

Errata for CCB 2044

The following text should be added to 05-3520-29 at Line 15382. This is an update to the ZoneID Attribute section and a re-write of the entire description of the IAS_CIE_Address Attribute section.

1.1.1.1.1.1 *ZoneID* Attribute

A unique reference number allocated by the CIE at zone enrollment time.

Used by IAS devices to reference specific zones when communicating with the CIE. The ZoneID of each zone stays fixed until that zone is un-enrolled.

1.1.1.1.1.2 *IAS_CIE_Address* Attribute

The *IAS_CIE_Address* attribute specifies the address that commands generated by the IAS Zone server shall be sent to.

1.1.1.1.1.3 Implementation Guidelines

Use of the *IAS_CIE_Address* and *ZoneID* attributes functions as an additional enrollment step that is not employed by other ZigBee Pro devices. The reason for this is to provide an extra layer of security due to the nature of these devices in protecting premises from physical intrusion and attack.

There are three methods for enrolling IAS Zone server to an IAS CIE (i.e., IAS Zone client):

- Trip-to-pair
- Auto-Enroll-Response
- Auto-Enroll-Request

IAS Zone servers SHALL support either:

- Trip-to-pair AND Auto-Enroll-Response, OR
- Auto-Enroll-Request

An IAS Zone client SHALL support either:

- Trip-to-pair AND Auto-Enroll-Response, OR
- Auto-Enroll-Request

An IAS Zone client MAY support all enrollment methods. The Trip-to-Pair enrollment method is primarily intended to be used when there is a desire for an explicit enrollment method (e.g., when a GUI wizard or other commissioning tool is used by a user or installer to add multiple IAS Zone servers in an orderly fashion, assign names to them, configure them in the system).

A commissioning tool may be used instead of an IAS_CIE device for either commissioning method.

The following requirements are intended to ensure a timely and interoperable commissioning process:

- After joining a network, an IAS Zone server SHALL data poll at least once every seven seconds until its *ZoneState* attribute has been updated to “enrolled” (i.e., until it receives a Zone Enroll Response command from an IAS Zone client).
- After joining a network, an IAS Zone server SHOULD data poll at least once every two seconds until its *ZoneState* attribute has been updated to “enrolled” (i.e., until it receives a Zone Enroll Response command from an IAS Zone client).
- If the IAS Zone server supports Poll Control cluster, it SHOULD continue data polling at this rate until its Poll Control cluster parameters are configured otherwise.
- The *IAS_CIE_Address* attribute of the IAS Zone server to be enrolled SHALL be configured only by the IAS_CIE. A self-configuration based on any kind of auto-detect approach triggered by the IAS Zone server itself SHALL be prohibited.

The detailed requirements for each commissioning method follow:

Trip-to-Pair

1. After an IAS Zone server is commissioned to a network, the IAS_CIE MAY perform service discovery.
2. If the IAS_CIE determines it wants to enroll the IAS Zone server, it SHALL send a Write Attribute command on the IAS Zone server’s *IAS_CIE_Address* attribute with its IEEE address.
3. The IAS Zone server MAY configure a binding table entry for the IAS CIE’s address because all of its communication will be directed to the IAS CIE.
4. Upon a user input determined by the manufacturer (e.g., a button, change to device’s *ZoneStatus* attribute that would result in a Zone Status Change Notification command) and the IAS Zone server’s *ZoneState* attribute equal to 0x00 (unenrolled), the IAS Zone server SHALL send a Zone Enroll Request command.
5. The IAS_CIE SHALL send a Zone Enroll Response command, which assigns the IAS Zone server’s *ZoneID* attribute.
6. The IAS Zone server SHALL change its *ZoneState* attribute to 0x01 (enrolled).

Auto-Enroll-Response

1. After an IAS Zone server is commissioned to a network, the IAS_CIE MAY perform service discovery.
2. If the IAS_CIE determines it wants to enroll the IAS Zone server, it SHALL send a Write Attribute command on the IAS Zone server's *CIE_IAS_Address* attribute with its IEEE address.
3. The IAS Zone server MAY configure a binding table entry for the IAS CIE's address because all of its communication will be directed to the IAS CIE.
4. The IAS_CIE SHALL send a Zone Enroll Response, which assigns the IAS Zone server's *ZoneID* attribute.
5. The IAS Zone server SHALL change its *ZoneState* attribute to 0x01 (enrolled).

Auto-Enroll-Request

1. After an IAS Zone server is commissioned to a network, the IAS_CIE MAY perform service discovery.
2. If the IAS_CIE determines it wants to enroll the IAS Zone server, it SHALL send a Write Attribute command on the IAS Zone server's *IAS_CIE_Address* attribute with its IEEE address.
3. The IAS Zone server MAY configure a binding table entry for the IAS CIE's address because all of its communication will be directed to the IAS CIE.
4. The IAS Zone server SHALL send a Zone Enroll Request command.
5. The IAS_CIE SHALL send a Zone Enroll Response command, which assigns the IAS Zone server's *ZoneID* attribute.
6. The IAS Zone server SHALL change its *ZoneState* attribute to 0x01 (enrolled).

Once the *IAS_CIE_Address* attribute has been written on an IAS Zone server, the IAS Zone server SHALL only act upon commands received from an initiator that matches the *IAS_CIE_Address* attribute.