

Software Update of snom devices with Microsoft Lync 2010

Introduced in “snom UC edition” Version 8.8.1.1

snom native software update via Lync Server 2010 feature:

Starting with Version 8.8.1.1 snom introduces the new feature “native software update via Lync Server 2010”. Software updates to snom devices can now be directly managed by Lync Server 2010 via Lync Control Panel and/or Lync PowerShell. This means that snom now provides firmware cabinet (.CAB) files in [your personal firmware portal](#).

There are two states from which the phone can perform an update:

- “not registered”:
In this state the device uses the static DNS A record *ucupdates-r2.<DNSDomainNameProvidedByDHCP>* as described in TechNet “Updating Devices” under: <http://technet.microsoft.com/en-us/library/gg412864.aspx>.
- “registered”:
If the device is registered, the update information will be received in the inband provisioning after successful registration and re-registration.

Notes and limitations:

As this feature is new to 8.8.1.1 the update won’t work in previous versions. This means that at least 8.8.1.1 firmware needs to be installed initially with snom mechanisms. Once 8.8.1.1 or higher is installed, the phone will work with the software update service from Lync Server 2010.

Limitations in this version:

- The snom 3xx series cannot download the firmware via an https URL, which is the default case for the Updates Server External URL. Updating snom 3xx internally is not affected (URL is http per default).
- A test device can only be added to the “Lync Control Panel – Test Device page” in conjunction with a snom device MAC address. The serial number is not a valid unique identifier for snom phones.
- The firmware update file cannot be downloaded in the background.

Configuration

Prerequisites

- As mentioned previously, the DNS A record *ucupdates-r2.<DNSDomainNameProvidedByDHCP>* should be configured in the internal DNS zone to enable device update “Out of Box”.
- Review the values provided in inband provisioning and ensure that the URLs are accessible from the network location at which the snom device resides.

Hint: In the local Lync PC client log file of a Lync Client use the same account used on the snom device file to perform a search in the Snooper tool and for the settings: *updatesServerInternalUrl*, *updatesServerExternalUrl* and *updatesServerEnabled*. Details about the Snooper tool are available in [Microsoft Lync Server 2010 Resource Kit Tool: Snooper](#).

Uploading the cabinet files

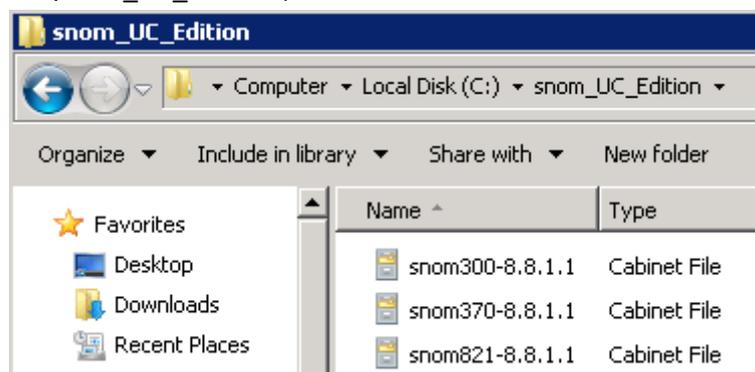
The snom firmware cabinet files can be uploaded by using the Lync PowerShell command `Import-CsDeviceUpdate` described in TechNet: <http://technet.microsoft.com/en-us/library/gg398861.aspx>

Hint: To ensure that all update files from the current folder (in `CSPowerShell`) are uploaded to all your Lync Update Device Webservices, run this command.

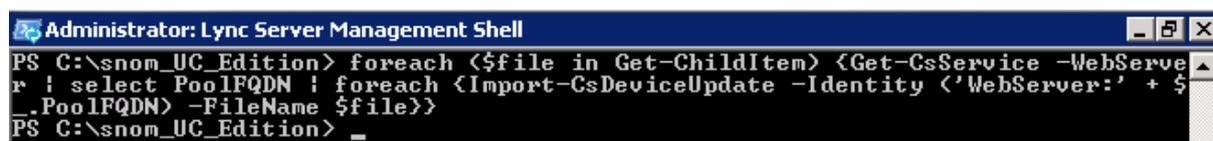
```
foreach ($file in Get-ChildItem) {Get-CsService -WebServer | select PoolFQDN | foreach
{Import-CsDeviceUpdate -Identity ('WebServer:' + $_.PoolFQDN) -FileName $file}}
```

This command can also be executed in single server installations (Standard Edition, Enterprise Edition), where there is typically only one Device Update Web Service.

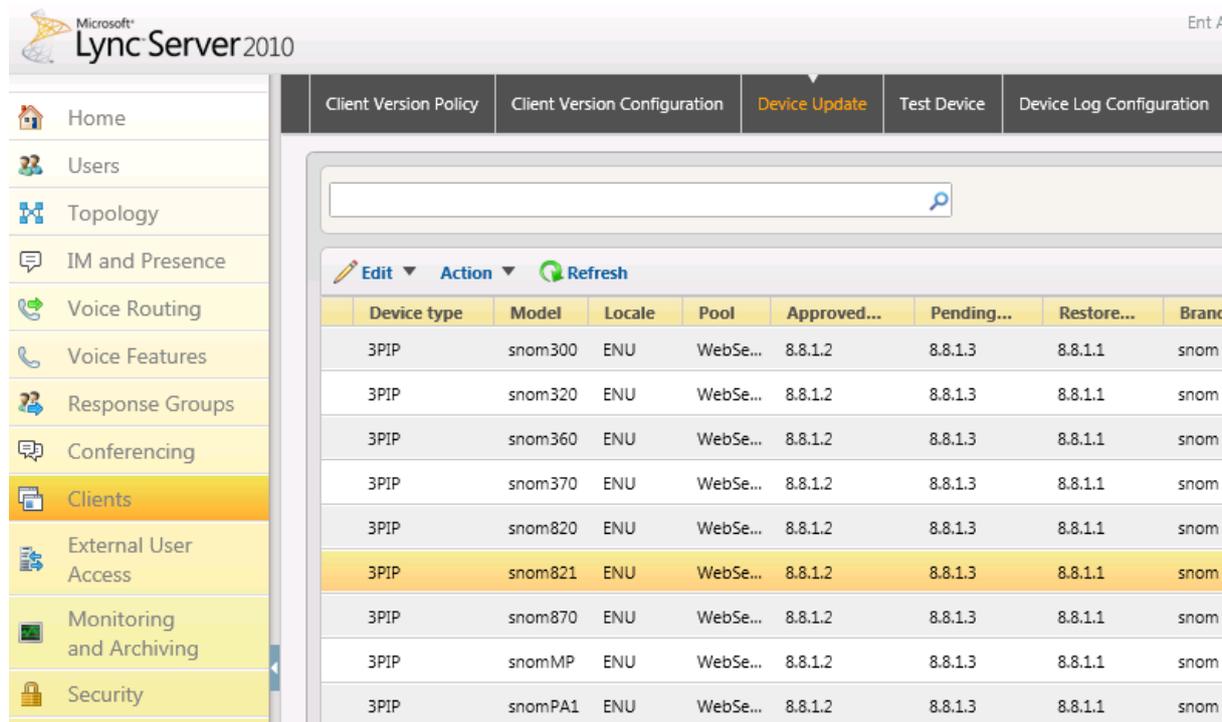
Example: If the snom 8.8.1.1 release for the snom 300, 370 and 821 is placed in the folder "C:\snom_UC_Edition",



the following command would import all files to all services:



In the Lync Control Panel – on the Device Update page, the uploaded version is listed under pending version.



Device type	Model	Locale	Pool	Approved...	Pending...	Restore...	Brand
3PIP	snom300	ENU	WebSe...	8.8.1.2	8.8.1.3	8.8.1.1	snom
3PIP	snom320	ENU	WebSe...	8.8.1.2	8.8.1.3	8.8.1.1	snom
3PIP	snom360	ENU	WebSe...	8.8.1.2	8.8.1.3	8.8.1.1	snom
3PIP	snom370	ENU	WebSe...	8.8.1.2	8.8.1.3	8.8.1.1	snom
3PIP	snom820	ENU	WebSe...	8.8.1.2	8.8.1.3	8.8.1.1	snom
3PIP	snom821	ENU	WebSe...	8.8.1.2	8.8.1.3	8.8.1.1	snom
3PIP	snom870	ENU	WebSe...	8.8.1.2	8.8.1.3	8.8.1.1	snom
3PIP	snomMP	ENU	WebSe...	8.8.1.2	8.8.1.3	8.8.1.1	snom
3PIP	snomPA1	ENU	WebSe...	8.8.1.2	8.8.1.3	8.8.1.1	snom

Managing firmware updates in Lync Server 2010

With the cabinet file successfully uploaded, the following tasks can be performed

- Rollout pending firmware to test devices (only MAC can be the unique identifier)
- Approve, Restore and Delete updates in Device Updates Web service
- via Lync Control Panel or Lync Powershell

Please review the TechNet article “Managing Device Updates” under <http://technet.microsoft.com/en-us/library/gg425953.aspx> for further information.

User experience

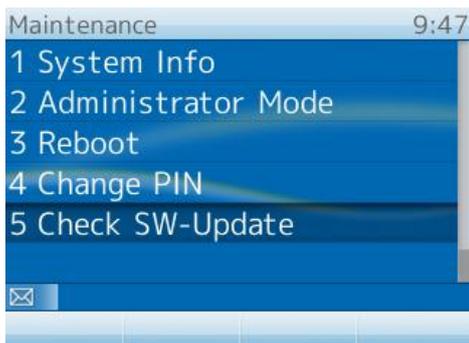
The device side update experience for the user is similar to Windows operating systems. The user can check for updates, postpone updates (whereby activity on the update will be delayed automatically), or opt to execute updates instantly.

The time required for the update to be completed is visible as a countdown to the user.

Update check

The snom phone will check for the latest available software on the following occasions:

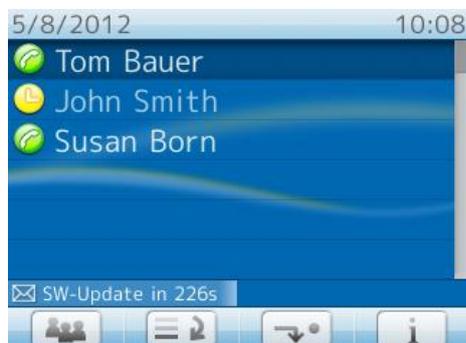
- each boot-up, regardless of whether or not it is registered,
- each re-registration (typically every 8 hours),
- on demand via the device user interface (example snom 821), irrespective of registration status:
Menu → Maintenance → Check SW-Update



(Option Check SW-Update is available in Administrator and User Mode per default)

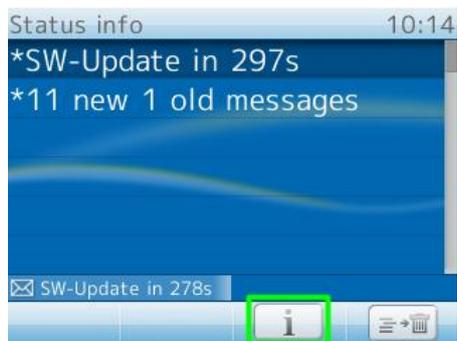
Indication of software update in the user interface

An indication of upcoming software updates is provided to the user as countdown of 5 minutes (300sec). The countdown will be reset by any user activity on the device to prevent an update while the phone is in use.



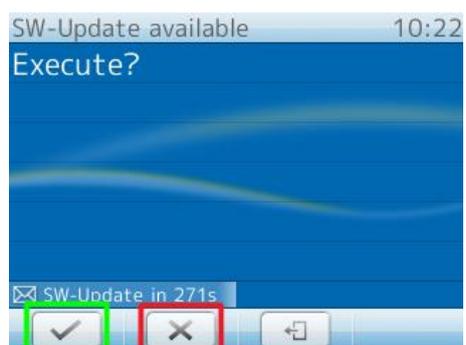
Forcing or postponing a software update

Instant execution or **postponing** of an update can be performed via the status info screen accessible using Menu → Status info.



Select the status message about “SW-Update in XXXs” by pressing the virtual key with the “i”.

By **confirming** the “Execute?” question the update is performed instantly. By **canceling** the “Execute?” dialogue, the update is postponed until the next software update check is performed (as stated earlier).



(The option to confirm or cancel is available in Administrator and User Mode.)

Troubleshooting

Besides the information provided in the TechNet article “Updating Devices” (<http://technet.microsoft.com/en-us/library/gg412864.aspx>) reviewing the snom device side log can be useful for troubleshooting. To access this, open the log.htm (https only per default) of the device in a browser by entering the device’s ip-address followed by /log.htm.

Example: <https://192.168.1.42/log.htm> (available as default in Administrator and User Mode).

By switching the Log Level to 6 and clicking “Apply”, the system log will include the correspondence with Device Update Web service. Performing a Software Update Check via the phone user interface results in the response from the device update web service being logged.

Please search and review everything that includes

- UcSendFirmwareUpdateAvailableRequest
- UcFirmwareUpdateAvailableResponseReceived NumOfFiles
- UcFirmwareUpdateAvailableResponseReceived URL

in your browser.