PERTEMUAN 4

PERAKITAN MEDIA TRANSMISI

Copyright © March 2024

PEMBUATAN JARINGAN SEDERHANA

Terdapat beberapa alat yang digunakan untuk membangun sebuah jaringan komputer sederhana:

1. Laptop / Komputer / End Device lainnya
2. Media Transmisi
3. Perangkat Perantara Jaringan (Intermediary Device)

Copyright © March 2024

JARINGAN KOMPUTER SEDERHANA

Jaringan komputer sederhana terdiri atas dua atau lebih komputer, dimana setiap *station* atau komputer yang terdapat di dalam lingkungan jaringan tersebut bisa saling berbagi data (peer-to-peer), dengan atau tanpa perangkat perantara

Copyright © March 2024

PERAKITAN MEDIA TRANSMISI

(PERALATAN)

CRIMPING TOOL

- Memotong Kabel
- Melepas Pembungkus Kabel
- Memasang Konektor

Copyright © March 2024

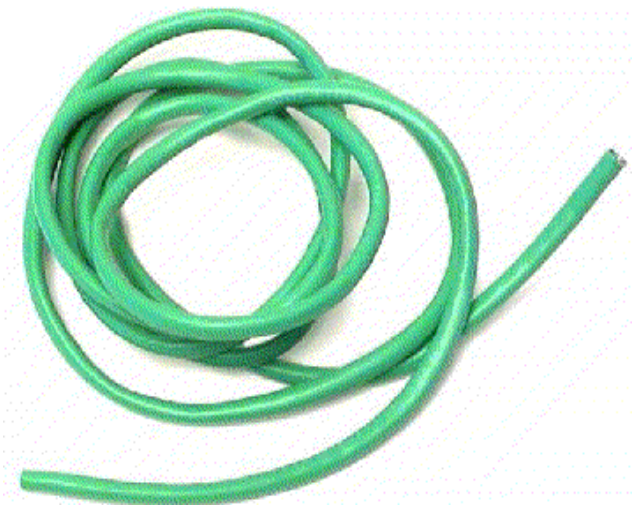
PERAKITAN MEDIA TRANSMISI
(PERALATAN)

LAN TESTER

Memeriksa koneksi antar kabel, apakah pin-pin yang terkoneksi telah sesuai dengan standar.

Copyright © March 2024

PERAKITAN MEDIA TRANSMISI
(PERALATAN)

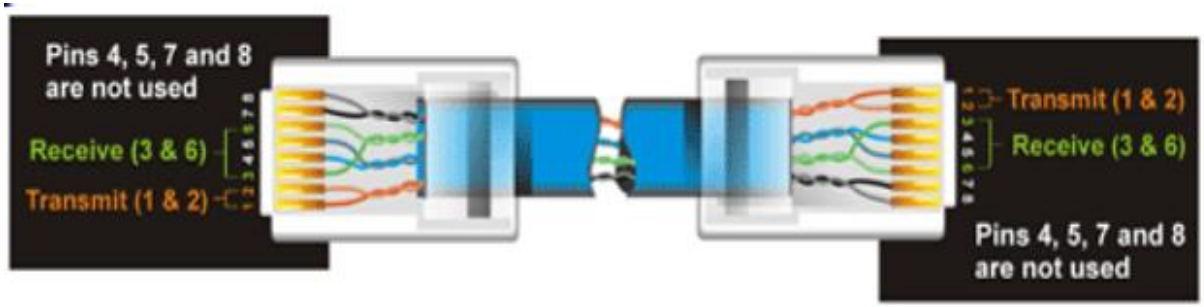


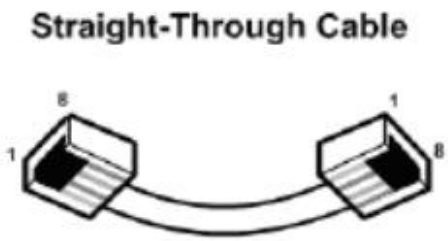
KABEL UTP

- Persiapkan kabel UTP
- Pastikan panjang kabel UTP sesuai dengan kebutuhan

Copyright © March 2024

Kabel Straight-Through



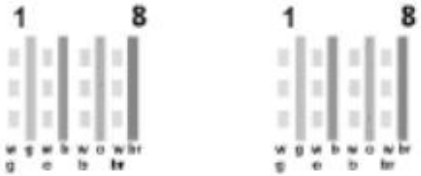


Pin number	Wire Color
Pin 1 ==>	Orange/White
Pin 2 ==>	Orange
Pin 3 ==>	Green/White
Pin 4 ==>	Blue
Pin 5 ==>	Blue/White
Pin 6 ==>	Green
Pin 7 ==>	Brown/White
Pin 8 ==>	Brown

Straight-Through

Wire		Becomes
1	→	1
2	→	2
3	→	3
6	→	6

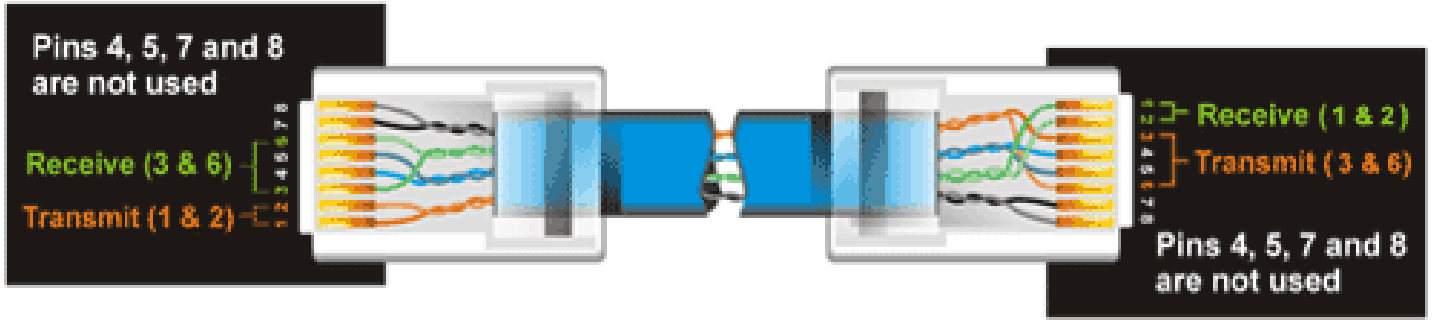
Pin number	Wire Color
Pin 1 ==>	Orange/White
Pin 2 ==>	Orange
Pin 3 ==>	Green/White
Pin 4 ==>	Blue
Pin 5 ==>	Blue/White
Pin 6 ==>	Green
Pin 7 ==>	Brown/White
Pin 8 ==>	Brown



Wires on Cable Ends Are in Same Order.

Copyright © March 2024

Kabel Cross-Over



Pin number	Wire Color
Pin 1 ==>	Orange/White
Pin 2 ==>	Orange
Pin 3 ==>	Green/White
Pin 4 ==>	Blue
Pin 5 ==>	Blue/White
Pin 6 ==>	Green
Pin 7 ==>	Brown/White
Pin 8 ==>	Brown

Crossed-Over

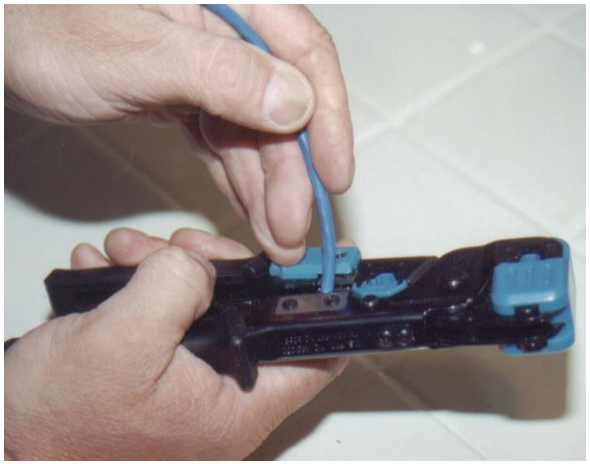
Wire	Becomes
1	3
2	6
3	1
6	2

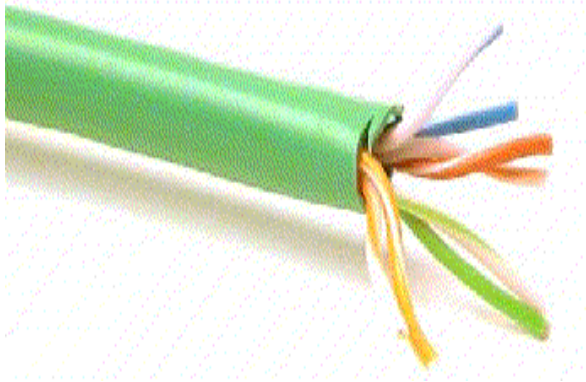
Pin number	Wire Color
Pin 1 ==>	Green/White
Pin 2 ==>	Green
Pin 3 ==>	Orange/White
Pin 4 ==>	Blue
Pin 5 ==>	Blue/White
Pin 6 ==>	Orange
Pin 7 ==>	Brown/White
Pin 8 ==>	Brown

Copyright © March 2024

PERAKITAN KABEL

1. Kupas kulit kabel sesuai dengan konektor RJ45
2. Pisahkan warna sesuai urutan warna pada standar kabel Straight-Through atau kabel Cross-Over





Copyright © March 2024

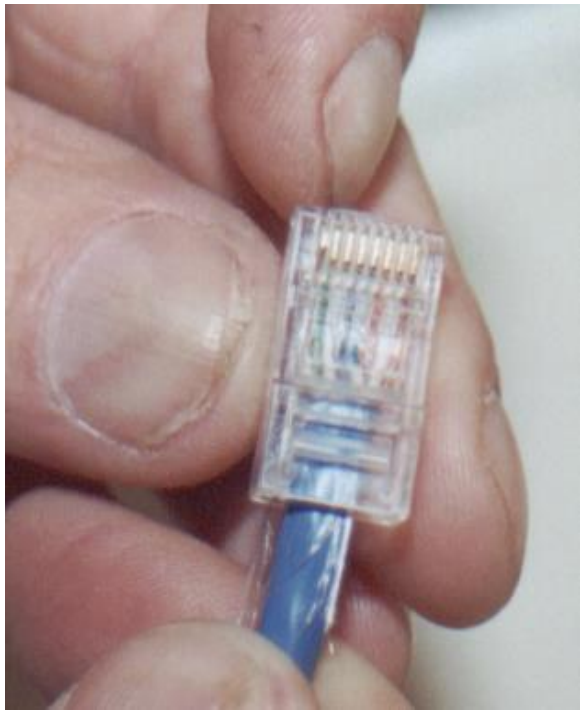
PERAKITAN KABEL (Lanjutan)

3. Susun urutan warna sesuai dengan kebutuhan
4. Pastikan urutan warna sesuai standar
5. Pastikan pula ujung kabel dipotong sama rata

Copyright © March 2024

PERAKITAN KABEL (Lanjutan)

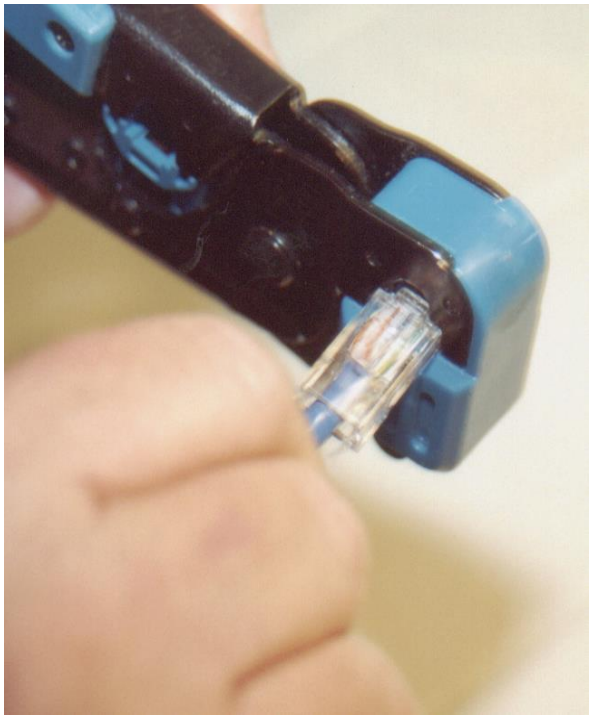
6. Jika urutan kabel telah sesuai dan dipotong sama rata, Masukkan kabel UTP tersebut kedalam konektor RJ45



Copyright © March 2024

PERAKITAN KABEL (Lanjutan)

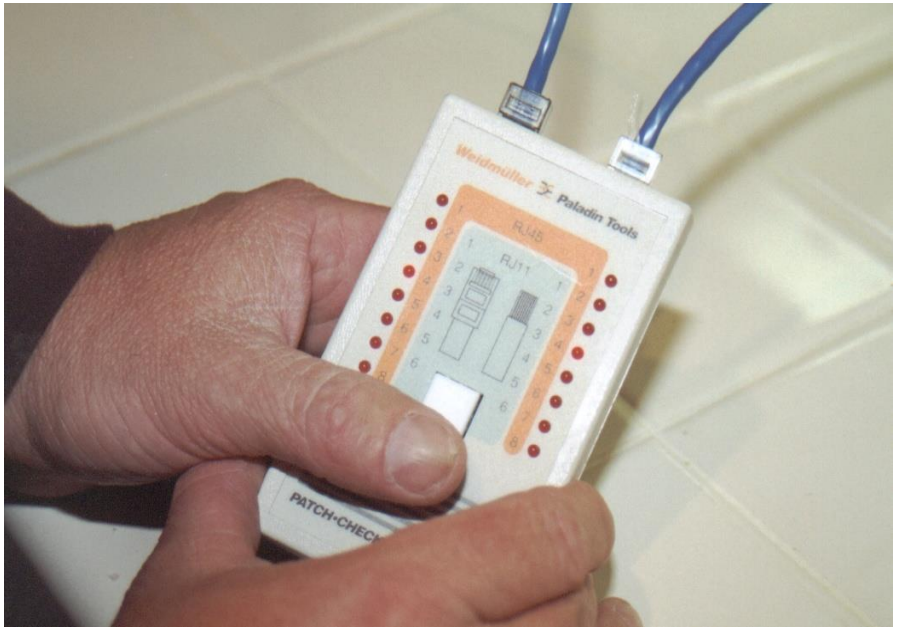
7. Rapatkan konektor menggunakan crimping tool



Copyright © March 2024

PERAKITAN KABEL (Lanjutan)

8. Uji konektivitas kabel UTP menggunakan LAN Tester



Copyright © March 2024

TUGAS KELOMPOK

1. Buatlah kabel UTP tipe Straight-Through
2. Buatlah kabel UTP tipe Cross-Over
3. Pastikan urutan kabel UTP tersebut sesuai dengan standar
4. Lakukan uji konektivitas kabel tersebut

Copyright © March 2024