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Policy for IP-Transit Community

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Purpose

This document defines the use of BGP communities in the context of IP Transit services. The purpose is to provide a technical description of supported communities, route handling, and applicable policy requirements for customer connections. The policy enables accurate traffic engineering, routing transparency, and operational security.



GRT Incoming route-filter

Strict prefix-filtering is used for all customers, all the prefixes that the customer wants to announce need to be specified in a prefix-set.

PA and PI prefixes are supported within the same route-policy and marked with different communities. Customers are allowed to announce prefixes of various size when the case is PI prefixes we need to handle them differently to be able to announce them on the internet

Graceful shutdown community

Name	Community	Comment
Graceful shutdown	65535:0	Well known community, used to make a peer only to be used if no other path is available, when used a policy should set the LP to lowest possible

Graceful shutdown (well known community) is supported where we lower the local preference to 0 on the prefixes.

We also do not filter any well known communities, no-export, no-advertise etc.

Traffic steering is supported where the customer marks the prefixes with a community and we will change from the default local preference value. Local-preference communities

Local-preference communities

Name	Community	Local preference
Customer - Not Preferred	1257:140	50
Customer - Lower	1257:145	80
Customer - Low	1257:150	90
Customer - Normal (Default)	1257:160	100
Customer - High	1257:170	110



Blackhole Community

Name	Community	Copmment
Remote Blackhole	1257:666	Blackhole / null-route for the prefix in all Tele2 devices

RTBH is supported where we automatically allow the customer to announce /29 and smaller prefixes to be able to mark the prefix with 1257:666 and we will NullO route the prefix in our network. We filter all other 1257: communies from the customer.

GRT outgoing route-filter

Bogon networks are filtered out.

Announces /25 and larger prefixes and the prefixes marked with the SMALL_PI community up to and equal /28.

Prepend to all ASN's

Traffic steering with prepend is supported.

Name	CommunityComment	
Prepend x1 everywhere including AS1257	1257:25	Prepend AS1257 one time
Prepend x2 everywhere including AS1257	1257:26	Prepend AS1257 two times
Prepend x3 everywhere including AS1257	1257:27	Prepend AS1257 three times
Prepend x4 everywhere including AS1257	1257:28	Prepend AS1257 four times

RPKI / ROA

RPKI validation, meaning that if the customer has signed their prefixes they need to sign all variations they want to be accepted, ie all networks including the smaller ones.

We drop invalid routes based on RPKI/ROA validation.

Customers can sign their PI addresses with RPKI/ROA records we then check each incoming eBGP route for validity.

