Product Datasheet
Voice Alert

Directory
Phone Directory
Jabber UDS Server
Web Directory
IPS Popup / Reverse Lookup
Personal Directory
H350 Video Conf directory
Corporate Speed Dials
ClickNDial
Alerting
Voice Alert
IPS Pager
Admin tools
Morning Check
Phone Remote
Phone Robot
Provisioning
Phone Deployment
CMS Admin & Selfcare
Extension Mobility Report
Manager Assistant
IP Phone / Jabber Interface

Productivity tools
IPS Phone Config
IPS Alarm Callback
IPS Lock
Wakeup Call
Missed Call Alerter
Conference Center
Busy Alerter Callback
Desktop Popup
Finesse Gadgets
Spark Bot
Attendant Console / IVR / Group
Tannounce
Line Group Manager
Silent Monitoring
Extension Mobility tools
TSSO
Delog / Relog
Pin & Password Manager
Recording
Call Recording
Recording Notification

1 Voice Alert Description

1.1 Services and features

Voice Alert is an alert management application for the Cisco Unified Communication Manager. Voice Alert may be used to alert automatically a list of recipients and play a recorded audio message alert or distribute text messages with an audible signal and vibration sent to the telephones.

Voice Alert can send broadcast or successive calls/messages and verifies that the call was indeed taken into account.

Voice Alert generates reports that can be sent to supervisors.

Supervisor can manage the alert and destinations' lists by entity.

1.2 Triggering

The alert may be triggered by calling a defined directory number, from an authorized calling number and eventually typing a DTMF code. The alert is selected according to the number dialed (one number per alert), or according to a list of calling numbers. A DTMF code may be required to trigger the transmission.

The alert can also be triggered by a dry contact, such as by pressing a button. The interface is accomplished either by a dry contact/IP converter (ControlByWeb WebRelay or X-332, for example), or by an ATA 186/188/190 unit which automatically, upon off hook, calls a defined number via an empty translation pattern.

An authorized user car display a Web Page to start, monitor and stop alerts, organized in alerts' groups.
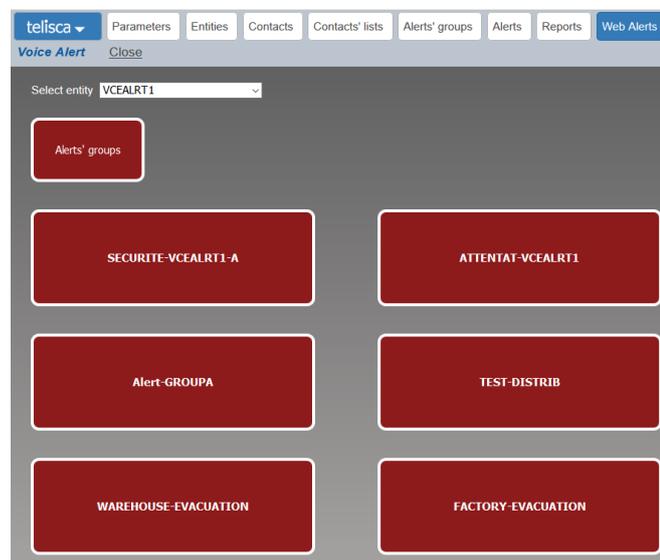
The alert can also be triggered by calling a specific URL with the ID of the alert, from an authorized calling IP address. This URL can be called from an html form, a customer application or an IP enabled device. The URL returns a status code.

The alert request is confirmed to the user by broadcast of the alert message, when one calls a defined number or by a return code when one calls a URL via http or by a relay with an IP/relay box.

1.3 Target lists, distribution modes

IPS Administration is used to define different alerts with a specific audio message, text message, recipients list, distribution and recycle modes.

The recipient list can be defined as:
- A list of contacts (defined in the administration, with several directory numbers)
- A list of directory numbers,
- A list of IP Phones,
- A selection of device pool,
- A selection of Location,
- A selection of Calling Search Space,
- A selection of IP address prefixes.

The list is browsed in order to mix the different destinations with different selection criteria (ex: call one phone from Device Pool A, then one phone from Device Pool B, …). The list of directory numbers to call is updated just before calling to take into account Extension Mobility users.

Different distribution modes are available:
- Broadcast : all recipients are called simultaneously,
- Intercom : Voice Alert answers the calls to force the message to be played on the IP Phones' speaker,
- Successive: the numbers are called in order. As soon as a number correctly takes the call, the alert if terminated.
- Broadcast on contact, successive on directory numbers per contact.
- Stop on first accepted alert or not.
- If the dialed number is busy, it is possible to interrupt the call in progress in order to send the alert,
- Numbers transferred to external lines are not called.

It is possible to define the conditions or a correct reception of the alerte:
- The call is answered before a defined response delay,
- The communication duration reaches a minimum length defined,
- The recipient has entered a DTMF validation code.
- The text notification is confirmed via the screen of the IP Phone.
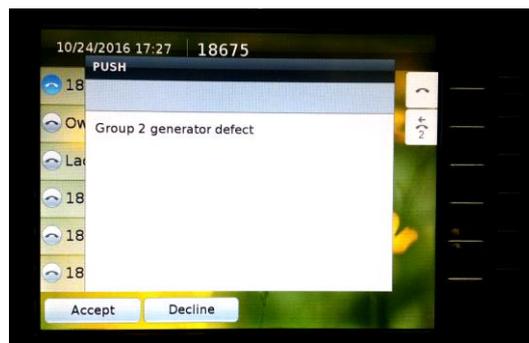
When the call is not answered or not listened 'adequately', the call is recycled several times after a defined delay.

An output dry contact can be closed, during the duration of the alert or when started or when at least one destination user has acknowledged the call.

1.4 Reporting

A report is generated to control the alerts triggered. It provides information on who has raised the alert, who has been called and who has listened/view/accepted the alert. The result of the call for each destination is also available, providing status and failed cause.

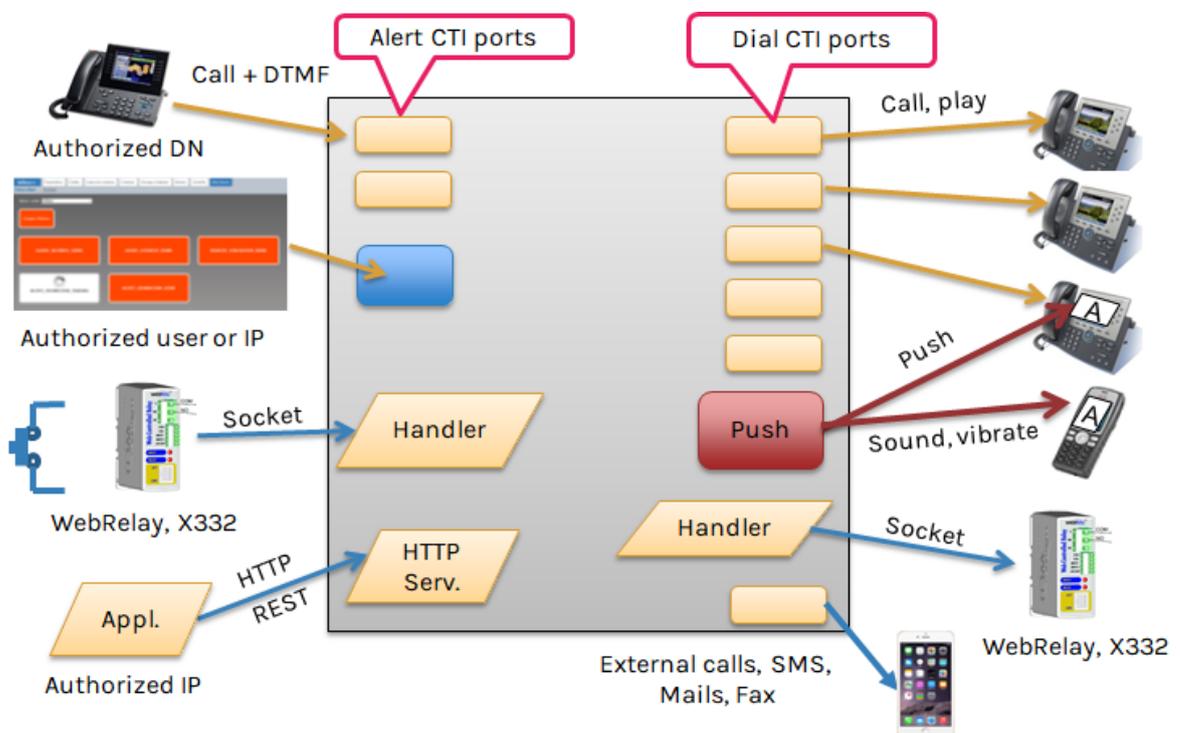The Alert report can be exported or sent by email to supervisors' address list.

A dynamic Dashboard can be displayed to analyze the reports.
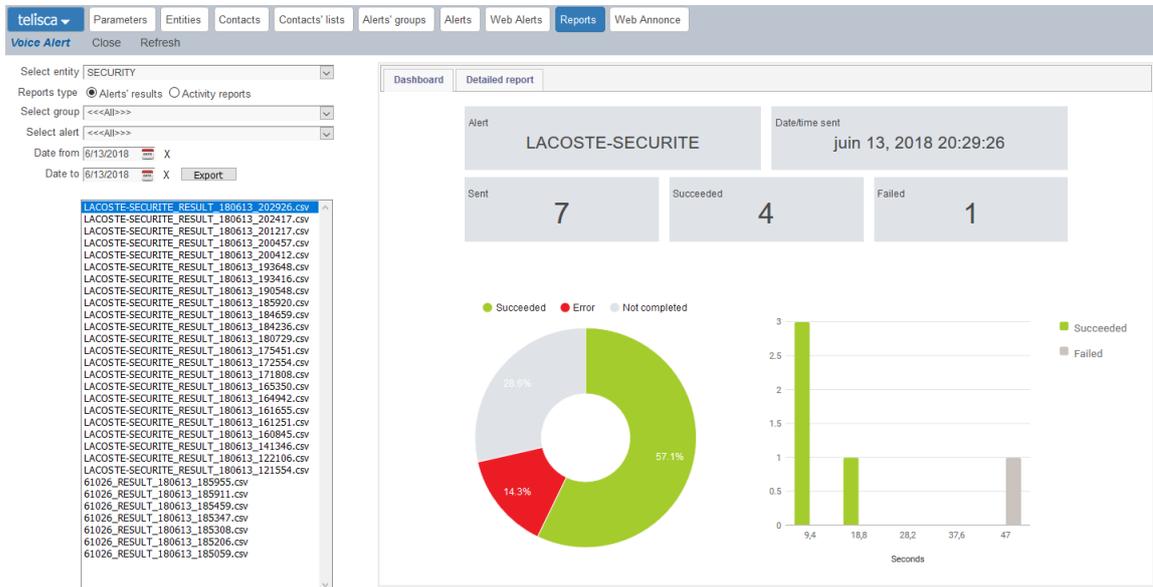
2 Architecture

2.1 Schema and components

Alerts can be triggered by calling a number + pressing DTMF, via a Web interface, by dry contact or by a secured API..

IPS Administration creates a pool of Dial CTI ports. They are used to call the recipients and play the audio message (with G711 Codec). Their display name can be set to alert the called party while ringing (ex: ***** ALERT *****).

The audio messages are loaded from audio files (.wav) and converted automatically to the right format. It is also possible to enter a text which is converted to audio by Text to Speech.

|	
Voices	Microsoft Server Speech Text to Speech Voice (en-GB, Hazel)
Speech text	This is a test alert. Please, remain to your office. [Generate]
Audio file	Parcourir...
	c:\inetpub\wwwroot\IPSCFG\data\audio\audio_41.wav
	Download

IPS Administration creates also the adequate number of alert's CTI ports that may be called to trigger the alerts. Depending of the entity, different pools of CTI Ports with different Device Pool, Partition and Calling Search Space can be created.

Voice Alert can generate calls but also push a text message on a Cisco IP phone, vibrate a Wifi IP phone, send an email, a SMS or Fax.

2.2 Fault tolerance

Voice Alert may function in fault tolerance mode. Voice Alert supports an automatic reconnection to a backup CTI Manager and publisher (for AXL read and Serviceability queries).

Voice Alert can also be installed on replicated servers with the additional Hot Standby module. In this case, both configurations are synchronized. The backup server monitors the primary server. If a failure is detected the backup server becomes primary, connects himself to the CTI Manager and registers again the CTI ports used to handle the alerts.
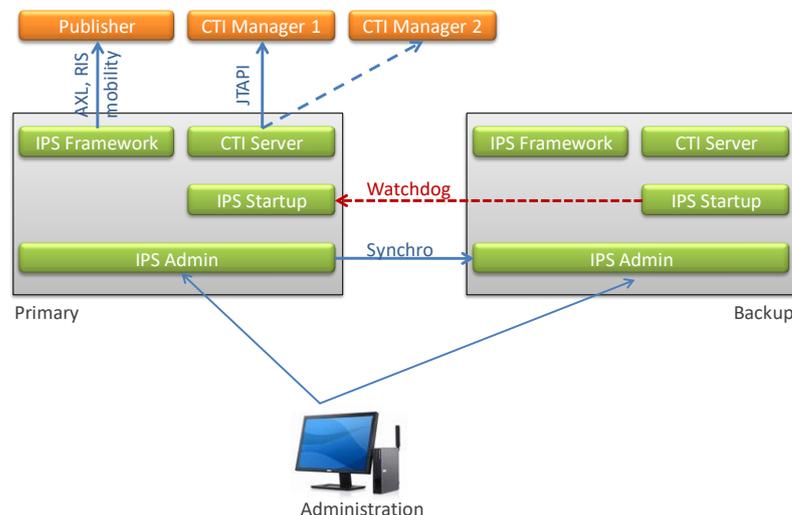
2.3 Requirements

Supported Cisco CUCM:
- CUCM version 8.6, 9.1, 10.5, 11, 11.5, 12, BE 6000, BE 7000

- Windows servers supported:
    Windows Server 2008 R2 SP1 or 2008 SP2 Foundation, EN/FR, (update only)
    Windows Server 2008 R2 SP1 or 2008 SP2 Standard, EN/FR, (update only)
    Windows Server 2012 or 2012 R2 Essentials, EN/FR,

Windows Server 2012 or 2012 R2 Standard, EN/FR,
Windows Server 2016 Essentials, EN/FR
Windows Server 2016 Standard, EN/FR

- DotNet 4.5.1 (minimum) up to 4.6.2 (advised)
- Minimum configuration: 1 vCPU, 4GB RAM, 70GB disk
- Virtual Machine VMware vSphere, HyperV or Cisco UCS, Cisco UCS-E

- Support dry Contact to IP: ControlbyWeb WebRelay (1 port) or X-332 (16 ports).
- Send email by SMTP,
- send SMS by could gateway,
- send fax by could gateway (email with fax destination in email address).