Communication Networks

Exercise 6

Important lecture topics

Introduction to this week’s exercise

Time to solve the exercise
## BGP policies

<table>
<thead>
<tr>
<th>send to</th>
<th>customer</th>
<th>peer</th>
<th>provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>customer</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>peer</td>
<td>✓</td>
<td>-</td>
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</tr>
<tr>
<td>provider</td>
<td>✓</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**from**

<table>
<thead>
<tr>
<th></th>
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<td>✓</td>
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</tbody>
</table>
BGP messages

For this exercise we define two subgroups of BGP UPDATE messages

update: Used to inform that parts of a previously advertised path have changed

withdraw: Used to inform that a previously advertised path is no longer available
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Task 6.1 BGP

Only a short conceptual question regarding eBGP sessions
Task 6.2 BGP under failure

Make sure to think about the BGP policies

Routes only get shared according to business relationship
Task 6.3 BGP visibility

Again, think about the BGP policies

Routes only get shared according to business relationship
Task 6.4 BGP route updates

What happens when BGP advertisements change

Look at how BGP decides which path to take if local-pref is equal
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