System should be assigned to Hunt Groups (Ring groups) with cyclic or linear call distribution, so each voice service can handle multiple calls concurrently. For this, Ring groups should be created on the PBX.

Missing: Create Hunt groups on the PBX and assign user objects to them.

Enable CDR output for call accounting

To generate call charging information for use with HSC, CDR output must be enabled on the PBX. HSC will act as TCP server to receive CDR information from PBX in real-time.

1. Enable “Generate CDRs” checkbox in PBX -> Config section.

The screenshot shows the web interface of an innovaphone Virtual Appliance. The browser address bar shows '192.168.10.153'. The page title is '192.168.10.153: innovaphone Virtual Appliance'. The navigation bar includes 'General', 'Interfaces', 'IP4', 'IP6', 'Services', 'PBX', 'Gateway', and 'Maintenance'. The 'PBX' tab is selected, and the 'Config' sub-tab is active. On the left sidebar, 'General' is selected. The main configuration area is titled 'PBX Mode: Master'. It contains various settings for the PBX, including System Name, PBX Name, Unknown Registrations, Reverse Proxy Addresses, Music On Hold URL, External Music On Hold, Response Timeout, Dial Complete Timeout, No of Regs w/o Pwd, Recall Timeout, Max Call Duration (h), Max WebRTC calls, Group Default Visibility, Presence with Alert, Enable External Transfer, No CLIR on internal calls, Media Relay, Generate CDRs (checked), Route Root-Node External Calls to, Route PBX-Node External Calls to, Route Internal Calls to, Escape Dialtone from, Prefix for Intl/Ntl/Subscriber, Tones, and Log Calls (checked). At the bottom, there is a 'Licenses' section with a table showing usage for Port12 and IPVA12. The 'Generate CDRs' checkbox is checked, indicating that call charging information will be generated.

Name	Count	Usage	Local	Slaves
Port12	0	3	3	0
IPVA12	0	3	3	0

Figure 4

2. Set CDR0 output as follows:

- **Type** TCP
- **Address/Port** IP address and port of HSC server

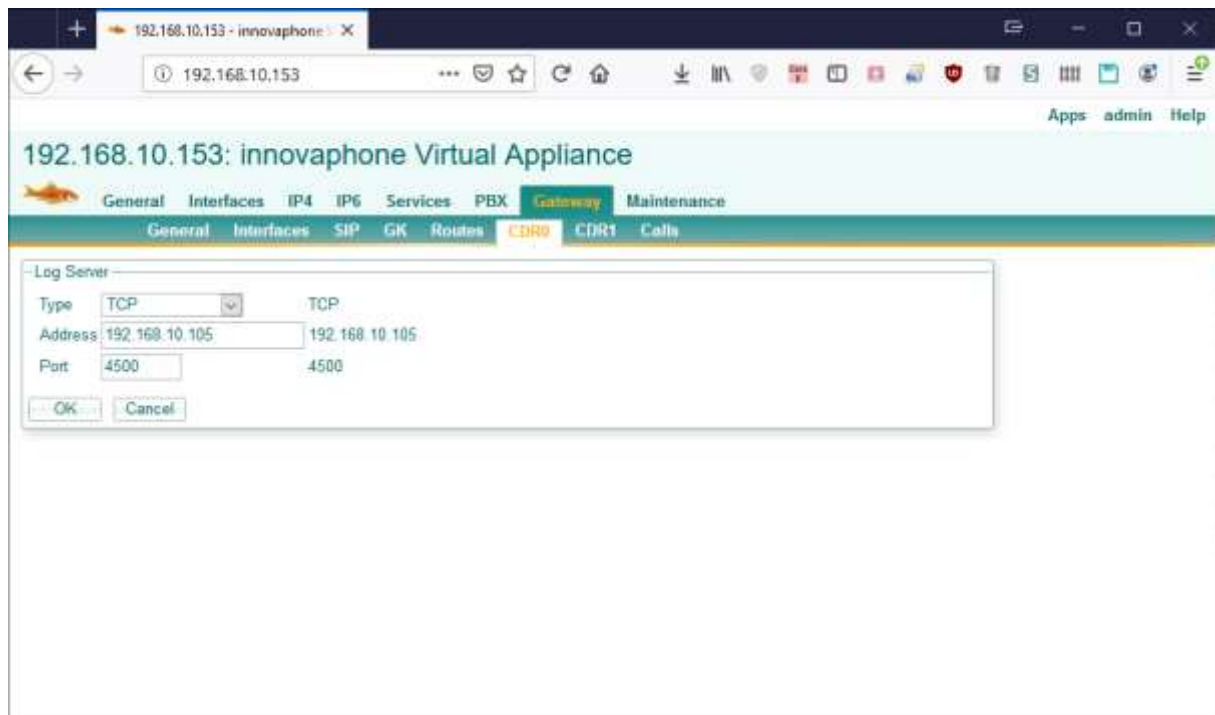


Figure 5

Configure Message Waiting Indicator (MWI)

This feature is used to notify users on their desk telephone set, that there is a new message waiting on the voicemail or other place, such as front desk.

To enable MWI, standard voicemail configuration on the PBX must be performed:

- Enable Compact Flash on the PBX
- Create Voicemail objects on the PBX

1. Enable Compact Flash on the PBX

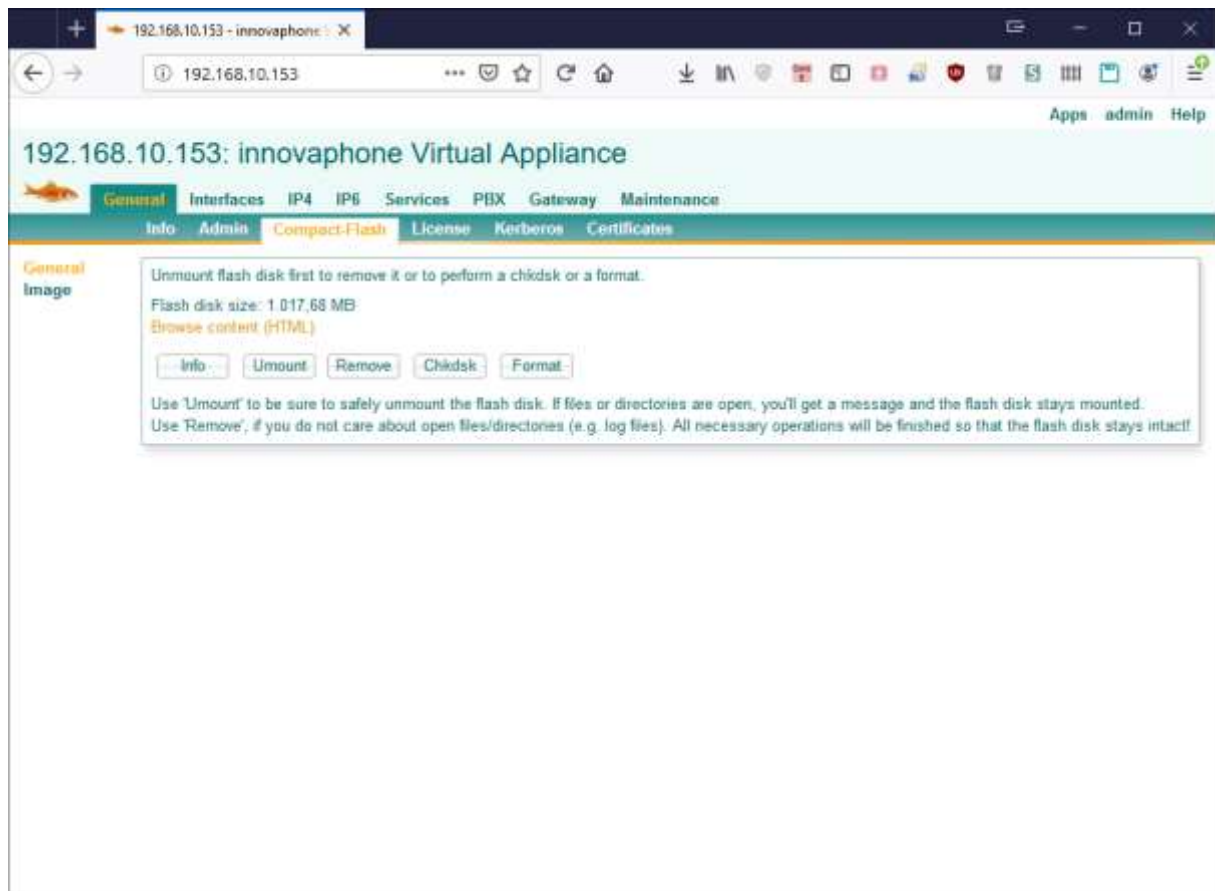


Figure 6

2. Create Voicemail objects on the PBX

Two voicemail objects have to be created on the PBX, one serves as MWI ON feature and the other as MWI OFF. See figures 7 and 8 below:

192.168.10.153 - innovaphone X Voicemail X

192.168.10.153/PBXD/A/

General Voicemail

Type: Voicemail

Description: VM-HSC-ON Hide from LDAP ☐

Long Name: VM-HSC-ON Display Name:

Name: Number: 300 Critical ☐

E-Mail:

Password: retype Password:

Node: root Local: ☐

PBX: headoffice Reject ext. Calls: ☐

Max Calls: Response Timeout:

Hide Connected Endpoint: ☐

UC: ☐

Reporting: ☐

Voicemail: ☐

Devices

Hardware Id	Name	PBX Pwd	No IP Filter	TLS only	No Mobility	Config VOIP	Reverse Proxy
VM-HSC-ON		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

OK Cancel Apply Delete Help

Figure 7

192.168.10.153 - innovaphone X Voicemail X

192.168.10.153/PBXD/A/

General Voicemail

Script URL: http://127.0.0.1/DRIVE/CF0/hsc/hsc-mwl-on.xml

Backup URL:

Trace: ☐

OK Cancel Apply Delete Help

Figure 8

NOTE: Repeat the same procedure to create a MWI OFF voicemail object and assign it a different number. 300 and 301 in the example figures 7 and 8.

Script URL in Figure 8 is the address on the Compact flash partition of the PBX with an arbitrary path (The part of the URL address that should not be changed “http://127.0.0.1/DRIVE/CF0/”. As for example, “hsc” folder is created on the Compact Flash partition. This partition can be accessed using WebDAV protocol. WinSCP program can be used to access this partition remotely. Select WebDAV protocol in WinSCP program to create a connection to the Compact Flash partition on the PBX. Enter the IP address of the PBX and login. Default access credentials are (admin/ipva):

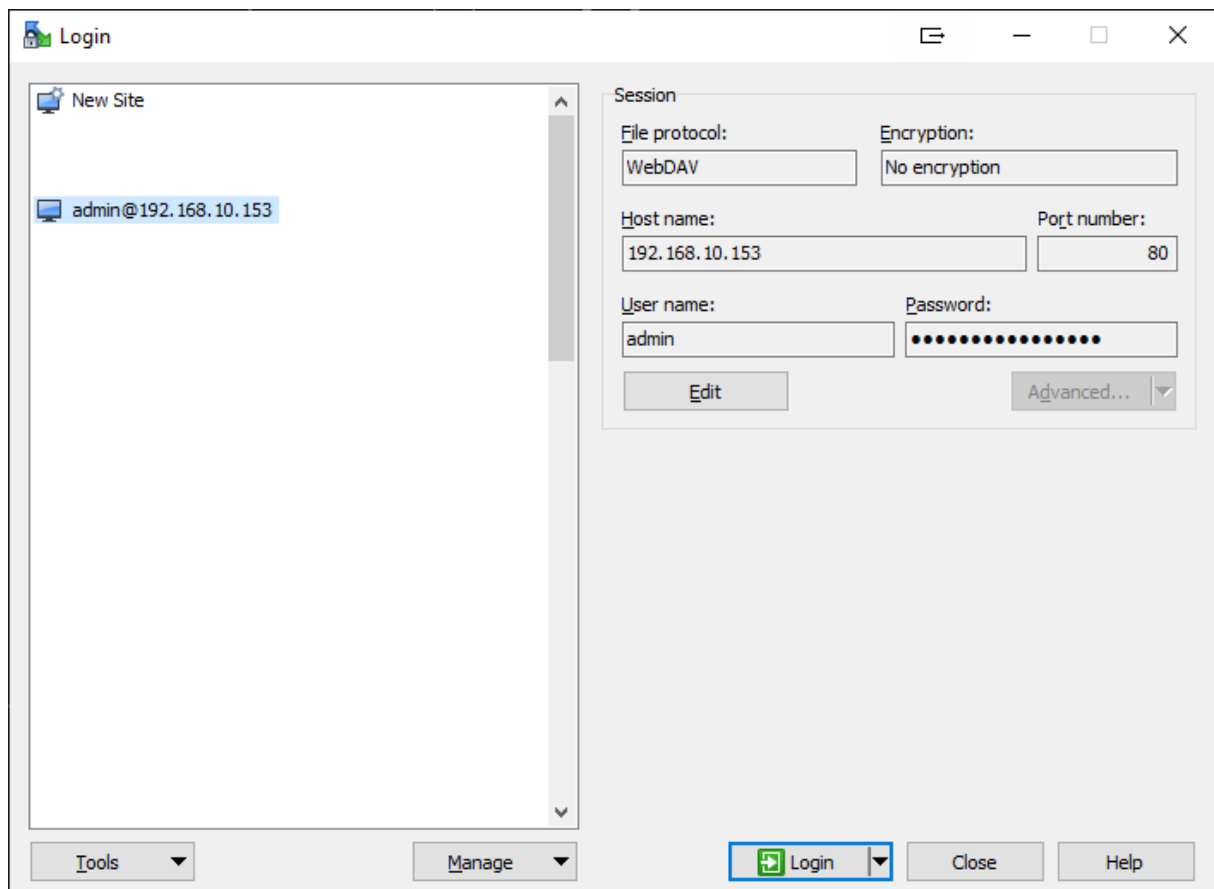


Figure 9

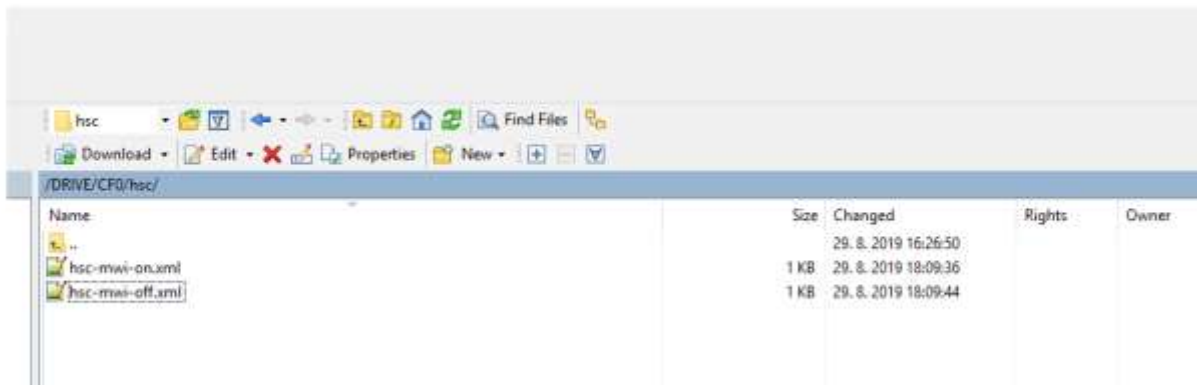


Figure 10 (Contents of “hsc” folder on the Compact Flash partition on the PBX)

Create hsc folder, then create two files inside the hsc folder, for example hsc-mwi-on.xml and hsc-mwi-off.xml (specified in Figure 7 and Figure 8) and paste the following content into each of the files and save them.

hsc-mwi-on.xml:

```
<?xml version="1.0" encoding="utf-8" ?>

<voicemail xmlns="http://www.innovaphone.com/xsd/voicemail6.xsd">

  <function define="Main">

    <pbx-mwi value="1"/>

    <pbx-disc/>

  </function>

</voicemail>
```

hsc-mwi-off.xml:

```
<?xml version="1.0" encoding="utf-8" ?>

<voicemail xmlns="http://www.innovaphone.com/xsd/voicemail6.xsd">

  <function define="Main">

    <pbx-mwi value="0"/>

    <pbx-disc/>

  </function>

</voicemail>
```

HSC PBX Interface configuration

Launch HSC Maintenance (Administration)

Click on the HSC Maintenance Desktop icon. Log in to HSC Maintenance using the appropriate credentials. Select Administration -> Interfaces. In Interfaces Window Select PBX -> Innovaphone IPVA -> Click Edit. In the popup window click on Add ...

Innovaphone IPVA Connection "Innovaphone IPVA Lab"

General

Name: Innovaphone IPVA Lab

Connection disabled: ☐

Soap connection

Soap URL: http://192.168.0.1/PBX0/user.soap ☐ Default

User name: admin

Password: ••••

CDR settings

Active: ☒

Port number: 4500 ☐ Default

Channel translation table

Pbx trunk	Hsc trunk
Trunk01	001

Add... Edit... Delete

COS Settings

Level	Name	Value
0	Lock on	internal
1	Lock off	external

Add... Edit... Delete Up Down

MWI settings

Mwi ON dialing number: 300

Mwi OFF dialing number: 301

OK Cancel

Figure 11

In the window that appears enter the following:

- **Name** Enter the informative name
- **Soap URL** Enter the URL address to pbx Soap interface with valid username and password (see fig. 11)

- **CDR active** Make sure checkbox is **checked**
- **CDR listen port** Enter port number as defined in PBX CDRO settings
(see Figure 5)
- **Channel translation table** Names of PBX trunk objects (Long name of the PBX Trunk Line object), used for outgoing trunk calls, paired with arbitrary HSC trunk. Must be a 3 digit number from 001 to 999
- **COS settings** Call barring table / Filter settings (see Figure. 1)
- **MWI On** Enter dialing number defined to switch MWI ON on
for user (see Figure. 11, 7,8, NOTE)
- **MWI Off** Enter dialing number defined to switch MWI OFF for
user (see Figure. 11,7,8, NOTE)

For other settings please consult HSC Service and Administration documentation.