NetID FAQ

Aim of this FAQ is to provide quick guidance on the LoRa Alliance NetID allocation, which is governed by the following policy document: NetID Allocation Eligibility Policy. Technical details of how NetID is used are specified in the Technical Committee specifications (LoRaWAN™ Specification Version: V1.0.3, LoRaWAN™ Backend Interfaces v1.0). In case there is a discrepancy between those aforementioned documents and the following FAQ, the former ones shall be taken as the authoritative source. Readers are urged to consult those documents for further details.

1. What is NetID?

NetID is a 24-bit value used for identifying LoRaWAN networks. It is assigned by the LoRa Alliance. It is used by networks for assigning network-specific addresses to their end-devices (i.e., DevAddr) so that uplink frames sent by those devices even when they are roaming outside their home network can be forwarded to their home network.

2. Do I need a NetID assigned by the LoRa Alliance?

You need to have a NetID if you are operating a LoRaWAN network and you are collaborating with the other networks (i.e., supporting roaming).

If you have a non-collaborating network, then you can use the 0x000000 or 0x000001 NetID values. These values are reserved and can be used by any LoRaWAN network that does not have an assigned NetID.

3. How do I get a NetID assigned?

NetIDs are assigned by the LoRa Alliance to its members. To qualify for a NetID, please be sure to satisfy all of the conditions described in the NetID Allocation Eligibility Policy before applying for one. The application process is initiated by sending an email to help@loralliance.org.

Assignments are tied to your membership. Therefore, an assignee must keep its membership active in order to keep using the NetID(s). Expired membership, or a change in membership level would lead to a change in NetID status.
4. **What is the relationship between the NetIDs and the LoRa Alliance membership level**

There are different types of NetIDs (Types 0 through 7), which differ based on the size of end-device address space they support (see LoRaWAN™ Backend Interfaces v1.0 for details). Sponsor members are granted one Type 0 and one Type 3 NetID, contributor members are granted one Type 3 and one Type 6 NetID, and adopter and institutional members are granted one Type 6 NetID.

Unused NetID types (Types 1, 2, 4, 5, 7) are reserved for future use. They may be used when the currently assigned types are fully consumed or NwkIDs generated from NetIDs start to collide.

5. **Why are there some non-sponsor members holding Type 0 NetIDs?**

Contributor members who are holding Type 0 NetIDs were granted those NetIDs according to an earlier version of the NetID Allocation Policy (v1.0). Those companies may retain their Type 0 NetIDs as long as they continue to maintain their status as a Contributor or Sponsor member.

Adopter members and non-members who are holding “provisional” Type 0 NetIDs took advantage of the provisional assignment (see Q9). These Adopter members need to upgrade to Contributor or Sponsor level (if subjected to v1.0 of the NetID Allocation Policy), and to Sponsor level (if subjected to a later version of the policy) before their provisional period ends.

6. **What happens when my LoRa Alliance membership expires?**

Your assigned NetID is taken away and returned to the available pool of NetIDs to be reassigned to another member (after a 90-day grace period).

7. **What happens when I upgrade my membership?**

You can retain your currently assigned NetIDs, and request a second NetID based on your new membership level. For example, an adopter member holding a Type 6 NetID would keep that NetID and would have the opportunity to apply for a Type 3 NetID when upgrading to contributor level.
8. What happens when I downgrade my membership?

The NetID from your past membership level (i.e., Type 0 if you were a Sponsor, and Type 3 if Contributor) is taken away. A new NetID matching your new membership level is assigned (if you don’t have one already).

For example, a Sponsor member downgrading to Contributor level would lose its Type 0 NetID, retain its Type 3 NetID, and have an opportunity to apply for a new Type 6 NetID. A contributor member downgrading to adopter level would lose its Type 3 NetID, and retain its Type 6 NetID.

9. What is a provisional allocation?

In order to facilitate the technical teams to progress their preparation while membership application/discussion is in progress, the LoRa Alliance can allocate a provisional NetID to the applicant. Membership MUST materialize within the period allowed by the policy, otherwise the provisionally allocated NetID is taken away. If the membership becomes effective within the period allowed by the policy, then the provisional designation is removed from the NetID. If the membership is realized at a level different than the one intended when the provisional NetID was assigned, then the NetID allocation is performed according to the actual (realized) level and the provisionally-allocated NetID is taken away if it is not part of the new assignments.

10. What happens if I use an arbitrary NetID (not the one assigned by the LoRa Alliance)?

Your devices cannot be served by any other collaborating network. Network collaboration (i.e., roaming) is based on the NetIDs assigned by the LoRa Alliance.