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MikroTik Certified Traffic Control Engineer (MTCTCE)

Objectives: This course is a detailed look at traffic control techniques in Mikrotik RouterOS

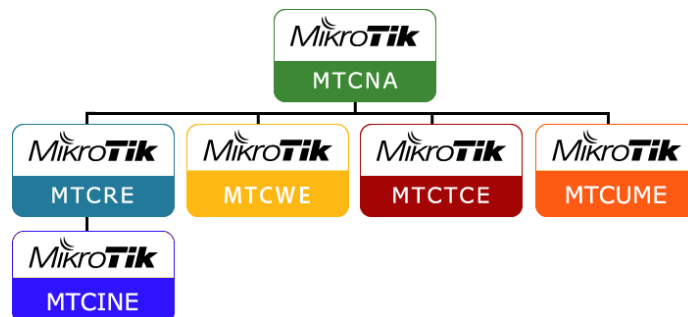
Target: Small ISPs, hotspot operators, network administrator.

Course prerequisites: Certification MTCNA (you can not take the exam if you don't have the certificate MTCNA), good knowledge of TCP/IP, notions of technical English.

Trainer: Alessandro Campanella – Fly Communications

Duration: 2 days - 8 hours per day

The course material is separated in modules, each of which is ended with a laboratory whose goal is to reinforce the material that has been demonstrated.



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Sede legale ed operativa: Via Giuntini n. 25 Int. 22 – 56023 Navacchio di Cascina (PI) - Italy

Registro Imprese di RE, P. IVA e C.F.: 01872100506 – Capitale Sociale: € 100.000,00

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Società soggetta ad attività di direzione e coordinamento da parte di Lagaria srl,

cap.soc. 118.000 i.v., CF/P.IVA/n.R.Imp.01785050509, sede legale Via Giuntini n.25, Navacchio di Cascina, Pisa.

Program:

Day 1

Module 1 Packet flow diagram	Why this diagram is necessary? Full overview of all things covered by diagram Simple examples how packet travels through the diagram (routing, bridging, connection to router etc.) + LAB More complex examples of diagram usage + LAB
Module 2 Firewall filter/nat/mangle	Connection tracking Filter + LAB <ul style="list-style-type: none">• chains (default/custom)• all rule "actions" covered• most common rule "conditions" covered NAT + LAB <ul style="list-style-type: none">• chains (default/custom)• all rule "actions" covered• most common rule "conditions" covered• NAT helpers Mangle + LAB <ul style="list-style-type: none">• chains (default/custom)• all rule "actions" covered• most common rule "conditions" covered Some complicated rule "conditions" covered ("advanced", "extra" tab) + LAB uPNP
Module 3 Quality of Service	HTB <ul style="list-style-type: none">• HTB general information• HTB implementation (queue tree)• HTB structure + LAB• HTB Dual Limitation + LAB• HTB priority + LAB Burst + LAB Queue types <ul style="list-style-type: none">• FIFO + LAB• SFQ + LAB• RED + LAB• PCQ + several LABs• queue size + LAB Simple queues + LAB Simple queue and queue tree interaction

Day 2

Module 4 DNS client/cache	Basic configuration + LAB Static DNS Entry + LAB
Module 5 DHCP client/relay/server	DHCP communication analysis DHCP-client identification/ configuration + LAB DHCP server configuration: + LAB <ul style="list-style-type: none">• DHCP networks• DHCP options (build-in and custom)• IP Pool• advanced DHCP DHCP relay configuration + LAB
Module 6 Web Proxy	Basic configuration Proxy rule lists <ul style="list-style-type: none">• Access list + LAB• Direct Access list + LAB• Cache list + LAB Regular expression + LAB
EXAM	