
Third Party Device License Handling for MX-ONE Integrated DECT

Interworking Description

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Description

3rd party device license for DECT

With MX-ONE 7.3 and later, we have added license handling for 3rd party DECT handsets when used with MX-ONE Integrated DECT. In this way we are aligning the usage/handling of 3rd party devices (SIP and DECT) within the system.

To keep it as simple as possible, the license used for 3rd party DECT devices is the same as the one that was earlier introduced for 3rd party SIP devices. This license (86L00079AAA-A) has been renamed to “MX - Extension 3rd party device”.

The license tag used for both 3rd party SIP and 3rd party DECT is still named “3RD-PARTY-SIP-EXTENSION” (we cannot change the name as it would destroy the backwards compatibility). The license price is the same for 3rd party SIP phones as for 3rd party DECT phones, as it is the same license.

With this new license control in MX-ONE 7.3 the system will verify and seize the 3rd party device licenses when the extension command is entered, *extension -i --third-party-client yes* or *extension -c -third-party-client yes*. Note, to remove the license key the command *extension -e* must be entered.

In the DECT standard there are two identifiers that are commonly used in DECT products:

- MANIC, manufacturer identifier
- MODIC, model identifier

These identifiers determine the Vendor and Model number of the DECT device and this is used for the 3rd party license control.

What is classified as a 3rd party DECT device

All Mitel, Aastra and Ericsson branded DECT phones are treated as Mitel phones and are therefore excepted from this license need. These phone models include, but are not limited to the following Mitel DECT phone models:

- Mitel 56xx – Latest generation models
- Mitel DTxxx – DT6xx, DT5xx, DT4xx, DT3xx, DT2xx
- TH688
- Mitel 6xxd/650c – Mitel SIP DECT models
- Mitel 142 – Mitel SIP DECT Entry model
- Mitel 7xxd – Mitel SIP DECT models

All other vendors phones / models are considered 3rd party phones and are subject to this license control.

There may still be a few earlier versions of Ascom and DeTeWe branded phones around, that used the same MANIC codes as we do. As these phones will use valid MANIC codes they can consequently not be identified/blocked by the license check in MX-ONE.

From all we know, no such phone is under active maintenance today and it is therefore extremely

unlikely that an updated software with an alternative MANIC code would be loaded on one of these phones.

How the License Control works

MX-ONE will check the registered phone's MANIC and MODIC and compare with conditions coded into the MX-ONE system. If the DECT handset is considered a 3rd party DECT handset the MX-ONE system will demand a license for "MX - Extension 3rd party device" for this handset.

- If a 3rd party device license is configured, and available, the subscription is completed.
- If no 3rd party device license is available and configured the subscription is rejected, an alarm message is generated and the phone will be blocked/unusable until a 3rd party device license is available and applied.

Example of generated Alarm Message at failed registration:

S N	Handle	Dom.	Code	LIM	Where	Explanation
1	7937	2	12	1	CTLP	Failed registration of third party DECT device due to missing third party license

Alarm handle: 7937

Count.....: 1

First at.....: 2020-12-19 18:12:46.221429 (UTC)

2020-12-19 19:12:46.221429 (CET)

Latest at.....: 2020-12-19 18:12:46.221429 (UTC)

2020-12-19 19:12:46.221429 (CET)

Sender LIM.....: 1

Sender unit.....: 92 = CTLP

Alarm domain: 2 = ACS

Alarm code: 12 = Failed registration of third party DECT device due to missing third party license

Severity: 1 = information

Noticed: No

Faulty unit: LIM=1 PU=92=CTLP

Additional text : Directory number =311

For 3rd party DECT devices that are already subscribed in an MX-ONE, the MX-ONE system will passively let them continue to operate as before. But if, for whatever reason, there is a need to un-subscribe the handset and then re-subscribe it, that will not be possible as the system will not allow you to re-subscribe it without adding the "MX - Extension 3rd party device" license.

Consequently, it will be possible to load a new hot fix on the MX-ONE system as well as an update to a later Service Pack, with the MX-ONE system passively continuing to support the already subscribed 3rd party DECT phones.

If PC Regen is used it will also be possible to upgrade the system to a later major release, as the upgraded system will re-use the same subscription key for each specific phone (same key as it had before the upgrade).

For a 3rd party DECT phones to take a newly added 3rd party device license the extension must be configured to take this license. The command *extension -i --third-party-client yes* or *extension -c --third-party-client yes* has to be entered for the license to be seized.

(Valid for 3rd party phones that are still working as well as for 3rd party phones that are blocked).

Although it is possible to run the system with passively supported 3rd party DECT phones we do urge customers to complement their existing system licenses with the necessary 3rd party licenses to avoid mishaps and disturbances as they go forward.

In addition to the alarm message generated when a 3rd party DECT phone is failing to subscribe due to missing 3rd party device license, the MX-ONE system will also provide a low-priority alarm / warning if there are subscribed 3rd party DECT phones in the system that does not have the required “MX - Extension 3rd party device” license. This alarm is intended to indicate to the system administrator that they need to complement the system with relevant number of 3rd Party Device Licenses to prevent them from running into problem in the future.

Example of generated Alarm Message for passively supported handsets:

S N	Handle	Dom.	Code	LIM	Where	Explanation
1	7425	2	14	1	CTLP	Having third party DECT device in system without third party license

```
Alarm handle ....: 7425
Count.....: 1
First at.....: 2020-12-18 15:35:27.966036 (UTC)
                2020-12-18 16:35:27.966036 (CET)
Latest at.....: 2020-12-18 15:35:27.966036 (UTC)
                2020-12-18 16:35:27.966036 (CET)
Sender LIM.....: 1
Sender unit.....: 92 = CTLP
Alarm domain ....: 2 = ACS
Alarm code .....: 14 = Having third party DECT device in system without third party license
Severity .....: 1 = information
Noticed .....: No
Faulty unit .....: LIM=1 PU=92=CTLP
Additional text: Directory number =309
```

Note that this low-priority alarm is generated once for the first identified missing 3rd party license. If this alarm is cleared and if there are additional phones missing the license a new alarm will be generated and so on. It is therefore recommended to not clear this alarm until the needed number of 3rd party licenses has been added to the system and applied.

For preventive administration and maintenance a new “*diagnostic_print*” command has been added with MX-ONE 7.3, in order to identify and list DECT devices that are Subscribed (since before) but are lacking the “MX - Extension 3rd party device” license they should have.

In addition, to simplify detection of the specific 3rd party DECT phones in the system, we are in MX-ONE 7.3 SP1 modifying the “*extension_info*” command to include Vendor/Model IDs for DECT phones like we do for SIP phones. This will give the same readable information for 3rd party DECT phones as we today get for 3rd party SIP sets.

This updated “*extension_info*” command may be back ported to 6.3 SP3 and later, on request to MX-ONE Support.

Example from printout of the *extension_info* command:

```
xxxxxx:~> extension_info -d all --terminal-info --terminal-type DECT
Extension Info
Dir      Terminal type  Revision      Vendor
1003     DECT            Not available  DH6
1035     DECT            Not available  DT390
```

2119	DECT	Not available	DH6
2130	DECT	Not available	DT390
2131	DECT	Not available	DH6
2135	DECT	Not available	
6014	DECT	Not available	Manufacturer: 10, Model: 77
6309	DECT	Not available	Manufacturer: 202, Model: 89

- Revision of software on the phone. As this information is not available for integrated DECT phones in the MX-ONE system the provided information in this field is “Not Available”.
- Mitel phones providing model identity; Mitel 56xx (in some earlier SW versions they may show up as DH6 and DH7), DT4x3, DT390, DT69x, DT590, DT292, DT290, DT570, Mitel 6x2, Mitel 6x0, Mitel 142, and Mitel 7xx.
- If the Vendor field starts with “Manufacturer: xxx” this phone has been identified as a 3rd party telephone. (The numbers are the provided MANIC and MODIC codes).
These DECT devices must have a 3rd party device license.
- If the Vendor field is empty/blanc it means that MX-ONE does not have any information of the phone’s identity. Older Ericsson models (DT4x2, DT4x0, DT26x, TH688, DT368) do not provide MANIC/MODIC data and will appear blank. Many 3rd party DECT phones do not provide MANIC/MODIC neither.
These “blanc” DECT devices will NOT demand a 3rd party device license.
But, our opinion is that customer shall try to identify these 3rd party DECT phones to request (free-of charge) and apply 3rd party device licenses for these phones.

Recommendations when upgrading to MiVoice MX-ONE 7.3

When migrating or upgrading a system including Integrated DECT to MX-ONE 7.3 or later consideration should be taken for any 3rd party DECT phones used in the existing system. In principle there are two alternative approaches:

- Recommendation for non-critical systems and not very large systems
Upgrade to 7.3 and make an “*extension_info*” or “*diagnostic print*” to identify the 3rd party DECT devices in the system. Complement MX-ONE license file with the correctly needed number of 3rd party device licenses (request the needed free-of-charge licenses via the License Center), update the license file in the MX-ONE and configure the extensions properly with the command *extension -i --third-party-client yes* or *extension -c --third-party-client yes*.
- Recommendation for critical systems and/or very large or distributed systems
Estimate the number of 3rd party DECT devices in the system, or request a back-port of the updated “*extension_info*” command in order to find-out the number of 3rd party DECT devices in the system. Add this number of 3rd party Device Licenses into the license file of the new MX-ONE 7.3 system you are migrating / upgrading to (contact your local Channel Manager/PLM and License Center for the needed free-of-charge licenses). Once the upgrade has been done and the extensions been properly configured with the command *extension -i --third-party-client yes* or *extension -c --third-party-client yes*, run the “*diagnostic print*” command to identify the 3rd party DECT devices in the system to verify the number of 3rd party devices is correct. If needed, complement the existing license file for the MX-ONE 7.3 system with the needed number of additional 3rd party device licenses.

Once the customer/partner has identified the number of additional “MX - Extension 3rd party device” license that is required, the local Mitel channel manager or support engineer should validate/judge in

writing (e-mail) that the number appears relevant. Thereafter the person contacting the Mitel License Center, requesting the additional licenses to be included in the new license file for the migrated system, should in communication with the Mitel License Center include the above-mentioned e-mail.

Trouble Shooting Tips To Keep In Mind

For good house-keeping please consider the following

Once the system has the correct license file inserted you should start the manual process to remove all un-used registrations that are stored in the handset.

Un-used registrations are hindering the location registration process each time handset has lost the network. In other word, it takes longer time before the handset becomes available again. In service and support situations we see quite often handsets with one or more un-used registrations.

Display info when subscribing a 3rd party DECT handset without a 3rd party device license

On-air Subscription is performed in two logical steps:

- First, Authentication. In this sequence the Model Identifier is not sent from the handset and the MX-ONE can consequently not judge what type of handset it is. The handset will indicate "Subscription OK". (Until the second step is completed).
- Second, Location Registration. In this sequence the Model Identifier is sent and controlled. If the 3rd party device license is missing the MX-ONE will reject the location registration and the handset will now show "No Access". The DECT phone is now blocked. See section below on how to unblock the device.

How to unblock 3rd party handsets

- Add new license file with the needed 3rd party device licenses, if needed
- Enter command `extension -c --third-party-client yes` for the blocked handset

How to clear either of the two new alarms

- Add new license file with the needed 3rd party device licenses, if needed
- Enter "`diagnostic_print`" to find terminal without license
- Enter command `extension -c --third-party-client yes`, for each of terminals listed
- Clear alarms
- Clear the "`diagnostic_print`" list
- Enter "`diagnostic_print`" to get an updated list of handsets without a license