

# PingER IPv6 backward compatibility

## Challenge

We need to be able to add IPv6 hosts to the <BeaconList>. However, PingER Measurement Agents (MA) that are not IPv6 capable need to NOT ping the IPv6 hosts, else there is noise in the measurements. At the same time we do not wish to upgrade pinger2.pl at all MAs.

## Proposal or interim

An interim solution is to not add IPv6 hosts to the Beacon list, rather enter them into the local <HostList> for MAs that wish to add IPv6 monitoring.

## Proposal to add IPv6 hosts to BeaconsList

Pros:

- Simple modification to pinger2.pl to not ping hosts with IPv6 addresses if the MA is not ping6 capable

```
If the host is not ping6 capable then the response will look like:  
pi@pinger-raspberry ~ $ ping6 2607:f8b0:4007:802::200e  
socket: Address family not supported by protocol
```

Cons:

- MAs without the most recent pinger2.pl will try and ping (not ping6) the IPv6 hosts and fail.

Mitigations

- Add a single IPv6 host to the <BeaconList> and see impact on pinger2.pl on pinger-raspberry.pl and pinger2.pl and review impact.

## Proposal to add a <BeaconsList6>

Add a <BeaconsList6> for IPv6 targets. This requires modifications to create the new <BeaconsList6>, plus modifying pinger2.pl to utilize the new <BeaconsList6>

Pros:

- old versions of pinger2.pl do not know about <BeaconsList6> and so will not load it and thus not ping those hosts.

Cons:

- Modifications to scripts that generate pinger.xml
- Modifications to pinger2.pl to load the new <BeaconsList6> file and process it