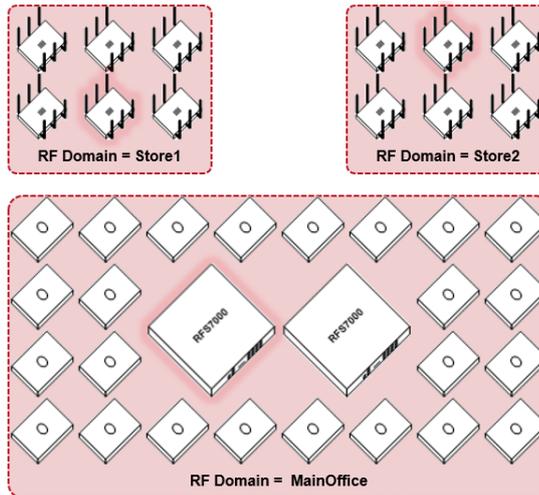


WING5 Q&A: I have controller with local APs and a couple remote sites. Which MiNT link levels to use?

This is a very popular question that is asked literally at every WING v5 training session. Getting those link levels is easy; troubleshooting the resulting system instability issues is not easy. We typically know what single-site scenarios use Level 1 links (up to a certain size) and between sites one always uses Level 2. So what happens when you have local and remote sites, as on the diagram below?

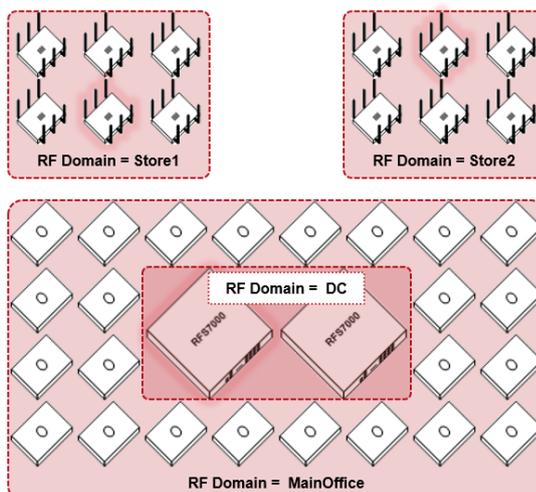


According to the Best Practices document, you must not mix MiNT link levels on the controllers, and must keep controllers in a separate RF Domain:

Note: MiNT links levels should be maintained across the whole deployment, mixing MiNT level 1 and MiNT level 2 links on the same controller is not recommended and not supported.

In distributed deployments with multiple remote sites NOC controllers must be placed into a separate isolated RF Domain with no Control VLAN defined.

Thus, we need to transform our diagram into this



Pretty much, we've moved our controllers into a separate RF Domain and local APs are now treated as "local remote site", with APs adopted over MiNT Level 2 as usual for remote sites. Based on the size of the local site, we have two options on how to implement it:

- **<= 128 APs:** Just a standard remote site with AP as RF Domain Manager. Make sure to define Control VLAN in the RF-Domain that the APs are mapped to.
- **>128 APs:** Either split into multiple sites under 128 APs each and see above, or make this RF Domain controller-managed (aka Virtual RFDM). In this case make sure **not** to define Control VLAN!

Thus, the golden rule is: it's either **ALL Level 1** or **ALL Level 2** on controllers. Mixing MiNT link levels on controllers is not supported: behaviour is not defined and you may see all sorts of weird things. It might actually work, or you might see random AP reboots, controller freezes, SMART RF issues and who knows what. Keeping MiNT link levels within supported guidelines ensures a healthy and stable network. Make sure to consult the Best Practices document.

MINT L2/Layer-3 Adoption/RF-Domains

Create an rf-domain just for the RFS; place the RFS into this domain. NO Control-vlan

Keep local APs in their own RF-domain with controller-managed defined

Keep remote APs in their own RF-Domain (for each remote site) with control-vlan defined

Make sure APs either have dhcp option 191 pushed or static controller host entries with MINT Level 2 links

Disable "mint mlcp vlan" on the controller and AP profiles

Do "service mint clear mlcp" on the controller, wait 1 minute and you are done