

BGP tesztelési jegyzőkönyv

BGP router hiba

Dátum: 2026. 02. 02.

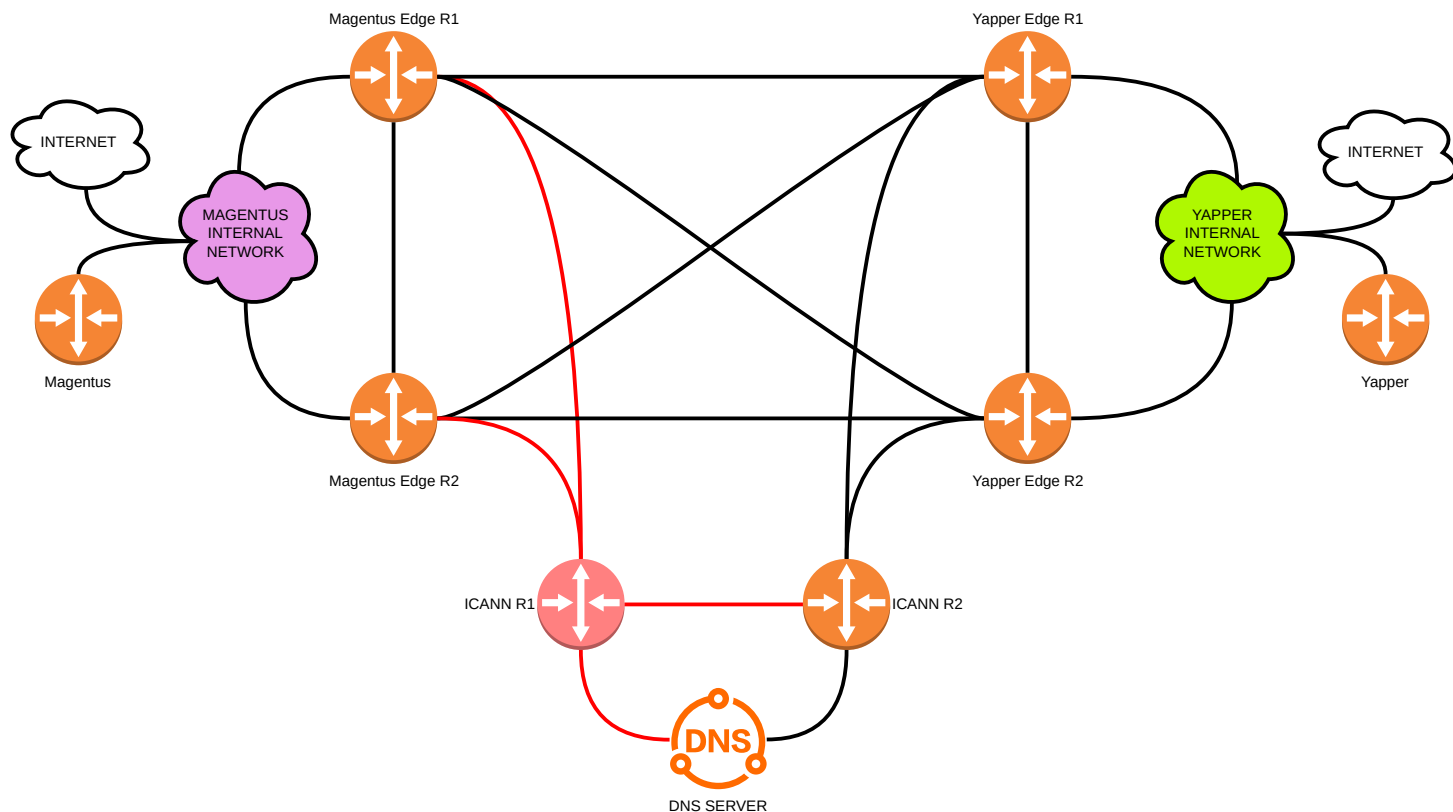
A dokumentum célja: A Yapper, Magentus és ICANN közötti BGP Peering kapcsolatok stabilitásának és redundanciájának tesztelése. A dokumentáció bemutatja, hogy specifikus hibaesetekben hogyan biztosított az internet és másik AS elérése a tartalék útvonalakon keresztül.

A tesztelés a `traceroute` parancs segítségével történt, a célcímek a következők:

- Yapper és Magentus közötti kapcsolat tesztelése: Management hálózatok
 - Magentus esetén: `172.16.255.1`
 - Yapper esetén: `172.17.255.1`
- Internet kapcsolat teszteléséhez: `1.1.1.1`
- ICANN kapcsolat teszteléséhez a 'távolabbi' cím:
 - Magentus esetén: `172.30.30.30`
 - Yapper esetén: `172.29.29.30`

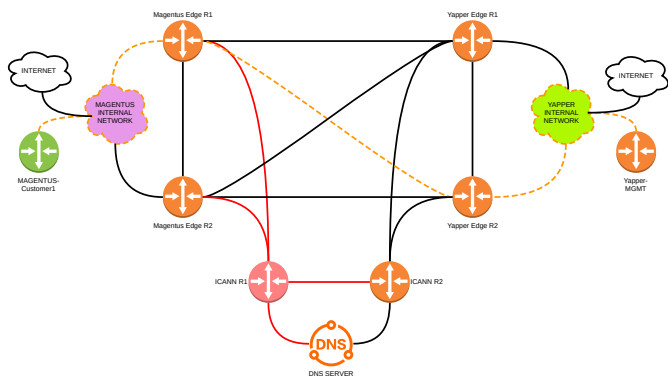
Jelmagyarázat: A tesztábrákon a szimulált hiba helyét vagy a megszakadt kapcsolatot **piros vonal**, míg a hibatűrés miatt létrejött alternatív útvonalat **sárga szaggatott vonal** jelöli.

Hiba szimuláció: ICANN-R1 - Magentus ping



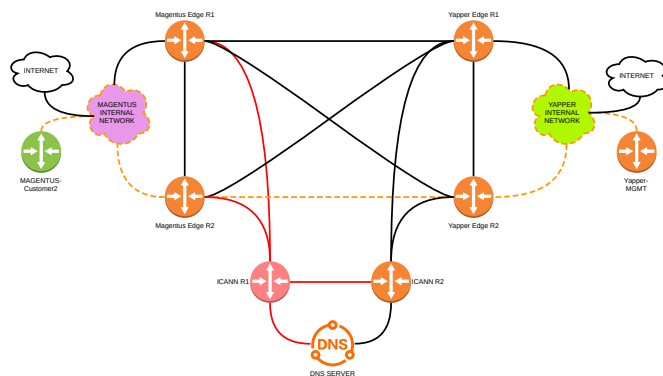
MAGENTUS-Customer1 ✓

Sikeres ping! 172.17.1.4 12ms 28ms 20ms



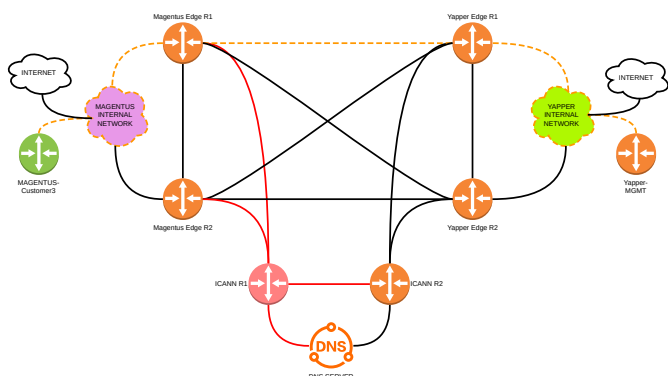
MAGENTUS-Customer2 ✓

Sikeres ping! 172.17.1.4 24ms 48ms 16ms



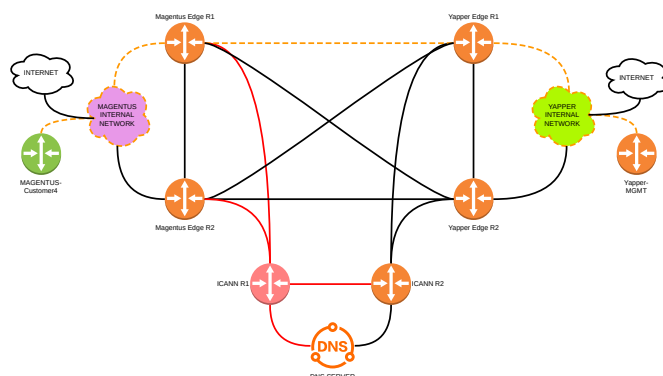
MAGENTUS-Customer3 ✓

Sikeres ping! 172.17.1.4 24ms 24ms 16ms

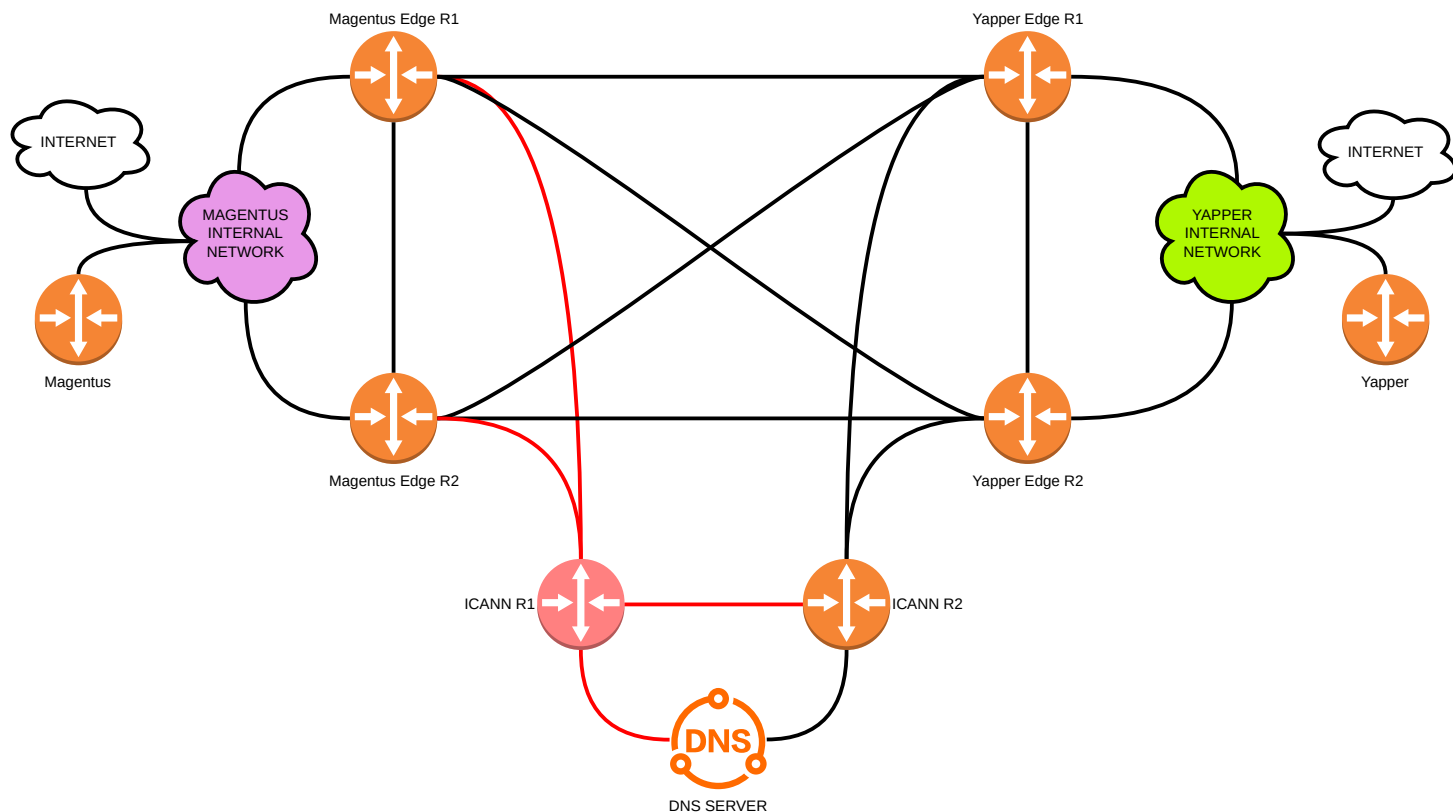


MAGENTUS-Customer4 ✓

Sikeres ping! 172.17.1.4 56ms 60ms 36ms

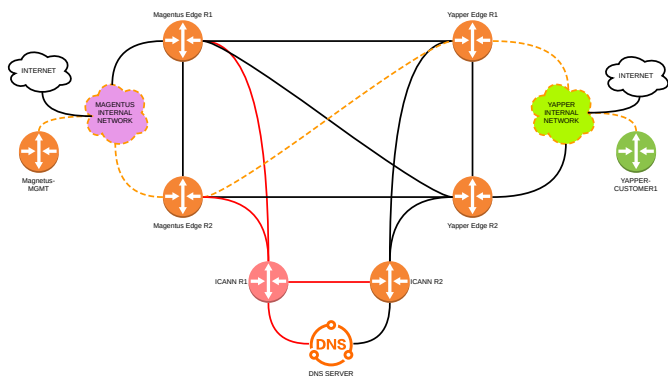


Hiba szimuláció: ICANN-R1 - Yapper ping



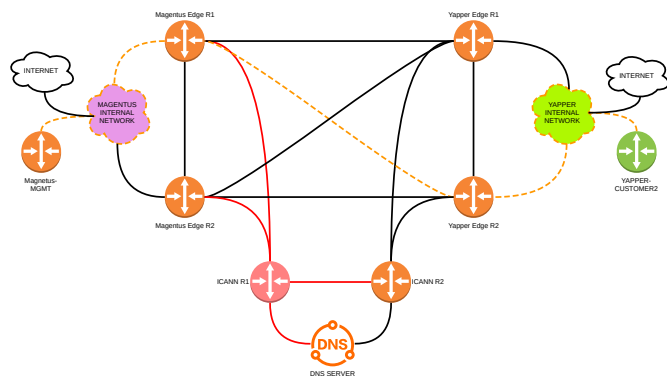
YAPPER-CUSTOMER1 ✓

Sikeres ping! 172.16.0.61 40ms 8ms 28ms



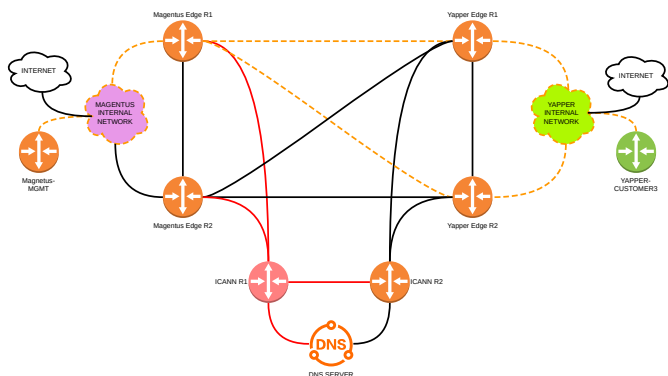
YAPPER-CUSTOMER2 ✓

Sikeres ping! 172.16.0.61 16ms 64ms 4ms



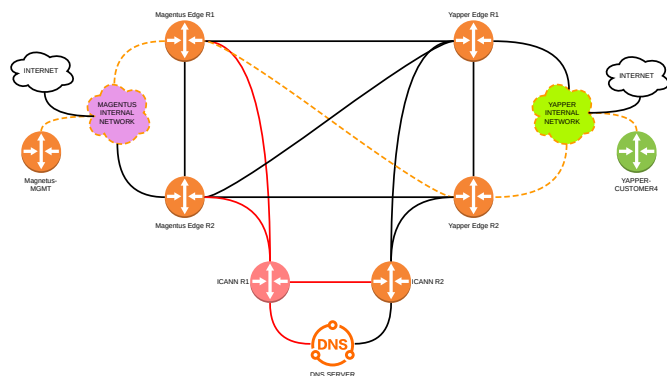
YAPPER-CUSTOMER3 ✓

Sikeres ping! 172.16.0.61 16ms 36ms 32ms

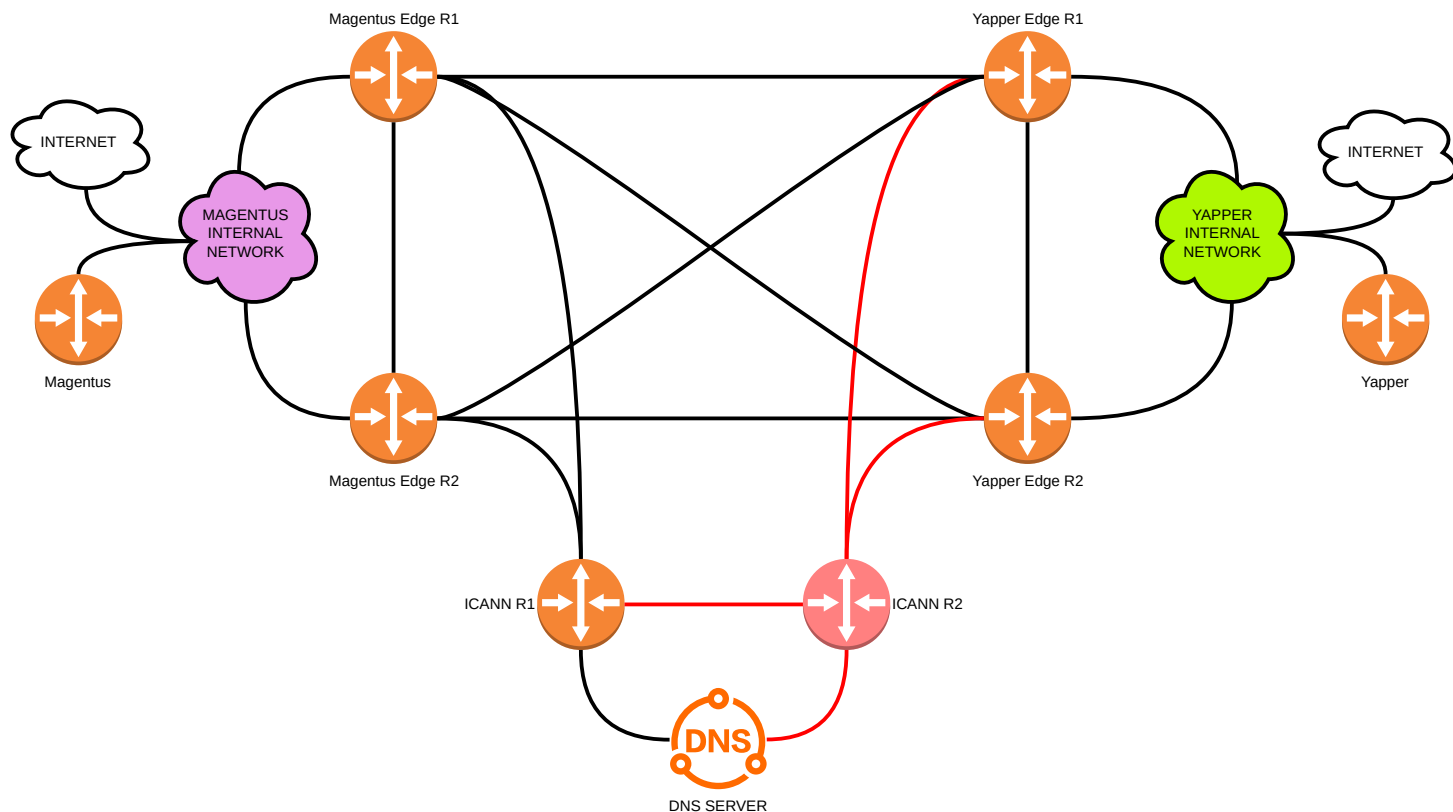


YAPPER-CUSTOMER4 ✓

Sikeres ping! 172.16.0.61 36ms 32ms 28ms

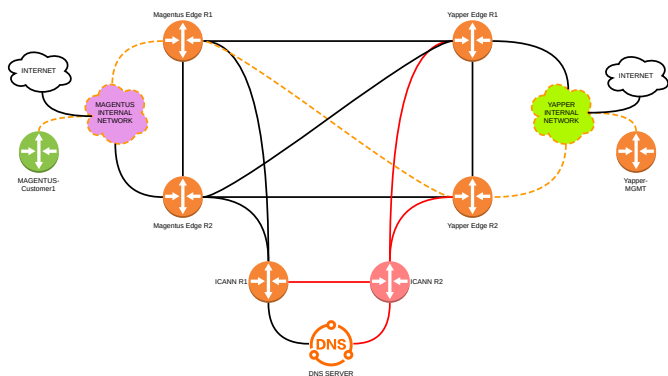


Hiba szimuláció: ICANN-R2 - Magentus ping



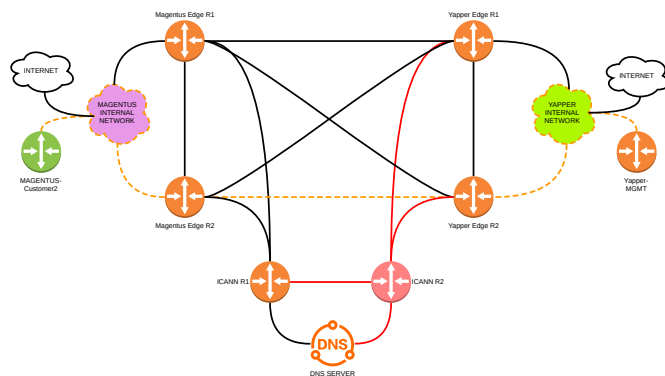
MAGENTUS-Customer1 ✓

Sikeres ping! 172.17.1.4 12ms 24ms 20ms



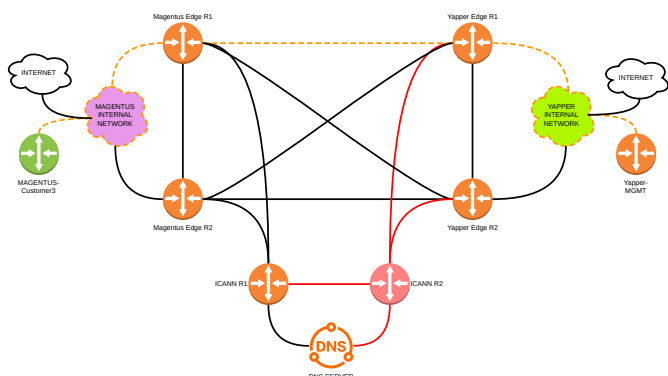
MAGENTUS-Customer2 ✓

Sikeres ping! 172.17.1.4 32ms 32ms 40ms



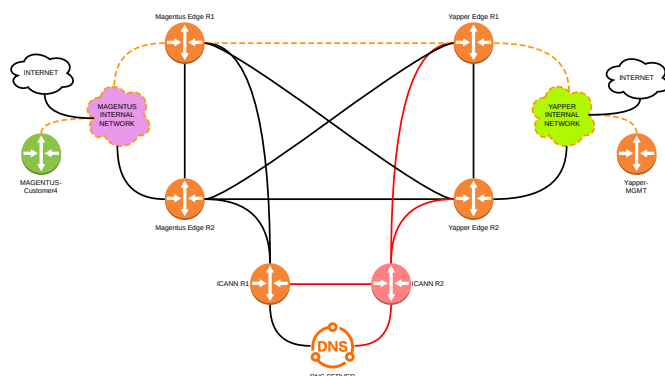
MAGENTUS-Customer3 ✓

Sikeres ping! 172.17.1.4 24ms 16ms 28ms

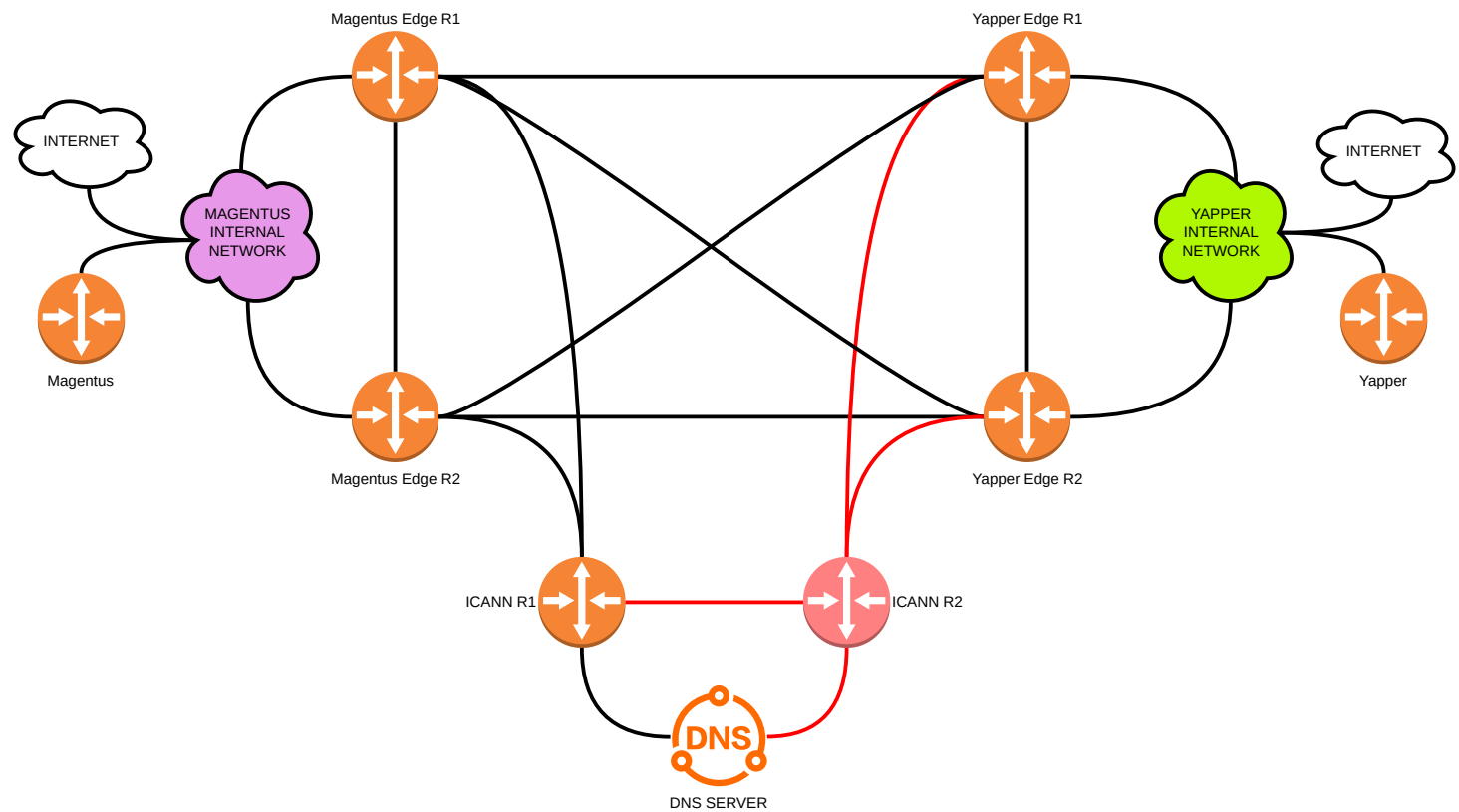


MAGENTUS-Customer4 ✓

Sikeres ping! 172.17.1.4 40ms 52ms 52ms

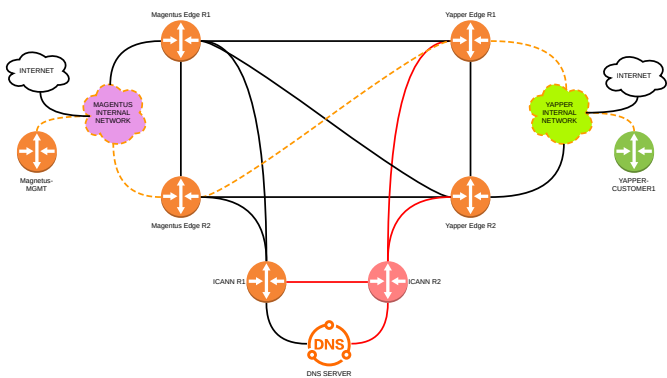


Hiba szimuláció: ICANN-R2 - Yapper ping



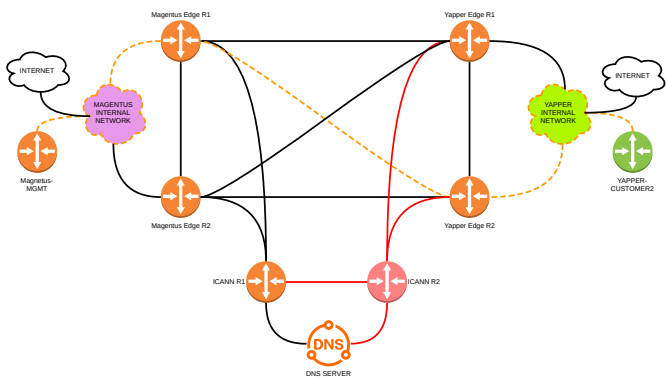
YAPPER-CUSTOMER1

Sikeres ping! 172.16.0.61 48ms 20ms 100ms



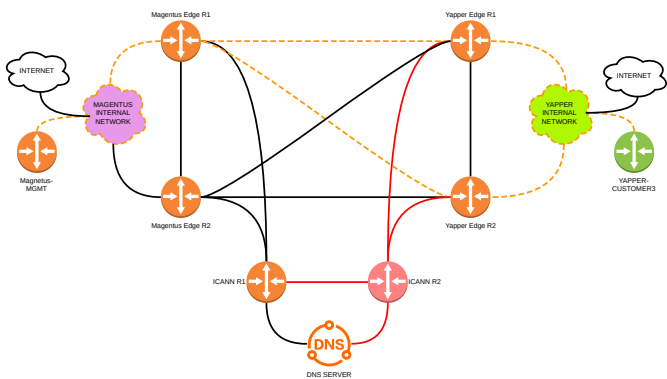
YAPPER-CUSTOMER2

Sikeres ping! 172.16.0.61 52ms 8ms 40ms



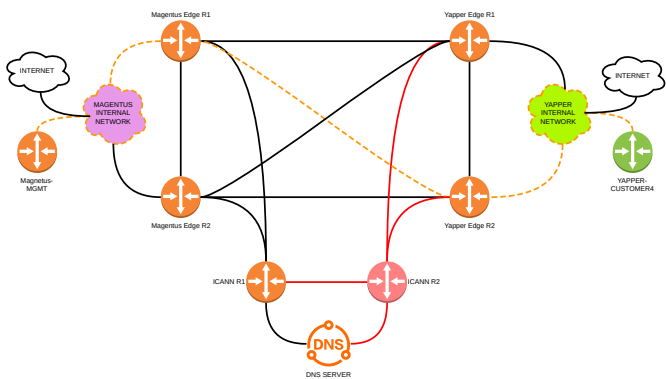
YAPPER-CUSTOMER3

Sikeres ping! 172.16.0.61 16ms 40ms 36ms

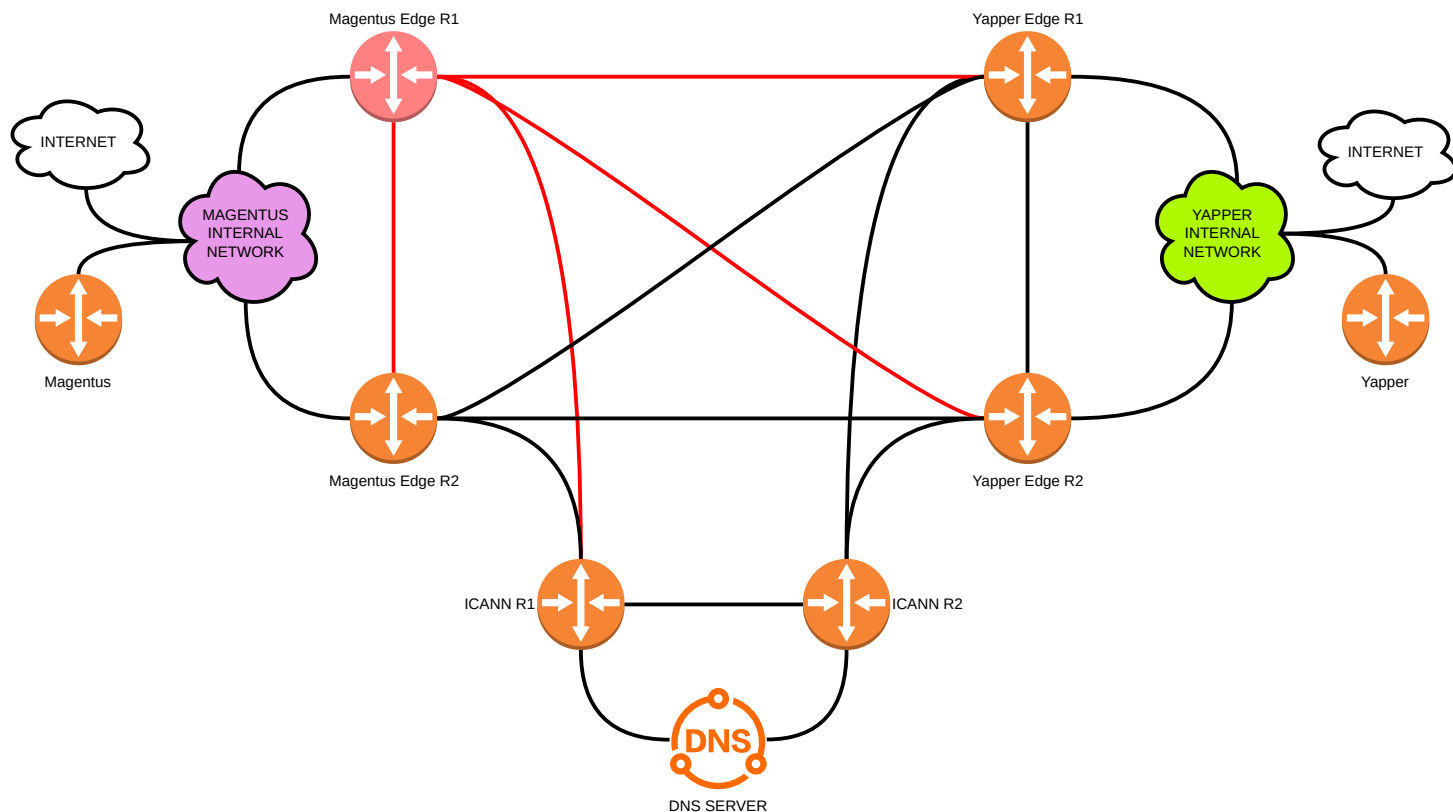


YAPPER-CUSTOMER4

Sikeres ping! 172.16.0.61 32ms 60ms 88ms

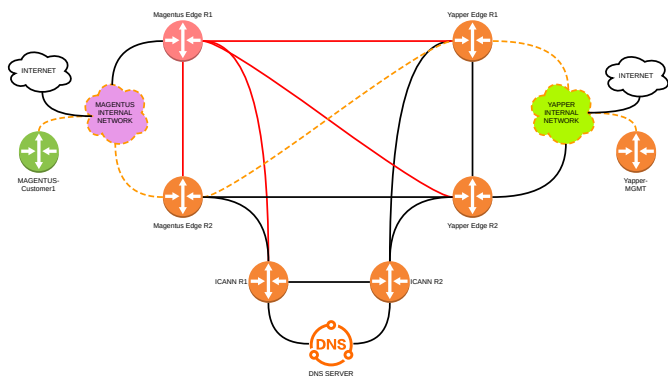


Hiba szimuláció: MAGENTUS-EDGE-R1 - Magentus ping



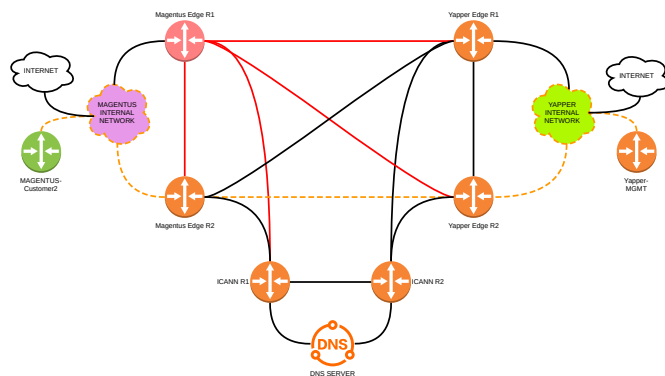
MAGENTUS-Customer1 ✓

Sikeres ping! 172.17.1.4 48ms 32ms 20ms



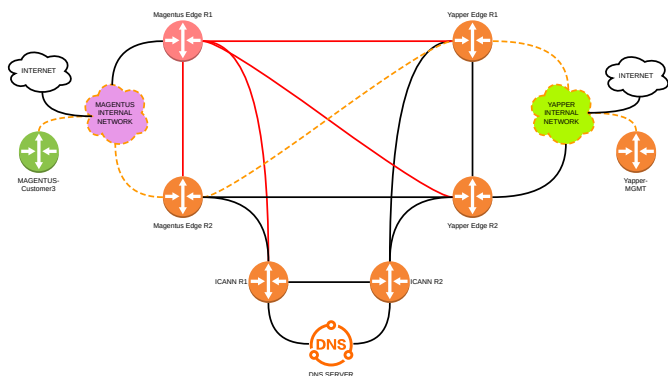
MAGENTUS-Customer2 ✓

Sikeres ping! 172.17.1.4 68ms 40ms 24ms



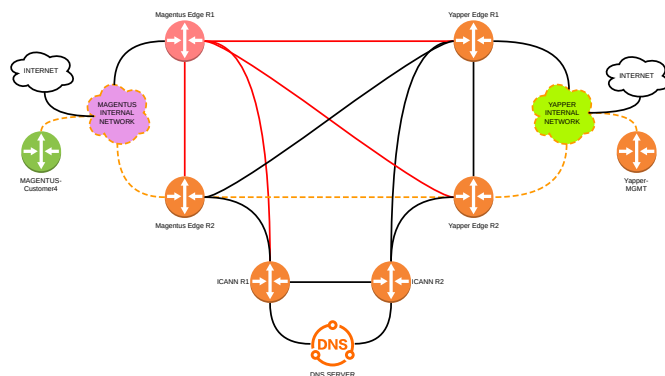
MAGENTUS-Customer3 ✓

Sikeres ping! 172.17.1.4 20ms 48ms 12ms

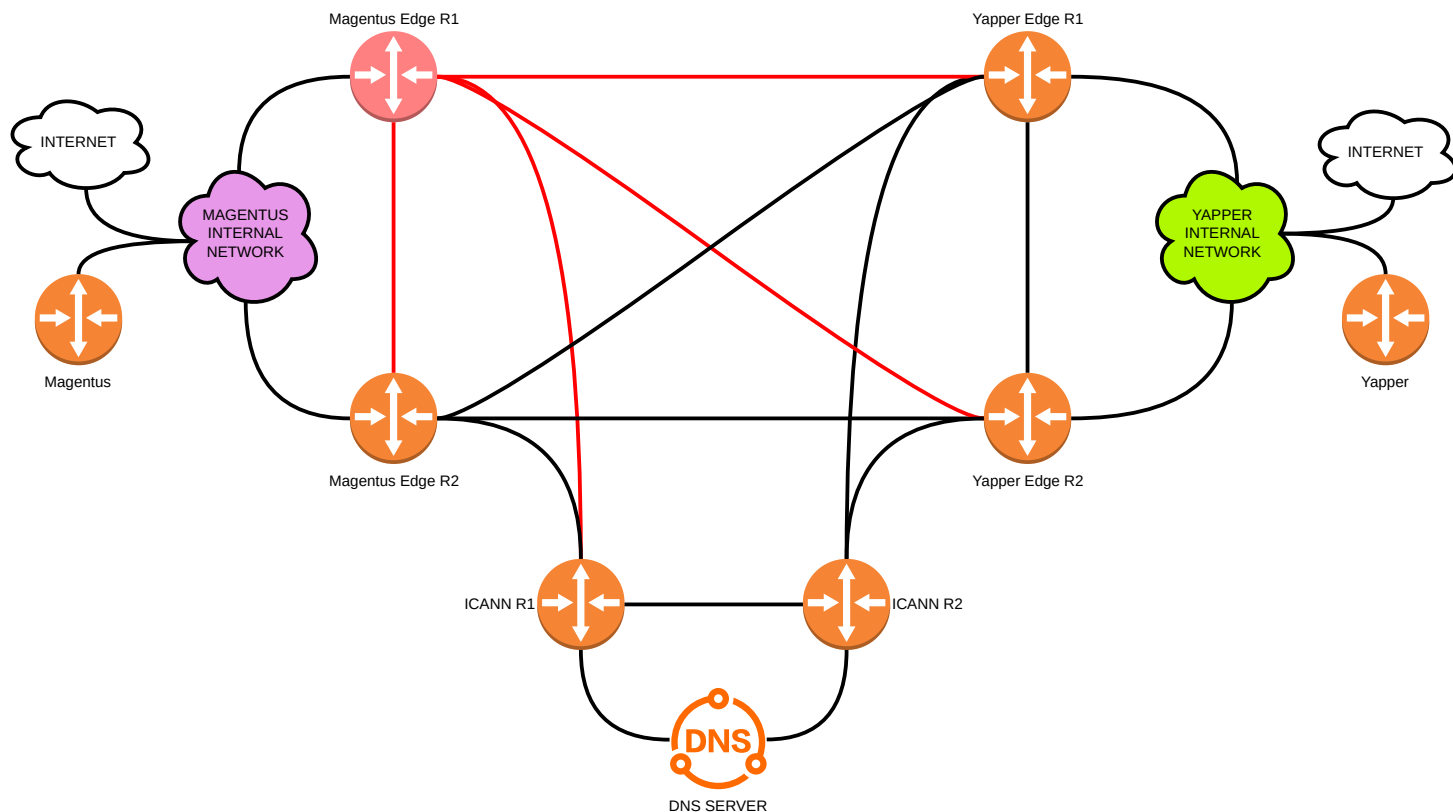


MAGENTUS-Customer4 ✓

Sikeres ping! 172.17.1.4 40ms 44ms 36ms

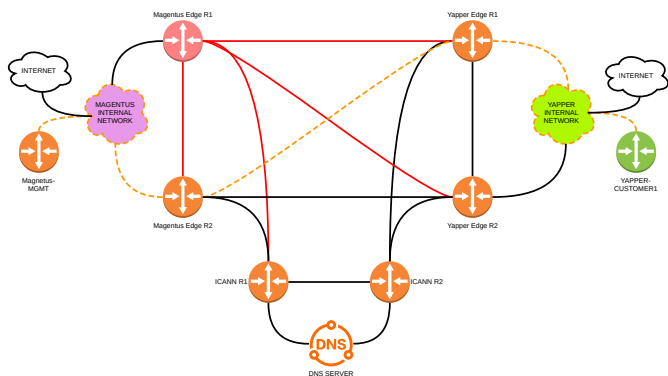


Hiba szimuláció: MAGENTUS-EDGE-R1 - Yapper ping



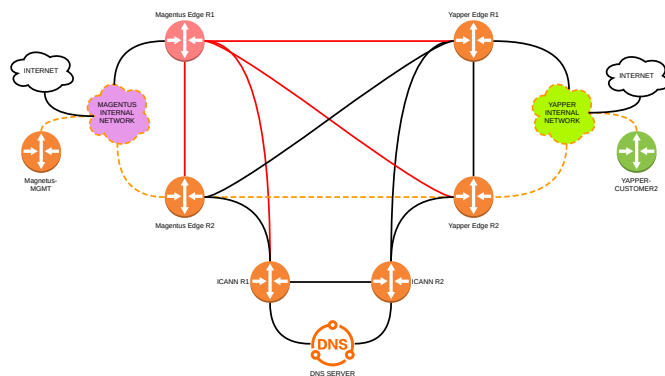
YAPPER-CUSTOMER1 ✓

Sikeres ping! 172.16.0.61 52ms 8ms 64ms



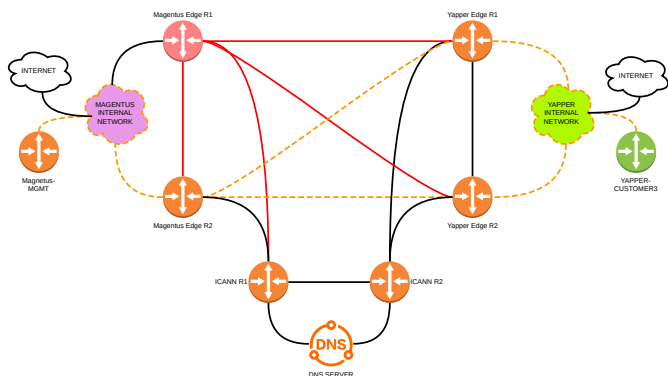
YAPPER-CUSTOMER2 ✓

Sikeres ping! 172.16.0.61 72ms 44ms 56ms



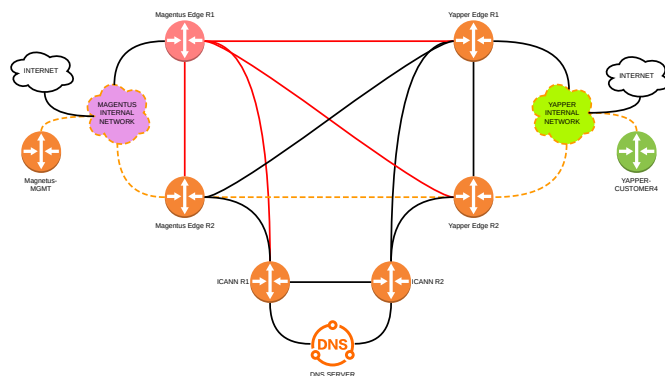
YAPPER-CUSTOMER3 ✓

Sikeres ping! 172.16.0.61 32ms 68ms 16ms

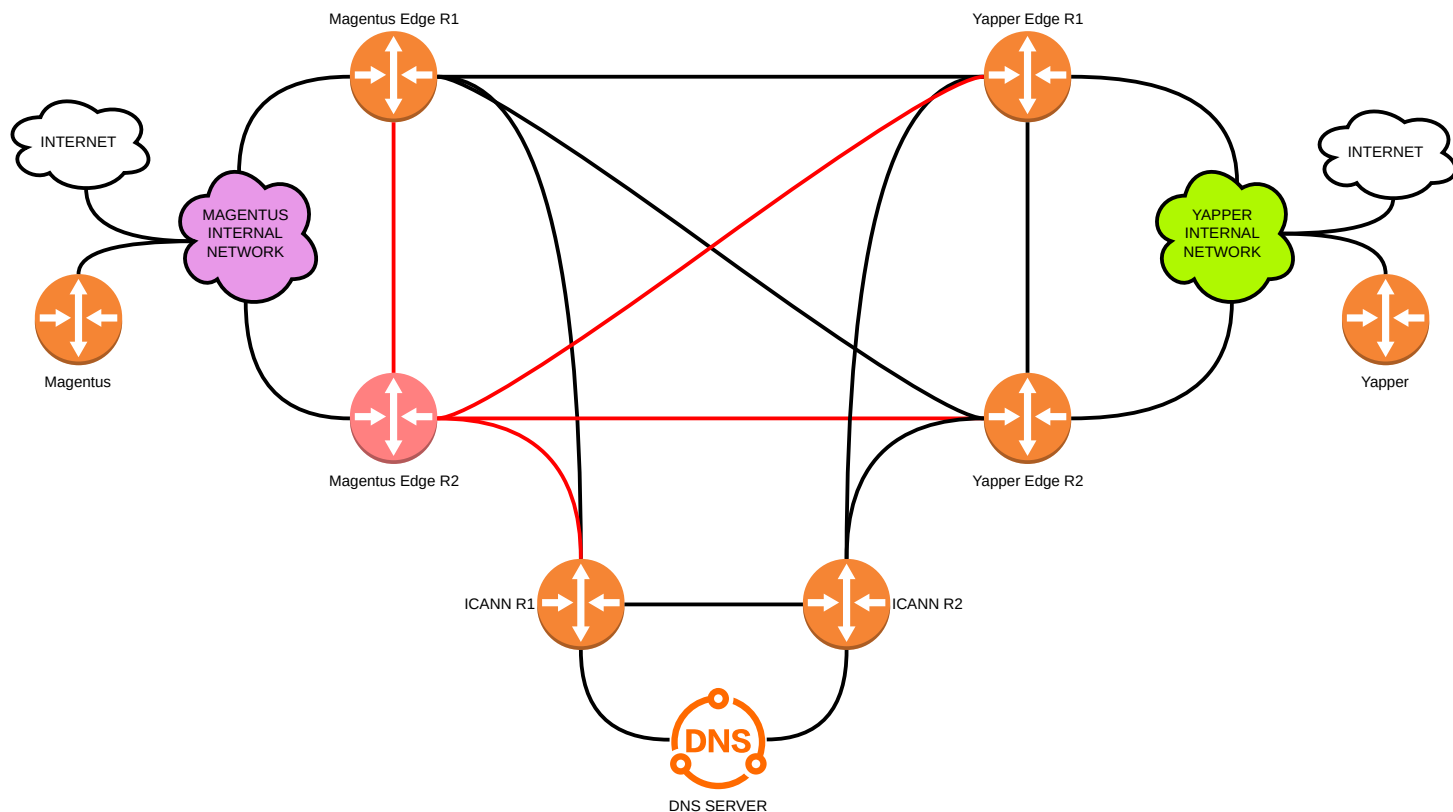


YAPPER-CUSTOMER4 ✓

Sikeres ping! 172.16.0.61 48ms 16ms 44ms

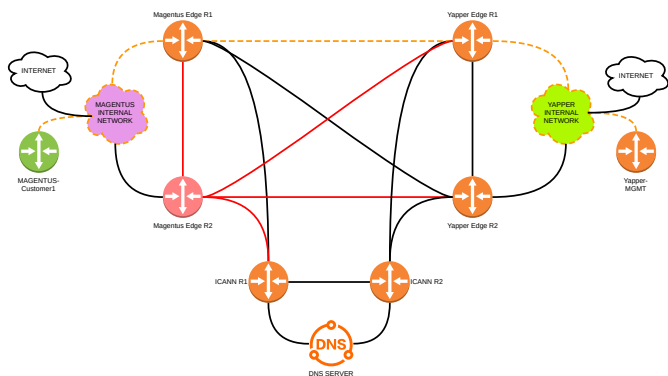


Hiba szimuláció: MAGENTUS-EDGE-R2 - Magentus ping



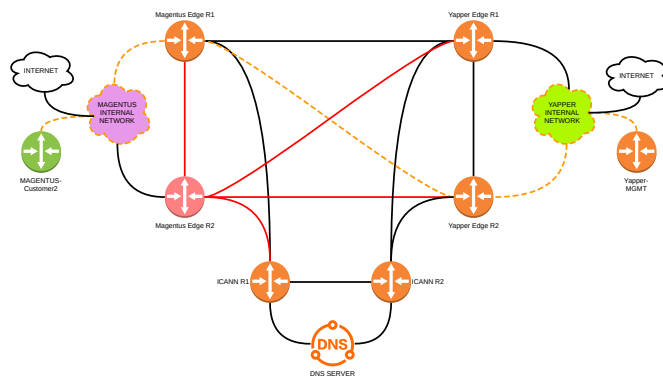
MAGENTUS-Customer1 ✓

Sikeres ping! 172.17.1.4 32ms 36ms 4ms



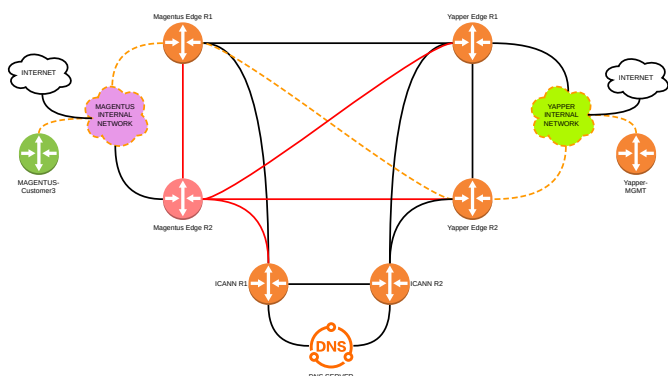
MAGENTUS-Customer2 ✓

Sikeres ping! 172.17.1.4 24ms 28ms 52ms



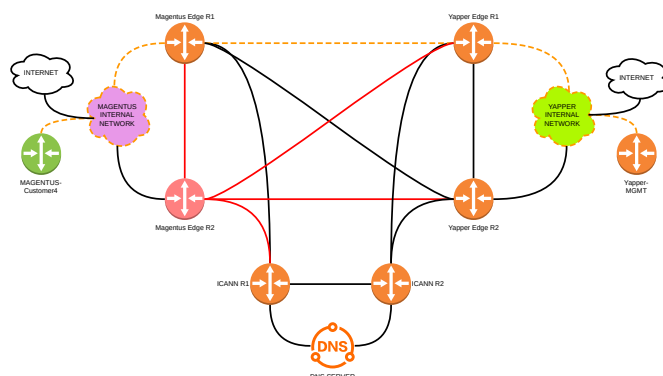
MAGENTUS-Customer3 ✓

Sikeres ping! 172.17.2.4 12ms 28ms 36ms

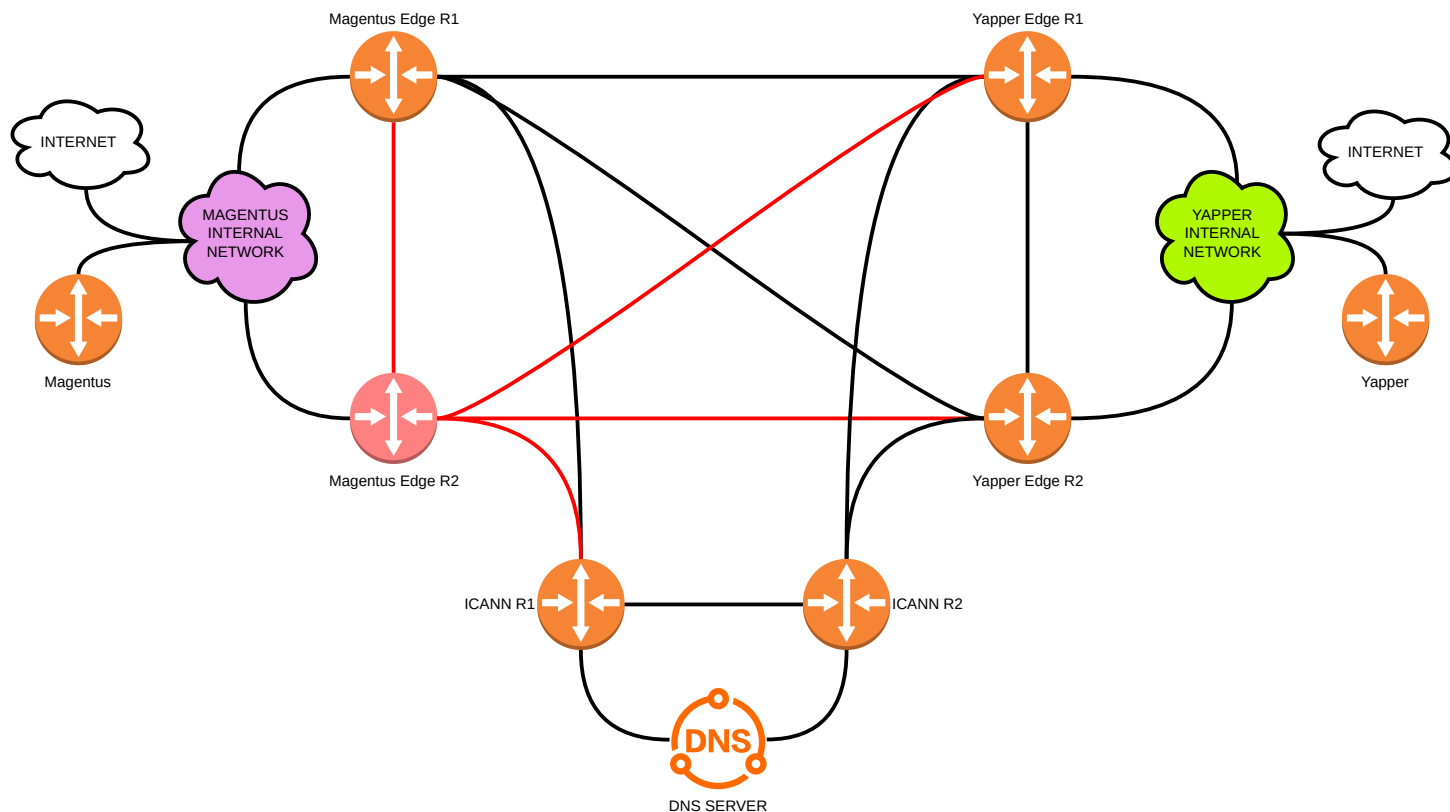


MAGENTUS-Customer4 ✓

Sikeres ping! 172.17.1.4 40ms 40ms 40ms

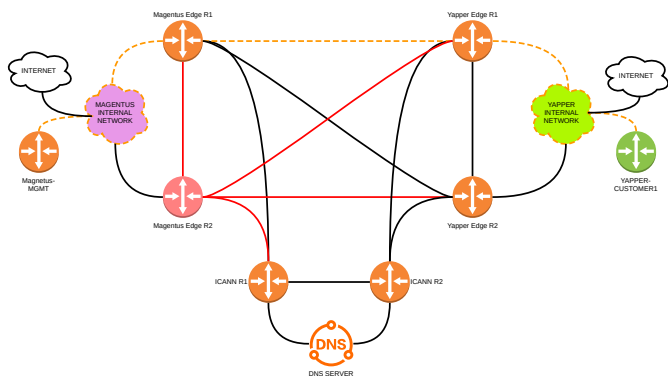


Hiba szimuláció: MAGENTUS-EDGE-R2 - Yapper ping



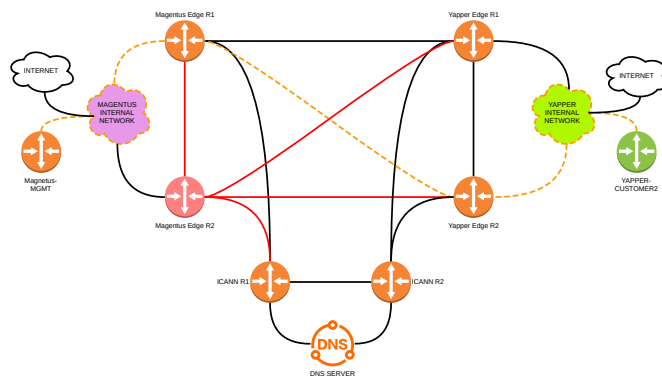
YAPPER-CUSTOMER1 ✓

Sikeres ping! 172.16.0.61 24ms 24ms 32ms



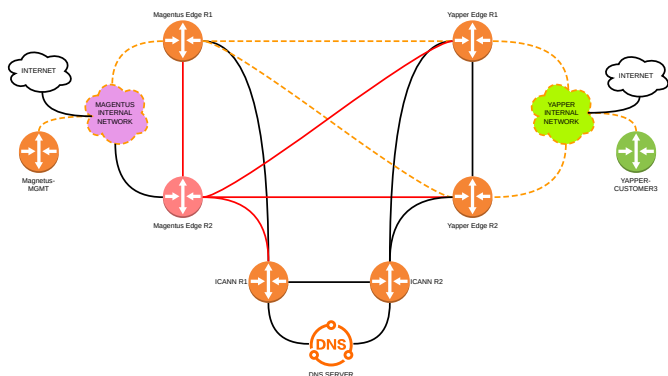
YAPPER-CUSTOMER2 ✓

Sikeres ping! 172.16.0.61 52ms 20ms 44ms



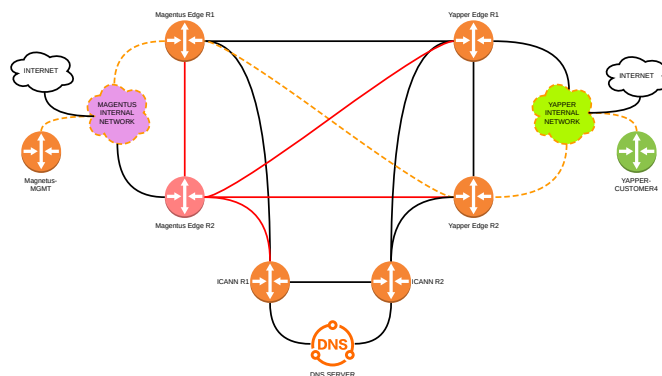
YAPPER-CUSTOMER3 ✓

Sikeres ping! 172.16.0.61 52ms 24ms 20ms

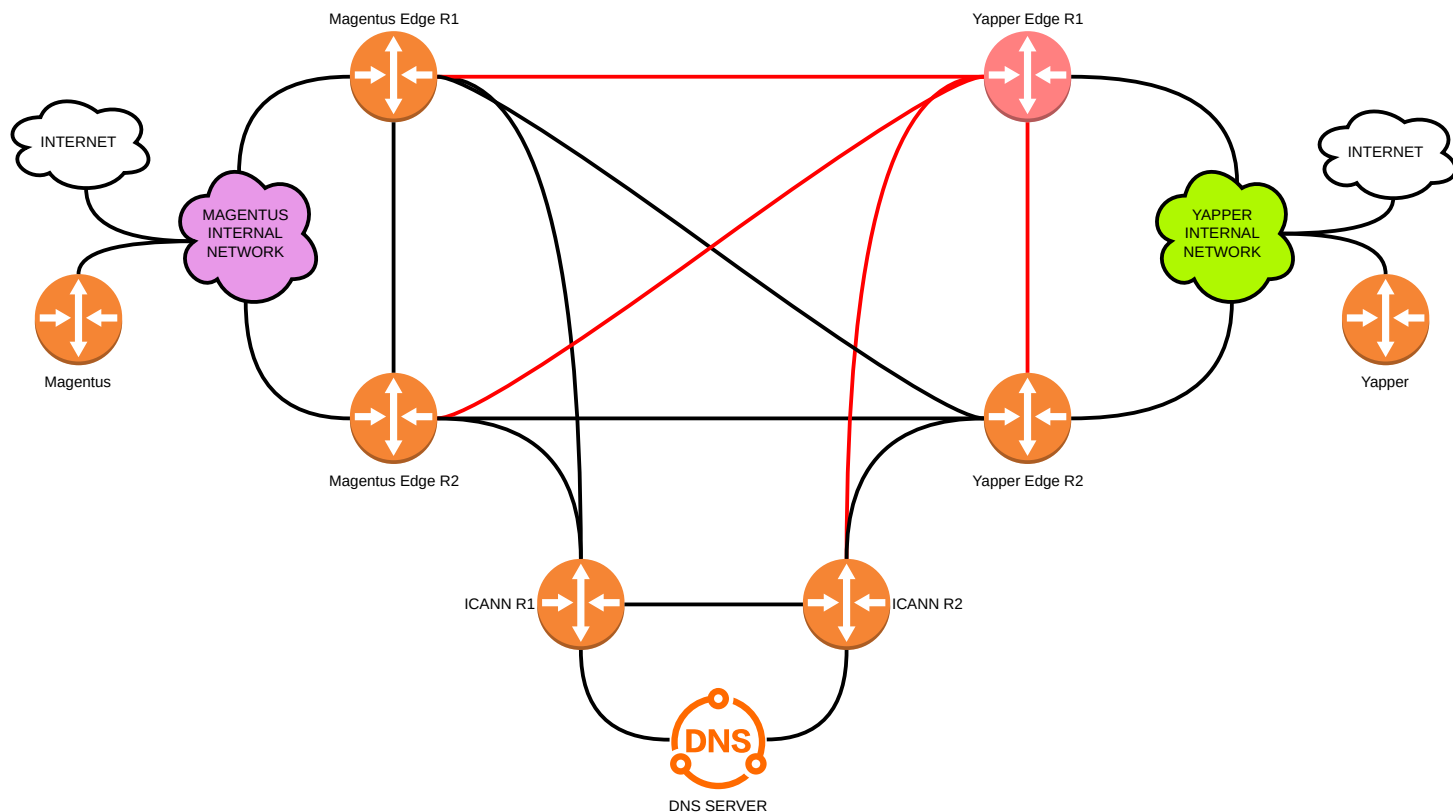


YAPPER-CUSTOMER4 ✓

Sikeres ping! 172.16.0.61 24ms 40ms 56ms

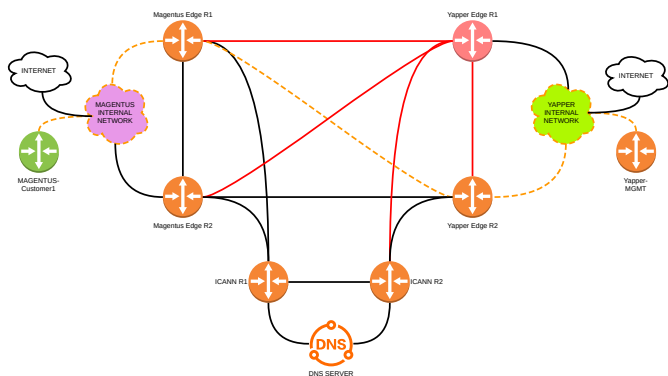


Hiba szimuláció: YAPPER-EDGE-R1 - Magentus ping



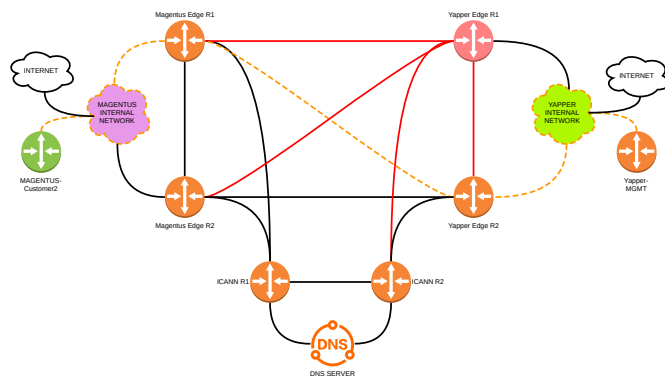
MAGENTUS-Customer1 ✓

Sikeres ping! 172.17.1.4 52ms 12ms 44ms



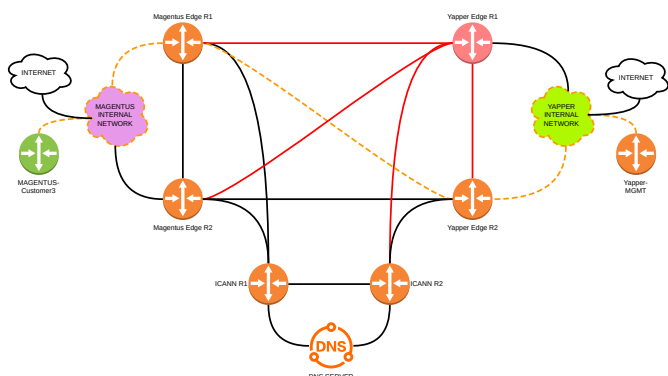
MAGENTUS-Customer2 ✓

Sikeres ping! 172.17.1.4 32ms 36ms 56ms



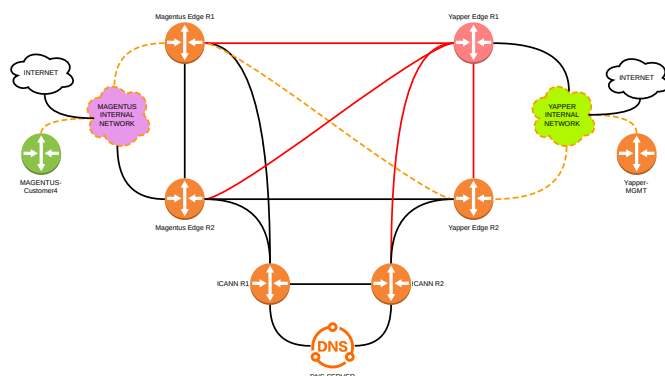
MAGENTUS-Customer3 ✓

Sikeres ping! 172.17.2.4 36ms 28ms 36ms

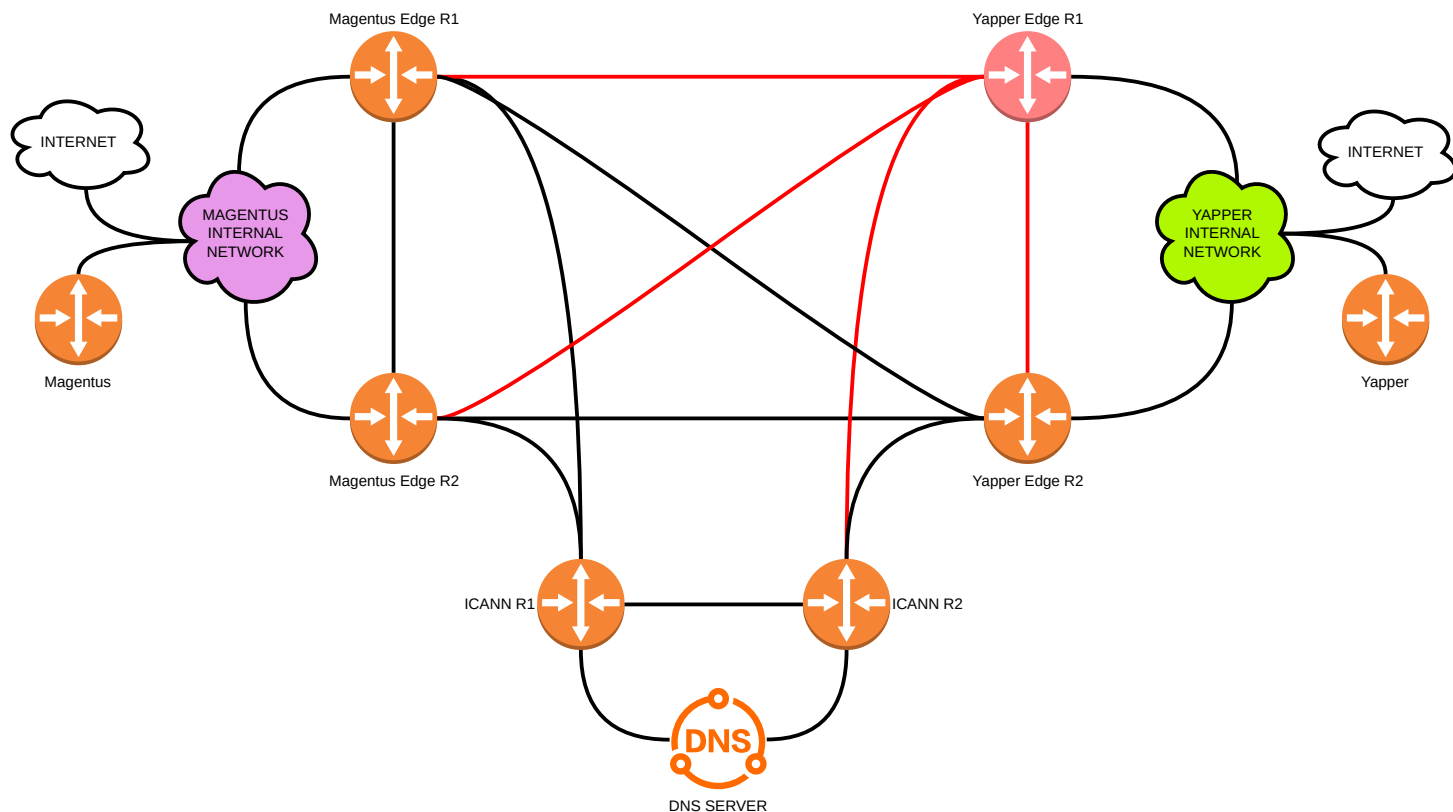


MAGENTUS-Customer4 ✓

Sikeres ping! 172.17.1.4 36ms 36ms 76ms

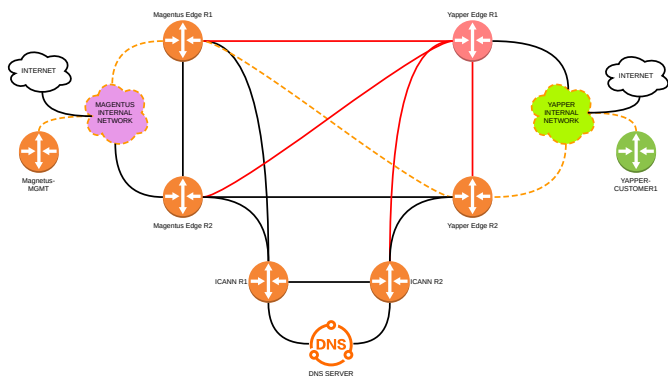


Hiba szimuláció: YAPPER-EDGE-R1 - Yapper ping



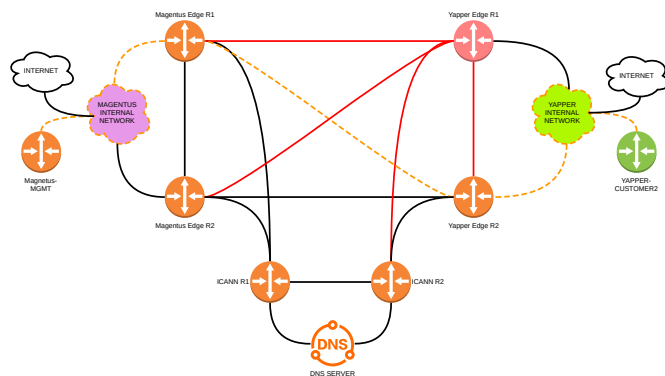
YAPPER-CUSTOMER1 ✓

Sikeres ping! 172.16.0.61 64ms 52ms 40ms



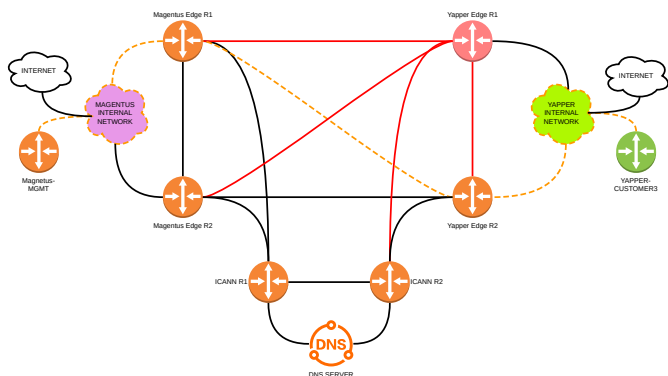
YAPPER-CUSTOMER2 ✓

Sikeres ping! 172.16.0.61 56ms 40ms 8ms



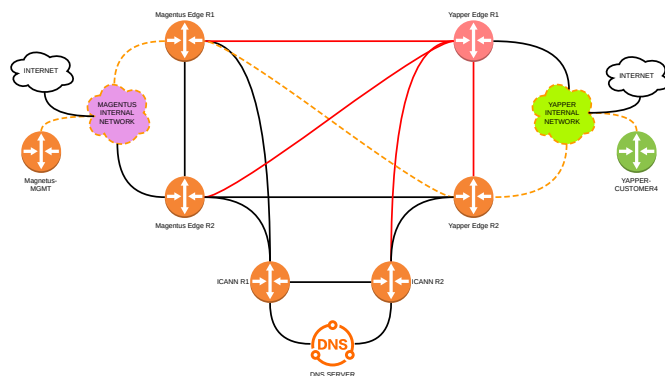
YAPPER-CUSTOMER3 ✓

Sikeres ping! 172.16.0.61 60ms 44ms 24ms

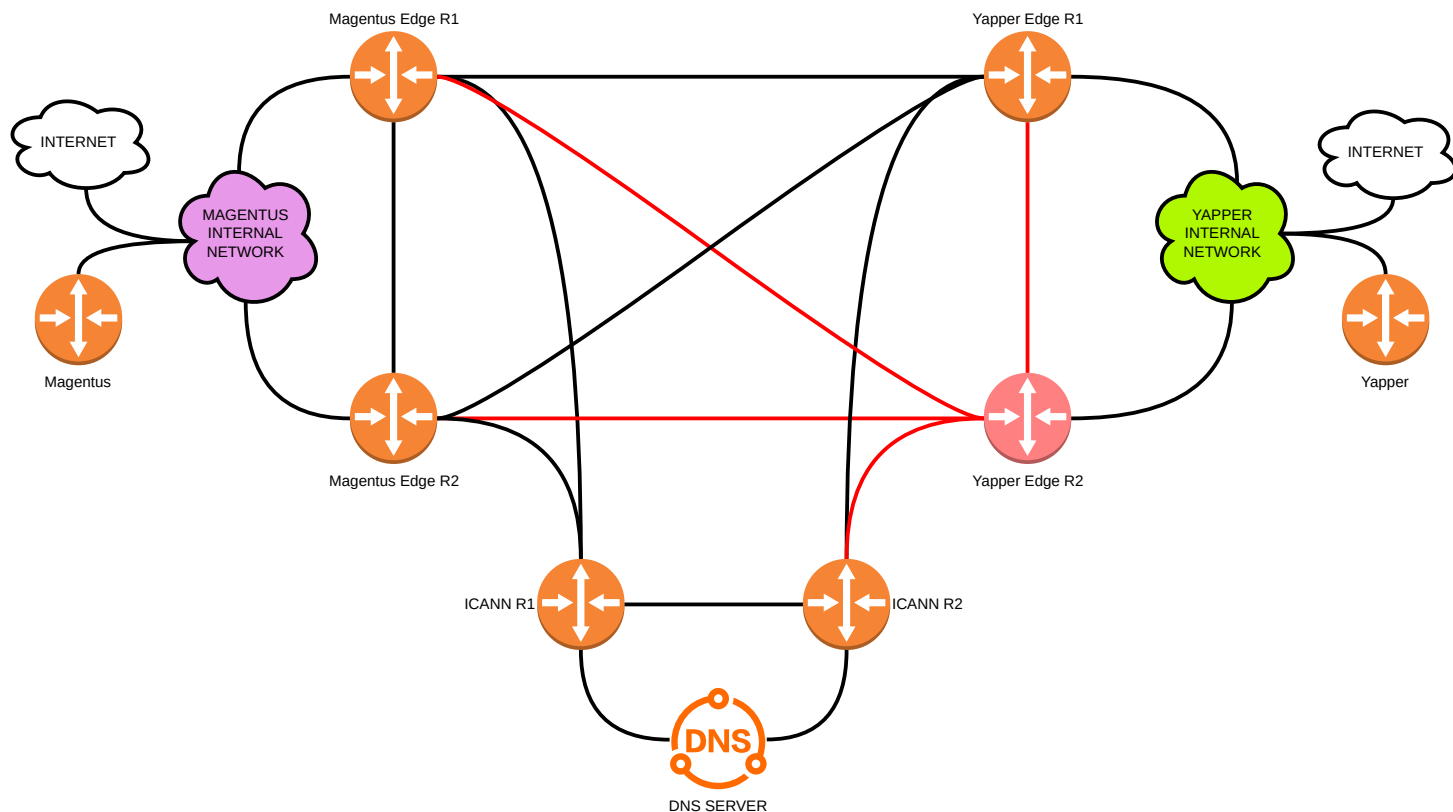


YAPPER-CUSTOMER4 ✓

Sikeres ping! 172.16.0.61 52ms 16ms 28ms

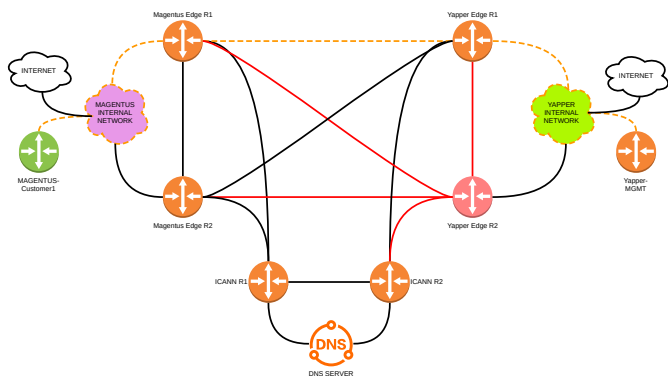


Hiba szimuláció: YAPPER-EDGE-R2 - Magentus ping



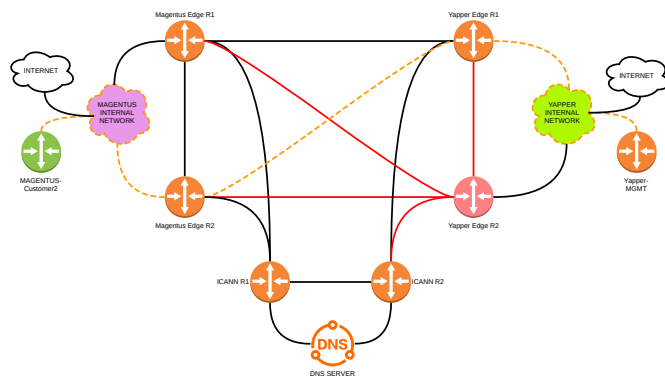
MAGENTUS-Customer1 ✓

Sikeres ping! 172.17.1.4 20ms 20ms 24ms



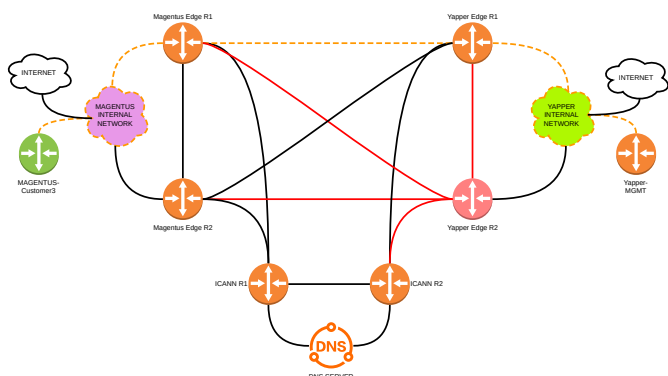
MAGENTUS-Customer2 ✓

Sikeres ping! 172.17.2.4 56ms 12ms 56ms



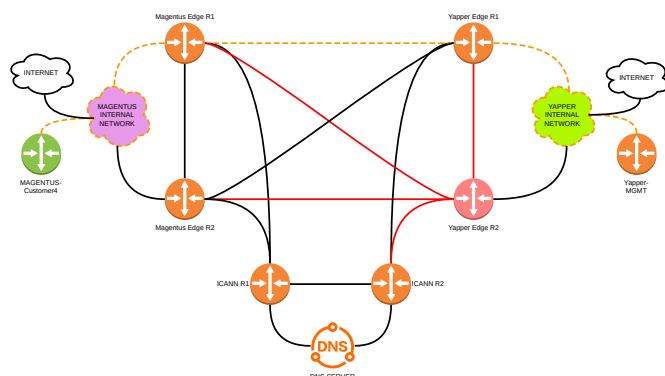
MAGENTUS-Customer3 ✓

Sikeres ping! 172.17.1.4 8ms 32ms 16ms

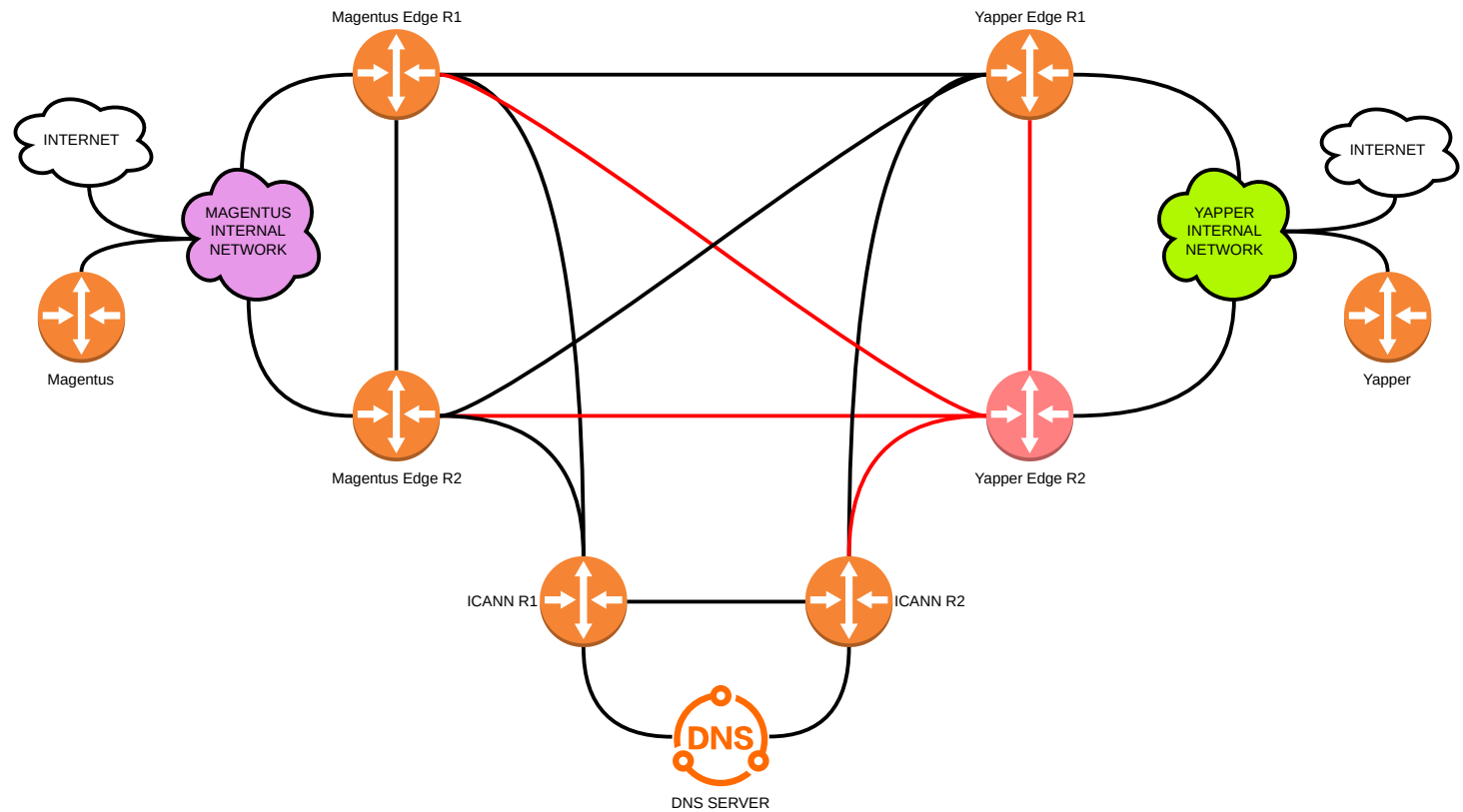


MAGENTUS-Customer4 ✓

Sikeres ping! 172.17.2.4 60ms 12ms 56ms

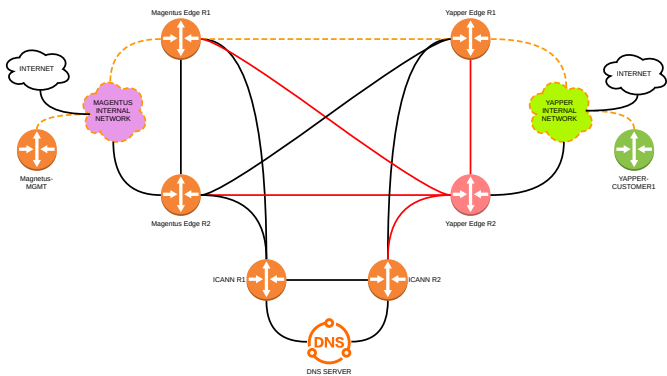


Hiba szimuláció: YAPPER-EDGE-R2 - Yapper ping



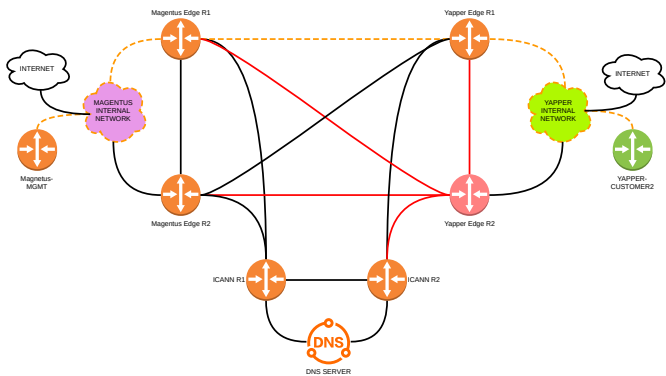
YAPPER-CUSTOMER1 ✓

Sikeres ping! 172.16.0.61 40ms 60ms 20ms



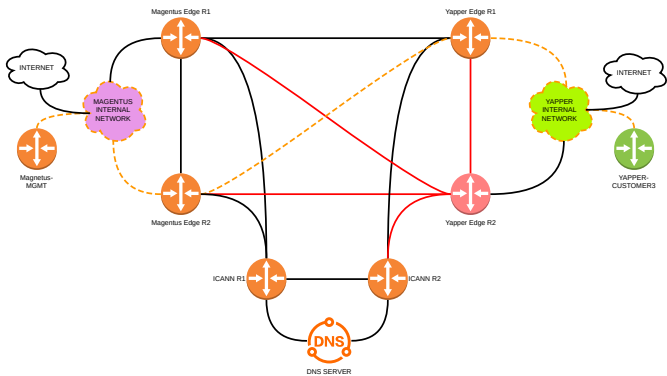
YAPPER-CUSTOMER2 ✓

Sikeres ping! 172.16.0.61 60ms 36ms 44ms



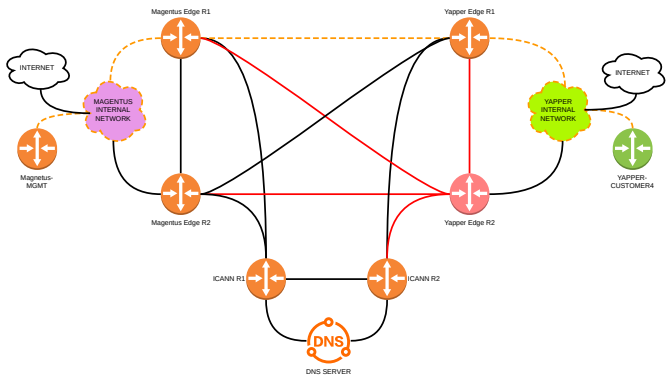
YAPPER-CUSTOMER3 ✓

Sikeres ping! 172.16.0.61 24ms 64ms 28ms



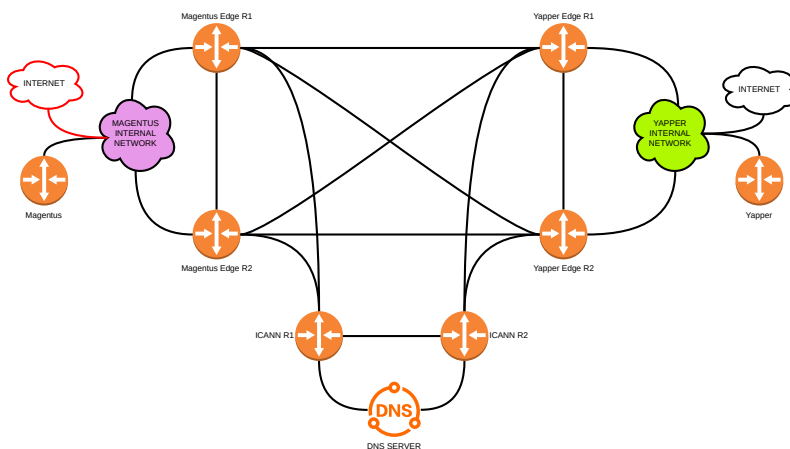
YAPPER-CUSTOMER4 ✓

Sikeres ping! 172.16.0.61 36ms 56ms 44ms



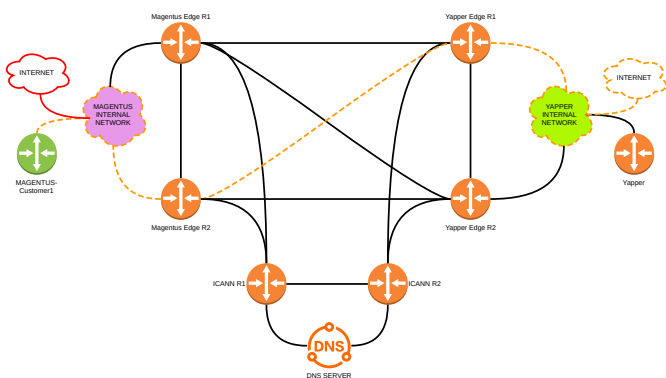
Magentus internet hiba

Magentus közvetlen összekötetése az internet felé megszakítva, internet elérés Yapper-en keresztül



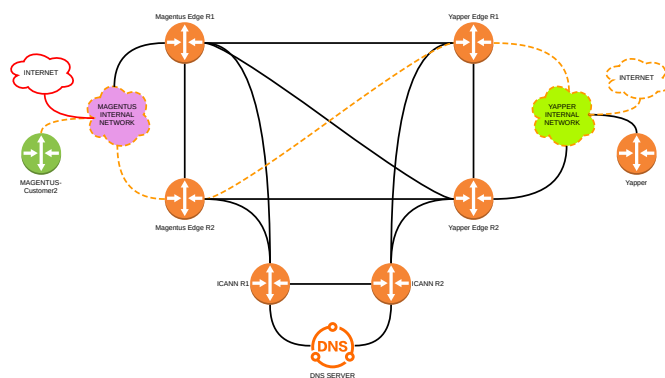
MAGENTUS-Customer1 ✓

Sikeres ping! 1.1.1.1 60ms 112ms



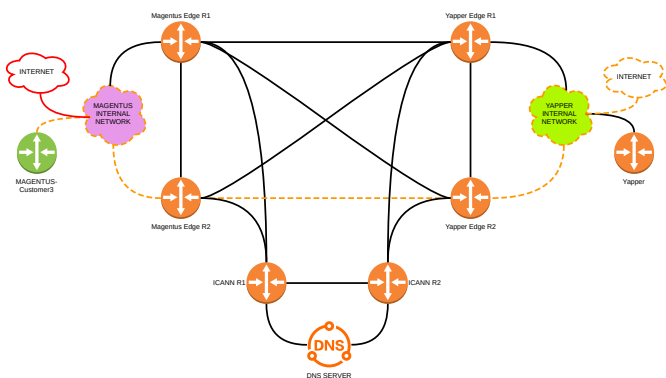
MAGENTUS-Customer2 ✓

Sikeres ping! 1.1.1.1 84ms



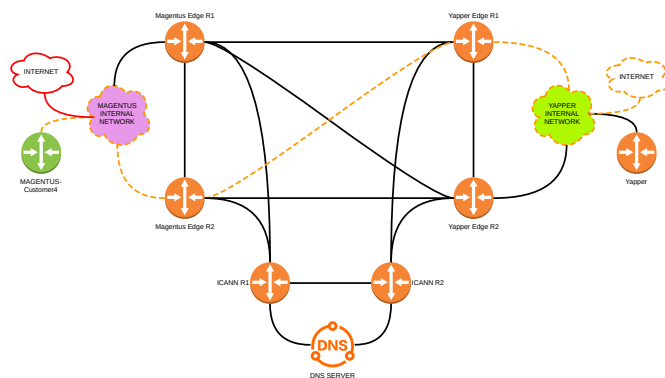
MAGENTUS-Customer3 ✓

Sikeres ping! 1.1.1.1 40ms



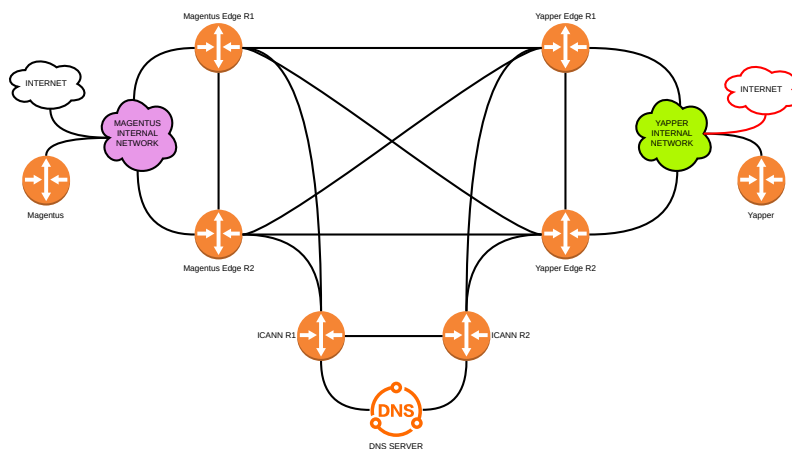
MAGENTUS-Customer4 ✓

Sikeres ping! 1.1.1.1 76ms



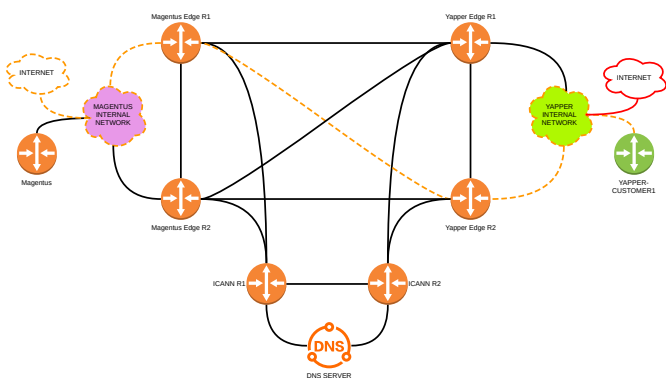
Yapper internet hiba

Yapper közvetlen összekötetése az internet felé megszakítva, internet elérés Magentus-on keresztül



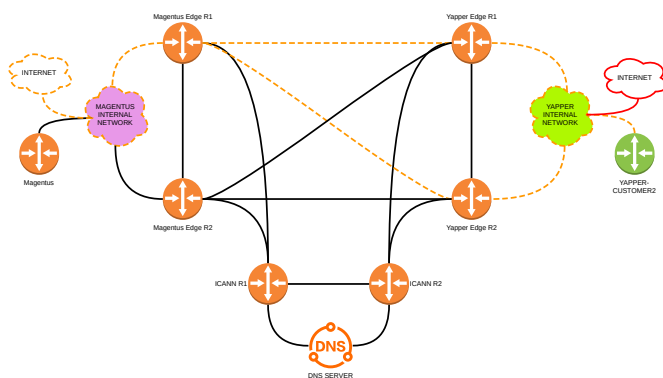
YAPPER-CUSTOMER1 ✓

Sikeres ping! 1.1.1.1 60ms



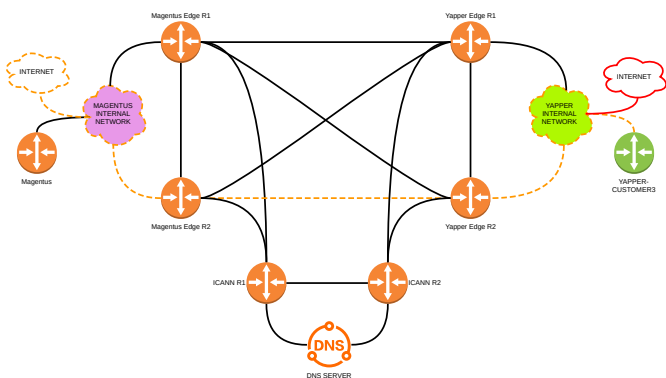
YAPPER-CUSTOMER2 ✓

Sikeres ping! 1.1.1.1 40ms 48ms 68ms



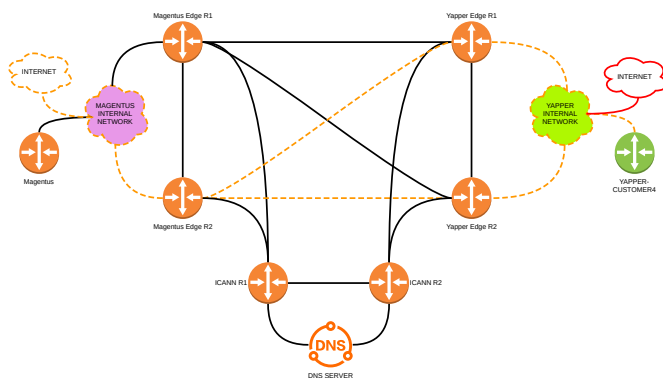
YAPPER-CUSTOMER3 ✓

Sikeres ping! 1.1.1.1 48ms



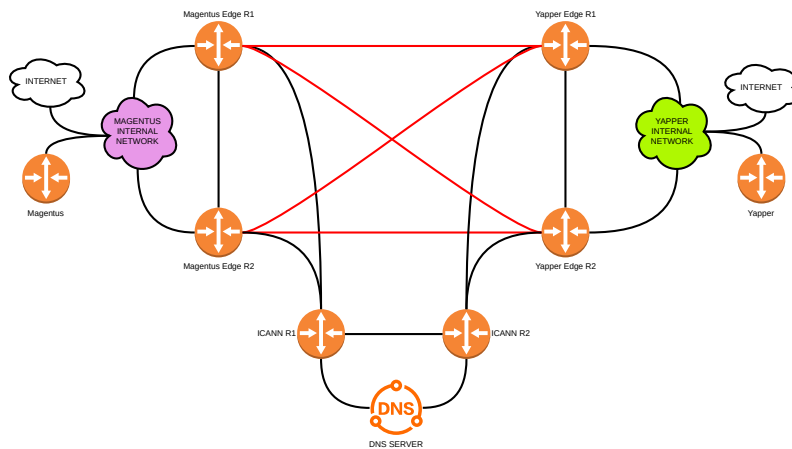
YAPPER-CUSTOMER4 ✓

Sikeres ping! 1.1.1.1 60ms 56ms 44ms



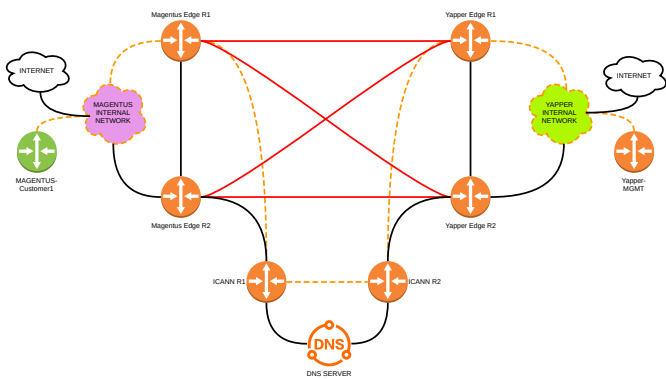
Magentus-Yapper interconnect hiba - Magentus Ping

Yapper és Magentus BGP peer linkjei nem működik, kapcsolat ICANN-en keresztül



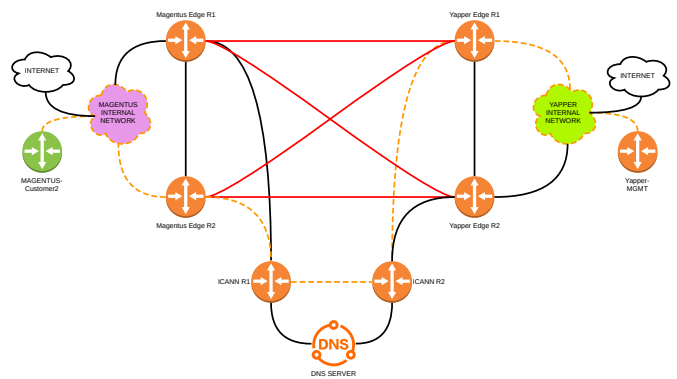
MAGENTUS-Customer1 ✓

Sikeres ping! 172.17.1.4 40ms 48ms 40ms



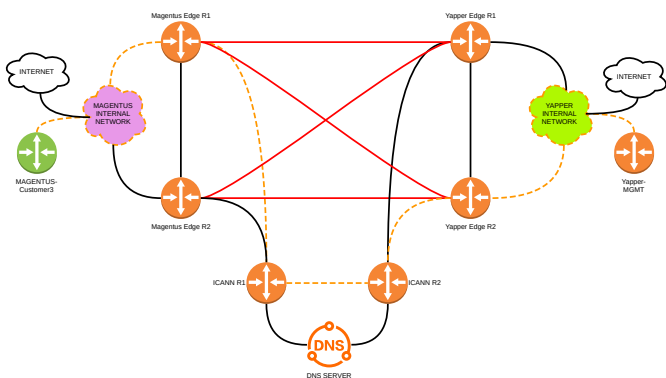
MAGENTUS-Customer2 ✓

Sikeres ping! 172.17.2.4 52ms 68ms 56ms



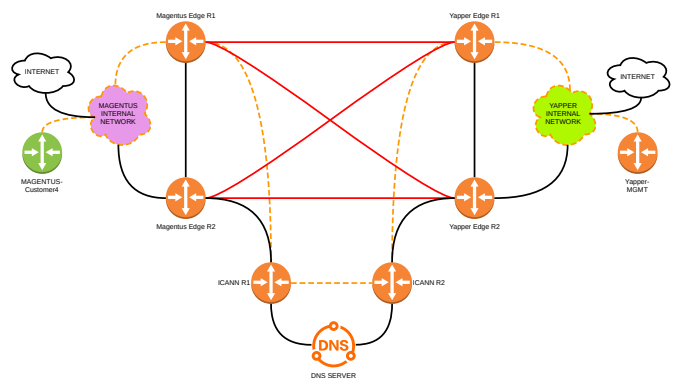
MAGENTUS-Customer3 ✓

Sikeres ping! 172.17.2.4 88ms 16ms 48ms

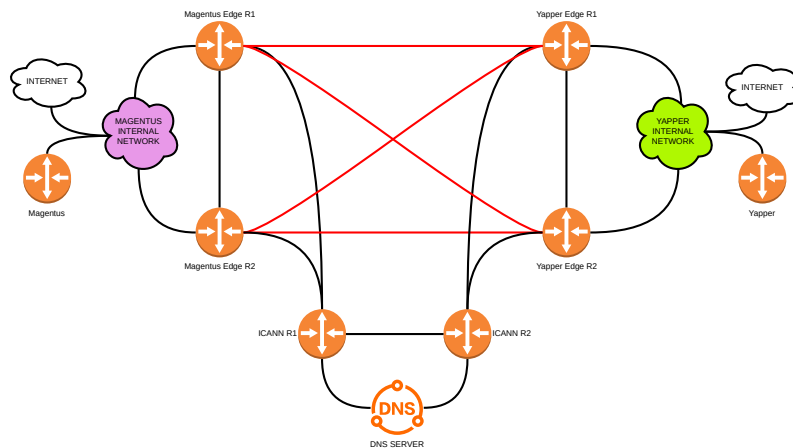


MAGENTUS-Customer4 ✓

Sikeres ping! 172.17.2.4 68ms 52ms 48ms

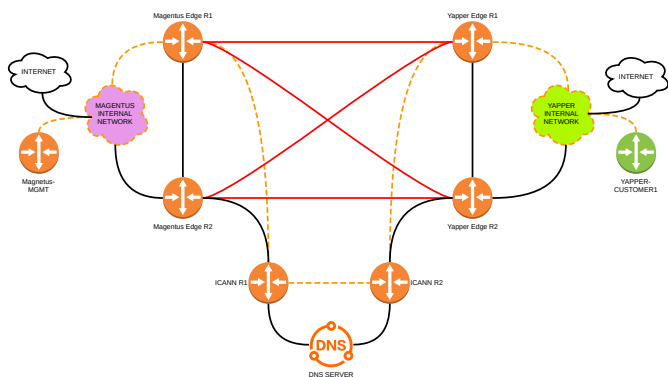


Magentus-Yapper interconnect hiba - Yapper Ping



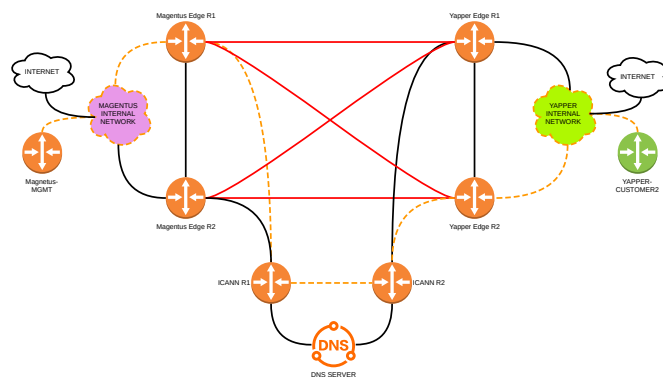
YAPPER-CUSTOMER1

Sikeres ping! 172.16.0.61 56ms 44ms 104ms



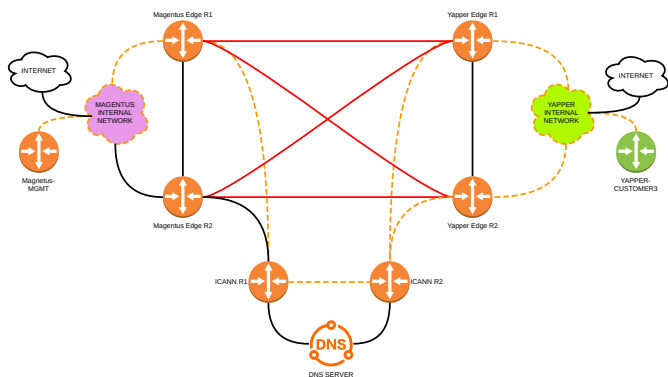
YAPPER-CUSTOMER2

Sikeres ping! 172.16.0.61 60ms 64ms 72ms



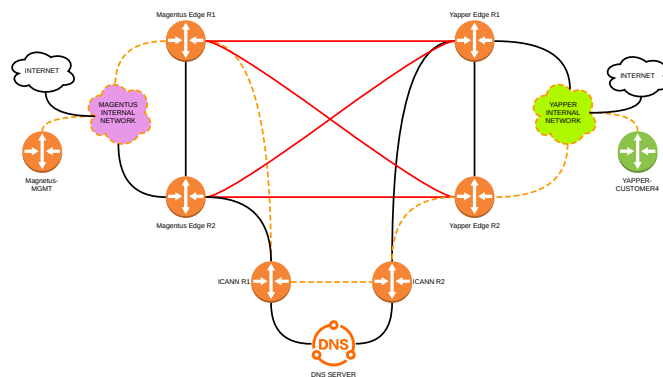
YAPPER-CUSTOMER3

Sikeres ping! 172.16.0.61 48ms 64ms 60ms



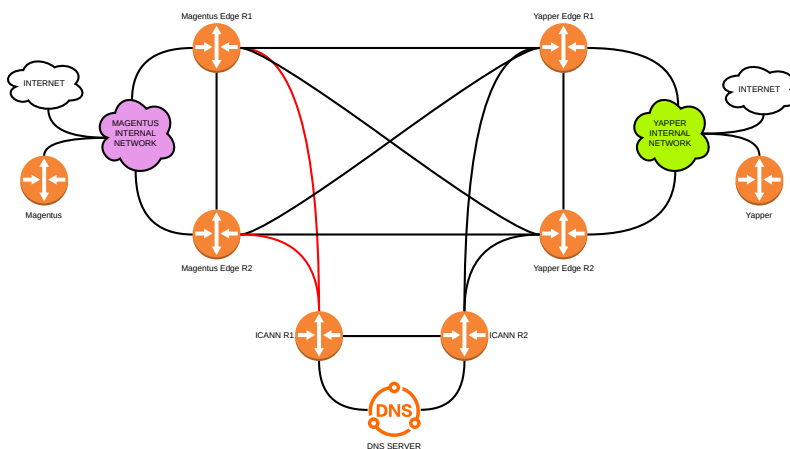
YAPPER-CUSTOMER4

Sikeres ping! 172.16.0.61 60ms 60ms 56ms



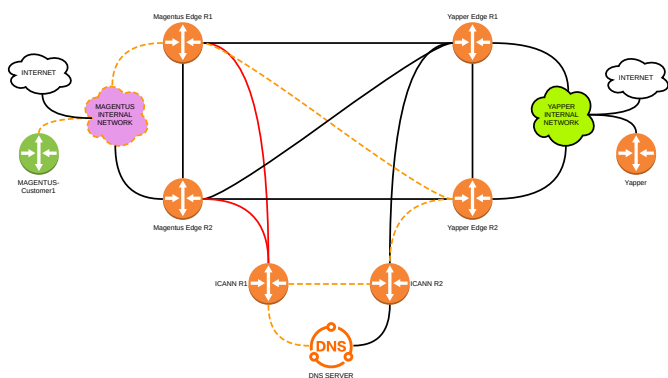
ICANN R1 közvetlen kapcsolat hiba

ICANN R1 közvetlen összekötése Magentus részéről megszakítva, kapcsolat Yapper-en keresztül



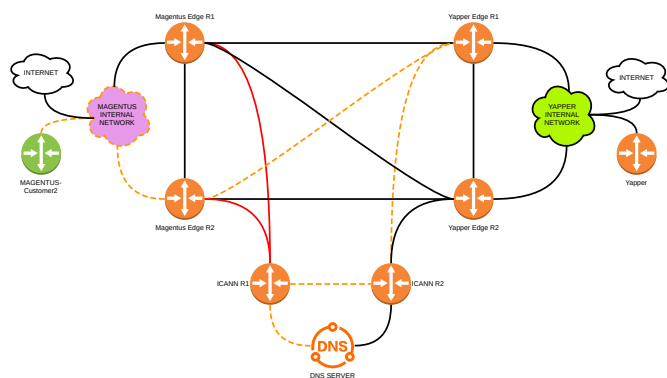
MAGENTUS-Customer1 ✓

Sikeres ping! 172.29.29.30 68ms 52ms 48ms



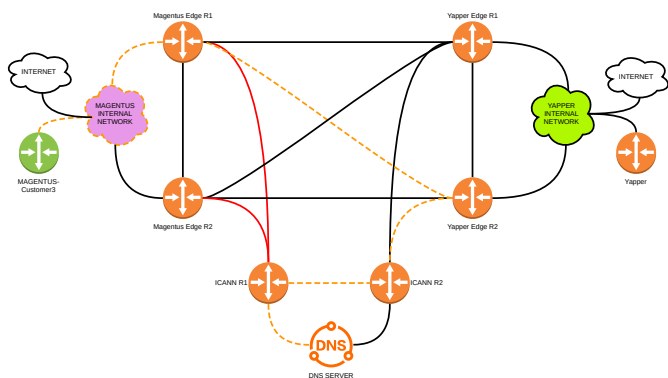
MAGENTUS-Customer2 ✓

Sikeres ping! 172.29.29.30 88ms 52ms 56ms



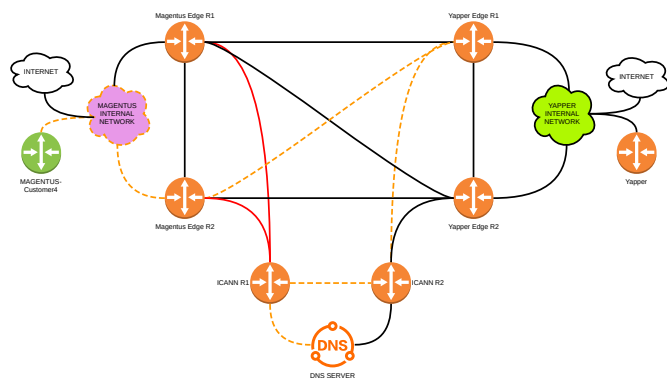
MAGENTUS-Customer3 ✓

Sikeres ping! 172.29.29.30 40ms 44ms 44ms



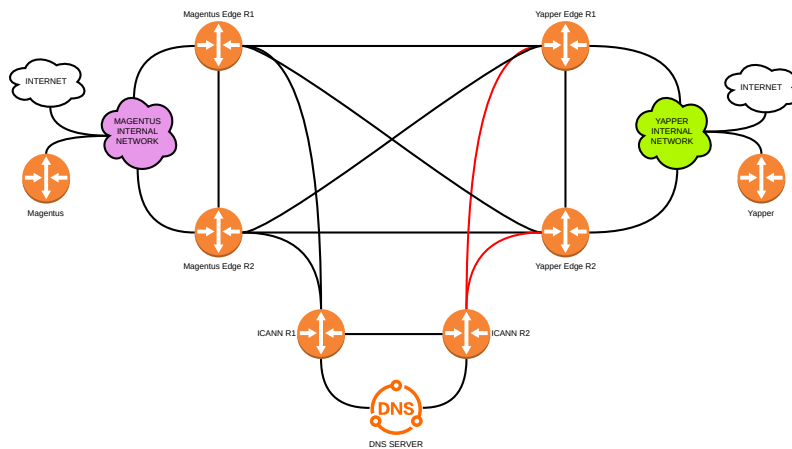
MAGENTUS-Customer4 ✓

Sikeres ping! 172.29.29.30 56ms 68ms 64ms



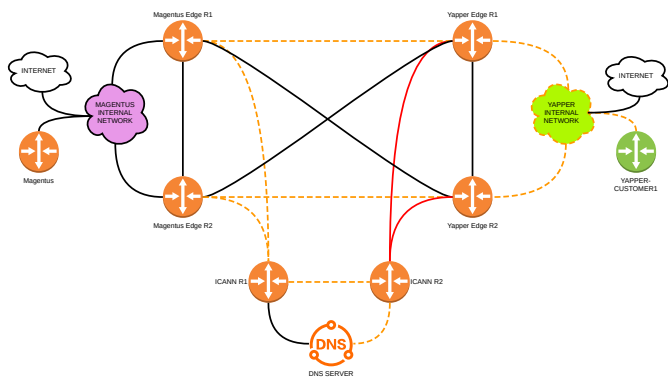
ICANN R2 közvetlen kapcsolat hiba

ICANN R2 közvetlen összekötése Yapper részéről megszakítva, kapcsolat Magentus-on keresztül



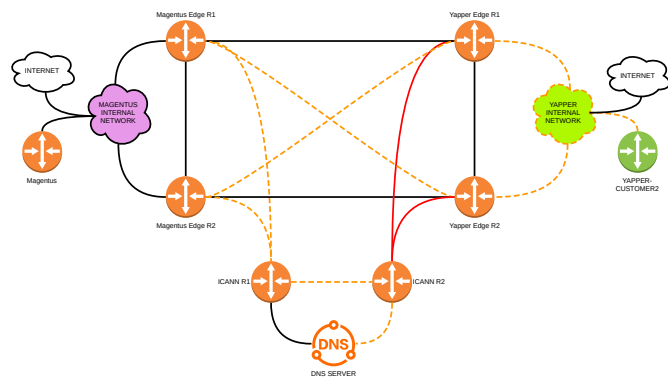
YAPPER-CUSTOMER1 ✓

Sikeres ping! 172.30.30.30 40ms 36ms 64ms



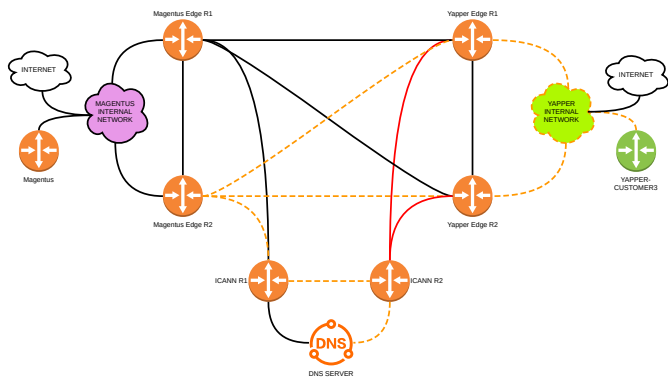
YAPPER-CUSTOMER2 ✓

Sikeres ping! 172.30.30.30 64ms 44ms 44ms



YAPPER-CUSTOMER3 ✓

Sikeres ping! 172.30.30.30 60ms 32ms 60ms



YAPPER-CUSTOMER4 ✓

Sikeres ping! 172.30.30.30 56ms 48ms 40ms

