

**Application Notes for is-phone plugin v1.0.27 for IBM Lotus Sametime with VCX v7.2.5c**

**Issue:** 1.1

**Date:** 11/1/2007

**Abstract:** These application notes describe the configuration procedures required to allow is-phone for IBM Lotus Sametime connect to the 3com VCX v7.2.5c

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### Revision History

Revision	Date	Author	Reason for change
0.1	05/11/07	Rolf Kuster	Initial version
0.2	Sept. 2007	Rolf Kuster	Config. Updates
0.3	10/8/2007	Bob Blair	Formatting, Graphics, and config.
1.0	10/10/2007	Bob Blair	Final release awaiting final fixes
1.1	11/1/2007	Bob Blair	Final verification complete

### References

Date	Document Name	Revision	Company

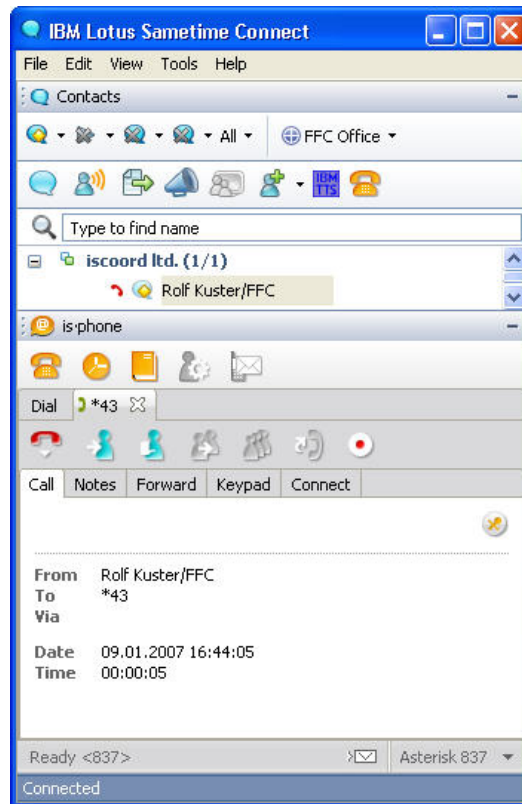
## Objective

These application notes assist the end user with installing and configuring Is-Phone Sametime Plugin to interoperate with the 3Com VCX v7.2.5c.

## iscoord and is-phone for IBM Lotus Sametime

iscoord ag Zurich is developing and distributing together with their worldwide partner network ([www.iscoord.com/partners](http://www.iscoord.com/partners)) the is-phone product line based on IBM software technology.

- Technical Summary  
<http://www.iscoord.com/softphones/is-phone-for-ibm-lotus-sametime/overview.html>
- Datasheet  
<http://www.iscoord.com/softphones/is-phone-for-ibm-lotus-sametime/product-data-sheet.html>
- Features, Functions, and Benefits  
<http://www.iscoord.com/softphones/is-phone-for-ibm-lotus-sametime/features.html>



Picture 1: is-phone for IBM Lotus Sametime

### ***iscoord ltd. Overview***

The is-phone softphone brings exceptional functionality, usability, and manageability to IBM Lotus Sametime and Lotus Notes users. It offers instant conferencing with up to 16 participants, recording on demand, multiple line appearances, speed dial numbers, intuitive, graphically-assisted functions, presence information, and full integration in Lotus Notes address books or other Lotus Notes databases.

The is-phone softphone closely adheres to industry standards including SIP, Java, and HTTP. Through either the supported application program interfaces (APIs) or the use of the open source software code-base, software developers can add new telephony functionality in every Lotus Notes application. The flexibility offers a whole new collection of valuable,

personalized voice services and applications that create entirely new ways of working together in teams and organizations.

### **Configuration Technical Details**

The is-phone for IBM Lotus Sametime requires:

- Windows XP.
- IBM Lotus Sametime client needs to be installed and configured.
- A connection to a Lotus Sametime Server is required.
- Audio Device (in/out) has to be available/functional on the PC.
- VCX SIP account information.

### ***How it Works***

The is-phone for IBM Lotus Sametime is an Eclipse based plugin running on the IBM Lotus Sametime Client. It works as a SIP endpoint device.

### ***Hardware Requirements***

- Workstation or Notebook with Intel Pentium 3
- Memory 1 GB
- Free Disk Space 10 MB
- IP Network Connection (Broadband)
- USB Handset or Headset is recommended for best Sound Quality

### ***Software Requirements***

- OS Microsoft Windows Professional XP with Service Pack 2
- IBM Lotus Sametime Version 7.5CF1 or higher
- VCX v7.2.5c or greater

### ***Software Revisions***

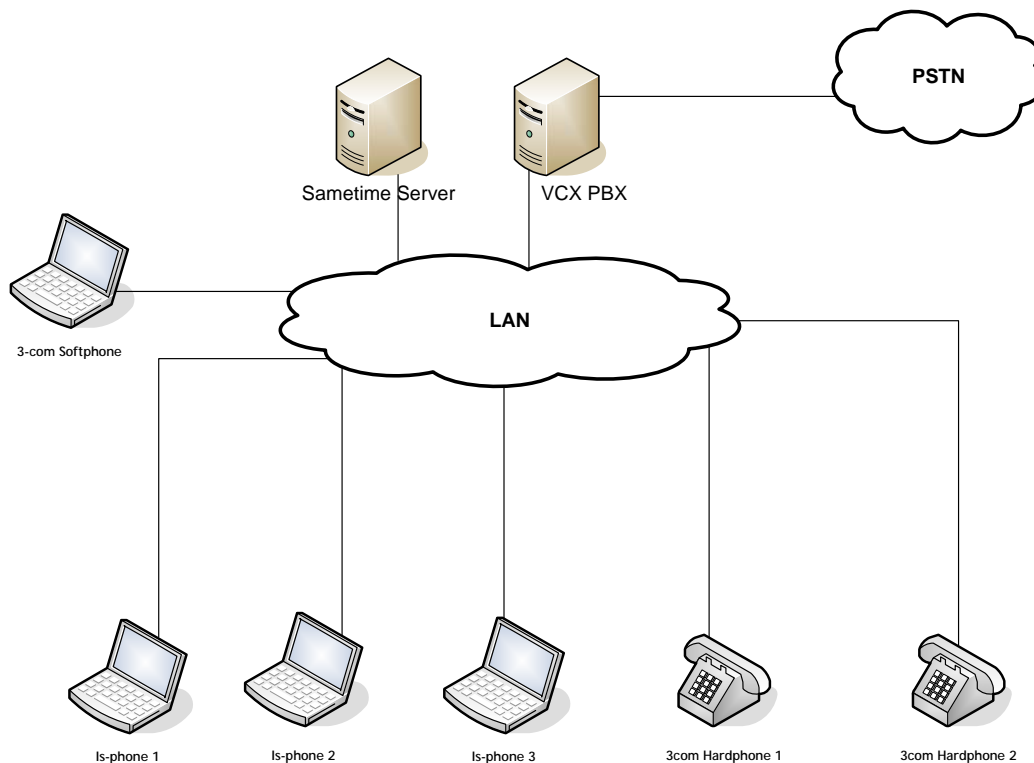
- Is-phone for IBM Louts Sametime version 7.0.2 (Build 1.0.27)

## Installation Overview

For the testing, following installation / setup should be available.

- VCX IBM Series i 7.2 with external PSTN connectivity
- 3 PCs/Laptops running Windows XP, Service Pack 2 and all Windows Patches, Sametime client 7.5.1 CF1 or 7.5.1 and is-phone plug-in 7.0.2 (rel. 1.0.26)
- 2 3-com hardphones connected to the PBX
- 1 3-com Softphone
- Audio devices (USB) connected to the Windows PCs
- Sametime Server 7.x or 7.5 – platform can be Windows or I-Series (any platforms are supported)

## Network Topology



### Picture 3: Logical Topology

#### Testing Observations

All tests in the test plan documents were completed successfully. Additionally, voice quality, speed and stability was proved to operate sufficiently.

- Registration: Dynamic Registration, Re-registration before TTL, and Incorrect Authentication
- Basic Calls: is-phone to is-phone, is-phone to 3Com, is-phone to PSTN
- Unsuccessful: Calling Party hangs up, Called Party rejects
- G711u / G711a Codec Negotiations
- On / Off Hold
- Blind Transfer
- Consultative Transfer
- Conference Calls
- Call Waiting
- DTMF Relay

#### Configuration Details

The following configuration details represent the configuration under test.

##### *VCX Configuration file*

Standard VCX user is sufficient. The same user that is logged into a 3Com phone may be utilized or a new user unique to the soft client. No special user settings are needed.

##### *iscoord Configuration Details*

#### Install Is-Phone Plugin

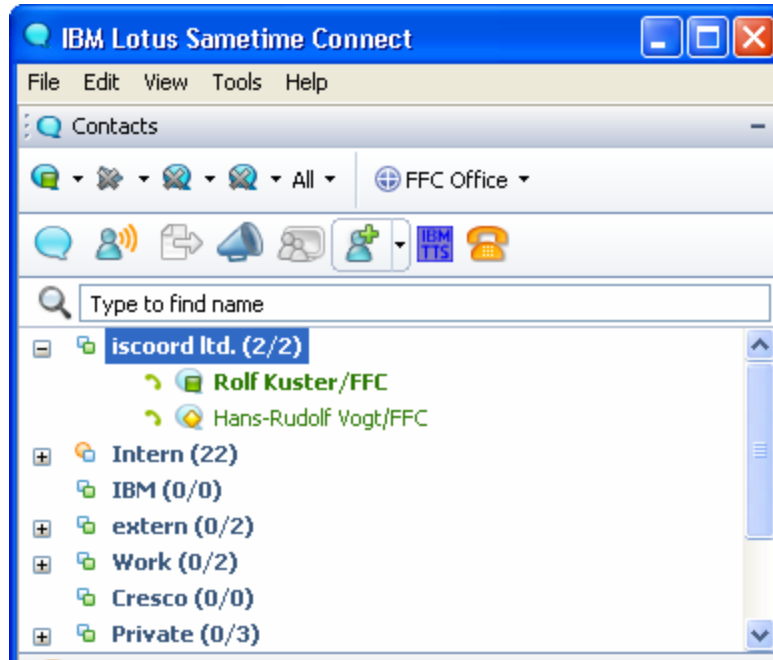
Install the plugin as described in the document:  
is-phone 7.0 for IBM Lotus Sametime 7.5.1 local installation 2007-06.pdf

This can be downloaded from:

[http://update.is-phone.com/doc/is-phone\\_sametime\\_install\\_operating.pdf](http://update.is-phone.com/doc/is-phone_sametime_install_operating.pdf)

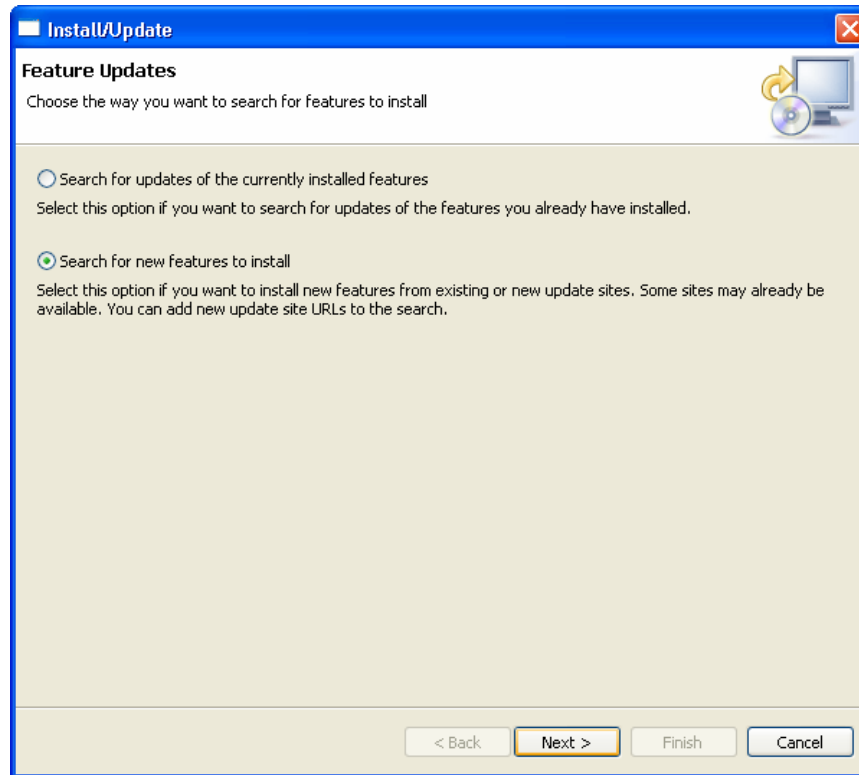
In brief the following steps may be followed to install the plug in.

1. Choose Tools → Plugins → Install Plugins from the Sametime Menu bar.



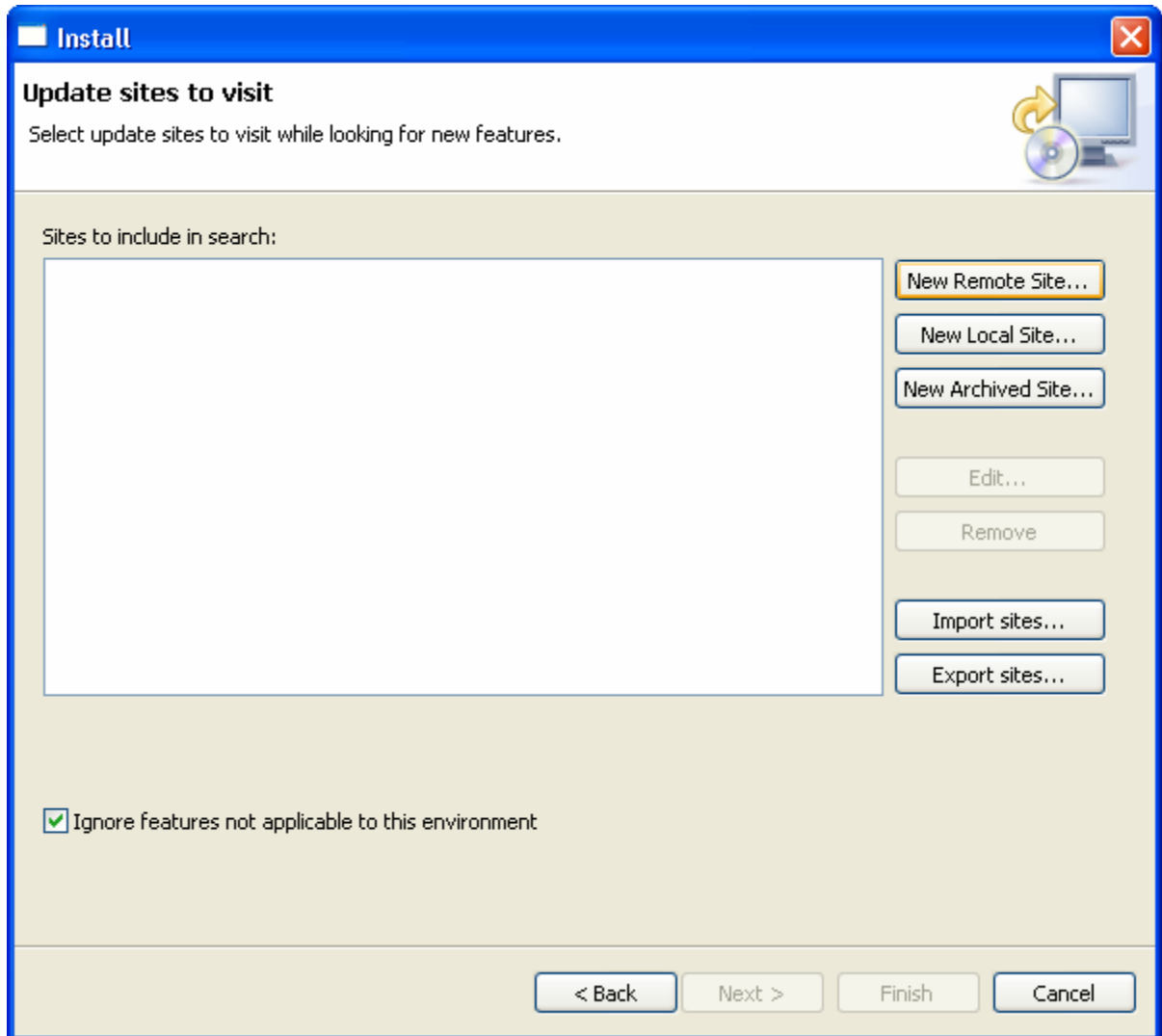
Picture 4: Sametime Screen shot

2. The following dialog box is presented. Select Search for new features to install and select Next.



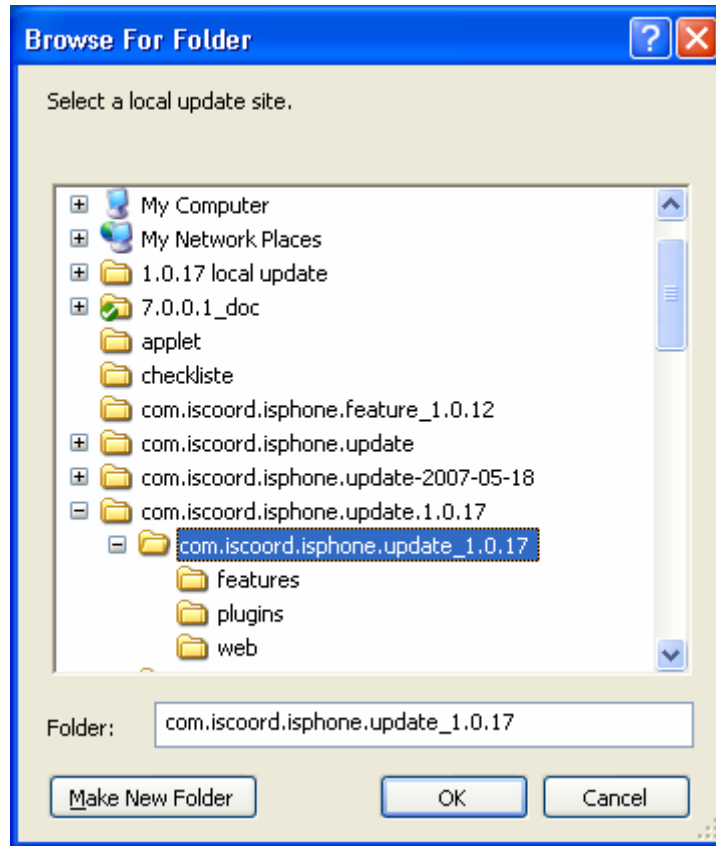
Picture 5: Install / Update dialog box

3. Select New Local Site button on the right hand side



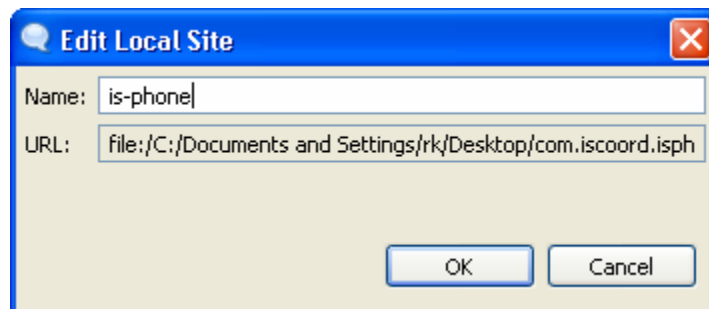
Picture 6: Install a new Local Site

4. Browse to where you unzipped the plugin zip file.



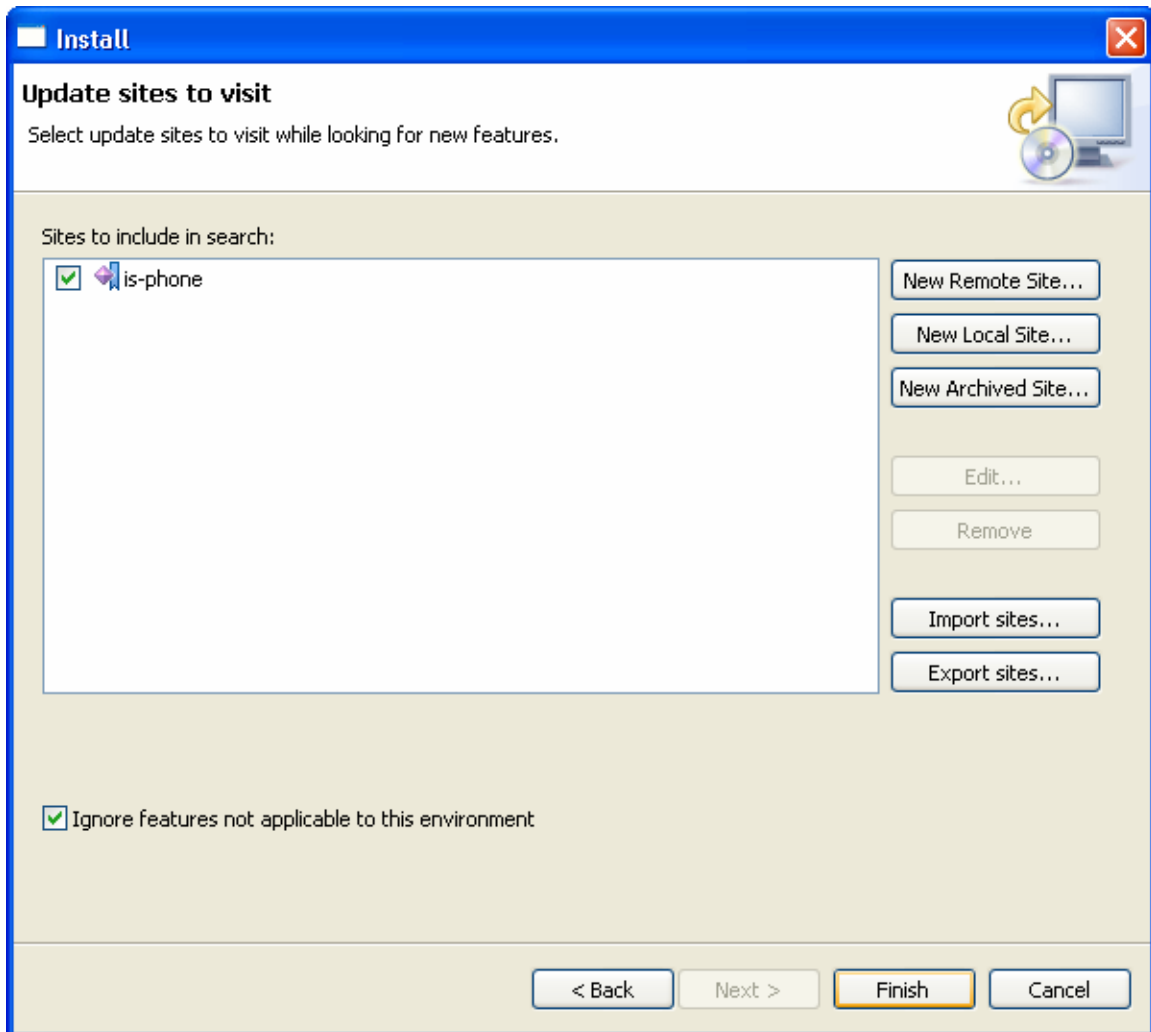
Picture 7: Browse for the isccord plugin location

5. Give the Local Site a name



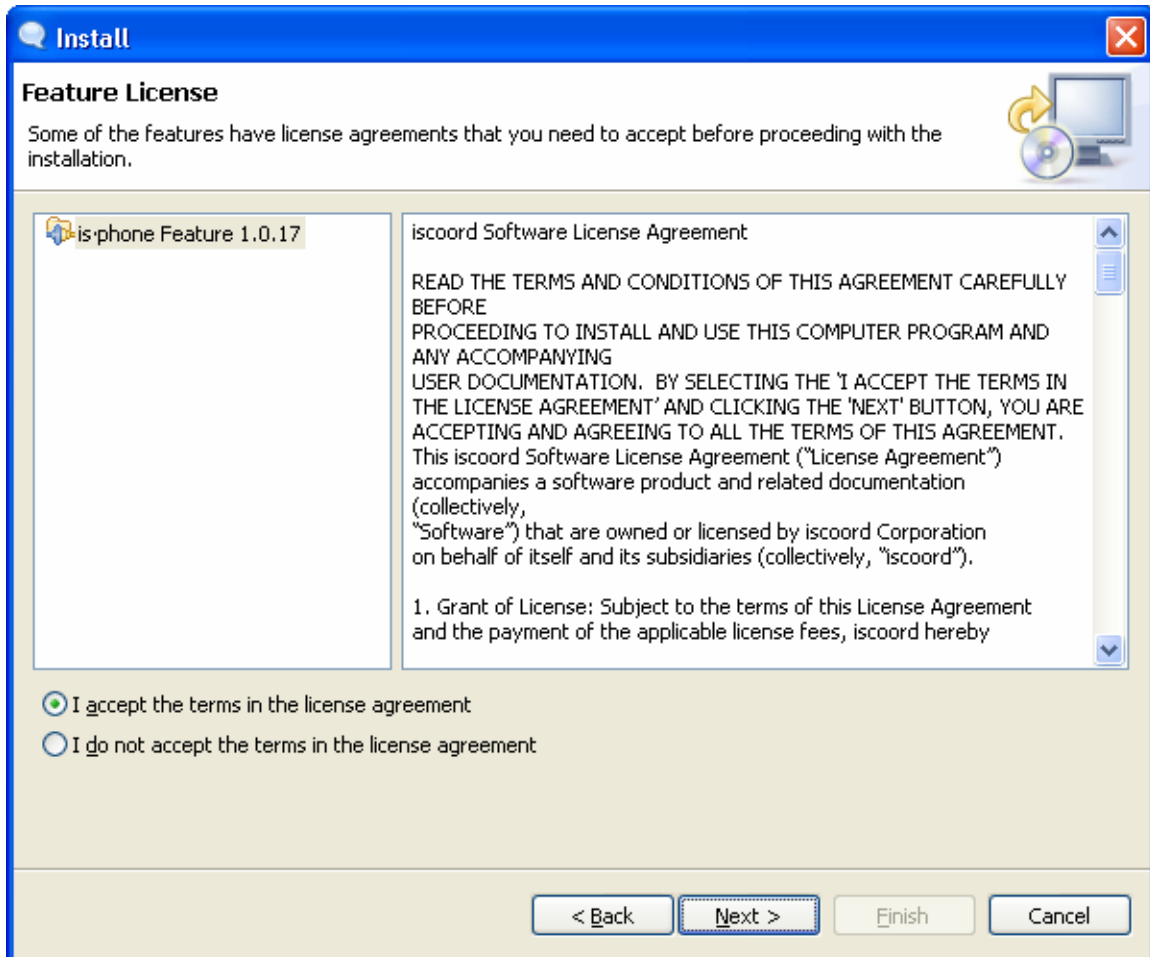
Picture 8: Name the site

6. Choose Finish



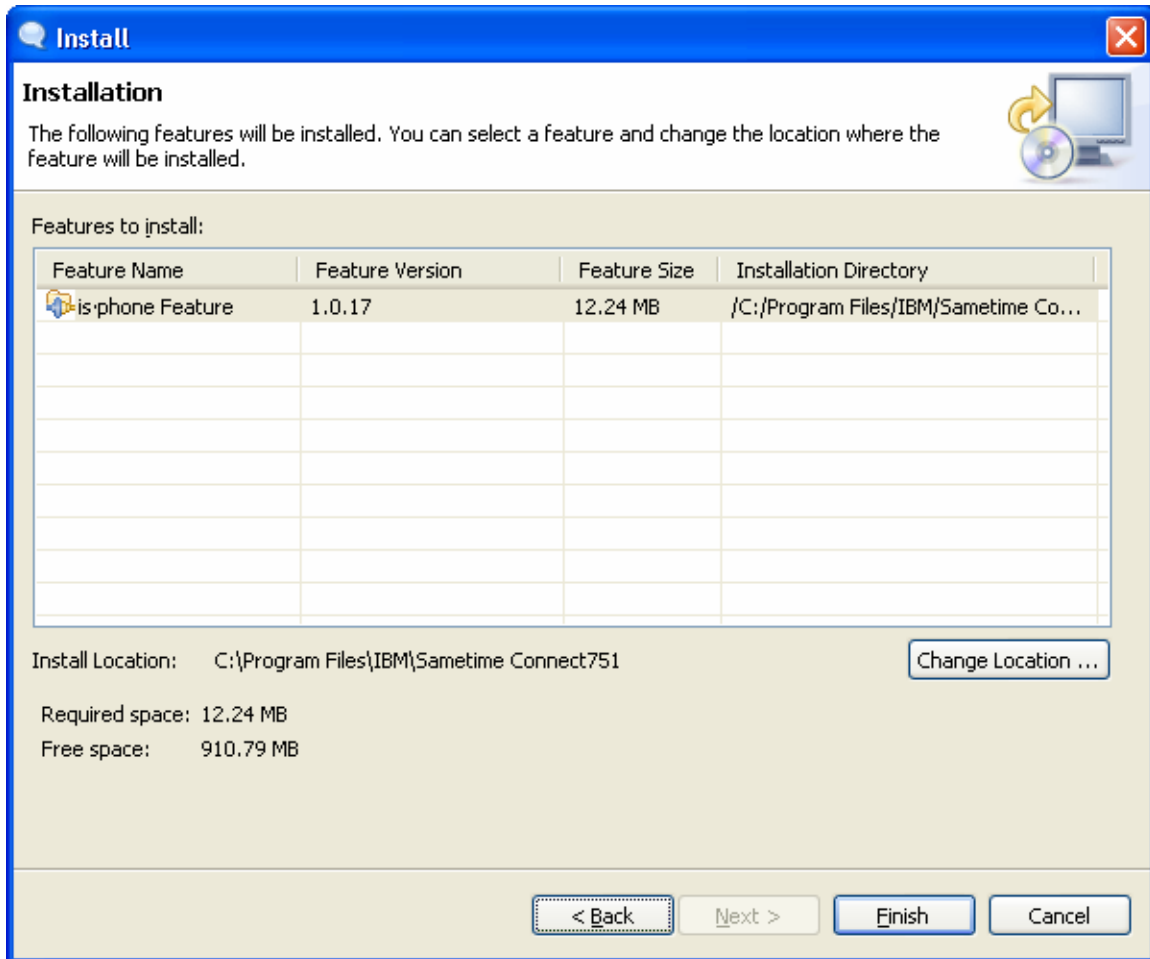
Picture 9: Update site to visit

7. The License agreement will be presented. Choose Accept.



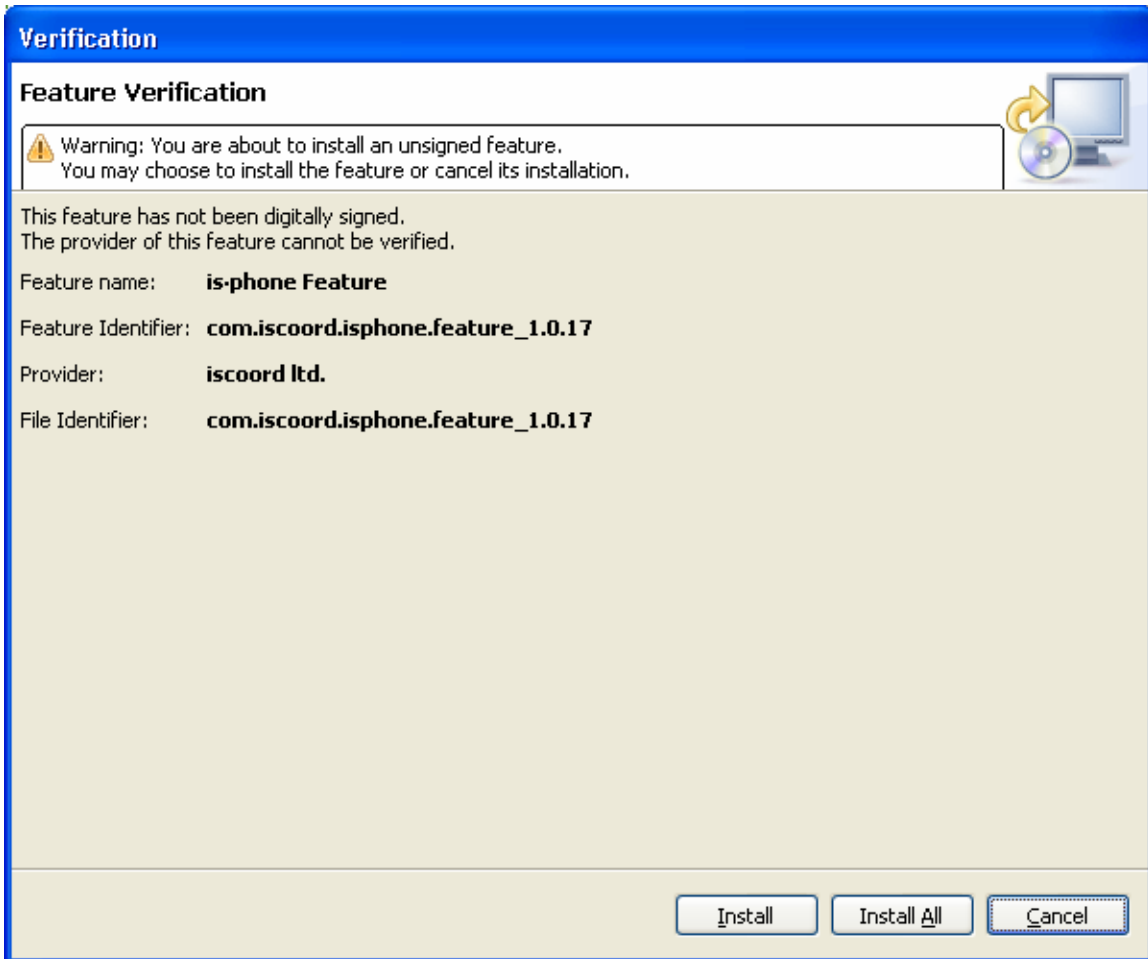
Picture 10: License Agreement

8. Click Finish



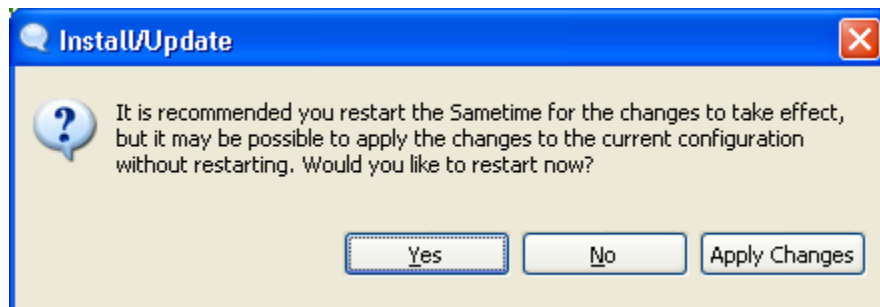
Picture 11: Plug in Installation

9. Click Install All



Picture 12: Feature Verification

10. Restart Sametime

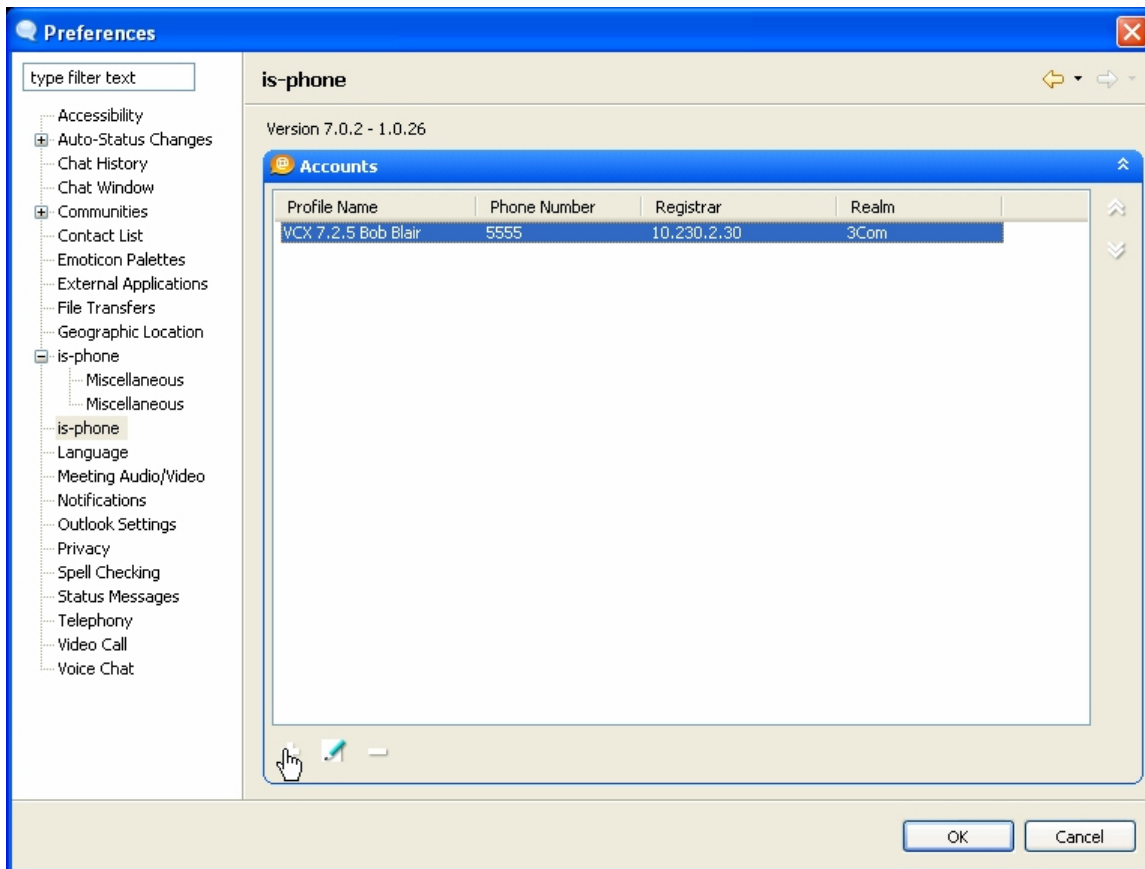


Picture 13: Restart Sametime

## Create a SIP account profile

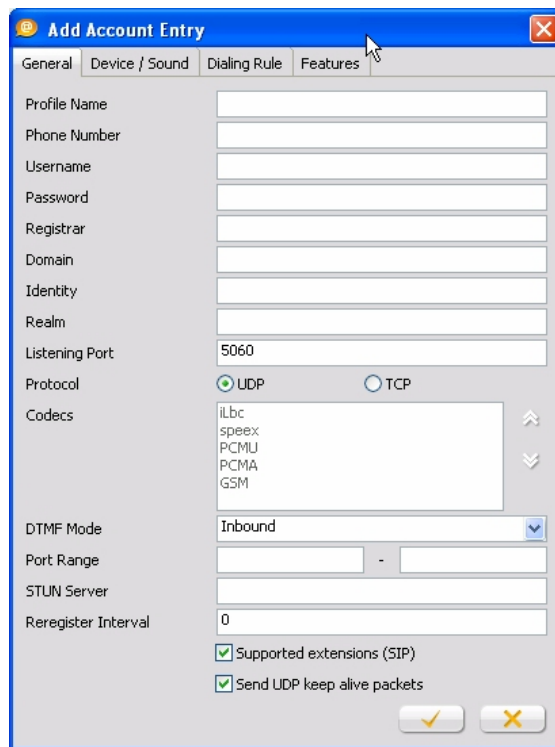
This can be done under File → Preferences → is-phone (in the Sametime client application).

1. Choose is-phone on the left hand pane and then select the + icon to add a new account.



Picture 14: Sametime Preferences

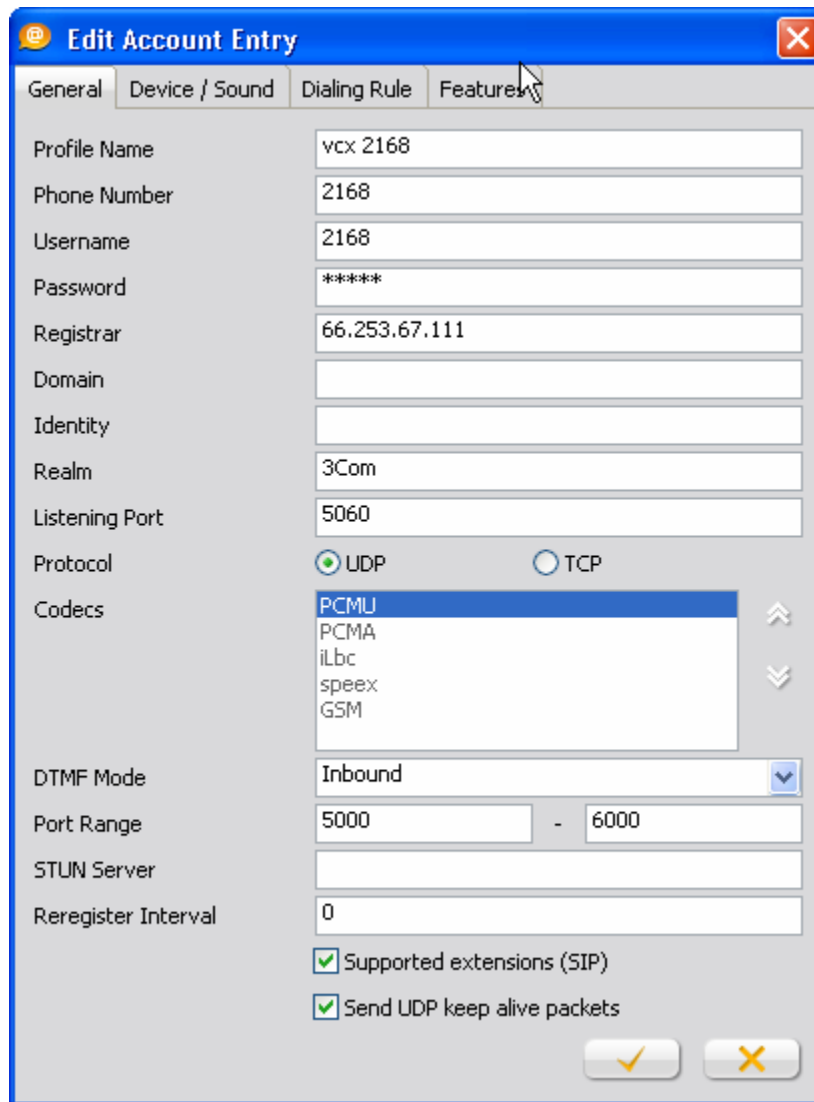
- You will be presented with a fresh account setup dialog box.



Picture 15: Account Detail

<b>Profile Name</b>	Any name to identify the profile
<b>Phone Number</b>	Enter the extension (eg. 2168)
<b>Username</b>	Authentication username (normally phone number 2168)
<b>Password</b>	Authentication password (eg. 98765)
<b>Registrar</b>	IP Address or DNS name of the Primary VCX
<b>Domain</b>	Blank
<b>Identity</b>	In SIP Format "Rolf Kuster" <sip:2168@66.253.67.111>
<b>Realm</b>	3Com
<b>Listening Port</b>	5060
<b>Protocol</b>	UDP
<b>DTMF Mode</b>	Inbound
<b>Port Range</b>	Audio port range – normally 5000 – 6000
<b>STUN Server</b>	Blank
<b>Re-Registration Interval</b>	0 (default) means 3600

3. Choose the check button and proceed. The following is example configuration that was used for remote testing.



Picture 16: Example Account Detail

**Note:**

Please restart the client after you made the configurations. Completely exit Sametime and relaunch it.

### Verification Tests

- Dynamic Registration
- Re-registration before TTL
- Incorrect authentication
- is-phone calls is-phone
- is-phone calls 3com phone
- 3com phone call is-phone
- Calling party hangs up before call is answered
- Called party rejects the call
- Codec Negotiations
- G711 u /G711 a
- On hold / off hold
- Call Forward unattended (blind transfer)
- Call Forward attended (consultative transfer)
- Conference call
- Call waiting
- DTMF Relay

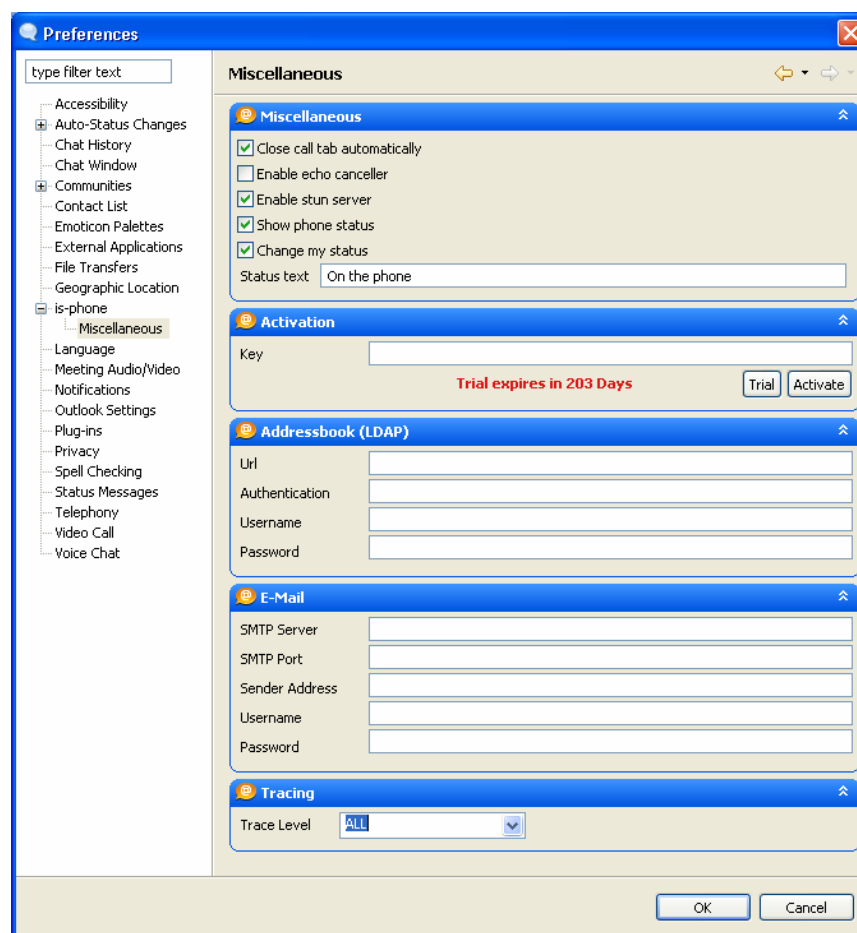
### *Troubleshooting is-phone*

There are two log / trace functionalities implemented in the is-phone plugin for debugging / troubleshooting:

- Application Log
- SIP stack trace Log
- Wireshark

## Application Log

The application log contains data / information about the function / features that have been done by the user. It helps to analyze the processes on the application level. To enable the application log, the user has to open the is-phone preferences page (File / Preferences / is-phone / Miscellaneous) and set the trace level to “ALL”



Picture 17: is-phone Miscellaneous Details

A log file (log.xml.txt) is then written in the following directory.

```
C:\Documents and
Settings\\IBM\RCP\Sametime\.metadata\.plugins\com.iscoord.isp
hone
```

Yellow

---

## SIP/Stack trace log

To enable the SIP/Stack trace log, the file `com.iscoord.isphone.prefs` located in following location needs to be edited with Notepad.

C:\Documents and Settings\\IBM\RCP\Sametime\.metadata\plugins\org.eclipse.core.runtime\settings

An additional line

```
Phone.debugLevel=6
```

Has to be added into the prefs file.

Example:

```
#Mon Jun 18 13:51:26 CEST 2007
IsPhoneMiniApp.name=Rolf Kuster/iscoord
MiscellaneousPreferencePage.enableStunServer=true
MiscellaneousPreferencePage.showAdditionalStatus=true
MiscellaneousPreferencePage.trialKey=4AAD2558-781A-4015-E83F-931F6B40EB64
MiscellaneousPreferencePage.closeTabAutomatically=true
MiscellaneousPreferencePage.switchStatus=true
MiscellaneousPreferencePage.traceLevel=0
eclipse.preferences.version=1
IsPhoneMiniApp.profileName=0435000640 e-fon
MiscellaneousPreferencePage.statusText=On the phone
Phone.debugLevel=6
Account.dtmfMode=Inbound
```

The trace file (`event_log.txt`) is then written in the following directory.

C:\Documents and Settings\\IBM\RCP\Sametime\.metadata\plugins\com.iscoord.isphone

## Wireshark

A free sniffer tool (Wireshark) can be downloaded from

[www.wireshark.org](http://www.wireshark.org)

With this tool, SIP traces can be obtained for deeper analysis.

## Product Support

Product support can be obtained from the respective product suppliers.

### ***3COM product support:***

Main 3COM Support link:

[http://www.3com.com/products/en\\_US/support/index.html](http://www.3com.com/products/en_US/support/index.html)

#### **Asia Pacific**

Telephone: +65 6543 6645

Fax: +65 6543 6518

E-mail: [ap\\_service@3com.com](mailto:ap_service@3com.com)

#### **Europe, Middle East and Africa**

Telephone: +44 (0)1442 435529 (Option 4)

Fax : +44 (0)1442 435811

E-mail: [focalpoint\\_services@3com.com](mailto:focalpoint_services@3com.com)

#### **North America and Latin America**

Telephone: 866-326-6222 (Option 3)

Fax : 408-326-7140

E-mail: [ecso\\_contracts@3com.com](mailto:ecso_contracts@3com.com)

### ***Is-phone Product Support:***

[www.is-phone.com/support](http://www.is-phone.com/support)

iscoord ag

[www.iscoord.com](http://www.iscoord.com)

**Support:** +41 44 258 8882

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### **Conclusion**

The interoperability with VCX was successfully validated. Is-coord performed self testing of their solution and 3COM|ON Lab reproduced the tested environment and validated the test results. Issues were located with DTMF Relay interoperability and were resolved in the v1.0.27 release