Well-Known Community Policy Behavior

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IETF 101
Well-Known Communities and the “Set” Syntax

“A BGP speaker receiving a route with the COMMUNITIES path attribute may modify this attribute according to local policy” – RFC 1997

All BGP implementations which we know provide a syntax to “set” communities

Understood to mean “remove all communities and replace with the specified set of communities”

Vendor implementations of the “set” syntax differ
Vendor Implementations Of The “Set” Syntax

All but one vendor Replace all communities, including well-known communities, with the specified set.

One vendor Replaces all communities, including well-known communities, with the specified set.

Except for a select sub-set of well-known communities, do not remove or modify unless they are in the specified set.

If you need to remove a community, an explicit “delete” syntax is available.
State of Affairs

Operators may not be advertising the set of communities that they mean to advertise.

Operators may be advertising communities they did not intend to advertise.
Recommendations

Vendors SHOULD NOT change current behavior

A change would be disruptive

But this is under discussion. Do operators know of this behavior and use it?
Recommendations

Vendors SHOULD share the behavior of their implementation for inclusion in this document.

When new well-known communities are defined, the “set” syntax should treat them exactly as the do other communities.

That is, the “set” syntax SHOULD operate on them exactly as they would operate on a community that is not well-known.
Next Step

Adopt as WG item