Administrators Guide Morning Check

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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**

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1 Description Morning Check

1.1 Overview

In order to offer the best quality of service to their users, information technology and telecommunications departments wish to verify **every morning and/or periodically** the proper functioning of the telephone system (**Health check**). To do this, they effect tests on a sample of telephones and critical applications as well as testing Voice Gateway status or CUCM services.

telisca has developed a tool which automates this operation, in order to free up the system administrators from this task and in order to effect more systematic tests. It also provides synthetic and detailed reports.

Morning Check allows to test CUCM, Unity Connection, CUP, UCCX, IP Phones, Video Collaboration Endpoints, Web Servers, third party server, but also does real telephony tests.

Morning Check may also be used for **performance testing**. It is possible to use Morning Check scripts to generate a large number of calls or simulate the use of applications on IP Phones.

1.2 Architecture

Morning Check may be activated on the same server supporting other telisca applications; it uses the IPS Framework & Administration and CTI Server modules already installed.

Morning Check uses a pool of CTI Ports in order to generate and receive calls. It may also simulate IP Phone keystrokes. It may connect/disconnect Extension Mobility users. It may affect screenshots of IP Phones.

1.3 Features/scripts

The scripts permit the execution of the following tests:

- Call from a pool of CTI ports
- Answer from a CTI port or IP Phone
- Check call is ringing
- Check call is answered
- Play an audio message
- Send a DTMF code
- Terminate a call
- Send keystrokes toward IP Phones
- Login a user via Extension Mobility
- Logout a user via Extension Mobility
- Send SSH commands, check answer (to CUCM, Voice Gateways, Switches)
- Check phones registered by switch
- Count IP Phones registered by CUCM subscriber
- Check CTI Port, CTI Route Point are registered
- Check SIP Trunk are registered
- Send a ping
- Check CUCM, CUC, CUP, UCCX Services
- Check Fault tolerant on CUCM presence server
- Check CUCM server certificates are valid
- Check Windows Services
- Check Web Services, check answer
- Check Voice Mail status
- Check TFTP Server
- Check XMPP Server
- Check backup files on shared drive
- Check file's content on shared drive
- Microsoft Teams presence status
- Microsoft Teams call generated via BOT to URI or number

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≡ telisca	telisca test	🖹 🔎 📥 me 🗸
🚳 Dashboard	Home / Morning Check / Create/Update script	🖌 Save 🛛 🗎 Delete
📽 Global configuration 🛛	♦ Settings ■ Script ■ Data	
Ø Support →	Name TEST-SERVERS	
Attendant Console	Access by Manager 📃 😧	
Voice Callback	# Total times script is executed 1	
😁 Conference Center 🕠	# simultaneous executions of the script 1	
G Silent Monitoring →	Delay between first simultaneous executions (ms) 200	
Desktop Popup 🕠	Required telephony status max. wait delay 500 Times of day to execute automatically (H-thmt) 07:00 13:00 13:00	
差 Ext. Mobility Report 🛛 🔸	Email addresses to send detailed report (separated by .) jmlacoste@telisca.com	
Busy Alerter Callback →	Email addresses to send simplified report (separated by .)	
IPS Global Directory +	Send report to sftp server	
PS Manager Assistant >	Execute Stop STOPPED	



The scripts may be run on a list of numbers/telephones. It is possible to execute consecutive or parallel tests, which permits in this case to effect performance tests.

The scripts may be launched automatically at defined times of the day. The scripts are divided in Group of sections and sections. Some section may be executed only some days of the week.

Both synthetic and detailed reports are sent to the administrators by SMTP or SFTP.

Script	TELISCA		
Time begin	15:35		
Time end	15:36:40		
Duration	1mn 71s		
		TEST SECTION NAME	RESULT
	SERVERS	TFTP	OK
		CUCM-SERVICES	ОК
		CUCM-TOMCAT	ОК
		CUCM-CLI	ERROR
	REGISTERED	PHONES	ОК
Result		CTI_PORTS	ОК
		CTI_ROUTE_POINT	ОК
	TELEPHONY	CALL_FROM_PHONE	ERROR
		FAX	ОК
		IVR	ОК
		VOICE_MAIL	OK
		EXTENSION MOBILITY	ОК



2 Pre-requisites & Architecture

Morning Check may be activated on the same server supporting other telisca applications, it uses the IPS Framework & Administration and CTI Server modules already installed.

- Windows servers supported: Windows Server 2012 R2 Essentials or Standard Windows Server 2016 Essentials or Standard Windows Server 2019 Essentials or Standard Windows Server 2022 Standard
- Minimum configuration: 1 vCPU, 4GB RAM, 70GB disk
- Virtual Machine VMware vSphere, Hyper-V or Cisco UCS, Cisco UCS-E, Microsoft Azure
- Cloud ready



2.1 CUCM prerequisite

Supported Cisco CUCM version 10.5, 11.5, 12.5, 14

Morning Check uses a pool of CTI Ports in order to generate and receive calls. It may also simulate IP Phone keystrokes (via CTI). It may connect/disconnect Extension Mobility users.

To be able to configure Morning Check, some prerequisites are necessary on CUCM side:

- **Publisher server DNS name /IPv4** AXL SOAP service must be enabled on CUCM server. DNS name must be identical to CUCM SSL certificate name. It's recommended to deploy CUCM SSL certificate on Morning Check server.
- Extension Mobility server DNS name/IPv4 Extension Mobility service must be enabled on CUCM server.
- CTI Manager server DNS name/IPv4 CTI Manager service must be enabled on CUCM server.
- Application User



An application user configured with following rights access:

- « Standard Super user »
- « Standard EM Authentication Proxy Rights »
- « Standard CTI Enabled »
- o « Standard CTI Allow control all devices »
- o « Standard CTI Allow control of Phones supporting connected Xfer and conf »

• CTI Ports information configuration

Device pool/Partitions/CSS/DN range used to configure CTI ports on CUCM from Morning Check administration interface.

2.2 Teams prerequisite

Please read IPCFG_admin_EN.pdf Azure configuration for Teams.

2.3 Framework prerequisite configuration

Morning Check needs minimal configuration of framework (framework configuration screens are available from "Menu/Global Config."):

- CUCM Config. (Administration guide IPSCFG_ADMIN_EN.pdf chapter 4.1)
- Parameters (Administration guide IPSCFG_ADMIN_EN.pdf chapter 4.3)
- CTI Config. (Administration guide IPSCFG_ADMIN_EN.pdf chapter 4.8.)
- Config. Email (Administration guide IPSCFG_ADMIN_EN.pdf chapter 4.6)

2.4 Network flows prerequisite

Source	Destination	Protocols/ports	Delay max RTT	
Telisca server	CUCM	HTTPS TCP/8443	500ms	
Telisca server	CUCM	JTAPI (CTI) : TCP/2748	250ms	
Web UI : IPS Administration	Telisca server	HTTP TCP/80 or HTTPS TCP/443 (1)	1000ms	
IP Phone	Telisca server	HTTP TCP/80 or HTTPS TCP/443 (1)	1000ms	
IP Phone (internal call)	Telisca server (AUDIO G711)	RTP UDP/24576+ ⁽¹⁾	200ms	
CUCM (internal call)	Telisca server (AUDIO G711)	RTP UDP/24576+ ⁽¹⁾	200ms	
Telisca server (e-mail send)	Server SMTP	TCP/25	1000ms	

(1) Customizable Ports



3 Administration

3.1 Parameters

This screen list global configuration for Morning Check.

Home / Morning Check / Parameters				
Enable Morning Check	•			
CTI Ports		List / Delete		Generate CTI ports
CTI Ports supports all CODECs	0			
Managers' security group			Q	

• Enable Morning Check

Option to enable Morning Check. After change on this option, a restart of telisca CTI server is mandatory.

• List/Delete CTI Ports

Screen to list CTI Ports created on CUCM, or delete them.

Generate CTI Ports

Screen to configure and generate CTI Ports on CUCM. The name of the CTI Port is built by concatenating the prefix and the directory number. The name's length must not exceed 15.

Partition and CSS used to configure CTI ports should be chosen to be able to make/receive a call with CUCM environment according to DN/devices used in scripts. The number of CTI Ports will define the maximum number of simultaneous executions of the script.

Generate CTI ports for CTISIM CTI ports name prefix CTISIM CTI Ports alerting/display name CTISIM CTI ports directory number range begin 105910 CTI ports directory number range end 105913 Device pool Default Partition Intern Calling Search Space CSS_ALL Update

• Generate audio file from text

Select the language, type the text and click on Generate button

• Upload test audio file (automatically converted)

Audio file used by Morning Check script to play audio messages. Accept most of audio format. The administration will convert it to a compatible format.

You can download the audio file to check it.

		teliso
Upload test audio file (automatically converted)		
Concatenate languages	1 language 🗸	
Voices	Microsoft Server Speech Text to Speech Voice (en-GB, Hazel)	
Text to speech	Warning: Morning Check is speaking	
		U
Or upload audio file	Browse	

c:\inetpub\wwwroot\IPSCFG\data\AUDIO\audio_27.wav

You can customize the object and body of the report's email. They are two different emails that can be set:

- Detailed,
- Simplified.

Detailed email	0	
Object	Detailed Morning Ch	neck report %ID%
	 O Source B I U S × I O I = 0 O I = 0 O I = 0 	C ● D X B 面 面 面 (← → Q b) 厚 (♥・ Β Θ Θ C C C = ∞ ⊄
Body	Hello, Here are %ID% test	is execution data:
	Script	%ID%
	Time begin	%TIME%
	Time end	%TIME_END%
	Duration	%DURATION%
	Result	%SECTIONS RESULT%

An execution report will be joined to the mail.

Here are values that can be used in the object and body:

%ID% %RESULT% %DATE% %TIME% %SECTIONS_RESULT% %NB_EXEC% %NB_SECTIONS% %TIME_END% %DURATION%

3.2 Scripts List

This screen lists the scripts defined in Morning Check.

Home / Morning Check / Scripts

Add new script						
Name	# exec	Time	Status			
DIAL_FROM_CTI_PORT	1	06:30	STOPPED	Update	Execute	Stop
EXT_MOBILITY	1	06:40	STOPPED	Update	Execute	Stop
MORNING_CHECK	1	07:00	STOPPED	Update	Execute	Stop
REGISTERED	1	07:10	STOPPED	Update	Execute	Stop
ROOMKIT	1	07:20	STOPPED	Update	Execute	Stop

The columns are:

• Name

Script name.

• # exec

Clos



Add

Number of simultaneous execution (# CTI ports used by this script).

• Time

Scheduled times (if any) to execute this script.

• Status

When executing, the status changes to RUNNING. The page is then updated every 4 seconds.

3.3 Crypted variables

In order to prevent password used in scripts to be visible in script reports, it is possible to define crypted variable that are defined in the script as variables. It will be more convenient to use variable than IP addresses for hosts.

For example, two variables are defined hereafter for the host name and the password.

			Add
		Variable name	Value
Edit	Delete	\$CUCM-PUB\$	XXXXXXXXXX
<u>Edit</u>	Delete	\$CUCM-PASSWORD\$	XXXXXXXXXX

In a script, we can enter the command line: SSH_LOGIN,\$CUCM-PUB\$,admin:\$CUCM-PASSWORD\$

3.4 Scripts configuration

This screen list all available options used to create/configure a script.

Home / Morning Check / Create/Update script		⊘ Cancel ✓ Save 🛍 Delete
Settings		
Namo	MORNING_CHECK	
Access by Manage	. 0	
# Total times script is executed	1	
# simultaneous executions of the scrip	1 🚱	
Delay between first simultaneous executions (ms	200	
Required telephony status max. wait delay	500 3	
Times of day to execute automatically (HH:mm	07:00	
Email addresses to send detailed report (separated by ,		
Email addresses to send simplified report (separated by ,		
Send report only on error		
Send report to sftp serve		
	Execute Stop STOPPED	

• Name

Script name and unique identifier

• Access by Manager

Managers can execute the script from the 'Prod. exec' folder. They can amend the variables %XXX% defined in the script.

• # Total times script is executed

Total number of executions of the script (nb. loop on the script x nb. simultaneous executions). If data are provided, loop on the next data. If the number of executions is greater thant the number of data, loop to the first data.



• # simultaneous executions of the script

Number of parallel executions of the script with the different data provided. It cannot be more than the number of CTI ports defined to execute the script.

• Delay between first simultaneous execution (ms)

When launching the first time the script execution, add this delay (in ms) between each CTI Ports. This will set the maximum rate of execution per second.

• Required telephony status max delay

Before executing a script command, wait this maximum additional delay (in ms), for the correct phone status. For example, to drop a call wait for dialing or talking.

• Times of day to execute automatically (HH:mm)

Times of day to execute automatically the script. Beware to configure this time according to telisca application restart time (default: 5:30am)

• Email addresses to send detailed report (separated by ,)

Email addresses to send a report of executed script. Report is sent for each script execution (manual or automatic).

• Email addresses to send simplified report (separated by ,)

Email addresses to send a report of executed script. Report is sent for each script execution (manual or automatic).

• EXECUTE/STOP

Buttons to execute/stop the script manually. Current status of running script is displayed in red.

Script definition:

Home / Morn	ing Check / Cl	reate/Update scri	pt ⊘Cancel	🗸 Sav	ve 🚺	🗊 Delete
Settings	Script 3	n Data				
	Add a comm	and line to the script	0,GROUP_OF_SECTIONS,groupName	0	Add	
			1000,TEST_SECTION,CALL TESTS 1000,DIAL,105006 1000,CHECK_ANSWERED,12000 5000,DROP			
			1000,TEST_SECTION,REGISTERED PHONES 1000,CHECK_REGISTERED_COUNT,10.2.105.10,10 1000,CHECK_REGISTERED,SEP00FFB23535BC SEP0123456789AB SEP2834A2821323 SEP00077D42BA24 SEP20 ECF86DAA8	23		
			1000,TEST_SECTION,TFTP SERVER 1000,TFTP_GET,10.2.111.10,Ringlist.xml			
		Script's content	1000,TEST_SECTION,CUCM SERVER 1000,CHECK_URL,https://10.2.5.10/ccmadmin,License 1000,CHECK_SERVICE,10.2.105.10,CONNECTION ERROR			

• Add a command line or a key to the script

List of command and keys available to use in script (see <u>Commands list</u> about command available and options). Command CHECK_SERVICE lists the CUCM services. Command SEND_KEYS lists authorized keys values.

• Scripts' content

List of commands executed by the script

Execute the script with different data.



• Select a CSV file and upload data

Fields used to load data from a csv file.

• Values list to process

List of values used by script as parameters to run command. One line for each set of values separated by comma, semi-column, tab. Each value in each column is called in script by using following variables:

%1%
 1st column.
 %2%

2nd column.

3.5 Prod execution

This screen is available from Morning Check menu 'Prod. Exec'. It is available to Administrators but as also to the 'Managers' (production users, that are logged with Manager's level as defined in Global Configuration / Parameter' screen).

The screen displays the script for which the check box 'Access by Manager has been checked'.

Home / Morning Check / Prod. exec				✓ Close
Scripts ID DIAL_FROM_CTI_PORT	Script content 1000,DIAL_FROM,%196:96:296,105010 6000,CHECK_ANSWERED;%196:,1000 1000,PLAY 1000,CHECK_DIALING,%296,10000 60000,DROP;%196:96:296			
	Script status STOPPED			
	Parameters			
	Variable	Value		
	%1%	SEP2834A2821323	Edit	
	%2%	105005	Edit	
	Run Save	Refresh	~	

The Manager cannot edit the script but can change the content of the variable used by the script.

The Manager can execute the script and display the report. The report can be compared with previous execution.

3.6 Process of script's execution

According to some script parameters, process of script execution can be different. Parameters which change the process are listed:

- Number of CTI ports different than 1. In this case, this value will be used to determine how many time the script will be executed.
- Set of values configured to use with the script. In this case each set of values will be used by script in parallel mode sequentially (if CTI ports number is different of 1) or in sequential mode (script is executed once for each set of value).
- Number of script execution different than 0 or 1. In this case the script will be executed more than 1 time, each time according to 2 other parameters listed below.

3.6.1 Example 1

Context:

- Number of CTI ports: 1.
- Number of sets of values: 4.
- Number of script execution: 3.

Process:

Time 1: Execution of script with set of values 1. Time 2: Execution of script with set of values 2. Time 3: Execution of script with set of values 3.

3.6.2 Example 2

Context:

- Number of CTI ports: 2.
- Number of sets of values: 4.
- Number of script execution: 5.

Process:

Time 1: Execution of 2 scripts in parallel with set of values 1 and 2.

Time 2: Execution of 2 scripts in parallel with set of values 3 and 4.

Time 3: Execution of 1 script with set of values 1.

3.6.3 Example 3

Context:

- Number of CTI ports: 3.
- Number of sets of values: 4.
- Number of script execution: 2.

Process:

Time 1: Execution of 2 scripts in parallel with set of values 1 and 2.

3.6.4 Example 4

Context:

- Number of CTI ports: 4.
- Number of sets of values: 3.
- Number of script execution: 4.

Process:

Time 1: Execution of 4 scripts in parallel with set of values 1 and 2 and 3 and 1.

→ Not a good idea, because two execution in parallel with the same data may create conflicts



4 Script's commands

4.1 Syntax

All commands have the following syntax: DELAY, ACTION, PARAMS.

• DELAY (ms)

Delay in milliseconds before executing the action.

ACTION

Action to perform by the script.

• PARAMS

Parameters for this action separated by commas.

4.1.1 Patterns

Some commands like CE_DIAGNOSTICS, CHECK_FILE_CONTENT, CHECK_URL, SSH_SEND search in the result a specific pattern.

The pattern may be a list of values separated by | Ex: OK|Succeed

If there is an ! before the pattern, it means that the result must not contain this pattern. Ex: !Error

The pattern may also be a regular expression, see http://regexr.com

4.1.2 Selectors

Before the pattern, one or several selectors (separated by |) will be added **line=line**: where line is a number or FIRST or LAST or LAST-n **prefix=pattern**: where pattern is the prefix value or regex **separator=c**: Where c is the character separator that delimit the value, if not defined, the separator is a space.

Numeric: The value extracted will be converted a numeric value

Before the pattern additionally to the not Boolean (!), if the value is 'numeric', it is possible to add >, = or <

Example 1: To check the CUCM CPU Idle is > 10% in the line CPU Idle: 98.42% System: 01.29% User: 00.29%

5000,SSH_SEND, show status, 30000, prefix=CPU Idle: |separator=%|numeric, >20

Example 2: To check that the last line of the report contains SUCCESS 2020-09-18-04-30-02.tar NETWORK Fri Sep 18 05:00:49 CEST 2020 SUCCESS SCHEDULED -CUCMCCv115_on_Silcasftpdid-211.5.1.16900-16 CDR_CAR,UCM ----

5000,SSH_SEND,utils disaster_recovery history backup,30000,line=LAST,SUCCESS

4.1.3 Always OK commands

By adding the character '/' before a command line, it means that the result of the command is not checked. So The result (OK) or (ERROR) is between parenthesis. If there is an error it is not added to the section, nor total errors' count.

4.1.4 Commented commands

By adding '//' at the beginning of the command line, the script's line is skipped.

4.2 Sections



1000,TEST_SECTION,sessionName[,MONDAY,TUESDAY,WEDNESDAY,THURSDAY,FRIDAY,SATURD AY,SUNDAY]

It is possible to group scripts commands in SECTIONs. This is useful to provide a report with the results of the different tests organized by sections.

If a day is added as a parameter, the section will be executed only the defined day of week.

0,GROUP_OF_SECTIONS,groupName

It is also possible to create groups of sections, to organize the reports.

4.3 Command's actions

• ANSWER

This action will answer a call on CTI port.

• ANSWER, directory Number

This action will answer a call on DN specified.

ANSWER, phoneName, directoryNumber

This action will answer a call on DN on the phoneName specified (in case of shared line).

• CE_ACCEPT,deviceOrIp/login:password

Answers a video call on a video collaboration endpoint.

• CE_CALL_STATUS, deviceOrIp/login:password, Idle | Dialling | Ringing | Connected | OnHold

Check call status on a Video Collaboration Endpoint.

• CE_DIAGNOSTICS, deviceOrIp/login:password, [!] pattern[(n)]

Checks a video collaboration endpoint. Check if response contains an 'alert' or 'OK'. Optionally counts the number of patterns found.

• CE_DIAL,deviceOrIp/login:password,uri

Call from a video collaboration endpoint. The destination URI can be a directory number or an email address/

• CE_DISCONNECT, deviceOrIp/login:password

Drop a video call on a video collaboration endpoint.

• CHECK_ANSWERED,[!]destination,delay

This action wait destination is connected for a define delay (in seconds). It checks the destination number is connected. If there is a ! before the destination it means the it must be anything but this number.

• CHECK_ANSWERED, delay

This action waits that the CTI Port that generates the call is connected within the defined delay (in seconds)

• CHECK_ANSWERED, destination, delay

This action waits that the destination is connected within the defined delay (in seconds)

CHECK_ANSWERED, callingPhone:dirNumber, delay

This action waits for the calling phone and the defined calling number to be connected within the defined delay (in seconds)

• CHECK_CERTIFICATES[,delay]

Checks that all CUCM's certificates are valid and will not expire before the given delay (in days).

• CHECK_CUP_FT

Checks that fault tolerant Presence Server are both actives.

• CHECK_DIALING[,destination],delay

This action checks that the current call generated par a Morning Check CTI port is dialing the right destination. This is useful when testing a call redirection as for telisca application IPS Manager Assistant or Recording



Notification. If the destination is defined it checks that the destination address is ringing. Otherwise, it checks that the CTI Port which has generated the call is dialing. It is waiting the delay in ms defined that the call is in dialing status.

• CHECK_FILE,Path-with-generic-file-name,login:password,DateCondition,minimumSizeKB

This action checks a file is available on a network shared drive (for example to test backups). The file can be on a network shared drive. The file name can be generic (containing a *). The action will select the last file modified. It checks the 'datecondition' that can be TODAY or YESTERDAY or WEEK. Check the file has a minimum size in Kilobytes.

• CHECK_FILE_CONTENT,Path-with-generic-file-name,login:password,[!]pattern[(n)]

This action analyzes the file's content to search for the presence of a pattern or not the presence if the pattern begin by the prefix !. The pattern can contain a regular expression. The file can be located on a network shared drive . The file name can contain a generic character (*). In this case the more recent file is checked. Optionally counts the number of patterns found.

• CHECK_MWI,directoryNumber,status

This action return true if Message Waiting Indicator is set to 'Lamp on' by default if not parameter set, or check the status defined: 1)Off, 2)On, 3)Wink, 4)Flash, 5)Blink

• CLEAR_MWI, directoryNumber

This action set Message Waiting Indicator to 'Lamp On'

• CHECK_SERVICE,ServiceName

This action checks the service is Started, if true return start time, if false return ReasonString ServiceNames are listed in administration combobox

• CHECK_REGISTERED, cti-Port-or-RP-name

This action checks SIP trunk or cti port or cti route point is registered and AutoAccept is enabled. It is possible to test several items separated by |

Example: CHECK_REGISTERED,CP1207|CP1208|CP1675 will check if the CTI Ports CP1207, CP1208 and CP1675 are registered

• CHECK_REGISTERED_COUNT[,CUCMHost1|CUCMHost2][,minimumCount]

Checks the minimum number of IP Phones are registered for the defined subscriber(s) host(s) separated by |. If no subscribers host is defined, it checks for the all CUCM cluster.

The list of registered phones are the one loaded in cache, at defined hours in CUCM Config screen. Is the minimumCount is empty, the command returns the number of registered devices instead of OK or ERROR.

• CHECK_URL,url[(header1,header2=value2) or (login:password)][,[!]pattern] [(n)]

This action makes a http or https request and check HTTP 200 is answered. If a pattern is defined, it will search for the presence of this pattern in the HTML answer or NOT the presence if the pattern starts by !. The pattern may contain a regular expression. Optionally counts the number of patterns found.

The URL can be followed by a list of HTTP headers separated with commas. These headers will be added to the HTTP request. If (user:password) is set after the URL, it is used to set a basic authentication in the http headers.

• CHECK_WINDOWS_SERVICE,host/login:password,serviceName

This action check that a Windows service is running on a defined server's host. You need to provide a credential that has enough rights to check services.

• DIAL, destination

This action will call the DN specified from one CTI port.

• DIAL_FROM, directoryNumber, destination

This action will call from directoryNumber the destination.

• DIAL_FROM, phoneName: directoryNumber, destination

This action will call from specified phoneName and directoryNumber the destination.



• DROP

This action will drop a call on CTI port.

• DROP, directoryNumber

This action will drop a call on specified number

• DROP,phoneName,directoryNumber

This action will drop a call on specified phoneName and directoryNumber.

• DTMF,dtmfcode

This action will send a DTMF code on call in progress. (dtmfcode should be a value from "1-9,*,#''.)

• LOGIN, userID, PhoneName

This action will login userID (associated with a device profile) on PhoneName (SEPXXXXXXXXXXX) specified.

• LOGOUT, PhoneName

This action will logout any userID logged on PhoneName (SEPXXXXXXXXXXX) specified.

• PHONES_STATUS_BY_CDP,switch-ip/login:password,switch-name

- PHONES_STATUS_BY_LLDP,switch-ip/login:password,switch-name
 - switch-ip is the IP address or DNS of a switch,
 - login and password authorized for the switch
 - switch-name the name used to build the report name.

The command executes a SSH connection to the switch, then send the command '**show cdp neighbors**' for the command PHONES_STATUS_BY_CDP and '**show lldp neighbors'** for the command PHONES_STATUS_BY_LLDP.

The command connects the list of phones returned.

The command sends a CUCM Serviceability SOAP query to get the status (registered, not registered, rejected) of the Phone with the IP address. And will write a report with file name based on the parameter 'PHONE_STATUS_' + switch-name + the date/time as postfix.

The phone are filtered by status provided in parameter: [REGISTERED], [UNREGISTERED], [REJECTED].

The command then disconnects from the switch

• PING,host[,delay]

This action sends a PING to the host and waits for the answer for the defined delay (in milliseconds).

• SEND_KEYS, PhoneName, keysList

This action will send a list of keys on PhoneName (SEPXXXXXXXXX) specified. KeysList items can be one of keys listed on second drop-down list in script configuration screen. KeysList items are no separated by any separator. Keys can be (un)available according to IP phone model.

Example: Open applications screen on 8841 IP phone ({key:Application}) and display information about IP phone (choice 7 : key 7) : **1000,SEND_KEYS,SEPXXXXXXXXXXXXX,{key:Application}7**.

• SSH_LOGIN,host/login:password

This action will login on the host by SSH using login and password.

SSH command are useful to test CUCM status (UTIL commands) or a router status.

• SSH_SEND,command,[delay:]pattern[(n)]

This action will send the command on the current SSH session and wait for the delay in milliseconds (if not specified, wait 7000ms). It returns OK if the answer contains answer2Check. Optionally counts the number of patterns found.



• SSH_SEND,command,[delay:]!notInAnswer

This action will send the command on the current SSH session and wait for the delay in milliseconds (if not specified, wait 7000ms). It returns OK if the answer does not contains notInAnswer.

Example: **SSH_SEND,utils service list,15000:!Out of Service** send on CUCM CLI, will return OK if all STARTED CUCM services are running without error Out of Service.

• SSH_LOGOUT

This action will logout the current SSH session.

• TEAMS_PRESENCE, userUPNorUserId

Tests that Teams' user is connected.

• TEAMS__CALL,uriOrNumber[,delay]

Call MS Teams' user from Bot. Checks delay (in seconds) to dial.

5 Reports & Dashboard

5.1.1 Dashboard

The report's screen is available from Morning Check menu. The screen lists all available reports about script execution. Content, in each report, is the same as the txt file send by email. You can filter by period, then by script. The more recent scripts are loaded first.

The report is analyzed to display a dashboard including:

- Status of each Group of sections
- Status of each section
- Donut with percentage of success/failure sections



The report named ~SCHEDULED_SCRIPTS contains a summary (by script or test sections) results for the day.

/ Mor	ning Check / LOg files					
riod	This month	~	Dashboard	Report	Detailed report	
Report	<< <all reports="">>></all>	~	Schedule	d scripts for	2020-12-08	
	Export		Global 13:	00:57		
	SCHEDULED_SCRIPTS 201210_235959 SCHEDULED_SCRIPTS 201208_235959SCHEDULED_SCRIPTS 201204_235959	^	🛎 Glok	bal		01
	SSH-CUCM 201213_200314 SSH-CUCM 201213_200007		Global 14:	00:57		
	CHECK-FILE 2012], 195759 CHECK-FILE 2012], 194736 CHECK-FILE 2012], 194736 CHECK-FILE 2012], 193747 CHECK-FILE 2012], 193555 SSH-CUCM 2012], 193554 SSH-CUCM 2012], 193354 SSH-CUCM 2012], 193294		🔹 Glob	bal		08
			Global 15:	00:57		
			🔹 Glob	bal		04
	SSH-CUCM 201213_192819 SSH-CUCM 201213_192212		Global 16:	00:57		
	SSH-CUCM 201213_190938 VERY-VERY-VERY-VERY-LONG-SCRIPT-NAME 201208_1900: VERY-VERY-VERY-VERY-LONG-SCRIPT-NAME 201204_1900:	_1900: _1900:	🗯 Glob	bal		0
	SSH-CUCM 201217_185324 SSH-CUCM 201217_184651		Global 17:	00:57		
	SSH-CUCM 201217_181358 SSH-CUCM 201217_181014 VERY-VERY-VERY-VERY-LONG-SCRIPT-NAME 201208	_1800:	🗯 Glob	bal		0
	VERY-VERY-VERY-VERY-LONG-SCRIPT-NAME 201204 IPSMA 201222_174614	_1800:	Global 18:	00:57		
	TEST-DIAL-FROM 201209_172729 VERY-VERY-VERY-VERY-LONG-SCRIPT-NAME 201208_1700 VERY-VERY-VERY-LONG-SCRIPT-NAME 201204_1700	_1700: _1700:	🛎 Glok	oal		0
	IPSMA 201222_165141 IPSMA 201222_164619		Global 19:	00:57		
	TEST-DIAL-FROM 201209_162030	•	🔅 Glob	bal		0

5.1.2 Report's content and detailed report

The report contains the detail of the execution by command.

At the bottom, the report contains:

- the execution time and duration,
- the result by section,



Dashboard	Report	Detailed report	
IPSMA - 2	020-12-22		
Timerectionactiondelaunaramerecult		alavinaramsiresult	
17:46:15.991:Global:check.url: 1000: url=http://192.168.0.23/JPSMA/user/Default.aspv?		p://192.168.0.23/IPSMA/user/Default.aspx?	
name=SE	P2834A2821	323&action=FILTER_E	XEC&filter=1(x-CiscolPPhoneModelName=CP-8961); containsValue=Activ�; => (OK
17:46:16.011;Global;dial; 1000; dn=105005;		al; 1000; dn=105005; (DK
17:46:16.9	96;Global;cl	neck_dialing; 1000; de	stination=105016; strDelay=2000; => OK
17:46:17.9	99;Global;cl	neck_dialing; 1000; de	stination=2000; strDelay=; => OK
17:46:21.0	108;Global;di	rop; 3000; dn=1057800); => OK
EXECUTIO	N SUMMAR	Y:	
SCRIPT;IPS	SMA		
BEGIN TIN	1E;At 17:46:1	4	
DURATION	N;6s		
SECTION	Global;OK		
GLOBAL R	ESULT:OK		

The detailed report contains also the full response to some command, the error detail of other commands. It is useful when there is an error to analyze immediately the root cause of the error.

IPSMA - 2020-12-22 Time;section;action;delay;params;result 17:46:15.992;Global;check_url; 1000; url=http://192.168.0.23/IPSMA/user/Default.aspx? name=SEP2834A2821323&action=FILTER_EXEC&filter=1(x-CiscoIPPhoneModelName=CP-8961); containsValue=Activ�; => (OK) <?xml version="1.0" encoding="UTF-8"?><CiscoIPPhoneText appId="TELISCA.IPSMA"><Title>...</Title><Prompt></Prompt><Text> Filtrage activ� vers Ass06</Text><SoftKeyItem><Name>Quit</Name><URL>http://192.168.0.23:80/IPSMA/user/Default.aspx? name=SEP2834A2821323&profile=_NONE_&action=QUIT_STATUS</URL><Position>4</Position></SoftKeyItem> </CiscoIPPhoneText> 17:46:16.011;Global;dial; 1000; dn=105005; OK 17:46:16.996;Global;check_dialing; 1000; destination=105016; strDelay=2000; => OK 17:46:17.999;Global;check_dialing; 1000; destination=2000; strDelay=; => OK 17:46:21.009;Global;drop; 3000; dn=1057800; => OK

5.1.3 Report sent by email

The screenshot below shows a report send by email after a script execution:





I pièce jointe : CTISIM_REPORT_160615_Check01_1758.txt 705 octets

5.1.4 Example of script with SECTIONs

Script

```
1000,TEST_SECTION,TEST_EXTMOBILITY
1000,LOGIN,mdn2,SEP04DAD2BF1AB9
30000,LOGOUT,SEP04DAD2BF1AB9
1000,TEST_SECTION,TRUNK_SIP
1000,DIAL,+33146450512
1000,TEST_SECTION,VOICEMAIL
1000,DIAL,610007
1000,DTMF,1
1000,PLAY
1000,TEST_SECTION,REGISTERED
10000,PHONES_STATUS_BY_CDP,192.168.0.219|192.168.0.220/admin:$PASSWORD$,ReportCDP
```

Email received





Jean-Marc Lacoste <jmlacoste@telisca.com>

jmlacoste@telisca.com

Result test - Fwd: SCRIPT 2017-10-02 - 15:49 - TEST - 4 ERRORS

PHONE_STATUS_ReportCDP_171002_1550_TEST.csv 351 octets		CTISIM_REPORT_171002_1549_TEST.txt 1 KB	*
---	--	--	---

```
SCRIPT: TEST
TIME BEGIN: 15:49:00
TIME END: 15:50:29
DURATION: 1mn 89s
NB SCRIPT EXEC: 1
NB TEST SECTION: 4
- RESULT TEST EXTMOBILITY : OK
- RESULT TRUNK_SIP : 1 ERROR
- RESULT VOICEMAIL : 3 ERRORS
- RESULT REGISTERED : OK
TOTAL RESULT: 4 ERRORS
```

Attached REPORT content

CTISIM - 2017-10-02 Time:script,line,command,result 15:49:00.054:TEST;;******** START EXECUTE ********;OK 15:49:00.059:TEST;test section=TEST EXTMOBILITY 15:49:08.873:TEST;action=login; delay=1000; userId=mdn2; phoneName=SEP04DAD2BF1AB9;OK 15:49:30.350:TEST;action=logout; delay=30000; phoneName=SEP04DAD2BF1AB9; ;OK 15:49:31.314:TEST;test section=TRUNK SIP 15:49:31.567:TEST; action=dial; delay=1000; dn=+33146450512; FAILED 15:49:32.717:TEST;test_section=VOICEMAIL 15:49:33.131:TEST;action=dial; delay=1000; dn=610007; OK 15:49:34.727:TEST;action=dtmf; delay=1000; dtmf=1; FAILED 15:49:34.925:TEST; action=play; delay=1000; audio=c:\inetpub\wwwroot\IPSCFG\data\audio\audio 11.wav; FATLED 15:49:35.124:TEST;test_section=REGISTERED 15:50:29.682:;;********* STOP EXECUTE ********* 15:50:29.681:TEST; action=phones status by cdp; delay=10000; list-switchip/login:password=192.168.0.219/192.168.0.220/admin:xxxxx; report-name=ReportCDP;OK 15:50:29.683:;;EXECUTION SUMMARY: SCRIPT: TEST TIME BEGIN: 15:49:00 TIME END: 15:50:29 DURATION: 1mn 89s NB SCRIPT EXEC: 1 NB TEST SECTION: 4 - RESULT TEST EXTMOBILITY : OK - RESULT TRUNK SIP : 1 ERROR - RESULT VOICEMAIL : 3 ERRORS _ RESULT REGISTERED : OK

5.1.5 Report uploaded by SFTP

The reports may be uploaded on a SFTP server as defined in Morning Check Parameters page.

SFTP parameters	
SFTP server	10.1.1.242
Port	22
User	admin
Password	
Remote SFTP directory	MORNINGCHECK