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## ThingMagic MercuryAPI v1.37.0 Release Notes

This release note describes the features and characteristics of the ThingMagic MercuryAPI version 1.37.0. This Includes release notes for Universal Reader Assistant v6.0. The release notes of previous versions can be found here: [ThingMagic® Mercury API - Jadak - A Novanta Company \(jadaktech.com\)](http://jadaktech.com)

This API supports ThingMagic M7e-Pico, M7e-Deka, M7e-Hecto and M3e modules.

### **NOTE**

- ❖ This API release is only compatible with the new M7e modules (Pico, Deka, Hecto) having firmware version 2.1.0.x and with the M3e modules having latest firmware version 1.3.1.x.
- ❖ This API Discontinues support for other ThingMagic products (M6e products and Fixed Readers (Izar and Sargas)). Users must use the previously released version (1.35.2.x) for these products.
- ❖ This API version is not compatible with the M7e Pico modules having old firmware versions 1.3.0.x or 1.1.2.x and M3e modules having old firmware versions 1.1.1.x or 1.1.0.x. Users need to update to the latest firmware version or can use previously released API (1.35.2.x).
- ❖ M7e-Pico modules with previous Application firmware versions 1.1.1, 1.1.2 or 1.3.0 are not forward compatible with the latest version 2.1.0. Please contact [rfid-support@jadaktech.com](mailto:rfid-support@jadaktech.com) to know more about upgrading firmware on these modules.

## Compatibility Summary:

Module	Firmware	API	Compatibility
M6E-A/M6E	1.25.1 and below	1.35.2 and below	Compatible
	1.25.1 and below	1.37.0	Not Compatible
M6E-Micro/M6E-M	1.D.2 and below	1.35.2 and below	Compatible
	1.D.2 and below	1.37.0	Not Compatible
M6E-Nano	1.B.1 and below	1.35.2 and below	Compatible
	1.B.1 and below	1.37.0	Not Compatible
All M7E SKUs	1.3.0 and below	1.35.2	Compatible
	1.3.0 and below	1.37.0	Not Compatible
	2.1.0	1.35.2	Not Compatible
	2.1.0	1.37.0	Compatible

For a full description of how to use the API and sample applications, refer to the following documentation:

- *The Mercury API Programmers Guide*
- *Universal Reader Assistant User Guide*
- *M6etoM7e Migration Guide.*

[RFID Document Library - Jadak - A Novanta Company \(jadaktech.com\)](http://jadaktech.com)

Topics covered in this release notes are:

- ❖ [Features](#)
- ❖ [Resolved Issues](#)
- ❖ [Operational Notes](#)

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## **Features**

The following features are added in this API release:

### **Support for M7e Family:**

The support for M7e modules (Pico, Deka and Hecto) is added in this Mercury API version, and this version does not support the M6e modules (M6e, Micro and Nano) and Network readers (Izar and Sargas).

Most of the M6e family features are supported in M7e FW. Only a few are discontinued. Please check the migration guide for more details.

### **Support for Error code in Embedded Read:**

In UHF modules, if embedded tag operation fails, API now displays error message to the user. This is demonstrated in EmbeddedReadTID, WriteTag and Gen2ReadAllMembanks code sample.

### **Probe Baud Rate Logic in Code Samples:**

The Baud rate probing mechanism was previously implemented in the API, where it tries to establish a connection with the module by communicating on all supported baud rates, until the connection is successful on a matching baud rate. But customers usually know at what baud rate they operate their readers. Therefore, we removed the baud rate probing mechanism from API and moved it to code samples. A demonstration is available in the readasync.c code sample.

### **Support for NTAG21x and Ultralight EV1 Password Acknowledgement bytes:**

The NTAG21x and Ultralight EV1 tags return the Password Acknowledgement bytes (2 bytes) from the tag memory if the Authentication is successful. This Password Acknowledgment from the NTAG is read by the M3e reader and sent to the user via MercuryAPI.

“NTAG\_ExtTagOps” C and C# code samples in the SDK (Software Development Kit) demonstrate this functionality

## **Resolved Issues**

### **MercuryAPI:**

The following bugs were resolved in this release:

- When users send a Stop read command, the previously released API version does not send the command immediately. It waits until the Async ON time timer expires and then sends the command to the module. This issue is now resolved, and API now sends the command immediately. **(Internal Ref #7320)**
- A few code samples in the previous API version did not have the Read plan for M3E module even though it is applicable. This issue is fixed, and the Read plan is now available for all supported code samples. **(Internal Ref #8499)**
- Reader stats code sample was not working as expected when logical antennas are enabled in the previous API version. This issue is now resolved in the new API version. **(Internal Ref #8049)**
- API throws an exception during streaming mode (Autonomous read --config 3), if the module has a baud rate other than 115200 and proceeds to communicate with other baud rates (i.e., streams the tag reports with saved baud rate). **(Internal Ref #8202)**
- Readallmembanks.c code sample works fine with no errors. **(Internal Ref #8132)**
- Autonomous read with embedded tag operation works fine. **(Internal Ref #8142)**
- C API throws buffer overflow error when it is reported which wasn't happening earlier. **(Internal Ref #8153)**
- Observed garbage value in tag report when buffer overflow error is occurred. This is fixed now. **(Internal Ref #8154)**
- Java API was hanging to stream data when GPI trigger is low with auto read enabled. This is fixed in this version. **(Internal Ref #8163)**
- MercuryAPI supports set/get params during continuous read. API should throw timeout error if it doesn't receive response within the specified time. This is implemented only in C and C#. **(Internal Ref #8218)**

#### URA:

- LoadSave configuration works with no errors. **(Internal Ref #8390)**
- Hop table gets updated under the regulatory testing tab according to the region selected. **(Internal Ref #8347)**

## Operational Notes

The following restrictions and caveats apply to the features and functionality of version 1.37.0:

#### MercuryAPI:

- This version of API is not compatible for M6e family, Izar and Sargas. Users need to continue using the last released API version i.e., 1.35.2.72 **(Internal Ref #8430)**
- `ENABLE_TMR_PARAM_RADIO_ENABLEPOWERSAVE` parameter is no longer supported. **(Internal Ref #8337)**

- Removed setting `"/reader/tagReadData/enableReadFilter"` from API for Sync and Async Reads. The module firmware will take care of this setting. **(Internal Ref #8383)**
- User may observe timeout exception when continuous read is performed for longer hours (>11hrs) with large tag population (200+). User can reinitiate the read again. This will be fixed in the upcoming API release. **(Internal Ref #8504)**

## URA:

- Setting Link frequency, Tag encoding, Tari from URA is no longer supported. Moving forward we are trying to get rid of these individual Gen2 settings and use Impinj chip supported modes.
- Read Distance vs Read Slider under Performance tuning tab is removed in URA as it uses Gen2 setting internally.

## Note:

The release notes of previous API versions can be found here: [ThingMagic® Mercury API - Jadak - A Novanta Company \(jadaltech.com\)](#)