

Single Sign On  
With Cisco Extension Mobility  
Telisca TSSO

Reference : 110127

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## 1 Description

### 1.1 Overview

Telisca SSO (TSSO) is a Single Sign-On application for Cisco Extension Mobility.

When opening a Windows session, TSSO logs your CUCM profile on your Phone, without requiring you to enter a PIN code. Depending on your configuration the process can be made completely invisible to the user.

TSSO may also log your profile out when closing the session, on demand or at a defined time of day.

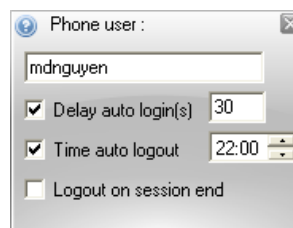
Several automatic User and Phone detection modes can be configured:

- use the Windows login as the CUCM UserId
- or search it in a LDAP or Active Directory
- or ask the user to enter it once.
- If the computer is connected to the LAN through the IP Phone, TSSO can automatically detect it.
- In the other case, the user may enter the IP phone directory Number.
- In most of the cases, the user will be able to log-in on the last IP Phone used.

When logging-in or logging-out is completed, TSSO can launch an external application such as a Call Center agent' banner.

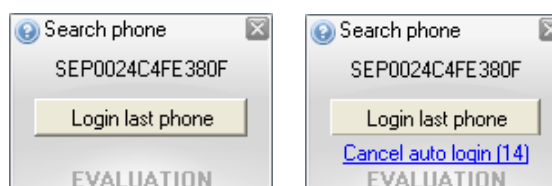
### 1.2 CUCM userId detection or configuration

TSSO can use the Windows login as CUCM userid if CUCM is synchronized on Active Directory. TSSO can also search the CUCM userid in a LDAP or Active Directory using Windows login as a search criteria. Finally, the user may enter his CUCM's Userid once.



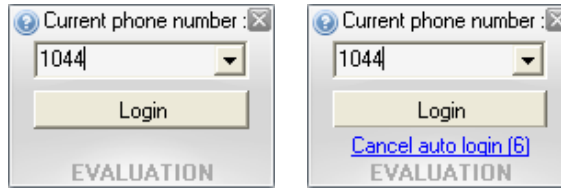
### 1.3 IP Phone detection

If the computer is connected to the LAN through the IP Phone, TSSO can automatically detect the IP Phone name. This is done by capturing CDP or LLDP broadcast from the IP Phone. The average time to detect the IP Phone is 30s.



If the PC is not connected to the IP Phone switch or when running TSSO on a virtual PC environment, the user may enter the IP Phone's directory number displayed on the Phone (which is usually not logged).

In most cases, the user will be able to log-in directly on the last IP Phone used. TSSO keeps track of the last 7 phones used.



## 1.4 Additional features

The user can optionally set a delay to login automatically on the last previously logged IP Phone.

It is possible to give the user the ability to configure an automatic logout time. TSSO then calculates the appropriate login duration left and redefines it in Extension Mobility.

TSSO is able to monitor when the IP Phone is actually logged in and launch an executable (for instance a Call Center agent's banner). This is useful since the time of login on the IP phone may be variable and some application will fail if the login is not completed.

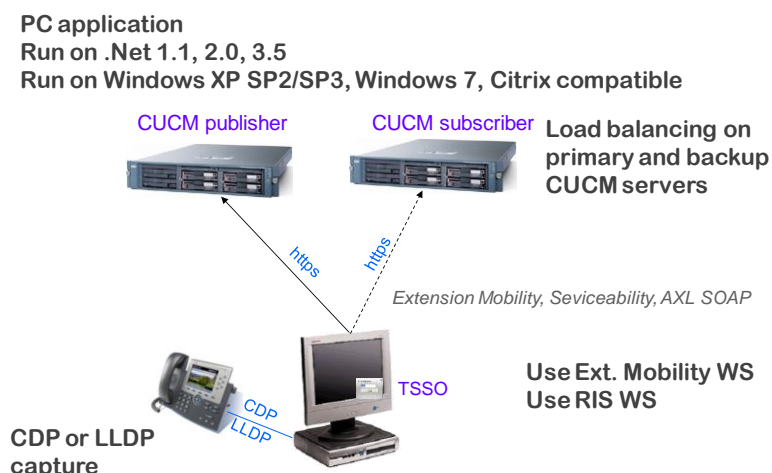
When closing the Windows session, or system shutdown, TSSO is closed which initiates an immediate logout, asynchronously. On crash, power failure, hibernation of the computer, however, the application is not closed normally and therefore the position is not logged out.

When using TSSO on a laptop, Windows may not be closed when un-plugging the laptop from the network. TSSO will continue running and will detect when the laptop is connected again to force log-in (if necessary) on the IP Phone.

## 2 Architecture and requirements

TSSO is an application that runs on the PC or on a Citrix virtual machine. It can be deployed on the PC by simply copying or run from the network, if the IP Phone Recognition option is not enabled.

TSSO takes advantage of CUCM Extension Mobility API and uses a Proxy user authentication for Extension Mobility.



Since CUCM 6.1, the performance of login / logout has increased and it is possible to execute a login / logout, even if the CUCM Publisher is stopped. Also TSSO can be configured to support a primary and backup CUCM server. The number of login / logout per

minute is directly related to the size of the cluster (without loss of performance due to the use of the API). TSSO can also operate in load balancing mode with multiple CUCM servers.

To detect automatically the IP Phone on which the PC is connected, TSSO relies on the 'pcap' library (to access to network layer) and retrieves the name of the IP Phone to which the PC is connected.

If the name of the IP Phone is granted by entering the telephone number of the IP Phone, the TSSO relies on CUCM 'RIS' API.

## 2.1 Requirements

TSSO is supported on CUCM 5.1, 6.1, 7.1, 8.0, 8.5

TSSO run on Microsoft Windows XP (SP2/SP3), Windows 7.

TSSO uses .Net 1.1, 2.0, 3.x. It may be installed by running an MSI or just copying TSSO or executing it from a LAN drive (when pcap module is not required). TSSO communicates with CUCM via https.

TSSO can run on a TSE or Citrix virtual terminal.

Generally no server is required to run TSSO.

An additional module is available on a server in a specific case : when the phone detection is based on the directory number entered by the user, it is possible to ask to confirm from the IP Phone itself, to log-out the previous user.