

**ΟΙΚΟΝΟΜΙΚΟ
ΠΑΝΕΠΙΣΤΗΜΙΟ
ΑΘΗΝΩΝ**



**ATHENS UNIVERSITY
OF ECONOMICS
AND BUSINESS**

**ΤΜΗΜΑ ΠΛΗΡΟΦΟΡΙΚΗΣ
ΜΕΤΑΠΤΥΧΙΑΚΟ ΔΙΠΛΩΜΑ
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ΔΙΠΛΩΜΑΤΙΚΗ ΕΡΓΑΣΙΑ

“Ανασχεδιασμός και βελτιστοποίηση του δικτύου δεδομένων του ΟΠΑ”

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**ATHENS UNIVERSITY
OF ECONOMICS
AND BUSINESS**

**DEPARTMENT OF INFORMATICS
MASTER of SCIENCE (MSc)
in INFORMATION SYSTEMS (IS)**

THESIS

“Athens University of Economics and Business Data Network Redesign and Optimization”

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Ευχαριστίες

Φτάνοντας στο τέλος της εκπόνησης της διπλωματικής μου εργασίας θα ήθελα να ευχαριστήσω θερμά τον επιβλέποντα καθηγητή κ. Ξυλωμένο για την καθοδήγησή του και όλο το προσωπικό του NOC, ιδιαιτέρως τους κ.κ. Αλεξανδρή και Κουσουρή, για την άψογη συνεργασία.

“Ανασχεδιασμός και βελτιστοποίηση του δικτύου δεδομένων του ΟΠΑ”

Περίληψη

Κατά τη διάρκεια των διαλέξεων του μαθήματος «Δίκτυα Επικοινωνιών και Υπολογιστών», διατυπώθηκε από τον κύριο Ξυλωμένο η ανάγκη ανασχεδιασμού του δικτύου δεδομένων του ΟΠΑ, η οποία πρόδηλα πήγαζε από την ανάγκη για βελτιστοποίηση του ίδιου δικτύου. Από εκεί και πέρα τα πράγματα πήραν μια φυσιολογική πορεία με τον κύριο Ξυλωμένο να διαμορφώνει και να μου αναθέτει το θέμα, κατόπιν δικής μου πρότασης.

Στην εργασία αυτή αποτυπώνεται αναλυτικά η παρούσα κατάσταση του δικτύου δεδομένων από την άποψη τόσο της λογικής όσο και της φυσικής τοπολογίας και αναπαριστώνται με τη βοήθεια του προγράμματος Microsoft Visio Professional 2013 οι συνδέσεις (λογικές και φυσικές) των δικτυακών συσκευών του δικτύου του Οικονομικού Πανεπιστημίου Αθηνών.

Ακολουθεί η πρόταση βελτιστοποίησης του δικτύου δεδομένων με την επιλεκτική ενεργοποίηση του IP routing στα layer 3 switches προκειμένου να αποφορτιστεί ο κεντρικός δρομολογητής Juniper από τα καθήκοντα του inter-vlan routing.

“Athens University of Economics and Business Data Network Redesign and Optimization”

Abstract

During the lectures regarding the course "Communication and Computer Networks" delivered by Mr. Xylomenos, the need for redesign of the Athens University of Economics and Business data network aroused, which obviously stemmed from the need to optimize the same network. From that moment on, things took a normal course with Mr. Xylomenos formulating and assigning the Thesis to me, after my proposal.

This paper includes a detailed description of the present state of the data network in terms of both logical and physical topology and the connections (both logical and physical) between network devices of the Athens University of Economics and Business data network are represented with the help of Microsoft Visio Professional 2013 software.

The proposal for optimization of the data network follows, by selectively activating the IP routing feature on layer 3 switches, in order to relieve the border router, made by Juniper, from the task of inter-vlan routing.

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ΕΙΣΑΓΩΓΗ

Το Κέντρο Διαχείρισης Δικτύων (ΚΕΔ) του Οικονομικού Πανεπιστημίου Αθηνών, έχει αναλάβει την εποπτεία και διαχείριση της λειτουργίας του δικτύου δεδομένων και φωνής (το οποίο εκτείνεται σε 9 κτήρια), την τυποποίηση και την τεκμηρίωση των διαδικασιών, τη συνεχή παρακολούθηση των συναφών αναγκών του Ιδρύματος και την εξυπηρέτηση των χρηστών του δικτύου δεδομένων και φωνής. Το ΚΕΔ αποτελεί μονάδα τεχνολογικής αιχμής με εξειδικευμένο προσωπικό, η οποία παρέχει παράλληλα διοικητικές υπηρεσίες βάσης, αλλά και σύγχρονες προηγμένες υπηρεσίες τηλεματικής.

Με πρωτοβουλία του ΚΕΔ, το δίκτυο δεδομένων του Οικονομικού Πανεπιστημίου Αθηνών έχει αναβαθμιστεί ακόμα περισσότερο. Η σύνδεση του Πανεπιστημίου με το δίκτυο του ΕΔΕΤ πραγματοποιείται μέσω γραμμής ταχύτητας 1Gbps. Επίσης, το βασικό δίκτυο κορμού του δικτύου στο οποίο συνδέονται και οι εξυπηρετητές των βασικών δικτυακών υπηρεσιών, καθώς επίσης και το σύστημα αποθήκευσης δεδομένων (Netapp filers) λειτουργεί σε τεχνολογία gigabit Ethernet.

Η πρόταση ανασχεδιασμού και βελτιστοποίησης του δικτύου δεδομένων αφορά κυρίως την χρήση της δυνατότητας των HP 8212zl switches για δρομολόγηση δεδομένων (layer 3 routing). Η αρχική σκέψη αφορούσε την ενεργοποίηση της δρομολόγησης σε όλα (ή τουλάχιστον σε ένα σε κάθε κτήριο) από τα προαναφερόμενα switches, αλλά εγκαταλείφθηκε λόγω της απαίτησης για εκτεταμένη ανακατανομή των διευθύνσεων IP σε όλο το εύρος του δικτύου και των στενών χρονικών περιθωρίων μέσα στα οποία έπρεπε να ολοκληρωθεί η παρούσα εργασία. Έτσι προκρίθηκε η λύση της ενεργοποίησης της δρομολόγησης σε ένα switch, αυτό του ισογείου της πτέρυγας Αντωνιάδου, προκειμένου να αποφορτιστεί από το έργο του inter-vlan routing ο κεντρικός δρομολογητής Juniper. Στο τέλος διατυπώνεται μια «επέκταση» της πρότασης, για την απόσυρση του δρομολογητή Juniper, ώστε να αναλάβει τον ρόλο του ένα layer 3 switch. Τα προαναφερθέντα συνοδεύονται και από τις κατάλληλες εντολές παραμετροποίησης.

ΚΕΦΑΛΑΙΟ 1

ΥΠΑΡΧΟΥΣΑ ΚΑΤΑΣΤΑΣΗ ΔΙΚΤΥΟΥ ΔΕΔΟΜΕΝΩΝ

1.1 Υπάρχουσα κατάσταση

1.1.1 Φυσική τοπολογία του Δικτύου

Το δίκτυο δεδομένων του Οικονομικού Πανεπιστημίου Αθηνών εκτείνεται σε εννέα κτήρια από το σύνολο των δέκα, στα οποία στεγάζονται υπηρεσίες του Πανεπιστημίου. Αναλυτικά τα κτήρια έχουν ως εξής:

- Κεντρικό κτήριο επί της Πατησίων 76 με δύο πτέρυγες (Δεριγνύ και Αντωνιάδου)
- Κτήριο στην οδό Κοδριγκτώνος 12
- Κτήριο μεταπτυχιακών σπουδών στην οδό Ευελπίδων 47 και Λευκάδος
- Κτήριο στην οδό Ύδρας 28
- Κτήριο στην οδό Ελπίδος
- Κτήριο στην οδό Πατησίων 95
- Κτήριο του ΕΛΚΕ στην οδό Κεφαλληνίας 46
- Κτήριο στην οδό Δεριγνύ 12
- Κτήριο στην οδό Πατησίων 80
- Κτήριο στην οδό Ευελπίδων 29

Το κτήριο της οδού Ευελπίδων 29 δεν είναι διασυνδεδεμένο με τα υπόλοιπα κτήρια αλλά έχει πρόσβαση στο διαδίκτυο μέσω μιας γραμμής ADSL.

Τα κτήρια των οδών Ελπίδος, Κεφαλληνίας και Πατησίων 95 διασυνδέονται με το κεντρικό κτήριο με ισάριθμα laser links. Το κτήριο της οδού Ύδρας συνδέεται μέσω laser link με το κτήριο της οδού Ευελπίδων 47 και Λευκάδος, ενώ το τελευταίο και τα υπόλοιπα τρία κτήρια διασυνδέονται με το κεντρικό με γραμμές οπτικών ινών.

Η πρόσβαση στο διαδίκτυο γίνεται μέσω του ΕΔΕΤ, κόμβος του οποίου υπάρχει στο κεντρικό κτήριο. Στο switch του ΕΔΕΤ υπάρχει συνδεδεμένος ένας ακόμη μεταγωγέας, ο οποίος χρησιμοποιείται για τις ανάγκες παροχής πρόσβασης στο διαδίκτυο του προγράμματος «ΔΙΟΔΟΣ». Αυτή η σύνδεση είναι και η μόνη που γίνεται με καλώδιο UTP καθώς όλες οι άλλες συνδέσεις είναι οπτικές.

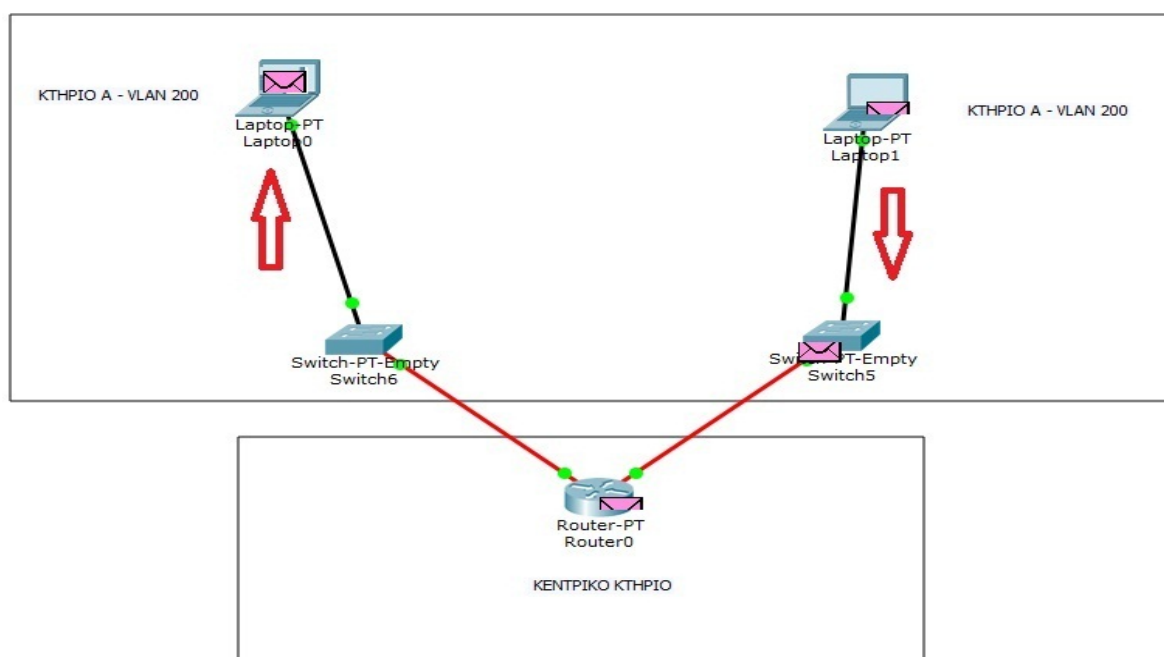
Όλες τελικά οι συνδέσεις καταλήγουν σε ένα HP 8212zl switch στον τρίτο όροφο της πτέρυγας Αντωνιάδου του κεντρικού κτηρίου και αυτό με τη σειρά του συνδέεται με ένα όμοιο μοντέλο στο ισόγειο της ίδιας πτέρυγας. Στο τελευταίο συνδέεται ο δρομολογητής (router), μοντέλο M5 της εταιρείας Juniper, αλλά και το switch του ΕΔΕΤ.

1.1.2 Λογική τοπολογία του Δικτύου

Το δίκτυο δεδομένων του Οικονομικού Πανεπιστημίου Αθηνών είναι μεταξύ όλων των διασυνδεδεμένων κτηρίων switched. Δρομολόγηση προς το public internet και inter-vlan routing γίνεται αποκλειστικά από τον δρομολογητή juniper του κεντρικού κτηρίου.

Η ροή των δεδομένων (data flow) από το κτήριο Α στο κτήριο Β πχ, θα πρέπει να περάσει από τον δρομολογητή του κεντρικού κτηρίου. Το ίδιο, πιο γλαφυρά, σημαίνει ότι και η ροή δεδομένων από ένα vlan σε ένα άλλο vlan, που βρίσκονται όμως μέσα στο ίδιο κτήριο, θα πρέπει να ακολουθήσει τη διαδρομή μέχρι τον δρομολογητή του κεντρικού κτηρίου και πίσω. Η εικόνα 1.1 δίνει μια σχηματική απεικόνιση των παραπάνω.

Εικόνα1.1
Σχηματική απεικόνιση ροής δεδομένων



1.2 Αποτύπωση υπάρχουσας κατάστασης

Για την αποτύπωση της υπάρχουσας φυσικής και λογικής τοπολογίας του δικτύου δεδομένων του Οικονομικού Πανεπιστημίου Αθηνών χρησιμοποιήθηκε το λογισμικό Microsoft Visio Professional 2013.

1.2.1 Φυσική τοπολογία του Δικτύου

Το διάγραμμα της φυσικής τοπολογίας του δικτύου (layer2 diagram) έχει ως σκοπό να αποτυπώσει τις φυσικές συσκευές που λειτουργούν στο επίπεδο 2 του μοντέλου αναφοράς OSI και τις φυσικές συνδέσεις μεταξύ τους (cable run).

Για την εκπόνηση του διαγράμματος επιπέδου 2 ακολουθήθηκαν οι παρακάτω συμβάσεις:

- Απεικονίζονται όλες οι ενεργές συσκευές δικτύου επιπέδου 2 (switch-routers[στον βαθμό που λειτουργούν στο layer 2]).
- Η απεικόνιση για λόγους πληρότητας έγινε με stencils των εταιρειών κατασκευής (HP-CISCO-JUNIPER).
- Τα κτήρια και η τοποθέτηση των συσκευών στους ορόφους τους είναι κατά το δυνατόν ακριβή.
- Με κόκκινο σύνδεσμο απεικονίζονται οι οπτικές συνδέσεις και με μπλε οι συνδέσεις χαλκού (UTP).
- Πάνω από κάθε φυσική σύνδεση αναγράφεται η θύρα σύνδεσης (switch port). Αρκετές πληροφορίες για γειτονικές συσκευές αλλά και για θύρες σύνδεσης εξήχθησαν με την χρήση εντολών του πρωτοκόλλου Link Layer Discovery Protocol (LLDP):
 - sh lldp info local-device
 - sh lldp info remote-device
- Στο μενού “shape data” της κάθε συσκευής καταχωρήθηκε πληθώρα τεχνικών στοιχείων.
 - Serial number
 - Location
 - Building

- Product number
- Manufacturer
- Part number
- IP address
- Subnet mask
- Number of ports
- Community string
- Number of power inputs
- System name
- Operating system
- Total memory
- Product description
- Floor

Τα περισσότερα τεχνικά χαρακτηριστικά εξήχθησαν με την χρήση εντολών από Command Line Interface (CLI) περιβάλλον:

- sh system information
- sh system fans
- sh system power-supply
- sh modules details
- sh mac-address

Στο κτήριο μεταπτυχιακών σπουδών στην οδό Ευελπίδων 47 και Λευκάδος μεταξύ των switches του πρώτου και έβδομου ορόφου έχει δημιουργηθεί trunk (etherchannel) configuration με την χρήση του πρωτοκόλλου Link Aggregation Control Protocol (LACP)

που περιλαμβάνει δύο switch ports από κάθε switch προκειμένου να αυξηθεί το διαθέσιμο bandwidth στην μεταξύ τους επικοινωνία.

1.2.2 Λογική τοπολογία του Δικτύου

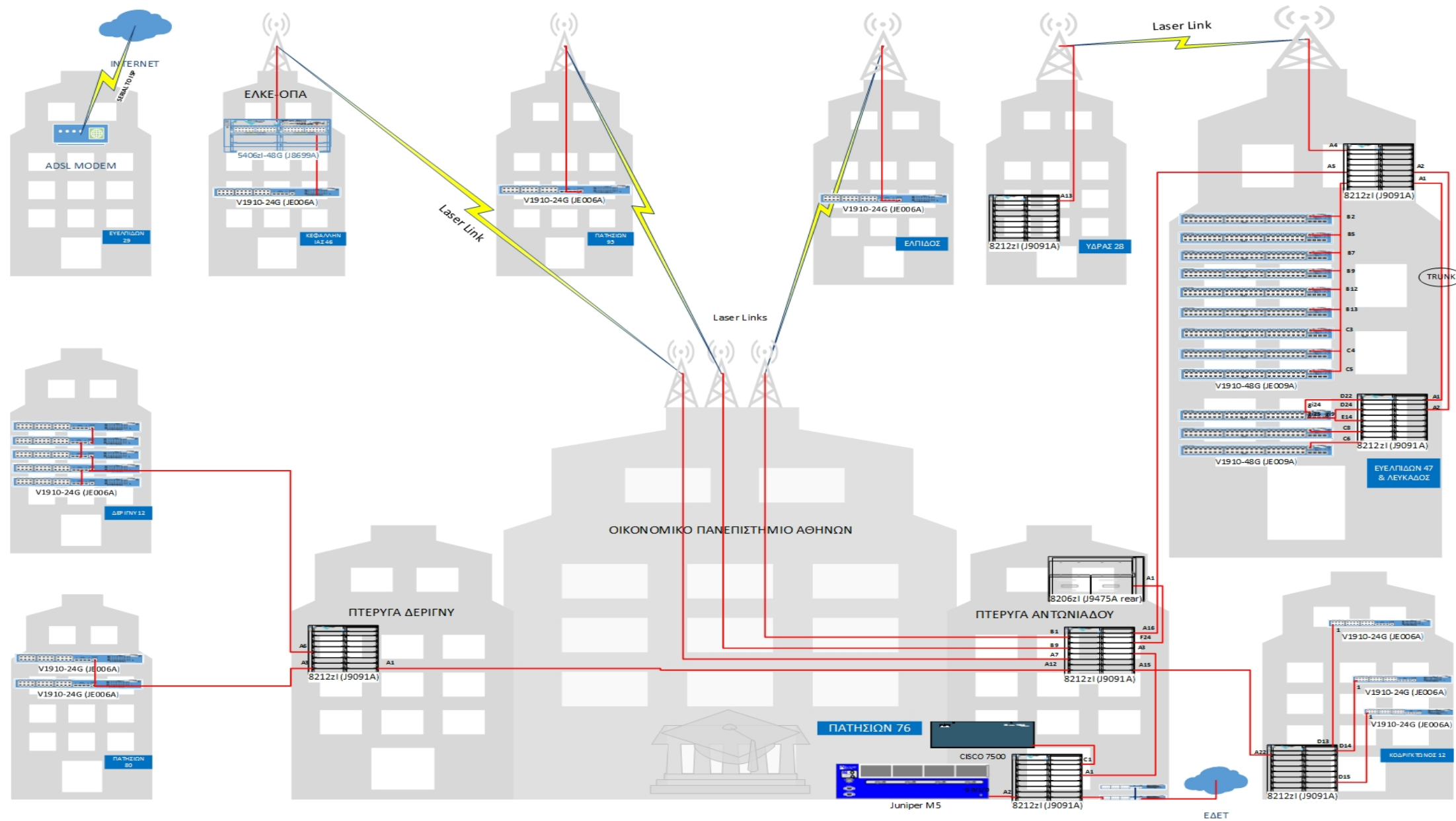
Το διάγραμμα της λογικής τοπολογίας του δικτύου (layer 3 diagram) έχει ως σκοπό να αποτυπώσει τις φυσικές συσκευές που λειτουργούν στο επίπεδο 3 του μοντέλου αναφοράς OSI και τις λογικές (virtual lans) συνδέσεις μεταξύ τους (data flow). Σε αυτό το σημείο θα πρέπει να διευκρινιστεί ότι, αν και τα vlan ως υλοποίηση και πληροφορία ανήκουν κατά κανόνα στο layer 2 του μοντέλου OSI, εντούτοις εμφανίζονται στο διάγραμμα επιπέδου 3 για λόγους ευχρηστίας και καλής πρακτικής, αφού συνήθως τα vlan συνοδεύονται από ένα ξεχωριστό υποδίκτυο το καθένα.

Για την εκπόνηση του διαγράμματος επιπέδου 3 ακολουθήθηκαν οι παρακάτω συμβάσεις:

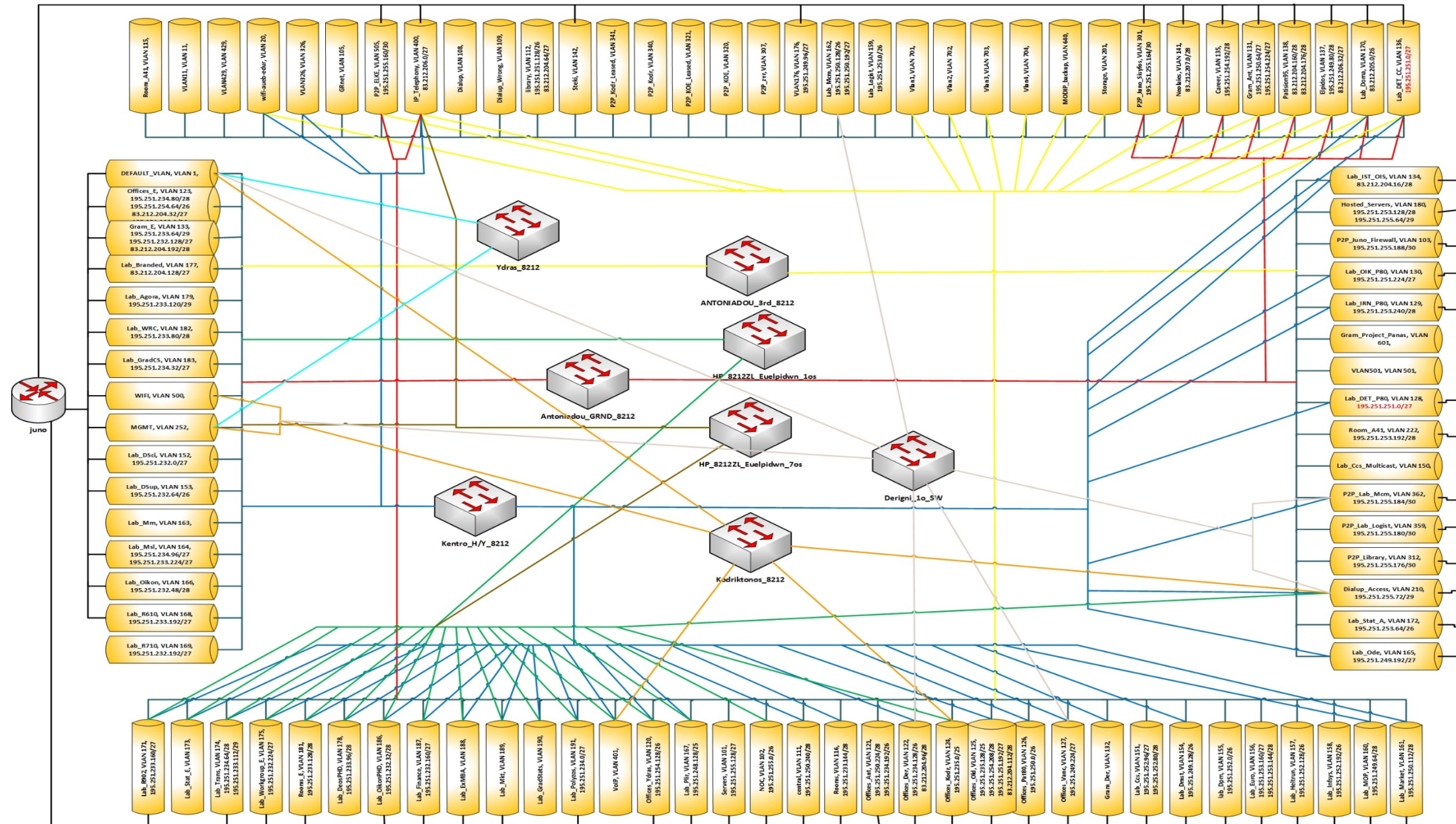
- Απεικονίζονται όλες οι ενεργές συσκευές δικτύου επιπέδου 3 (routers – switches [wannabe layer 3 devices])
- Η απεικόνιση έγινε με τα ενσωματωμένα stencils του Microsoft Visio 2013 δεδομένου ότι πρόκειται για λογικό διάγραμμα, επομένως έχει μικρή σημασία η πραγματική εμφάνιση του hardware.
- Σε κάθε συσκευή αποδόθηκε το system name όπως αυτό φαίνεται στο configuration.
- Απεικονίζονται σε κυλινδρική μορφή **όλα** τα vlans με τα εξής (με σειρά εμφάνισης) στοιχεία:
 - Vlan name
 - Vlan ID
 - Subnet(s) ID (slash notation)
 - Η κάθε συσκευή συνδέεται με διαφορετικού χρώματος σύνδεση με τα vlans, στα οποία ανήκει μια τουλάχιστον θύρα της.

Στις εικόνες 1.2 και 1.3 φαίνονται τα layer 2 και layer 3 διαγράμματα αντίστοιχα.

Εικόνα 1. 2
Διάγραμμα επιπέδου 2



Εικόνα 1.3
Διάγραμμα επιπέδου 3



ΚΕΦΑΛΑΙΟ 2

ΠΡΟΤΑΣΗ ΑΝΑΣΧΕΔΙΑΣΜΟΥ – ΒΕΛΤΙΣΤΟΠΟΙΗΣΗΣ

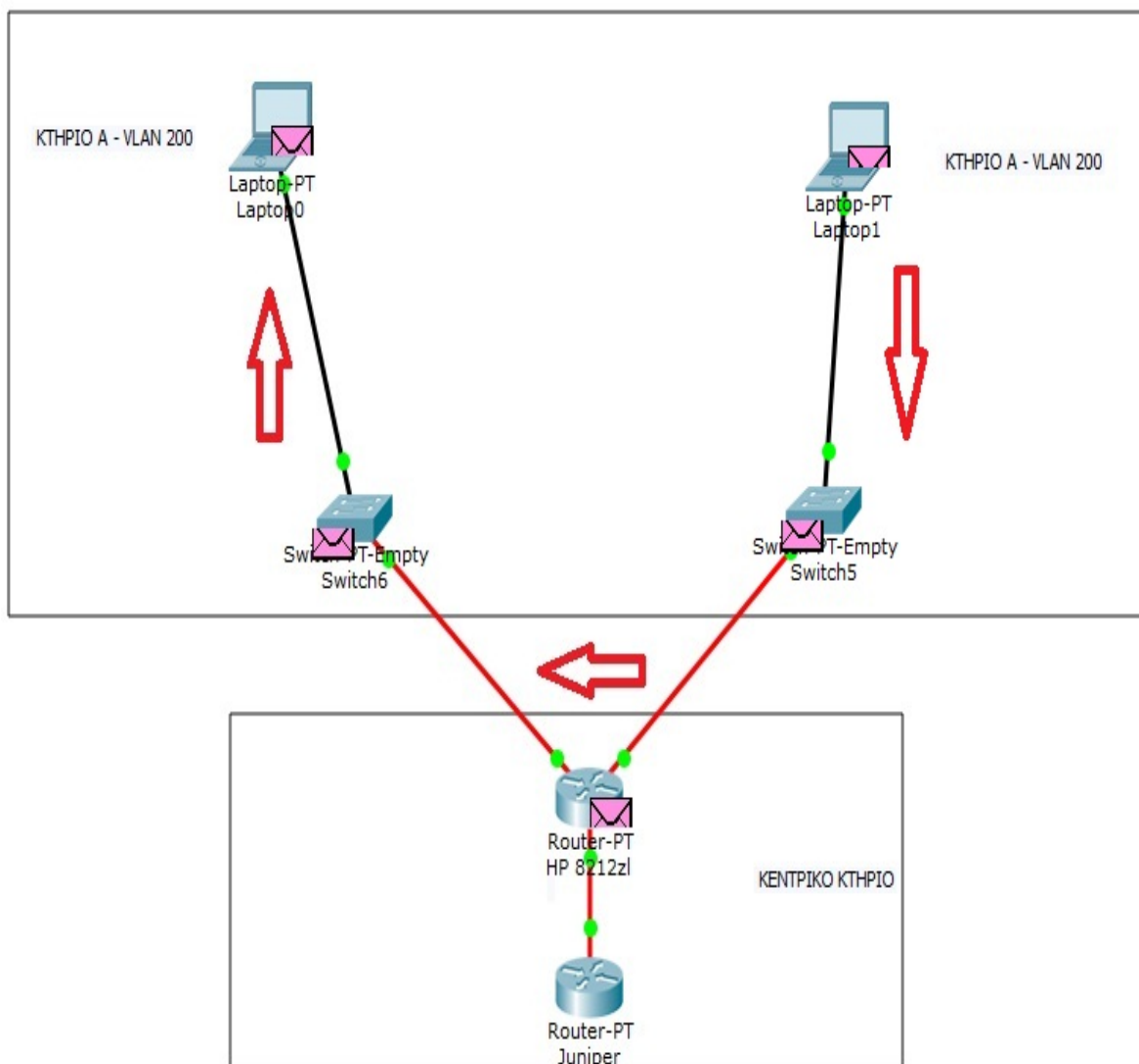
2.1 Περιεχόμενο της πρότασης

Όπως προαναφέρθηκε το δίκτυο δεδομένων του Οικονομικού Πανεπιστημίου Αθηνών είναι switched μεταξύ όλων των διασυνδεδεμένων κτηρίων. Δρομολόγηση προς το public internet και inter-vlan routing γίνεται αποκλειστικά από τον δρομολογητή Juniper του κεντρικού κτηρίου. Αυτό έχει ως συνέπεια τη συνολική επιβάρυνση του δρομολογητή Juniper με κίνηση δεδομένων που θα μπορούσε να γίνει από το HP 8212zl switch του ισογείου της πτέρυγας Αντωνιάδου, το οποίο αποτελεί την τελική κατάληξη όλου του δικτύου δεδομένων πριν τον κόμβο του ΕΔΕΤ. Έτσι με την κατάλληλη παραμετροποίηση το συγκεκριμένο switch θα μπορεί να δρομολογεί κίνηση από το ένα vlan στο άλλο και με την εισαγωγή ενός default route θα προωθεί ό,τι δεν «γνωρίζει» (δηλαδή για ό,τι δεν υπάρχει καταχώρηση στον πίνακα δρομολόγησης του) στον Juniper για περαιτέρω δρομολόγηση.

2.2 Σημεία βελτιστοποίησης

Κατόπιν των ανωτέρω αβίαστα προκύπτει, ότι το δίκτυο δεδομένων θα παρουσιάσει βελτίωση στην απόδοσή του λόγω ελαχιστοποίησης και διαμοιρασμού του φόρτου της δρομολόγησης, η οποία πραγματοποιείται με recursive lookups στον πίνακα δρομολόγησης και μπορεί πολλές φορές να είναι CPU και memory intensive. Εξάλλου η διέλευση των broadcast μηνυμάτων στο δίκτυο θα περιορίζεται πλέον από το switch (πχ ARP broadcasts) και δεν θα επιβαρύνει τον juniper. Η εικόνα 2.1 δίνει μια σχηματική αναπαράσταση των παραπάνω.

Εικόνα 2.1
Σχηματική απεικόνιση βελτιστοποιημένης ροής δεδομένων



2.3 Περαιτέρω ανασχεδιασμός και βελτιστοποίηση

Κατόπιν συζητήσεων με το προσωπικό του NOC παρουσία και του επιβλέποντα καθηγητή κ. Ξυλωμένου διατυπώθηκε και η ιδέα της ολικής απομάκρυνσης του κεντρικού δρομολογητή Juniper, λόγω παλαιότητας και υψηλού κόστους συντήρησης, και της αντικατάστασής του από το HP 8212zl switch του ισογείου της πτέρυγας Αντωνιάδου. Αυτή η κίνηση θα επέτρεπε τη δρομολόγηση των δεδομένων προς το δίκτυο του ΕΔΕΤ από το προαναφερόμενο switch.

Το άκρο του δικτύου του ΟΠΑ, σε επίπεδο δρομολόγησης, συνεργάζεται με το ΕΔΕΤ με τη χρήση του πρωτοκόλλου BGP (Border Gateway Protocol). Είναι δυνατή η παραμετροποίηση του switch με το πρωτόκολλο BGP, αλλά σε αυτή την περίπτωση θα πρέπει τον φόρτο του inter-vlan routing να τον αναλάβει το HP 8212zl switch του τρίτου ορόφου της πτέρυγας Αντωνιάδου δεδομένου ότι όλη η παραμετροποίηση και όλη η κίνηση του Juniper (access lists, BGP routing κλπ), θα περάσει πλέον στο HP 8212zl switch του ισογείου της πτέρυγας Αντωνιάδου.

2.4 Configuration

Το απαραίτητο configuration για τα διαλαμβανόμενα στις παραγράφους 2.2 και 2.4 παρατίθεται παρακάτω:

- ProCurve# config
- ProCurve(config)# ip routing
- ProCurve(config)# ip route 0.0.0.0/0 <juniper's ge-0/1/0 ip address>
- ProCurve(config)# dhcp-relay
- ProCurve(config)# vlan <vlan id>
- ProCurve(vlan-id)# ip address <ip-address/mask-length>
- ProCurve(vlan-id)# ip proxy-arp
- ProCurve(vlan-id)# ip helper-address 255.255.255.255
- ProCurve(vlan-id)# exit
- ProCurve(config)# interface loopback 1
- ProCurve(eth-lo1)# ip address <ip address>
- ProCurve(eth-lo1)# exit
- ProCurve(bgp)# router bgp 8611
- ProCurve(bgp)# enable
- ProCurve(bgp)# no auto-summary
- ProCurve(bgp)# no synchronization
- ProCurve(bgp)# no default-originate
- ProCurve(bgp)# soft-reconfiguration inbound
- ProCurve(bgp)# bgp router-id <interface's loopback 1 ip address>
- ProCurve(bgp)# update-source loopback 1

Η κάθε εντολή
πρέπει να εκτελεστεί
ξεχωριστά για κάθε
vlan

- ProCurve(bgp)# bgp log-neighbor-changes
- ProCurve(bgp)# neighbor 195.251.24.5 remote-as 5408
- ProCurve(bgp)# network 195.251.232.0 255.255.252.0
- ProCurve(bgp)# network 195.251.248.0 255.255.248.0
- ProCurve(bgp)# network 83.212.204.0 255.255.252.0
- ProCurve(bgp)# exit
- ProCurve(config)# ip route 195.251.232.0 255.255.252.0 null 0
- ProCurve(config)# ip route 195.251.248.0 255.255.248.0 null 0
- ProCurve(config)# ip route 83.212.204.0 255.255.252.0 null 0
- ProCurve(config)# write memory

ΣΥΜΠΕΡΑΣΜΑΤΑ - ΕΠΙΛΟΓΟΣ

Κατά τη διάρκεια της μελέτης για την εκπόνηση της παρούσας εργασίας προέκυψαν κάποια χρήσιμα συμπεράσματα και παρατηρήσεις. Αναλυτικά:

- Από τη μελέτη του αποτελέσματος, που εξήχθη με τη χρήση της εντολής “ sh lldp info remote-device”, προέκυψε ότι σε τρεις πόρτες του HP_8212ZL_Euelpidwn_1os (D22,D24,E14) είναι συνδεδεμένο το switch με mac-address 24:b6:57:08:e0:ff ισάριθμες φορές από τρεις διαφορετικές δικές του πόρτες (gi24,gi9,gi25). Περαιτέρω διερεύνηση έδειξε ότι σύμφωνα με το configuration του HP_8212ZL_Euelpidwn_1os οι τρεις αυτές πόρτες (D22,D24,E14) ανήκουν σε διαφορετικά vlans, οπότε από μια άποψη, θα μπορούσε να δικαιολογηθεί αυτή η συνδεσμολογία.
- Το επόμενο βήμα βελτιστοποίησης του δικτύου θα μπορούσε - και πρέπει να είναι - η ενεργοποίηση του IP routing σε όλα τα layer 3 switches (ένα ανά κτήριο). Αυτό θα προσφέρει περαιτέρω αποσυμφόρηση του δικτύου από broadcast μηνύματα, τα οποία θα περιορίζονται πλέον στο εκάστοτε broadcast domain, που θα ορίζεται από κάθε layer 3 routing device και ανα vlan. Βασική βεβαίως προϋπόθεση είναι ο εκ βάθρων ανασχεδιασμός της IP διευθυνσιοδότησης, ανά vlan και ανά κτήριο.
- Με την υλοποίηση της ενεργοποίησης του IP routing σε όλα τα layer 3 switches θα μπορούσε να γίνει και ο κατάλληλος σχεδιασμός, ώστε η δρομολόγηση να γίνεται πλέον όχι στατικά αλλά με τη χρήση ενός δυναμικού πρωτοκόλλου δρομολόγησης, όπως το OSPF.

Λόγω έλλειψης διαθέσιμου υλικού και simulator/emulator λογισμικού για δοκιμές, οι εντολές παραμετροποίησης δεν κατέστη δυνατόν να ελεγχθούν ως προς την ορθότητά τους. Ωστόσο ο γράφων θα ήταν παραπάνω από διαθέσιμος εάν καλούνταν να συνδράμει στην πρακτική εφαρμογή αυτής της εργασίας ή και εάν ακόμη ενημερωνόταν για την έκβαση αυτής.

ΠΑΡΑΡΤΗΜΑ Α

CONFIGURATION ΒΑΣΙΚΩΝ ΔΙΚΤΥΑΚΩΝ ΣΥΣΚΕΥΩΝ

; J9091A Configuration Editor; Created on release #K.15.02.0005

hostname "Antoniadou_GRND_8212"

console inactivity-timer 30

module 1 type J9537A

module 2 type J9536A

module 3 type J9534A

module 4 type J9534A

module 5 type J9534A

module 6 type J9534A

module 7 type J9534A

interface A1

name "Connection_to_3rd"

exit

interface A2

name "Connection_to_Juniper"

exit

interface C1

name "Connection_to_7500"

exit

interface C7

poe-value 19

exit

interface C9

name "Connection_to_Procurve_stack"

exit

interface C11

speed-duplex 100-half

exit

interface C12

speed-duplex 100-full

exit

interface D9

speed-duplex 10-half

exit

ip default-gateway 10.10.20.1

vlan 1

name "DEFAULT_VLAN"

untagged A1-A24,B6-B14,B21-B22,C1-C2,C23,D10,D12,D14-D17,D19,D21-D24,E1-E24,F1-F24,G1-G24

no untagged B1-B5,B15-B20,C3-C22,C24,D1-D9,D11,D13,D18,D20

no ip address

exit

vlan 123

```
    name "Offices_E"
    tagged A1-A2
    no ip address
    exit
vlan 133
    name "Gram_E"
    tagged A1-A2
    no ip address
    exit
vlan 177
    name "Lab_Branded"
    tagged A1-A2
    no ip address
    exit
vlan 179
    name "Lab_Agora"
    tagged A1-A2
    no ip address
    exit
vlan 182
    name "Lab_WRC"
    tagged A1-A2
    no ip address
    exit
vlan 183
    name "Lab_GradCS"
    tagged A1-A2
    no ip address
    exit
vlan 500
    name "WIFI"
    tagged A1-A2,B4,C4,C6-C8,C17,C19-C22,C24,D3,D20
    no ip address
    exit
vlan 252
    name "MGMT"
    untagged B4,C5-C8,C17,C19-C22,C24,D3,D20
    ip address 10.10.20.105 255.255.255.0
    tagged A1-A2,B19-B20,C1
    exit
vlan 152
    name "Lab_DSci"
    tagged A1-A2
    no ip address
    exit
vlan 153
    name "Lab_DSup"
    tagged A1-A2
    no ip address
```

```
    exit
vlan 163
    name "Lab_Mm"
    tagged A1-A2
    no ip address
    exit
vlan 164
    name "Lab_Msl"
    tagged A1-A2
    no ip address
    exit
vlan 166
    name "Lab_Oikon"
    tagged A1-A2
    no ip address
    exit
vlan 168
    name "Lab_R610"
    tagged A1-A2
    no ip address
    exit
vlan 169
    name "Lab_R710"
    tagged A1-A2
    no ip address
    exit
vlan 171
    name "Lab_R902"
    tagged A1-A2
    no ip address
    exit
vlan 173
    name "Lab_Stat_E"
    tagged A1-A2
    no ip address
    exit
vlan 174
    name "Lab_Trans"
    tagged A1-A2
    no ip address
    exit
vlan 175
    name "Lab_Workgroup_E"
    tagged A1-A2
    no ip address
    exit
vlan 181
    name "Rooms_E"
    tagged A1-A2
```

```
no ip address
exit
vlan 178
name "Lab_DeosPHD"
tagged A1-A2
no ip address
exit
vlan 186
name "Lab_OikonPHD"
tagged A1-A2
no ip address
exit
vlan 187
name "Lab_Finance"
tagged A1-A2
no ip address
exit
vlan 188
name "Lab_ExMBA"
tagged A1-A2
no ip address
exit
vlan 189
name "Lab_Mkt"
tagged A1-A2
no ip address
exit
vlan 190
name "Lab_GradStats"
tagged A1-A2
no ip address
exit
vlan 191
name "Lab_Polyzos"
tagged A1-A2
no ip address
exit
vlan 401
name "VoIP"
untagged B19-B20
qos priority 6
tagged A1-A2
no ip address
exit
vlan 120
name "Offices_Ydras"
tagged A1-A2
no ip address
exit
```

```
vlan 167
  name "Lab_Plir"
  tagged A1-A2,C1
  no ip address
  exit
vlan 101
  name "Servers"
  tagged A1-A2,C1
  no ip address
  exit
vlan 102
  name "NOC"
  tagged A1-A2,C1
  no ip address
  exit
vlan 111
  name "central"
  tagged A1-A2,C1
  no ip address
  exit
vlan 116
  name "Rooms"
  untagged D2,D9,D13,D18
  tagged A1-A2,C1
  no ip address
  exit
vlan 121
  name "Offices_Ant"
  untagged C4,C16
  tagged A1-A2,C1
  no ip address
  exit
vlan 122
  name "Offices_Der"
  tagged A1-A2,C1
  no ip address
  exit
vlan 124
  name "Offices_Kodr"
  tagged A1-A2
  no ip address
  exit
vlan 125
  name "Offices_Old"
  tagged A1-A2,C1
  no ip address
  exit
vlan 126
  name "Offices_Pat80"
```

```
    tagged A1-A2,C1
    no ip address
    exit
vlan 127
    name "Offices_Vanc"
    tagged A1-A2,C1
    no ip address
    exit
vlan 132
    name "Gram_Der"
    untagged C9
    tagged A1-A2,C1
    no ip address
    exit
vlan 151
    name "Lab_Ccs"
    tagged A1-A2,C1
    no ip address
    exit
vlan 154
    name "Lab_Dmst"
    untagged C11
    tagged A1-A2,C1
    no ip address
    exit
vlan 155
    name "lab_Dpm"
    tagged A1-A2,C1
    no ip address
    exit
vlan 156
    name "Lab_Euro"
    tagged A1-A2,C1
    no ip address
    exit
vlan 157
    name "Lab_Heltrun"
    tagged A1-A2,C1
    no ip address
    exit
vlan 158
    name "Lab_Infsys"
    tagged A1-A2,C1
    no ip address
    exit
vlan 160
    name "Lab_MOP"
    tagged A1-A2,C1
    no ip address
```

```
    exit
vlan 161
    name "Lab_Market"
    tagged A1-A2,C1
    no ip address
    exit
vlan 165
    name "Lab_Ode"
    tagged A1-A2,C1
    no ip address
    exit
vlan 172
    name "Lab_Stat_A"
    untagged C3
    tagged A1-A2,C1
    no ip address
    exit
vlan 210
    name "Dialup_Access"
    untagged C18
    tagged A1-A2,B4,C1,C6-C8,C17,C19-C22,C24,D3,D20
    no ip address
    exit
vlan 312
    name "P2P_Library"
    tagged A1-A2,C1
    no ip address
    exit
vlan 359
    name "P2P_Lab_Logist"
    tagged A1-A2,C1
    no ip address
    exit
vlan 362
    name "P2P_Lab_Mcm"
    tagged A1-A2,C1
    no ip address
    exit
vlan 150
    name "Lab_Ccs_Multicast"
    tagged A1-A2,C1
    no ip address
    exit
vlan 222
    name "Room_A41"
    untagged B15
    tagged A1-A2,C1
    no ip address
    exit
```

```
vlan 128
  name "Lab_DET_P80"
  tagged A1-A2,C1
  no ip address
  exit
vlan 501
  name "VLAN501"
  tagged A1-A2
  no ip address
  exit
vlan 601
  name "Gram_Project_Panas"
  untagged B1-B3,B5,C15
  tagged A1-A2
  no ip address
  exit
vlan 129
  name "Lab_IRN_P80"
  tagged A1-A2
  no ip address
  exit
vlan 130
  name "Lab_OIK_P80"
  tagged A1-A2
  no ip address
  exit
vlan 103
  name "P2P_Juno_Firewall"
  tagged A1-A2
  no ip address
  exit
vlan 180
  name "Hosted_Servers"
  tagged A1-A2,C1
  no ip address
  exit
vlan 134
  name "Lab_IST_OIS"
  tagged A1-A2
  no ip address
  exit
vlan 136
  name "Lab_DET_CC"
  tagged A1-A2
  no ip address
  exit
vlan 170
  name "Lab_Doma"
  tagged A1-A2,C1
```

```
no ip address
exit
vlan 137
name "Elpidos"
tagged A1-A2
no ip address
exit
vlan 138
name "Patisation95"
tagged A1-A2
no ip address
exit
vlan 131
name "Gram_Ant"
tagged A2,C1
no ip address
exit
vlan 135
name "Career"
untagged C12-C14,D4-D8,D11
tagged A2,C1
no ip address
exit
vlan 141
name "Neolaies"
untagged C10,D1
tagged A1-A2,C1
no ip address
exit
vlan 301
name "P2P_Juno_Sisyfos"
tagged A2,C1
no ip address
exit
vlan 176
name "VLAN176"
tagged A2
no ip address
exit
vlan 105
name "GRnet"
no ip address
exit
vlan 108
name "Dialup"
no ip address
exit
vlan 109
name "Dialup_Wrong"
```

```
no ip address
exit
vlan 112
name "library"
no ip address
exit
vlan 142
name "Steki"
no ip address
exit
vlan 159
name "Lab_Logist"
no ip address
exit
vlan 162
name "Lab_Mcm"
no ip address
exit
vlan 201
name "Storage"
no ip address
exit
vlan 307
name "P2P_zvr"
no ip address
exit
vlan 320
name "P2P_KOE"
no ip address
exit
vlan 321
name "P2P_KOE_Leased"
no ip address
exit
vlan 340
name "P2P_Kodr"
no ip address
exit
vlan 341
name "P2P_Kodr_Leased"
no ip address
exit
vlan 701
name "Vlan1"
no ip address
exit
vlan 702
name "Vlan2"
no ip address
```

```

    exit
vlan 703
    name "Vlan3"
    no ip address
    exit
vlan 704
    name "Vlan4"
    no ip address
    exit
vlan 400
    name "IP_Telephony"
    untagged B16-B18
    tagged A1-A2
    no ip address
    exit
vlan 505
    name "P2P_ELKE"
    tagged A1-A2
    no ip address
    exit
power-over-ethernet pre-std-detect
no telnet-server
no web-management
web-management ssl
spanning-tree
spanning-tree legacy-path-cost
spanning-tree force-version stp-compatible
no autorun
no dhcp config-file-update
no dhcp image-file-update

```



```

version 7.1R2.2;
groups {
    filters-no-ms {
        firewall {
            family inet {
                filter <*> {
                    term no-ms-ports {
                        from {
                            destination-port [ 135-139 445 593 1433 1434 42 ];
                        }
                        then {
                            reject;
                        }
                    }
                }
            }
        }
    }
}

```

```

    }
}
filters-default-accept {
    firewall {
        family inet {
            filter <*> {
                term everything-ok {
                    then accept;
                }
            }
        }
    }
}
filters-top;
}
system {
    host-name juno;
    time-zone Europe/Athens;
    ports {
        console type vt100;
    }
    root-authentication {
        encrypted-password "$1$0TEfNjsQ$qu8beDe9igaEvz4AKUJO..";
    }
    login {
        class view-only {
            permissions [ view view-configuration ];
        }
        user admin {
            full-name "Administration Account";
            uid 200;
            class superuser;
            authentication {
                encrypted-password "$1$zLyQMeLB$IITNynDzi8rpqbOCz7Fd/0";
            }
        }
        user kousou {
            full-name "Constantinos Kousouris";
            uid 2002;
            class superuser;
            authentication {
                encrypted-password "$1$vw6Jl.Ab$EY6l61.7gJ0p8f1UCbjwL.";
            }
        }
    }
}
services {
    telnet;
}
syslog {

```

```

user * {
    any emergency;
}
file messages {
    any info;
    authorization info;
}
}
archival {
    configuration {
        transfer-on-commit;
        archive-sites {
            "ftp://kousou@195.251.255.37://filer/DATA/Configs/Juniper" password
"$9$n3m5/tO1IcyK81IYgaZjiBIR";
        }
    }
}
ntp {
    boot-server 194.177.210.54;
    server 194.177.210.54 prefer;
}
}
interfaces {
    ge-0/0/0 {
        unit 0 {
            family inet {
                filter {
                    input from-internet;
                    output to-internet;
                }
                address 195.251.24.6/30;
            }
        }
    }
    ge-0/1/0 {
        vlan-tagging;
        unit 1 {
            disable;
            description Servers;
            vlan-id 101;
            family inet {
                filter {
                    input from-servers;
                    output to-servers;
                }
                address 195.251.255.129/27;
            }
        }
        unit 2 {

```

```

description NOC;
vlan-id 102;
family inet {
    filter {
        input from-noc;
        output to-noc;
    }
    address 195.251.255.1/26;
}
family inet6 {
    address 2001:648:2020:2::1/64;
}
}
unit 3 {
    description "P2P to Fortigate Firewall";
    vlan-id 103;
    family inet {
        address 195.251.255.189/30;
    }
}
unit 11 {
    description Central;
    vlan-id 111;
    family inet {
        filter {
            input from-central;
            output to-central;
        }
        address 195.251.250.254/28;
    }
}
unit 16 {
    description Rooms;
    vlan-id 116;
    family inet {
        address 195.251.233.145/28;
    }
}
unit 20 {
    description Offices_Ydras;
    vlan-id 120;
    family inet {
        address 195.251.254.190/26;
    }
}
unit 21 {
    description Offices_Ant;
    vlan-id 121;
    family inet {

```

```

        address 195.251.234.193/26 {
            preferred;
        }
        address 195.251.250.225/28;
    }
}
unit 22 {
    description Offices_Der;
    vlan-id 122;
    accounting-profile Offices_Der;
    family inet {
        filter {
            input from-offices_der;
            output to-offices_der;
        }
        address 195.251.234.129/26;
        address 83.212.204.97/28;
    }
}
unit 23 {
    description Offices_Eyelpidon;
    vlan-id 123;
    family inet {
        address 195.251.233.62/26;
        address 195.251.234.81/28;
        address 83.212.204.62/27;
        address 195.251.254.94/27;
    }
}
unit 24 {
    description "Offices Kodrigktonos";
    vlan-id 124;
    family inet {
        filter {
            input from-offices_kodr;
            output to-offices_kodr;
        }
        address 195.251.235.1/25;
    }
}
unit 25 {
    description Offices_Old;
    vlan-id 125;
    family inet {
        filter {
            input from-offices_old;
            output to-offices_old;
        }
        address 195.251.235.129/25;
    }
}

```

```

        address 195.251.254.209/28;
        address 195.251.251.193/27;
        address 195.251.253.225/28;
        address 83.212.204.113/28;
    }
}
unit 26 {
    description Offices_Pat80;
    vlan-id 126;
    family inet {
        filter {
            input from-offices_pat80;
            output to-offices_pat80;
        }
        address 195.251.250.1/26;
    }
}
unit 27 {
    description Offices_Vanc;
    vlan-id 127;
    family inet {
        filter {
            input from-offices_vanc;
            output to-offices_vanc;
        }
        address 195.251.249.225/28;
    }
}
unit 28 {
    description "Lab_DET_Pathsion80_3rdFloor_lazaris@aueb.gr";
    vlan-id 128;
    family inet {
        filter {
            input from-lab_det_P80;
            output to-lab_det_P80;
        }
        address 195.251.251.1/28;
    }
}
unit 29 {
    description "Lab Industrial Relations and Negotiations, Patision 80, 1os orofos,
ilias@aueb.gr";
    vlan-id 129;
    family inet {
        filter {
            input from-lab_irn_P80;
            output to-lab_irn_P80;
        }
        address 195.251.253.241/28;
    }
}

```

```

    }
}
unit 30 {
    description "Lab Oikonomikou, Patision 80, 1os orofos, admin: Chronis
gchronisaueb@yahoo.com";
    vlan-id 130;
    family inet {
        filter {
            input from-lab_oik_P80;
            output to-lab_oik_P80;
        }
        address 195.251.251.225/27;
    }
}
unit 31 {
    disable;
    description Gram_Ant;
    vlan-id 131;
    family inet {
        filter {
            input from-gram_ant;
            output to-gram_ant;
        }
    }
}
unit 32 {
    description Gram_Der;
    vlan-id 132;
    family inet {
        filter {
            input from-gram_der;
            output to-gram_der;
        }
        address 83.212.205.129/25;
        address 195.251.250.65/27;
    }
}
unit 33 {
    description Gram_Eyelpidon;
    vlan-id 133;
    family inet {
        address 195.251.232.129/27;
        address 195.251.233.65/28;
        address 83.212.204.193/28;
    }
}
unit 34 {
    description "IST_OIS Lab (Poulimenakou)";
    vlan-id 134;

```

```

family inet {
    filter {
        input from-ist_ois_lab;
        output to-ist_ois_lab;
    }
    address 83.212.204.17/28;
}
}
unit 35 {
    description Career;
    vlan-id 135;
    family inet {
        filter {
            input from-career;
            output to-career;
        }
        address 195.251.254.206/28;
    }
}
unit 36 {
    description "Lab DET pt. Derigny, 3rd floor - D. Spinelis";
    vlan-id 136;
    family inet {
        filter {
            input from-det_cc_lab;
            output to-det_cc_lab;
        }
        address 195.251.251.17/28;
    }
}
unit 37 {
    description Elpidos;
    vlan-id 137;
    family inet {
        filter {
            input from-elpidos;
            output to-elpidos;
        }
        address 83.212.206.33/27;
        address 195.251.249.81/28;
    }
}
unit 38 {
    description Patision95;
    vlan-id 138;
    family inet {
        filter {
            input from-patision95;
            output to-patision95;
        }
    }
}

```

```

    }
    address 83.212.204.177/28;
    address 83.212.204.161/28;
  }
}
unit 41 {
  description Neolaies;
  vlan-id 141;
  family inet {
    filter {
      input from-neolaies;
      output to-neolaies;
    }
    address 83.212.207.1/28;
  }
}
unit 42 {
  disable;
  description Steki;
  vlan-id 142;
  family inet;
}
unit 51 {
  description Lab_Ccs;
  vlan-id 151;
  family inet {
    filter {
      input from-ccs_lab;
      output to-ccs_lab;
    }
    address 195.251.252.126/27 {
      primary;
      preferred;
    }
    address 195.251.252.94/28;
  }
}
unit 52 {
  description Lab_DSci;
  vlan-id 152;
  family inet {
    address 195.251.232.1/27;
  }
}
unit 53 {
  description Lab_DSup;
  vlan-id 153;
  family inet {
    address 195.251.232.65/26;
  }
}

```

```

    }
}
unit 54 {
    description Lab_Dmst;
    vlan-id 154;
    family inet {
        filter {
            input from-lab_dmst;
            output to-lab_dmst;
        }
        address 195.251.249.190/26;
    }
}
unit 55 {
    description Lab_Dpm;
    vlan-id 155;
    family inet {
        filter {
            input from-lab_dpm;
            output to-lab_dpm;
        }
        address 195.251.252.62/26;
    }
}
unit 56 {
    description Lab_Euro;
    vlan-id 156;
    family inet {
        filter {
            input from-lab_euro;
            output to-lab_euro;
        }
        address 195.251.253.190/27;
        address 195.251.253.158/28;
    }
}
unit 57 {
    description Lab_Heltrun;
    vlan-id 157;
    family inet {
        filter {
            input from-lab_heltrun;
            output to-lab_heltrun;
        }
        address 195.251.252.190/26;
    }
}
unit 58 {
    description Lab_InfSys;

```

```

vlan-id 158;
family inet {
    filter {
        input from-lab_infsys;
        output to-lab_infsys;
    }
    address 195.251.252.254/26;
}
}
unit 60 {
    description Lab_MOP;
    vlan-id 160;
    family inet {
        filter {
            input from-lab_mop;
            output to-lab_mop;
        }
        address 195.251.249.78/28;
    }
}
unit 61 {
    description Lab_Market;
    vlan-id 161;
    family inet {
        filter {
            input from-lab_market;
            output to-lab_market;
        }
        address 195.251.250.126/28;
    }
}
unit 64 {
    description Lab_Msl;
    vlan-id 164;
    family inet {
        address 195.251.233.254/27;
        address 195.251.234.126/27;
    }
}
unit 65 {
    description Lab_Ode;
    vlan-id 165;
    family inet {
        filter {
            input from-lab_ode;
            output to-lab_ode;
        }
        address 195.251.249.222/27;
    }
}

```

```

}
unit 66 {
    description "Lab Oikonomikoy - Eyelpidvn";
    vlan-id 166;
    family inet {
        address 195.251.232.49/28;
    }
}
unit 67 {
    description Lab_Plir;
    vlan-id 167;
    family inet {
        filter {
            input from-lab_plir;
            output to-lab_plir;
        }
        address 195.251.248.254/25;
    }
}
unit 68 {
    description "Lab_R610 - Eyelpidon";
    vlan-id 168;
    family inet {
        address 195.251.233.193/27;
    }
}
unit 70 {
    description Lab_Doma_pt_Dergny;
    vlan-id 170;
    family inet {
        address 83.212.205.62/26;
    }
}
unit 71 {
    description "Lab_R902 - Eyelpidon";
    vlan-id 171;
    family inet {
        address 195.251.233.161/27;
    }
}
unit 72 {
    description Lab_Stat_A;
    vlan-id 172;
    family inet {
        filter {
            input from-lab_stat_a;
            output to-lab_stat_a;
        }
        address 195.251.253.126/26;
    }
}

```

```

        address 195.251.249.97/27;
    }
}
unit 74 {
    description "Lab Traslog Eyelpidvn";
    vlan-id 174;
    family inet {
        address 195.251.234.65/28;
        address 195.251.233.113/29;
    }
}
unit 75 {
    description "Lab Workgroup Eyelpidon";
    vlan-id 175;
    family inet {
        address 195.251.232.225/27;
    }
}
unit 76 {
    disable;
    description "Lab_Stat_Risk, has been incorporated to Lab_Stat_A after request by
Dimitris Papachristos (Panas) 23/10/09";
    vlan-id 176;
    family inet {
        filter {
            input from-lab_stat_risk;
            output to-lab_stat_risk;
        }
    }
}
unit 77 {
    description "Ergasthrio Branded (Eyelpidvn 1os)";
    vlan-id 177;
    family inet {
        address 83.212.204.129/27;
    }
}
unit 79 {
    description "Ergasthrio Organwshs Agorwn (Eyelpidwn 1os)";
    vlan-id 179;
    family inet {
        address 195.251.233.121/29;
    }
}
unit 80 {
    description Hosted_Servers;
    vlan-id 180;
    family inet {
        filter {

```

```

        input from-hosted-servers;
        output to-hosted-servers;
    }
    address 195.251.253.129/28;
    inactive: address 10.0.0.5/24;
    address 195.251.253.209/28;
    address 195.251.255.65/29;
}
}
unit 81 {
    description "Aithoyses Eyelpidvn";
    vlan-id 181;
    family inet {
        address 195.251.233.129/28;
    }
}
unit 82 {
    description "Lab --- Wireless Research Centre (Giaglis)";
    vlan-id 182;
    family inet {
        address 195.251.233.81/28;
    }
}
unit 83 {
    description "Ergasthrio Metaptyxiakwn Plhroforikhs (Eyelpidwn 2os)";
    vlan-id 183;
    family inet {
        address 195.251.234.62/27;
    }
}
unit 86 {
    description "Ergasthrio Didaktorikwn Oikonomikhs Episthmhs (Eyelpidwn 1os)";
    vlan-id 186;
    family inet {
        address 195.251.232.46/28;
        address 195.251.233.110/28;
    }
}
unit 87 {
    description "Ergasthrio Logistikhs kai Xrhmatooikonomikhs (Eyelpidwn 1os)";
    vlan-id 187;
    family inet {
        address 195.251.232.190/27;
    }
}
unit 88 {
    disable;
    description "Ergasthrio Executive MBA (Eyelpidwn 2os)";
    vlan-id 188;
}

```

```

}
unit 89 {
    description "Ergasthrio Marketing (Eyelpidwn 1os)";
    vlan-id 189;
    family inet {
        address 195.251.232.193/27;
    }
}
unit 91 {
    description "Lab Polyzos Eyelpidon (Lab_Polyzos)";
    vlan-id 191;
    family inet {
        address 195.251.234.1/27;
    }
}
unit 110 {
    description Dialup_Access;
    vlan-id 210;
    family inet {
        filter {
            input from-dialup_access;
            output to-dialup_access;
        }
        address 195.251.255.73/29;
    }
}
unit 122 {
    description Room-A41;
    vlan-id 222;
    family inet {
        address 195.251.253.193/28;
    }
}
unit 152 {
    description "Management VLAN for Network Devices";
    vlan-id 252;
    family inet {
        address 10.10.20.1/24;
        address 10.10.21.1/24;
        address 10.10.10.1/24;
        address 10.10.11.1/24;
        address 10.10.30.1/24;
    }
}
unit 201 {
    description P2P_Juno_Sisyfos;
    vlan-id 301;
    family inet {
        address 195.251.255.165/30;
    }
}

```

```

    }
}
unit 212 {
    description P2P_Library;
    vlan-id 312;
    family inet {
        filter {
            input from-p2p_library;
            output to-p2p_library;
        }
        address 195.251.255.177/30;
    }
}
unit 259 {
    description P2P_Lab_Logist;
    vlan-id 359;
    family inet {
        filter {
            input from-p2p_lab_logist;
            output to-p2p_lab_logist;
        }
        address 195.251.255.181/30;
    }
}
unit 262 {
    description P2P_Lab_Mcm;
    vlan-id 362;
    family inet {
        filter {
            input from-p2p_lab_mcm;
            output to-p2p_lab_mcm;
        }
        address 195.251.255.185/30;
    }
}
unit 300 {
    description IP_Telephony;
    vlan-id 400;
    family inet {
        filter {
            input from-ip_telephony;
            output to-ip_telephony;
        }
        address 83.212.206.1/27;
        address 10.10.90.1/24;
    }
}
unit 400 {
    disable;
}

```

```

    description wireless-gbit;
    vlan-id 500;
    family inet {
        filter {
            input from-wi-gbit;
            output to-wi-gbit;
        }
    }
}
unit 405 {
    description P2P_ELKE;
    vlan-id 505;
    family inet {
        address 195.251.255.161/30;
    }
}
}
fxp0 {
    unit 0 {
        disable;
        description "Mgmt Ethernet (in front of chassis)";
        family inet;
    }
}
lo0 {
    unit 0 {
        family inet {
            address 127.0.0.1/32;
            address 195.251.255.169/32 {
                primary;
                preferred;
            }
        }
        family iso {
            address 49.0001.1022.0001.0001.00;
        }
    }
}
}
snmp {
    community monitor {
        authorization read-only;
    }
}
accounting-options {
    file Offices_Der_Acc.log {
        size 1000k;
        files 5;
    }
}

```

```

interface-profile Offices_Der {
    file Offices_Der_Acc.log;
    interval 5;
    fields {
        input-bytes;
    }
}
}
routing-options {
    interface-routes {
        rib-group inet ifrg;
    }
    static {
        route 10.222.0.0/24 reject;
        route 0.0.0.0/0 {
            next-hop 195.251.24.5;
            retain;
            no-readvertise;
            preference 250;
        }
        route 195.251.255.192/26 {
            next-hop 195.251.255.74;
            preference 151;
        }
        route 195.251.252.64/29 next-hop 195.251.252.122;
        route 195.251.252.72/29 next-hop 195.251.252.123;
        route 195.251.248.55/32 reject;
        route 195.251.251.32/27 next-hop 195.251.251.4;
        route 195.251.253.66/32 reject;
        route 83.212.204.64/27 next-hop 195.251.255.178;
        route 195.251.251.128/26 next-hop 195.251.255.178;
        route 195.251.250.192/27 next-hop 195.251.255.186;
        route 195.251.250.128/26 next-hop 195.251.255.186;
        route 195.251.253.0/26 next-hop 195.251.255.182;
        route 195.251.255.128/27 next-hop 195.251.255.190;
        route 195.251.255.64/29 next-hop 195.251.255.190;
        route 10.1.1.0/24 next-hop 195.251.255.190;
        route 195.251.255.172/30 next-hop 195.251.255.190;
        route 195.251.255.96/28 next-hop 195.251.255.190;
        route 83.212.204.0/28 next-hop 195.251.255.162;
        route 195.251.255.112/29 next-hop 195.251.255.190;
        route 195.251.248.0/25 next-hop 195.251.250.245;
        route 195.251.249.0/26 next-hop 195.251.250.245;
        route 75.98.17.62/32 reject;
        route 198.49.73.89/32 reject;
    }
    aggregate {
        route 195.251.232.0/22;
        route 195.251.248.0/21;
    }
}

```

```

    route 83.212.204.0/22;
}
rib-groups {
    ifrg {
        import-rib [ inet.0 inet.2 ];
    }
    mcrg {
        export-rib inet.2;
        import-rib inet.2;
    }
}
autonomous-system 8611;
}
protocols {
    igmp {
        interface fxp0.0 {
            disable;
        }
        interface ge-0/1/0.2 {
            static {
                group 224.2.127.254;
            }
        }
        interface ge-0/1/0.16 {
            static {
                group 224.2.127.254;
            }
        }
        interface ge-0/0/0.0 {
            static {
                group 224.2.127.254;
            }
        }
        interface lo0.0;
        interface ge-0/1/0.201;
    }
}
sap;
bgp {
    group ext-to-GRnet {
        type external;
        import from-grnet;
        family inet {
            any;
        }
        export aggregates-only;
        peer-as 5408;
        neighbor 195.251.24.5 {
            local-preference 109;
        }
    }
}

```

```

}
group int-to-sisyfos {
    type internal;
    local-address 195.251.255.165;
    neighbor 195.251.255.166;
}
}
msdp {
    rib-group mcrg;
    group ext-to-GRnet {
        peer 195.251.24.5 {
            local-address 195.251.24.6;
        }
    }
}
ospf {
    export my-own;
    area 0.0.0.0 {
        interface lo0.0 {
            passive;
        }
        interface ge-0/1/0.201;
        interface ge-0/1/0.51;
        interface ge-0/1/0.110;
    }
}
pim {
    rib-group inet mcrg;
    rp {
        bootstrap-import block-bsr;
        bootstrap-export block-bsr;
        local {
            address 195.251.255.169;
        }
    }
    interface fxp0.0 {
        disable;
    }
    interface ge-0/1/0.2 {
        mode sparse;
        version 2;
    }
    interface ge-0/1/0.16 {
        mode sparse;
        version 2;
    }
    interface ge-0/0/0.0 {
        mode sparse;
        version 2;
    }
}

```

```

    }
    interface lo0.0 {
        mode sparse;
        version 2;
    }
    interface ge-0/1/0.201 {
        mode sparse;
        version 2;
    }
}
policy-options {
    policy-statement static-ok {
        from protocol static;
        then accept;
    }
    policy-statement aggregates-only {
        term no-short-routes {
            from {
                route-filter 195.251.232.0/22 longer;
                route-filter 195.251.248.0/21 longer;
                route-filter 83.212.204.0/22 longer;
            }
            then reject;
        }
        term aggregates-ok {
            from protocol aggregate;
            then {
                community set GRnet-high;
                accept;
            }
        }
    }
    policy-statement test-announce {
        term test {
            from {
                route-filter 195.251.255.64/27 exact;
                route-filter 10.222.0.0/16 orlonger;
                route-filter 195.251.24.0/29 exact;
                route-filter 195.251.255.164/30 exact;
            }
            then accept;
        }
    }
    policy-statement subnet-ok {
        term short-routes {
            from {
                route-filter 195.251.232.0/22 longer;
                route-filter 195.251.248.0/21 longer;
            }
        }
    }
}

```

```

        route-filter 83.212.204.0/22 longer;
    }
    then accept;
}
}
policy-statement from-grnet {
    term no-aueb-routes {
        from {
            route-filter 195.251.232.0/22 orlonger;
            route-filter 195.251.248.0/21 orlonger;
            route-filter 83.212.204.0/22 orlonger;
        }
        then reject;
    }
    term bgp-ok {
        from protocol bgp;
        then {
            local-preference 120;
            accept;
        }
    }
}
policy-statement my-own {
    term static-ok {
        from protocol static;
        then accept;
    }
    term direct-ok {
        from protocol direct;
        then accept;
    }
}
policy-statement close-ext-nets {
    term close-nets {
        from {
            protocol bgp;
            as-path [ one-as two-as ];
        }
        then accept;
    }
}
policy-statement block-bsr {
    then reject;
}
community GRnet-high members 5408:120;
community GRnet-low members 5408:110;
community GRnet-test members 5408:109;
as-path one-as "[0-9]+";
as-path two-as "[0-9]+ [0-9]+";

```

```

}
firewall {
  family inet {
    filter to-noc {
      term no-dns {
        from {
          destination-port domain;
        }
        then {
          reject;
        }
      }
    }
    term Printers-ESXIs-nothing {
      from {
        destination-address {
          195.251.255.30/32;
          195.251.255.17/32;
          195.251.255.48/32;
          195.251.255.49/32;
          195.251.255.8/32;
          195.251.255.9/32;
          195.251.255.15/32;
          195.251.255.50/32;
          195.251.255.28/32;
        }
      }
      then {
        reject;
      }
    }
    term gbc-video-only {
      from {
        destination-address {
          195.251.255.27/32;
        }
        destination-port-except 8080;
      }
      then {
        discard;
      }
    }
    term no-ms-ports {
      from {
        destination-port [ 135-139 445 593 1433 1434 42 ];
      }
      then {
        reject;
      }
    }
  }
}

```

```

term kousou0 {
    from {
        destination-address {
            195.251.255.22/32;
        }
        protocol tcp;
        tcp-established;
    }
    then accept;
}
term kousou-dns {
    from {
        source-address {
            195.251.255.142/32;
        }
        destination-address {
            195.251.255.22/32;
        }
        source-port domain;
    }
    then accept;
}
term kousou1 {
    from {
        destination-address {
            195.251.255.22/32;
        }
        destination-port [ http https ident ssh ftp 873 1194 ];
    }
    then accept;
}
term kousou {
    from {
        destination-address {
            195.251.255.22/32;
        }
    }
    then {
        discard;
    }
}
term toOASTYVPNestabl {
    from {
        destination-address {
            195.251.255.45/32;
        }
        protocol tcp;
        tcp-established;
    }
}

```

```

    then accept;
}
term toOASTYVPNopenvpn {
    from {
        destination-address {
            195.251.255.45/32;
        }
        protocol tcp;
        destination-port 1194;
    }
    then accept;
}
term toOASTYVPNdns {
    from {
        destination-address {
            195.251.255.45/32;
        }
        source-port domain;
    }
    then accept;
}
term toOASTYVPNreject {
    from {
        destination-address {
            195.251.255.45/32;
        }
    }
    then {
        reject;
    }
}
term toEduroamRadiusEstabl {
    from {
        destination-address {
            195.251.255.14/32;
            195.251.255.50/32;
        }
        protocol tcp;
        tcp-established;
    }
    then accept;
}
term toEduroamRadiusRadius {
    from {
        destination-address {
            195.251.255.14/32;
            195.251.255.50/32;
        }
        protocol tcp;
    }

```

```

        destination-port [ 1812 1813 1814 ];
    }
    then accept;
}
term toEduroamRadiusDNS {
    from {
        destination-address {
            195.251.255.14/32;
            195.251.255.50/32;
        }
        source-port domain;
    }
    then accept;
}
term toEduroamRadiusFromEduroamEDET {
    from {
        source-address {
            194.177.210.143/32;
            194.177.210.217/32;
            10.10.20.209/32;
        }
        destination-address {
            195.251.255.14/32;
        }
    }
    then accept;
}
term toEduroamRadiusReject {
    from {
        destination-address {
            195.251.255.14/32;
        }
    }
    then {
        reject;
    }
}
term toFilerDELL {
    from {
        destination-address {
            195.251.255.61/32;
        }
    }
    then {
        reject;
    }
}
term toSSBserverRejectSSH {
    from {

```

```

        destination-address {
            195.251.255.12/32;
        }
        destination-port 22;
    }
    then {
        reject;
    }
}
term everything-ok {
    then accept;
}
}
filter from-noc {
    term test {
        from {
            destination-address {
                195.251.252.171/32;
                195.251.252.133/32;
            }
            destination-port 445;
        }
        then accept;
    }
}
term to-backup-server {
    from {
        destination-address {
            195.251.249.12/32;
        }
    }
    then accept;
}
term mysql-vicky {
    from {
        destination-address {
            83.212.240.72/32;
        }
        destination-port 1433;
    }
    then accept;
}
term to248-2 {
    from {
        destination-address {
            195.251.248.2/32;
        }
    }
    then accept;
}
}

```

```

term no-ms-ports {
    from {
        destination-port [ 135-139 445 593 1433 1434 42 ];
    }
    then {
        reject;
    }
}
term everything-ok {
    then accept;
}
}
filter all-but-ms {
    apply-groups [ filters-no-ms filters-default-accept ];
}
filter from-internet {
    term blackhole {
        from {
            source-address {
                174.142.19.4/32;
            }
        }
        then {
            discard;
        }
    }
}
term ms-sql-allowed {
    from {
        destination-address {
            195.251.253.61/32;
            195.251.253.40/32;
            195.251.253.58/32;
            195.251.253.49/32;
            195.251.250.66/32;
            195.251.253.33/32;
            195.251.253.44/32;
            195.251.253.51/32;
            195.251.253.43/32;
            195.251.253.37/32;
            195.251.250.36/32;
            195.251.250.37/32;
        }
        protocol tcp;
        destination-port [ 1433 135 ];
    }
    then accept;
}
term e-grammaties {
    from {

```

```

        source-address {
            83.212.6.64/32;
        }
        destination-address {
            83.212.205.254/32;
        }
        destination-port 1433;
    }
    then accept;
}
term to_1433_specific {
    from {
        source-address {
            62.103.68.64/32;
        }
        destination-address {
            195.251.250.36/32;
            195.251.250.37/32;
        }
        destination-port 1433;
    }
    then accept;
}
term no-ms-ports {
    from {
        destination-port [ 135-139 445 593 1433 1434 1025 42 ];
    }
    then {
        reject;
    }
}
term no-dns-open-resolvers {
    from {
        destination-address {
            195.251.234.111/32;
            195.251.234.97/32;
            195.251.253.169/32;
            83.212.204.194/32;
            195.251.232.30/32;
            195.251.250.37/32;
        }
        destination-port domain;
    }
    then {
        reject;
    }
}
term everything-ok {
    then accept;
}

```

```

    }
}
filter to-internet {
    term SQL-access {
        from {
            source-address {
                195.251.253.0/26;
                195.251.252.24/32;
                195.251.252.28/32;
            }
            protocol tcp;
            destination-port [ 1433 135 ];
        }
        then accept;
    }
    term MySQL-Vicky-NOC {
        from {
            destination-address {
                83.212.240.72/32;
            }
            protocol tcp;
            destination-port [ 1433 135 ];
        }
        then accept;
    }
    term SQL-access-both {
        from {
            source-address {
                83.212.206.37/32;
            }
            protocol tcp;
            destination-port [ 1433 1434 ];
        }
        then accept;
    }
    term no-ms-ports {
        from {
            destination-port [ 135-139 445 593 1433 1434 42 1025 ];
        }
        then {
            reject;
        }
    }
    term Virus-Blackworm {
        from {
            destination-address {
                207.172.16.155/32;
            }
        }
    }
}

```

```

    then {
        log;
        accept;
    }
}
inactive: term todnsq {
    from {
        source-address {
            195.251.255.96/28;
            195.251.255.128/27;
            195.251.255.0/26;
            195.251.249.147/32;
        }
        destination-port domain;
    }
    then accept;
}
inactive: term to-dns-reject {
    from {
        destination-port domain;
    }
    then {
        reject;
    }
}
term everything-ok {
    then accept;
}
}
filter to-servers {
    term establ {
        from {
            destination-address {
                195.251.255.128/27;
            }
            tcp-established;
        }
        then accept;
    }
    term black-hole {
        from {
            source-address {
                195.251.251.10/32;
            }
        }
        then {
            reject;
        }
    }
}

```

```

term ntp {
    from {
        protocol udp;
        source-port ntp;
        destination-port ntp;
    }
    then accept;
}
term dialin {
    from {
        source-address {
            195.251.255.253/32;
            195.251.255.254/32;
        }
        destination-address {
            195.251.255.128/27;
        }
        destination-port ssh;
    }
    then accept;
}
term to130nfs {
    from {
        source-address {
            195.251.248.158/32;
            195.251.252.97/32;
        }
        destination-address {
            195.251.255.140/32;
        }
        destination-port [ 111 2049 4000-4002 ];
    }
    then accept;
}
term to130services {
    from {
        destination-address {
            195.251.255.130/32;
        }
        protocol tcp;
        destination-port smtp;
    }
    then accept;
}
term to130tcpnoc {
    from {
        source-address {
            195.251.255.0/26;
            195.251.255.253/32;
        }
    }
}

```

```

        195.251.255.254/32;
    }
    destination-address {
        195.251.255.130/32;
    }
    protocol tcp;
    destination-port [ 22 https http ];
}
then accept;
}
term to130-spam-monitor {
    from {
        source-address {
            195.251.255.29/32;
            195.251.255.37/32;
        }
        destination-address {
            195.251.255.130/32;
        }
        protocol tcp;
        destination-port 2345;
    }
    then accept;
}
term to131noc {
    from {
        source-address {
            195.251.255.253/32;
            195.251.255.254/32;
            195.251.255.0/26;
        }
        destination-address {
            195.251.255.131/32;
        }
        protocol tcp;
        destination-port ssh;
    }
    then accept;
}
term to132any {
    from {
        destination-address {
            195.251.255.132/32;
        }
        protocol tcp;
        destination-port [ http 443 ];
    }
    then accept;
}

```

```

term to132noc {
  from {
    source-address {
      195.251.255.0/26;
    }
    destination-address {
      195.251.255.132/32;
    }
    protocol tcp;
    destination-port [ ssh ftp ];
  }
  then accept;
}
term to133tcp {
  from {
    source-address {
      195.251.255.4/32;
      195.251.255.37/32;
    }
    destination-address {
      195.251.255.133/32;
    }
    protocol tcp;
    destination-port [ ssh smtp imap pop3 http https ];
  }
  then accept;
}
term to138tcp {
  from {
    destination-address {
      195.251.255.138/32;
    }
    protocol tcp;
    destination-port [ http 443 domain ];
  }
  then accept;
}
term to138udp {
  from {
    destination-address {
      195.251.255.138/32;
    }
    protocol udp;
    destination-port domain;
  }
  then accept;
}
term to138domaind {
  from {

```

```

        destination-address {
            195.251.255.138/32;
        }
        source-port domain;
    }
    then accept;
}
term to138ftp {
    from {
        destination-address {
            195.251.255.138/32;
        }
        protocol tcp;
        destination-port ftp;
    }
    then accept;
}
term to138ftppasv {
    from {
        destination-address {
            195.251.255.138/32;
        }
        protocol tcp;
        destination-port 1024-65535;
    }
    then accept;
}
term to138mysql {
    from {
        source-address {
            195.251.255.2/32;
            195.251.249.141/32;
            195.251.249.189/32;
        }
        destination-address {
            195.251.255.138/32;
        }
        destination-port 3306;
    }
    then accept;
}
term to138ssh {
    from {
        source-address {
            195.251.255.0/26;
            195.251.255.252/32;
            195.251.255.253/32;
            195.251.255.254/32;
            194.177.215.202/32;

```

```

    }
    destination-address {
        195.251.255.138/32;
    }
    protocol tcp;
    destination-port ssh;
}
then accept;
}
term to138icmp {
    from {
        source-address {
            194.177.210.216/32;
        }
        destination-address {
            195.251.255.138/32;
        }
        protocol icmp;
    }
    then accept;
}
term to139services {
    from {
        destination-address {
            195.251.255.139/32;
        }
        protocol tcp;
        destination-port [ ntp https ];
    }
    then accept;
}
term to139ssh {
    from {
        source-address {
            195.251.255.0/26;
        }
        destination-address {
            195.251.255.139/32;
        }
        protocol tcp;
        destination-port ssh;
    }
    then accept;
}
term to139dns {
    from {
        destination-address {
            195.251.255.139/32;
        }
    }
}

```

```

        source-port domain;
    }
    then accept;
}
term to140tcp {
    from {
        destination-address {
            195.251.255.140/32;
        }
        protocol tcp;
        destination-port [ http 443 domain imap pop3 ];
    }
    then accept;
}
term to140domain {
    from {
        destination-address {
            195.251.255.140/32;
        }
        source-port domain;
    }
    then accept;
}
term to140ftp {
    from {
        source-address {
            195.251.255.0/26;
        }
        destination-address {
            195.251.255.140/32;
        }
        protocol tcp;
        destination-port ftp;
    }
    then accept;
}
term to140ssh {
    from {
        source-address {
            195.251.255.0/26;
            195.251.255.253/32;
            195.251.255.254/32;
        }
        destination-address {
            195.251.255.140/32;
        }
        protocol tcp;
        destination-port ssh;
    }
}

```

```

    then accept;
}
term to141ssh {
    from {
        source-address {
            195.251.255.0/26;
        }
        destination-address {
            195.251.255.141/32;
        }
        protocol tcp;
        destination-port ssh;
    }
    then accept;
}
term to141www-ftp {
    from {
        destination-address {
            195.251.255.141/32;
        }
        protocol tcp;
        destination-port [ http https ftp ];
    }
    then accept;
}
term to142dnsq {
    from {
        destination-address {
            195.251.255.142/32;
        }
        destination-port domain;
    }
    then accept;
}
term to142dnsd {
    from {
        destination-address {
            195.251.255.142/32;
        }
        source-port domain;
    }
    then accept;
}
term to142ssh {
    from {
        source-address {
            195.251.255.0/26;
        }
        destination-address {

```

```

        195.251.255.142/32;
    }
    protocol tcp;
    destination-port ssh;
}
then accept;
}
term to143-reject {
    from {
        source-address {
            195.78.86.91/32;
        }
        destination-address {
            195.251.255.143/32;
        }
    }
    then {
        reject;
    }
}
term to143any {
    from {
        destination-address {
            195.251.255.143/32;
        }
        destination-port [ smtp 465 pop3 995 imap 993 https ident ];
    }
    then accept;
}
term to143noc {
    from {
        source-address {
            195.251.255.4/32;
            195.251.255.45/32;
            195.251.255.5/32;
        }
        destination-address {
            195.251.255.143/32;
        }
        protocol tcp;
        destination-port ssh;
    }
    then accept;
}
term to144 {
    from {
        source-address {
            195.251.255.0/26;
            195.251.255.76/32;

```

```

        195.251.255.77/32;
    }
    destination-address {
        195.251.255.144/32;
        195.251.255.154/32;
        195.251.255.133/32;
        195.251.255.134/32;
        195.251.255.135/32;
    }
    protocol tcp;
    destination-port [ ssh 389 636 ];
}
then accept;
}
term to154makedos {
    from {
        source-address {
            195.251.234.32/27;
            83.212.204.185/32;
            195.251.248.240/28;
        }
        destination-address {
            195.251.255.154/32;
        }
        protocol tcp;
        destination-port [ 389 636 ];
    }
    then accept;
}
term to144eVoting {
    from {
        source-address {
            195.251.249.147/32;
        }
        destination-address {
            195.251.255.144/32;
        }
        protocol tcp;
        destination-port [ 389 636 ];
    }
    then accept;
}
term to144eclassTest {
    from {
        source-address {
            195.251.252.234/32;
        }
        destination-address {
            195.251.255.154/32;
        }
    }
}

```

```

    }
    protocol tcp;
    destination-port 389;
  }
  then accept;
}
term to154www {
  from {
    destination-address {
      195.251.255.154/32;
    }
    protocol tcp;
    destination-port 443;
  }
  then accept;
}
term to154ftpdata-dias {
  from {
    source-address {
      195.251.250.242/32;
    }
    destination-address {
      195.251.255.154/32;
    }
    protocol tcp;
    source-port ftp-data;
  }
  then accept;
}
term to154from23439 {
  from {
    source-address {
      195.251.234.39/32;
      195.251.252.189/32;
    }
    destination-address {
      195.251.255.154/32;
    }
    protocol tcp;
    destination-port 389;
  }
  then accept;
}
term to154ldapsevdoxos {
  from {
    destination-address {
      195.251.255.154/32;
    }
    protocol tcp;

```

```

        destination-port 636;
    }
    then accept;
}
term to144ftpdata {
    from {
        destination-address {
            195.251.255.144/32;
        }
        protocol tcp;
        source-port ftp-data;
    }
    then accept;
}
term to145 {
    from {
        destination-address {
            195.251.255.145/32;
        }
        protocol tcp;
        destination-port [ http smtp pop3 imap ntp https 993 995 465 587 ];
    }
    then accept;
}
term to145ssh {
    from {
        source-address {
            195.251.255.0/26;
        }
        destination-address {
            195.251.255.145/32;
        }
        protocol tcp;
        destination-port ssh;
    }
    then accept;
}
term to145dns {
    from {
        destination-address {
            195.251.255.145/32;
        }
        source-port domain;
    }
    then accept;
}
term to146smtp {
    from {
        source-address {

```

```

        195.251.255.0/26;
    }
    destination-address {
        195.251.255.146/32;
    }
    destination-port [ ident smtp ];
}
then accept;
}
term to146ssh {
    from {
        source-address {
            195.251.255.4/32;
            195.251.255.11/32;
            195.251.255.3/32;
            195.251.255.45/32;
            195.251.255.5/32;
        }
        destination-address {
            195.251.255.146/32;
        }
        protocol tcp;
        destination-port ssh;
    }
    then accept;
}
term to147ssh {
    from {
        source-address {
            195.251.255.0/26;
            195.251.255.76/32;
            195.251.255.77/32;
            195.251.255.5/32;
        }
        destination-address {
            195.251.255.147/32;
            195.251.255.139/32;
        }
        protocol tcp;
        destination-port ssh;
    }
    then accept;
}
term to147dnsdata {
    from {
        destination-address {
            195.251.255.147/32;
        }
        source-port domain;
    }
}

```

```

    }
    then accept;
}
term to148access {
    from {
        source-address {
            195.251.255.74/32;
            195.251.255.0/26;
            195.251.255.77/32;
        }
        destination-address {
            195.251.255.148/32;
        }
    }
    then accept;
}
term to152any {
    from {
        destination-address {
            195.251.255.152/32;
        }
        destination-port [ smtp 110 995 143 993 443 ident 465 ];
    }
    then accept;
}
term to152noc {
    from {
        source-address {
            195.251.255.0/26;
        }
        destination-address {
            195.251.255.152/32;
        }
        protocol tcp;
        destination-port [ http ssh ftp ];
    }
    then accept;
}
term to153admin {
    from {
        source-address {
            195.251.255.0/26;
            195.251.255.253/32;
            195.251.255.254/32;
        }
        destination-address {
            195.251.255.153/32;
        }
        protocol tcp;
    }
}

```

```

        destination-port [ ssh https imap ];
    }
    then accept;
}
term to153fromVpnHttps {
    from {
        source-address {
            195.251.255.77/32;
        }
        destination-address {
            195.251.255.153/32;
        }
        protocol tcp;
        destination-port https;
    }
    then accept;
}
term to153smtp {
    from {
        source-address {
            195.251.255.4/32;
        }
        destination-address {
            195.251.255.153/32;
        }
        protocol tcp;
        destination-port smtp;
    }
    then accept;
}
term to155tcp {
    from {
        destination-address {
            195.251.255.155/32;
        }
        protocol tcp;
        destination-port [ ssh 220 8000 domain ftp pop3 smtp telnet http 7000-10000 ];
    }
    then accept;
}
term to155udp {
    from {
        destination-address {
            195.251.255.155/32;
        }
        protocol udp;
        destination-port [ domain 5000-10000 ];
    }
    then accept;
}

```

```

}
term to155dnsd {
  from {
    destination-address {
      195.251.255.155/32;
    }
    source-port domain;
  }
  then accept;
}
term to155ftpdata {
  from {
    destination-address {
      195.251.255.155/32;
    }
    protocol tcp;
    source-port ftp-data;
  }
  then accept;
}
term to155icmp {
  from {
    destination-address {
      195.251.255.155/32;
    }
    protocol icmp;
  }
  then accept;
}
term from212deny {
  from {
    source-address {
      212.0.0.0/8;
    }
  }
  then {
    discard;
  }
}
term to151ssh {
  from {
    source-address {
      195.251.255.0/26;
      195.251.255.253/32;
      195.251.255.254/32;
    }
    destination-address {
      195.251.255.151/32;
    }
  }
}

```

```

        protocol tcp;
        destination-port ssh;
    }
    then accept;
}
term to151wi {
    from {
        source-address {
            10.10.20.0/24;
        }
        destination-address {
            195.251.255.151/32;
        }
    }
    then accept;
}
term to151ftp {
    from {
        source-address {
            195.251.255.3/32;
        }
        destination-address {
            195.251.255.151/32;
        }
        destination-port 20-25;
    }
    then accept;
}
term to150ssh {
    from {
        source-address {
            195.251.255.0/26;
            195.251.255.254/32;
            195.251.255.253/32;
        }
        destination-address {
            195.251.255.150/32;
        }
        protocol tcp;
        destination-port ssh;
    }
    then accept;
}
term to150wi {
    from {
        source-address {
            10.10.20.0/24;
        }
        destination-address {

```

```

        195.251.255.150/32;
    }
}
then accept;
}
term to157ssh {
    from {
        source-address {
            195.251.255.0/26;
        }
        destination-address {
            195.251.255.157/32;
        }
        protocol tcp;
        destination-port ssh;
    }
    then accept;
}
term to157radius {
    from {
        source-address {
            195.251.249.147/32;
            195.251.255.0/27;
        }
        destination-address {
            195.251.255.157/32;
        }
        protocol [ tcp udp ];
        destination-port [ 1812 1813 ];
    }
    then accept;
}
term to136web {
    from {
        source-address {
            195.251.255.3/32;
            195.251.255.4/32;
        }
        destination-address {
            195.251.255.136/32;
        }
        protocol tcp;
        destination-port http;
    }
    then accept;
}
term to136ssh {
    from {
        destination-address {

```

```

        195.251.255.136/32;
    }
    protocol tcp;
    destination-port ssh;
}
then accept;
}
term to136ldap {
    from {
        source-address {
            195.251.255.13/32;
        }
        destination-address {
            195.251.255.136/32;
        }
        protocol tcp;
        destination-port [ 389 636 ];
    }
    then accept;
}
term to136https {
    from {
        destination-address {
            195.251.255.136/32;
        }
        protocol tcp;
        destination-port https;
    }
    then accept;
}
term to136shib {
    from {
        destination-address {
            195.251.255.136/32;
        }
        protocol [ tcp udp ];
        destination-port 8443;
    }
    then accept;
}
term to136icmp {
    from {
        destination-address {
            195.251.255.136/32;
        }
        protocol icmp;
    }
    then accept;
}

```

```

term to158ssh {
    from {
        source-address {
            195.251.255.4/32;
            195.251.255.37/32;
        }
        destination-address {
            195.251.255.158/32;
        }
        destination-port ssh;
    }
    then accept;
}
term to158www {
    from {
        source-address {
            195.251.255.0/26;
            195.251.255.76/32;
            195.251.255.77/32;
        }
        destination-address {
            195.251.255.158/32;
        }
        destination-port [ http https ];
    }
    then accept;
}
term to158mrtg {
    from {
        source-address {
            195.251.255.129/32;
            192.168.100.220/32;
            192.168.100.221/32;
            10.10.10.1/32;
            10.10.20.0/24;
        }
        destination-address {
            195.251.255.158/32;
        }
        source-port 161;
    }
    then accept;
}
term denyall {
    then {
        reject;
    }
}
term to139 {

```

```

    from {
        source-address {
            195.251.255.0/26;
            195.251.253.240/28;
        }
        destination-address {
            195.251.255.139/32;
        }
    }
    then accept;
}
}
filter from-servers {
    term everything-ok {
        then accept;
    }
}
filter from-central {
    term tcp-establ {
        from {
            tcp-established;
        }
        then accept;
    }
}
term accept-central {
    from {
        destination-address {
            195.251.253.61/32;
            195.251.253.37/32;
        }
        destination-port 1433;
    }
    then accept;
}
term deny-central {
    from {
        protocol tcp;
        destination-port [ 4662 5555 6660-6669 7000 194 ];
    }
    then {
        discard;
    }
}
term no-ms-ports {
    from {
        destination-port [ 135-139 445 593 1025 1433 1434 42 ];
    }
    then {
        reject;
    }
}

```

```

    }
  }
  term everything-ok {
    then accept;
  }
}
filter to-central {
  term no-dns {
    from {
      destination-port domain;
    }
    then {
      reject;
    }
  }
  term to248-2 {
    from {
      destination-address {
        195.251.248.2/32;
      }
    }
    then accept;
  }
  term no-ms-ports {
    from {
      destination-port [ 135-139 445 593 1433 1434 42 ];
    }
    then {
      reject;
    }
  }
  term everything-ok {
    then accept;
  }
}
filter to-lab_dpm {
  term no-ms-ports {
    from {
      destination-port [ 135-139 445 593 1433 1434 42 ];
    }
    then {
      reject;
    }
  }
  term from23deny {
    from {
      source-address {
        195.251.252.23/32;
      }
    }
  }
}

```

```

    }
    then {
        discard;
    }
}
term to23deny {
    from {
        destination-address {
            195.251.252.23/32;
        }
    }
    then {
        discard;
    }
}
term to45www {
    from {
        destination-address {
            195.251.252.45/32;
        }
        protocol tcp;
        destination-port http;
    }
    then accept;
}
term everything-ok {
    then accept;
}
}
filter from-lab_dpm {
    term from23deny {
        from {
            source-address {
                195.251.252.23/32;
            }
        }
        then {
            discard;
        }
    }
}
term to23deny {
    from {
        destination-address {
            195.251.252.23/32;
        }
    }
    then {
        discard;
    }
}

```

```

}
term to45www {
    from {
        destination-address {
            195.251.252.45/32;
        }
        protocol tcp;
        destination-port http;
    }
    then accept;
}
term from24_28 {
    from {
        source-address {
            195.251.252.24/32;
            195.251.252.28/32;
        }
        destination-port 1433;
    }
    then accept;
}
term no-ms-ports {
    from {
        destination-port [ 135-139 445 593 1025 1433 1434 42 ];
    }
    then {
        reject;
    }
}
term everything-ok {
    then accept;
}
}
filter from-lab_euro {
    apply-groups [ filters-no-ms filters-default-accept ];
}
filter to-lab_euro {
    apply-groups [ filters-no-ms filters-default-accept ];
}
filter from-lab_infsys {
    apply-groups [ filters-no-ms filters-default-accept ];
}
filter to-lab_infsys {
    apply-groups [ filters-no-ms filters-default-accept ];
}
filter from-lab_plir {
    term SQL-Logist {
        from {
            destination-address {

```

```

        195.251.253.61/32;
    }
    destination-port 1433;
}
then accept;
}
term to248-2 {
    from {
        destination-address {
            195.251.248.2/32;
        }
    }
    then accept;
}
term no-ms-ports {
    from {
        destination-port [ 135-139 445 593 1433 1434 42 ];
    }
    then {
        reject;
    }
}
term everything-ok {
    then accept;
}
}
filter to-lab_plir {
    apply-groups [ filters-no-ms filters-default-accept ];
}
filter from-lab_stat_a {
    apply-groups [ filters-no-ms filters-default-accept ];
}
filter to-lab_stat_a {
    term to92deny {
        from {
            destination-address {
                195.251.253.92/32;
            }
        }
        then {
            discard;
        }
    }
}
term to91establ {
    from {
        destination-address {
            195.251.253.91/32;
        }
    }
    tcp-established;
}

```

```

    }
    then accept;
}
term to91dns {
    from {
        destination-address {
            195.251.253.91/32;
        }
        protocol udp;
        source-port domain;
    }
    then accept;
}
term to91telnet {
    from {
        source-address {
            195.251.232.0/22;
            195.251.248.0/21;
        }
        destination-address {
            195.251.253.91/32;
        }
        protocol tcp;
        destination-port telnet;
    }
    then accept;
}
term to91permit {
    from {
        destination-address {
            195.251.253.91/32;
        }
        destination-port [ http https ftp smtp pop3 imap ssh ftp-data ];
    }
    then accept;
}
term to91deny {
    from {
        destination-address {
            195.251.253.91/32;
        }
    }
    then {
        discard;
    }
}
term everything-ok {
    then accept;
}

```

```

}
filter from-rooms {
    apply-groups [ filters-no-ms filters-default-accept ];
}
filter to-rooms {
    term everything-ok {
        then accept;
    }
}
filter from-offices_der {
    apply-groups [ filters-no-ms filters-default-accept ];
}
filter to-offices_der {
    term everything-ok {
        then accept;
    }
}
filter from-offices_old {
    term fromKatagrafikoCamerasAccept {
        from {
            source-address {
                195.251.235.253/32;
            }
            destination-address {
                195.251.235.166/32;
                195.251.233.156/32;
                195.251.250.252/32;
            }
        }
        then accept;
    }
}
term fromKatagrafikoCamerasReject {
    from {
        source-address {
            195.251.235.253/32;
        }
    }
    then {
        reject;
    }
}
term no-ms-ports {
    from {
        destination-port [ 135-139 445 593 1433 1434 42 ];
    }
    then {
        reject;
    }
}
}

```

```

    term everything-ok {
        then accept;
    }
}
filter to-offices_old {
    term katagrafikoCamerasAccept {
        from {
            source-address {
                195.251.235.166/32;
                195.251.233.156/32;
                195.251.250.252/32;
            }
            destination-address {
                195.251.235.253/32;
            }
        }
        then accept;
    }
    term katagrafikoCamerasReject {
        from {
            destination-address {
                195.251.235.253/32;
            }
        }
        then {
            reject;
        }
    }
    term everything-ok {
        then accept;
    }
}
filter from-offices_pat80 {
    apply-groups [ filters-no-ms filters-default-accept ];
}
filter to-offices_pat80 {
    term everything-ok {
        then accept;
    }
}
filter from-offices_vanc {
    term vasalos {
        from {
            source-address {
                195.251.249.234/32;
                195.251.249.235/32;
                195.251.249.236/32;
                195.251.249.237/32;
            }
        }
    }
}

```

```

        destination-address {
            195.251.252.171/32;
            195.251.252.133/32;
        }
        destination-port 445;
    }
    then accept;
}
term no-ms-ports {
    from {
        destination-port [ 135-139 445 593 1433 1434 42 ];
    }
    then {
        reject;
    }
}
term everything-ok {
    then accept;
}
}
filter to-offices_vanc {
    term everything-ok {
        then accept;
    }
}
filter from-gram_ant {
    term to-server-Gram {
        from {
            destination-address {
                195.251.251.97/32;
            }
        }
        then accept;
    }
}
term no-ms-ports {
    from {
        destination-port [ 135-139 445 593 1433 1434 42 ];
    }
    then {
        reject;
    }
}
term everything-ok {
    then accept;
}
}
filter to-gram_ant {
    term everything-ok {
        then accept;
    }
}

```

```

    }
}
filter from-gram_der {
    term to-backup-server {
        from {
            destination-address {
                195.251.249.12/32;
            }
        }
        then accept;
    }
}
term to-gram-ant {
    from {
        destination-address {
            195.251.254.224/27;
        }
    }
    then accept;
}
term no-ms-ports {
    from {
        destination-port [ 135-139 445 593 1433 1434 42 ];
    }
    then {
        reject;
    }
}
term everything-ok {
    then accept;
}
term to-server-Gram {
    from {
        destination-address {
            195.251.251.97/32;
        }
    }
    then accept;
}
}
filter to-gram_der {
    term everything-ok {
        then accept;
    }
}
filter from-career {
    apply-groups [ filters-no-ms filters-default-accept ];
}
filter to-career {
    term everything-ok {

```

```

        then accept;
    }
}
filter from-neolaies {
    apply-groups [ filters-no-ms filters-default-accept ];
}
filter to-neolaies {
    term everything-ok {
        then accept;
    }
}
filter from-lab_dmst {
    apply-groups [ filters-no-ms filters-default-accept ];
}
filter to-lab_dmst {
    /* from */
    term to249141 {
        from {
            destination-address {
                195.251.249.141/32;
            }
        }
        then accept;
    }
    term to249147 {
        from {
            destination-address {
                195.251.249.147/32;
            }
        }
        then accept;
    }
    term no-dns {
        from {
            destination-port domain;
        }
        then {
            reject;
        }
    }
    term everything-ok {
        then accept;
    }
}
filter from-lab_heltrun {
    apply-groups [ filters-no-ms filters-default-accept ];
}
filter to-lab_heltrun {
    term HackLog {

```

```

        from {
            destination-address {
                195.251.252.184/32;
            }
        }
        then {
            syslog;
            accept;
        }
    }
    term everything-ok {
        then accept;
    }
}
filter from-lab_mop {
    apply-groups [ filters-no-ms filters-default-accept ];
}
filter to-lab_mop {
    term everything-ok {
        then accept;
    }
}
filter from-lab_market {
    apply-groups [ filters-no-ms filters-default-accept ];
}
filter to-lab_market {
    term everything-ok {
        then accept;
    }
}
filter from-lab_ode {
    apply-groups [ filters-no-ms filters-default-accept ];
}
filter to-lab_ode {
    term everything-ok {
        then accept;
    }
}
filter from-p2p_library {
    apply-groups [ filters-no-ms filters-default-accept ];
}
filter to-p2p_library {
    term everything-ok {
        then accept;
    }
}
filter from-p2p_lab_mcm {
    apply-groups [ filters-no-ms filters-default-accept ];
}

```

```

filter to-p2p_lab_mcm {
    term everything-ok {
        then accept;
    }
}
filter from-zvr-project {
    apply-groups [ filters-no-ms filters-default-accept ];
}
filter to-zvr-project {
    apply-groups [ filters-no-ms filters-default-accept ];
}
filter from-lab_det_P80 {
    apply-groups [ filters-no-ms filters-default-accept ];
}
filter to-lab_det_P80 {
    apply-groups [ filters-no-ms filters-default-accept ];
}
filter jtac {
    term ms-sql-allowed {
        from {
            destination-address {
                195.251.253.61/32;
                195.251.253.40/32;
                195.251.253.58/32;
                195.251.253.49/32;
                195.251.250.66/32;
            }
            protocol tcp;
            destination-port 1433;
        }
        then accept;
    }
    term no-ms-ports {
        from {
            destination-port [ 135-139 445 593 1433 1434 1025 42 ];
        }
        then {
            reject;
        }
    }
    term mcast {
        from {
            destination-address {
                224.0.0.0/4;
            }
        }
        then {
            count mcast;
            log;
        }
    }
}

```

```

        accept;
    }
}
term everything-ok {
    then accept;
}
}
filter to-p2p_lab_logist {
    term ms-sql-allowed {
        from {
            destination-address {
                195.251.253.61/32;
                195.251.253.40/32;
                195.251.253.58/32;
                195.251.253.49/32;
                195.251.250.66/32;
                195.251.253.33/32;
                195.251.253.44/32;
                195.251.253.30/32;
                195.251.253.51/32;
                195.251.253.37/32;
            }
            protocol tcp;
            destination-port [ 1433 135 ];
        }
        then accept;
    }
}
term no-ms-ports {
    from {
        destination-port [ 135-139 445 593 1433 1434 1025 42 ];
    }
    then {
        reject;
    }
}
term everything-ok {
    then accept;
}
}
filter from-p2p_lab_logist {
    term sql-lab_logist {
        from {
            source-address {
                195.251.253.0/26;
            }
            protocol tcp;
            destination-port [ 1433 135 ];
        }
        then accept;
    }
}

```

```

}
term no-ms-ports {
  from {
    destination-port [ 135-139 445 593 1433 1434 42 1025 ];
  }
  then {
    reject;
  }
}
term everything-ok {
  then accept;
}
}
filter from-wi-gbit {
  apply-groups [ filters-no-ms filters-default-accept ];
}
filter to-wi-gbit {
  term to-server-established {
    from {
      destination-address {
        195.251.251.254/32;
      }
      protocol tcp;
      tcp-established;
    }
    then accept;
  }
  term to-server-dns {
    from {
      destination-address {
        195.251.251.254/32;
      }
      protocol udp;
      source-port domain;
    }
    then accept;
  }
  term to-server-ssh {
    from {
      source-address {
        195.251.255.0/26;
      }
      destination-address {
        195.251.251.254/32;
      }
      destination-port ssh;
    }
    then accept;
  }
}

```

```

term denyall-server {
    from {
        destination-address {
            195.251.251.254/32;
        }
    }
    then {
        reject;
    }
}
term everything-ok {
    then accept;
}
}
filter from-lab_stat_risk {
    apply-groups [ filters-no-ms filters-default-accept ];
}
filter to-lab_stat_risk {
    apply-groups [ filters-no-ms filters-default-accept ];
}
filter from-dialup_access {
    apply-groups [ filters-no-ms filters-default-accept ];
}
filter to-dialup_access {
    term establ {
        from {
            destination-address {
                195.251.255.72/29;
            }
            tcp-established;
        }
        then accept;
    }
}
term ntp {
    from {
        destination-address {
            195.251.255.77/32;
            195.251.255.76/32;
            195.251.255.78/32;
        }
        protocol udp;
        destination-port ntp;
    }
    then accept;
}
term toVPNopenvpn {
    from {
        destination-address {
            195.251.255.76/32;

```

```

    }
    protocol tcp;
    destination-port 1194;
  }
  then accept;
}
term toVPNssh {
  from {
    source-address {
      195.251.255.253/32;
      195.251.255.254/32;
      195.251.255.0/26;
    }
    destination-address {
      195.251.255.76/32;
    }
    protocol tcp;
    destination-port ssh;
  }
  then accept;
}
term toVPNdns {
  from {
    destination-address {
      195.251.255.76/32;
      195.251.255.77/32;
    }
    source-port domain;
  }
  then accept;
}
term toVPN2openvpn {
  from {
    destination-address {
      195.251.255.77/32;
    }
    protocol tcp;
    destination-port 1194;
  }
  then accept;
}
term toVPN2ssh {
  from {
    source-address {
      195.251.255.253/32;
      195.251.255.254/32;
      195.251.255.0/26;
    }
    destination-address {

```

```

        195.251.255.77/32;
    }
    protocol tcp;
    destination-port ssh;
}
then accept;
}
term toVPN2fromRadius {
    from {
        source-address {
            195.251.255.148/32;
        }
        destination-address {
            195.251.255.77/32;
        }
    }
    then accept;
}
term toVPNreject {
    from {
        destination-address {
            195.251.255.76/32;
            195.251.255.77/32;
        }
    }
    then {
        reject;
    }
}
term toEduroamRadiusEstabl {
    from {
        destination-address {
            195.251.255.78/32;
            195.251.255.74/32;
        }
        protocol tcp;
        tcp-established;
    }
    then accept;
}
term toEduroamRadiusRadius {
    from {
        destination-address {
            195.251.255.78/32;
            195.251.255.74/32;
        }
        protocol tcp;
        destination-port [ 1812 1813 1814 ];
    }
}

```

```

    then accept;
}
term toEduroamRadiusDNS {
    from {
        destination-address {
            195.251.255.78/32;
            195.251.255.74/32;
        }
        source-port domain;
    }
    then accept;
}
term toEduroamRadiusFromEduroamEDET {
    from {
        source-address {
            194.177.210.143/32;
            194.177.210.217/32;
            10.10.20.225/32;
            10.10.20.209/32;
            10.10.20.213/32;
            10.10.20.211/32;
            10.10.20.222/32;
            10.10.20.223/32;
            10.10.20.224/32;
            10.10.20.226/32;
            10.10.20.227/32;
            10.10.20.228/32;
            10.10.20.229/32;
            10.10.20.230/32;
            10.10.20.231/32;
            10.10.20.233/32;
            10.10.20.201/32;
            10.10.20.202/32;
            10.10.20.204/32;
            10.10.20.205/32;
            10.10.20.206/32;
            10.10.20.207/32;
            10.10.20.208/32;
            10.10.20.210/32;
            10.10.20.212/32;
            10.10.20.214/32;
            10.10.20.215/32;
            10.10.20.221/32;
            10.10.20.235/32;
            10.10.20.236/32;
            10.10.20.237/32;
            10.10.20.238/32;
            10.10.20.239/32;
            10.10.20.234/32;
        }
    }
}

```

```

        10.10.20.220/32;
        10.10.20.240/32;
        10.10.20.203/32;
        195.251.235.73/32;
        10.10.20.248/32;
        10.10.20.241/32;
        10.10.20.242/32;
        10.10.20.243/32;
        10.10.20.244/32;
        10.10.20.245/32;
        10.10.20.246/32;
        10.10.20.247/32;
    }
    destination-address {
        195.251.255.78/32;
        195.251.255.74/32;
    }
}
then accept;
}
term toEduroamRadiusSsh {
    from {
        source-address {
            195.251.255.0/26;
        }
        destination-address {
            195.251.255.78/32;
            195.251.255.74/32;
        }
        protocol tcp;
        destination-port ssh;
    }
    then accept;
}
term toEduroamRadiusReject {
    from {
        destination-address {
            195.251.255.78/32;
            195.251.255.74/32;
        }
    }
    then {
        reject;
    }
}
term everything-ok {
    then accept;
}
}

```

```

filter to-lab_irn_P80 {
    apply-groups [ filters-no-ms filters-default-accept ];
}
filter from-lab_irn_P80 {
    apply-groups [ filters-no-ms filters-default-accept ];
}
filter to-lab_oik_P80 {
    apply-groups [ filters-no-ms filters-default-accept ];
}
filter from-lab_oik_P80 {
    apply-groups [ filters-no-ms filters-default-accept ];
}
filter from-test {
    term permit-all {
        then accept;
    }
}
filter to-test {
    term established {
        from {
            tcp-established;
        }
        then accept;
    }
    term services {
        from {
            protocol tcp;
            destination-port [ http 443 ];
        }
        then accept;
    }
    term dns_replies {
        from {
            source-port domain;
        }
        then accept;
    }
    term ftp {
        from {
            source-address {
                195.251.255.0/26;
            }
            protocol tcp;
            destination-port ftp;
        }
        then accept;
    }
    term ssh {
        from {

```

```

        source-address {
            195.251.255.0/26;
            195.251.255.253/32;
            195.251.255.254/32;
        }
        protocol tcp;
        destination-port ssh;
    }
    then accept;
}
term deny-all {
    then {
        reject;
    }
}
}
filter to-ccs_lab {
    term no-ms-ports {
        from {
            destination-port [ 135-139 445 593 1433 1434 42 ];
        }
        then {
            reject;
        }
    }
}
term hosts-wide-open {
    from {
        destination-address {
            195.251.252.64/28;
            195.251.252.97/32;
            195.251.252.98/32;
            195.251.252.99/32;
            195.251.252.100/32;
            195.251.252.101/32;
            195.251.252.102/32;
            195.251.252.121/32;
            195.251.252.112/32;
        }
    }
    then accept;
}
term established {
    from {
        destination-address {
            195.251.252.80/28;
            195.251.252.96/27;
        }
    }
    tcp-established;
}

```

```

    then accept;
}
term www-only {
    from {
        destination-address {
            195.251.252.107/32;
        }
        protocol tcp;
        port 80;
    }
    then accept;
}
term dns-data {
    from {
        source-address {
            195.251.255.142/32;
        }
        source-port domain;
    }
    then accept;
}
term ftp-data {
    from {
        source-port ftp-data;
    }
    then accept;
}
term moria-all {
    from {
        destination-address {
            195.251.252.110/32;
        }
        protocol tcp;
        destination-port [ http https ssh ];
    }
    then accept;
}
term moria-int {
    from {
        source-address {
            195.251.255.76/32;
            83.212.208.0/20;
            195.251.255.0/26;
            195.251.255.77/32;
        }
        destination-address {
            195.251.252.110/32;
        }
        protocol tcp;
    }
}

```

```

        destination-port [ ssh ftp ];
    }
    then accept;
}
term alexandros {
    from {
        destination-address {
            195.251.252.103/32;
        }
        protocol tcp;
        destination-port [ http https telnet ssh ftp ];
    }
    then accept;
}
term from-DIODOS-VPN {
    from {
        source-address {
            195.251.255.76/32;
            83.212.208.0/20;
        }
        destination-address {
            195.251.252.80/28;
            195.251.252.96/27;
        }
        protocol tcp;
        destination-port [ ssh ftp ];
    }
    then accept;
}
term to-114 {
    from {
        source-address {
            195.251.248.0/21;
            195.251.232.0/22;
            83.212.204.0/22;
            83.212.208.0/20;
        }
        destination-address {
            195.251.252.114/32;
        }
    }
    then accept;
}
term to-114-internet {
    from {
        destination-address {
            195.251.252.114/32;
        }
        destination-port [ 80 3389 ];
    }
}

```

```

    }
    then accept;
}
term to-109 {
    from {
        destination-address {
            195.251.252.109/32;
        }
        destination-port 22;
    }
    then accept;
}
term to-any-from-109 {
    from {
        source-address {
            195.251.252.109/32;
        }
        destination-port [ 119 433 ];
    }
    then accept;
}
term black-hole {
    then {
        reject;
    }
}
}
filter from-ccs_lab {
    term no-ms-ports {
        from {
            destination-port [ 135-139 445 593 1433 1434 42 ];
        }
        then {
            reject;
        }
    }
}
term hosts-wide-open {
    from {
        source-address {
            195.251.252.64/28;
            195.251.252.97/32;
            195.251.252.98/32;
            195.251.252.99/32;
            195.251.252.100/32;
            195.251.252.101/32;
            195.251.252.102/32;
            195.251.252.112/32;
        }
    }
}

```

```

    then accept;
}
term established {
    from {
        source-address {
            195.251.252.80/28;
            195.251.252.96/27;
            195.251.252.114/32;
        }
        tcp-established;
    }
    then accept;
}
term telnet-ssh-int {
    from {
        source-address {
            195.251.252.80/28;
            195.251.252.96/27;
        }
        destination-address {
            195.251.252.80/28;
            195.251.252.96/27;
        }
        destination-port [ ssh telnet ];
    }
    then accept;
}
term hosts-filtered {
    from {
        source-address {
            195.251.252.80/28;
            195.251.252.96/27;
        }
        destination-port [ http https ftp smtp pop3 imap domain 9100 ];
    }
    then accept;
}
term alexandros-ftp-data {
    from {
        source-address {
            195.251.252.103/32;
        }
        source-port ftp-data;
    }
    then accept;
}
term to-DIODOS {
    from {
        source-address {

```

```

        195.251.252.80/28;
        195.251.252.96/27;
    }
    destination-address {
        83.212.208.0/20;
        195.251.255.76/32;
        195.251.255.0/26;
    }
    source-port ftp-data;
}
then accept;
}
term to-114 {
    from {
        destination-address {
            195.251.252.114/32;
        }
    }
    then accept;
}
term from-109 {
    from {
        source-address {
            195.251.252.109/32;
        }
        destination-port [ 22 119 433 ];
    }
    then accept;
}
term black-hole {
    then {
        reject;
    }
}
}
filter from-ist_ois_lab {
    apply-groups [ filters-no-ms filters-default-accept ];
}
filter to-ist_ois_lab {
    term everything-ok {
        then accept;
    }
}
filter from-det_cc_lab {
    term from25130 {
        from {
            source-address {
                195.251.251.30/32;
            }
        }
    }
}

```

```

        destination-address {
            195.251.249.128/26;
        }
    }
    then accept;
}
term no-ms-ports {
    from {
        destination-port [ 135-139 445 593 1433 1434 42 ];
    }
    then {
        reject;
    }
}
term everything-ok {
    then accept;
}
}
filter to-det_cc_lab {
    apply-groups [ filters-no-ms filters-default-accept ];
}
filter from-elpidos {
    term SQL-access-both {
        from {
            source-address {
                83.212.206.37/32;
            }
            protocol tcp;
            destination-port [ 1433 1434 ];
        }
        then accept;
    }
    term no-ms-ports {
        from {
            destination-port [ 135-139 445 593 1433 1434 42 1025 ];
        }
        then {
            reject;
        }
    }
    term everything-ok {
        then accept;
    }
}
filter to-elpidos {
    apply-groups [ filters-no-ms filters-default-accept ];
}
filter from-patision95 {
    apply-groups [ filters-no-ms filters-default-accept ];
}

```

```

}
filter to-patision95 {
    apply-groups [ filters-no-ms filters-default-accept ];
}
filter from-offices_kodr {
    apply-groups [ filters-no-ms filters-default-accept ];
}
filter to-offices_kodr {
    term everything-ok {
        then accept;
    }
}
filter to-hosted-servers {
    term establ {
        from {
            destination-address {
                195.251.253.128/28;
            }
            tcp-established;
        }
        then accept;
    }
    term fromKOE {
        from {
            source-address {
                83.212.204.0/28;
            }
            destination-address {
                195.251.253.135/32;
            }
        }
        then accept;
    }
    term fromAUEB {
        from {
            source-address {
                195.251.248.0/21;
                195.251.232.0/22;
                83.212.204.0/22;
            }
            destination-address {
                195.251.253.135/32;
            }
            destination-port 80;
        }
        then accept;
    }
    term toKOEserversDNS {
        from {

```

```

        destination-address {
            195.251.253.135/32;
        }
        source-port domain;
    }
    then accept;
}
term denyToKOEServer {
    from {
        destination-address {
            195.251.253.135/32;
        }
    }
    then {
        reject;
    }
}
term permitAll {
    then accept;
}
}
filter from-hosted-servers {
    term everything-ok {
        then accept;
    }
}
filter to-ip_telephony {
    term ntp-setup {
        from {
            source-address {
                83.212.206.1/32;
                10.10.90.1/32;
            }
            source-port ntp;
        }
        then accept;
    }
}
term marac_admin {
    from {
        source-address {
            195.251.255.4/32;
            178.128.49.80/32;
            195.251.255.37/32;
        }
        destination-address {
            83.212.206.24/32;
            83.212.206.10/32;
            83.212.206.12/32;
            83.212.206.2/32;
        }
    }
}

```

```

    }
  }
  then accept;
}
term noc-admin {
  from {
    source-address {
      195.251.255.4/32;
      195.251.255.37/32;
    }
  }
  then accept;
}
term test-allow {
  from {
    destination-address {
      83.212.206.15/32;
    }
    tcp-established;
  }
  then accept;
}
term dns-allow {
  from {
    destination-address {
      83.212.206.15/32;
    }
    source-port domain;
  }
  then accept;
}
term deny_all {
  then {
    reject;
  }
}
}
filter from-ip_telephony {
  apply-groups [ filters-no-ms filters-default-accept ];
  term established {
    from {
      source-address {
        83.212.206.2/32;
      }
      destination-address {
        195.251.255.4/32;
        195.251.255.37/32;
      }
    }
  }
}

```

```
    then accept;  
  }  
}  
}
```

ΠΑΡΑΡΤΗΜΑ Β

ΕΝΔΕΙΚΤΙΚΟ OUTPUT ΤΩΝ ΕΝΤΟΛΩΝ ΠΟΥ ΕΚΤΕΛΕΣΤΗΚΑΝ ΣΕ SWITCH

10.10.20.105_25_09_2014_09_36_07 CONNECT
ProCurve J9091A Switch 8212zl

Software revision K.15.02.0005

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HEWLETT-PACKARD COMPANY, 3000 Hanover St., Palo Alto, CA 94303

[1;14r[1;1H[47;1HPress any key to
continue[14;1H[?25h[47;27H[?6l[1;47r[?7l[2J[1;1H[1;47r[47;1H[47;1H[2K[47;1H[?25h[47;
1H[47;1HAntoniadou_GRND_8212#
[47;1H[47;23H[47;1H[?25h[47;23H[47;0HE[47;1H[47;23H[47;1H[2K[47;1H[?25h[47;1H[1;
47r[47;1H[1;47r[47;1H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRND_8212#
[47;1H[47;23H[47;1H[?25h[47;23H[47;0HE[47;1H[47;23H[47;1H[2K[47;1H[?25h[47;1H[1;
47r[47;1H[1;47r[47;1H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRND_8212#
[47;1H[47;23H[47;1H[?25h[47;23H[47;23Hs[47;23H[?25h[47;24H[47;24Hh[47;24H[?25h[4
7;25H[47;25Ho[47;25H[?25h[47;26H[47;26Hw[47;26H[?25h[47;27H[47;27H
[47;27H[?25h[47;28H[47;28Hs[47;28H[?25h[47;29H[47;29Hy[47;29H[?25h[47;30H[47;30H
s[47;30H[?25h[47;31H[47;31Ht[47;31H[?25h[47;32H[47;32He[47;32H[?25h[47;33H[47;33
Hm[47;33H[?25h[47;34H[47;34H [47;34H[?25h[47;35H[?25h[47;1H[1;47r[47;1H
chassislocate Displays ChassisLocate LED status.
fans Show system fan status.
information Show global configured and operational system
 parameters.
power-consumption Show switch blade power consumption information.
power-supply Show Chassis Power Supply info and settings.
temperature Show systems temperatures and settings.
<cr>

[1;47r[47;1H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRND_8212#
[47;1H[47;23Hshow system
[47;1H[?25h[47;35H[47;0HE[47;1H[47;35H[47;1H[2K[47;1H[?25h[47;1H[1;47r[47;1H
Status and Counters - General System Information

System Name : Antoniadou_GRND_8212
System Contact :
System Location :

MAC Age Time (sec) : 300

Time Zone : 0
Daylight Time Rule : None

Software revision : K.15.02.0005 Base MAC Addr : 3c4a92-2a8200
ROM Version : K.15.10 Serial Number : SG11DXX02T
Allow V1 Modules : Yes

Up Time : 308 days Memory - Total : 122,445,824
CPU Util (%) : 0 Free : 61,533,176

IP Mgmt - Pkts Rx : 6,604,537 Packet - Total : 6750
Pkts Tx : 7,822,161 Buffers Free : 5086
Lowest : 4839
Missed : 0

[1;47r[47;1H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRND_8212#
[47;1H[47;23H[47;1H[?25h[47;23H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRN
D_8212# [47;1H[47;23Hshow system
[47;1H[?25h[47;35H[47;35Hi[47;35H[?25h[47;36H[47;36Hn[47;36H[?25h[47;37H[47;37Hf[
47;37H[?25h[47;38H[47;38Ho[47;38H[?25h[47;39H[?25h[47;1H[1;47r[47;1H[1;47r[47;1H[
47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRND_8212# [47;1H[47;23Hshow system
information
[47;1H[?25h[47;47H[47;0HE[47;1H[47;47H[47;1H[2K[47;1H[?25h[47;1H[1;47r[47;1H
Status and Counters - General System Information

System Name : Antoniadou_GRND_8212
System Contact :
System Location :

MAC Age Time (sec) : 300

Time Zone : 0
Daylight Time Rule : None

Software revision : K.15.02.0005 Base MAC Addr : 3c4a92-2a8200
ROM Version : K.15.10 Serial Number : SG11DXX02T

Allow V1 Modules : Yes

Up Time : 308 days Memory - Total : 122,445,824
CPU Util (%) : 0 Free : 61,529,784

IP Mgmt - Pkts Rx : 6,604,563 Packet - Total : 6750
Pkts Tx : 7,822,178 Buffers Free : 5086
Lowest : 4839
Missed : 0

[1;47r[47;1H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRND_8212#
[47;1H[47;23H[47;1H[?25h[47;23H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRN
D_8212# [47;1H[47;23Hshow system information
[47;1H[?25h[47;47H[?25h[47;46H[47;46H [47;46H[?25h[47;45H[47;45H
[47;45H[?25h[47;44H[47;44H [47;44H[?25h[47;43H[47;43H [47;43H[?25h[47;42H[47;42H
[47;42H[?25h[47;41H[47;41H [47;41H[?25h[47;40H[47;40H [47;40H[?25h[47;39H[47;39H
[47;39H[?25h[47;38H[47;38H [47;38H[?25h[47;37H[47;37H [47;37H[?25h[47;36H[47;36H
[47;36H[?25h[47;35H[47;35H
[47;35H[47;35Hf[47;35H[?25h[47;36H[47;36Ha[47;36H[?25h[47;37H[47;37Hn[47;37H[?25
h[47;38H[47;38Hs[47;38H[?25h[47;39H[47;0HE[47;1H[47;39H[47;1H[2K[47;1H[?25h[47;1
H[1;47r[47;1H

Fan Information

Num	State	Failures
-----+-----+-----		
Sys-1	Fan OK	0
Sys-2	Fan OK	0
Sys-3	Fan OK	0
Sys-4	Fan OK	0
Sys-5	Fan OK	0
Sys-6	Fan OK	0

0 / 6 Fans in Failure State

0 / 6 Fans have been in Failure State

[1;47r[47;1H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRND_8212#
[47;1H[47;23H[47;1H[?25h[47;23H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRN
D_8212# [47;1H[47;23Hshow system fans[47;1H[?25h[47;39H[?25h[47;38H[47;38H
[47;38H[?25h[47;37H[47;37H [47;37H[?25h[47;36H[47;36H [47;36H[?25h[47;35H[47;35H
[47;35H[47;35Hp[47;35H[?25h[47;36H[47;36Ho[47;36H[?25h[47;37H[47;37Hw[47;37H[?2
5h[47;38H[47;38He[47;38H[?25h[47;39H[47;39Hr[47;39H[?25h[47;40H[?25h[47;1H[1;47r[
47;1H

power-consumption

power-supply

[1;47r[47;1H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRND_8212#
[47;1H[47;23Hshow system power[47;1H[?25h[47;40H[47;40H-
[47;40H[?25h[47;41H[47;41Hs[47;41H[?25h[47;42H[47;42Hu[47;42H[?25h[47;43H[?25h[4
7;1H[1;47r[47;1H[1;47r[47;1H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRND_821
2# [47;1H[47;23Hshow system power-supply
[47;1H[?25h[47;48H[47;0HE[47;1H[47;48H[47;1H[2K[47;1H[?25h[47;1H[1;47r[47;1H

Power Supply Status:

PS# | State | AC/DC + V | Wattage

```
-----+-----+-----+-----
1 | Powered | AC 220V | 1500
2 | Not Plugged | AC 120V | 875
3 | Powered | AC 220V | 1500
4 | Not Present | -- ---- | 0
```

2 / 4 supply bays delivering power.

```
[1;47r[47;1H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRND_8212#
[47;1H[47;23H[47;1H[?25h[47;23H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRN
D_8212# [47;1H[47;23Hshow system power-supply
[47;1H[?25h[47;48H[?25h[47;47H[47;47H [47;47H[?25h[47;46H[47;46H
[47;46H[?25h[47;45H[47;45H [47;45H[?25h[47;44H[47;44H [47;44H[?25h[47;43H[47;43H
[47;43H[?25h[47;42H[47;42H [47;42H[?25h[47;41H[47;41H [47;41H[?25h[47;40H[47;40H
[47;40H[?25h[47;39H[47;39H [47;39H[?25h[47;38H[47;38H [47;38H[?25h[47;37H[47;37H
[47;37H[?25h[47;36H[47;36H [47;36H[?25h[47;35H[47;35H
[47;35H[47;35Ht[47;35H[?25h[47;36H[47;36He[47;36H[?25h[47;37H[47;37Hm[47;37H[?2
5h[47;38H[47;38Hp[47;38H[?25h[47;39H[47;0HE[47;1H[47;39H[47;1H[2K[47;1H[?25h[47
;1H[1;47r[47;1H
```

System Air Temperature

Current Temp Max Temp Min Temp Threshold Over Temp

```
-----
+ Sys-1 27C 31C 25C 45C NO
[1;47r[47;1H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRND_8212#
[47;1H[47;23H[47;1H[?25h[47;23H[47;23Hd[47;23H[?25h[47;24H[47;24Hi[47;24H[?25h[4
7;25H[47;25Hs[47;25H[?25h[47;26H[47;26Hp[47;26H[?25h[47;27H[47;27Hi[47;27H[?25h[
47;28H[47;28Ha[47;28H[?25h[47;29H[47;29Hy[47;29H[?25h[47;30H[47;30H
[47;30H[?25h[47;31H[47;31Hm[47;31H[?25h[47;32H[47;32He[47;32H[?25h[47;33H[47;33
Hm[47;33H[?25h[47;34H[47;34Ho[47;34H[?25h[47;35H[47;35Hr[47;35H[?25h[47;36H[47;
36Hy[47;36H[?25h[47;37H[47;0HE[47;1H[47;37H[47;1H[2K[47;1H[?25h[47;1H[1;47r[47;1
HInvalid input: display
[1;47r[47;1H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRND_8212#
[47;1H[47;23H[47;1H[?25h[47;23H[47;23Hs[47;23H[?25h[47;24H[47;24Hh[47;24H[?25h[4
7;25H[?25h[47;1H[1;47r[47;1H[1;47r[47;1H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniado
u_GRND_8212# [47;1H[47;23Hshow
[47;1H[?25h[47;28H[47;28Hm[47;28H[?25h[47;29H[47;29Ho[47;29H[?25h[47;30H[47;30H
d[47;30H[?25h[47;31H[47;31Hu[47;31H[?25h[47;32H[?25h[47;1H[1;47r[47;1H[1;47r[47;1
H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRND_8212# [47;1H[47;23Hshow
modules
[47;1H[?25h[47;36H[47;0HE[47;1H[47;36H[47;1H[2K[47;1H[?25h[47;1H[1;47r[47;1H
Status and Counters - Module Information
```

Chassis: 8212zl J9091A Serial Number: SG11DXX02T

Allow V1 Modules: Yes

Core Mod

Slot Module Description Serial Number Status Dump Ver

MM1 ProCurve J9092A Management Module 8... SG034BP09F Active YES 1

SSM ProCurve J9095A System Support Module SG040BZ04C

FM1 ProCurve J9093A Fabric Module 8200zl SG047BQ0NR Enabled - 1
 FM2 ProCurve J9093A Fabric Module 8200zl SG047BQ04F Enabled - 1

A	ProCurve J9537A 24p SFP v2 zl Module	SG0507V0C9	Up	YES	2
B	ProCurve J9536A 20p GT PoE+/2p SFP+...	SG0457T04M	Up	YES	2
C	ProCurve J9534A 24p Gig-T PoE+ v2 z...	SG0437R10D	Up	YES	2
D	ProCurve J9534A 24p Gig-T PoE+ v2 z...	SG0487R0CY	Up	YES	2
E	ProCurve J9534A 24p Gig-T PoE+ v2 z...	SG0517R0HG	Up	YES	2
F	ProCurve J9534A 24p Gig-T PoE+ v2 z...	SG0517R0M8	Up	YES	2
G	ProCurve J9534A 24p Gig-T PoE+ v2 z...	SG0527R09B	Up	YES	2

```
[1;47r[47;1H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRND_8212#
[47;1H[47;23H[47;1H[?25h[47;23H[47;23Hs[47;23H[?25h[47;24H[47;24Hh[47;24H[?25h[4
7;25H[?25h[47;1H[1;47r[47;1H[1;47r[47;1H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniado
u_GRND_8212# [47;1H[47;23Hshow
[47;1H[?25h[47;28H[47;28Hm[47;28H[?25h[47;29H[47;29Ha[47;29H[?25h[47;30H[47;30H
c[47;30H[?25h[47;31H[?25h[47;1H[1;47r[47;1H[1;47r[47;1H[47;1H[2K[47;1H[?25h[47;1H[
47;1HAntoniadou_GRND_8212# [47;1H[47;23Hshow mac-address
[47;1H[?25h[47;40H[47;0HE[47;1H[47;40H[47;1H[2K[47;1H[?25h[47;1H[1;47r[47;1H
Status and Counters - Port Address Table
```

MAC Address Located on Port

000bfd-df3bf1 A1
 000d65-48d0b1 A1
 0010f6-467808 C1
 001120-bc79f2 A1
 00169d-062759 A1
 0050c2-1938fd A1
 20fdf1-baab99 A1
 20fdf1-f504a2 A1
 20fdf1-f56c5c A1
 3c4a92-3356fd A1
 b8af67-1911d1 A1
 00090f-fc6594 A1
 000c29-9639e6 A1
 000c29-a04d38 A1
 000c29-b09b18 A1
 000d65-48d0b1 A1
 00163e-462553 A1
 78e3b5-1d4bd0 A1
 000585-29e81f A2
 00090f-fc6595 A1
 000a6b-02821f A1
 000bcd-659edd A1

000c29-d3c53a A1
000d65-48d0b1 A1
000fea-36a2c8 A1
001485-725257 A1
0014d1-72975e A1
0014d1-7298bd A1
001e33-aa03be A1
0026b9-8c3810 A1
0030c1-2cc5d4 A1
00b0d0-ea2990 A1
00d0b7-272ad2 A1
00e018-c557dc A1
00e018-c55f54 A1
101f74-3375b8 A1
6cf049-188a65 A1
6cf049-188acb A1
6cf049-188b91 A1
6cf049-188db8 A1
78e3b5-1d3b70 A1

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00090f-fc6593 A1
000585-29e81f A2
000c29-1c6138 A1
000c29-41a300 A1
000c29-6dccc6 A1
000c29-7c78a0 A1
000c29-a61990 A1
000c29-b69447 A1
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90f652-03896f A1
000585-29e81f A2
000d65-48d0b1 A1
0010f6-467808 C1
9002a9-20128a D13
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40167e-7a5efe A1
60a44c-51fe6b A1
60a44c-51fe6d A1
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6cf049-02ce5b A1
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00188b-2c03ad A1
0021b7-1cfea1 A1
00c0ee-19c32f A1
00c0ee-90df8a A1
18a905-0743da A1
5453ed-22ab8c A1
6466b3-85e223 A1
782bcb-8e573f A1
848f69-ae314f A1
90e6ba-071aa5 A1
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c81f66-2a97d6 A1
000074-9de044 A1
0000aa-f06ea9 A1
000585-29e81f A2
001132-22a9f1 A1
00123f-d2b2bc A1
001599-d4f17c A1
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009c02-87b1cb A1
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001d7d-d13d4d A1
001ec9-2ffea5 A1
001fc6-9e007a A1
0021b7-ee98da A1
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0090a9-b409e5 A1
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1c6f65-4ae116 A1
6c626d-a3e49d A1
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6cf049-18dee9 A1
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000585-29e81f A2
000585-29e81f A2
0014d1-7298b8 A1
002618-aa02b0 A1
0000aa-95659d A1
000585-29e81f A2
001372-fe657a A1
00c0ee-6eae94 A1
901b0e-05cb0f A1
901b0e-05cd5a A1
901b0e-05cfdd A1
000585-29e81f A2
000a5e-24c397 A1
0014bf-e2b8f4 A1
00223f-f01da2 A1
424c07-c3a5e0 A1
782bcb-180b35 A1

[47;1H[2K-- MORE --, next page: Space, next line: Enter, quit: Control-C[47;1H[47;1H[2K[47;1H[1;47r[47;1H 782bcb-180b37 A1

901b0e-05cb91 A1
000585-29e81f A2
000c29-3d1f0e A1
000c29-ed8e4c A1
000d65-48d0b1 A1
b4527e-d0b00d A1
bc20a4-097e8f A1
000585-29e81f A2
000d65-48d0b1 A1
000585-29e81f A2
000bfd-df3bc0 A1
000bfd-df3bf1 A1
000d65-48d080 A1
000f23-5d6600 A1
0010f6-467808 C1
001120-bc79c0 A1
001563-3cf840 C24
001563-66ed4a C24
0015f9-c95340 A1
0015f9-c95364 A1
0015f9-c95370 A1
0015f9-c95374 A1
0015f9-c95388 A1
0015f9-c953a2 A1
001646-5a7e92 C19
001646-5a7e94 C20
001646-5a7ea2 A1
001646-5a7ec3 C6
001646-5a7ec5 A1
001646-5a7ed2 C8
001646-5a7ed4 C21
001646-5a7f5a A1
001646-5a7f5b B4
001646-5a7f61 A1
001646-5a7f6a A1
001646-5a7f70 A1
001646-5a7f9a C22
001646-5a7fa8 C7
001646-6a7600 A1
00169d-062740 A1
00169d-575160 C7
00169d-575170 C20
00169d-5751f0 C22
00169d-575260 C21
00169d-5752b0 C8
[47;1H[2K-- MORE --, next page: Space, next line: Enter, quit: Control-
C[47;1H[47;1H[2K[47;1H[1;47r[47;1H 001da2-45aedd A1
001da2-45aedd A1
001da2-45aee0 A1

001da2-45aee1 A1
001da2-45aee6 A1
001da2-7c8d10 A1
001da2-7cb530 A1
001e13-101a7c C17
001e13-101b79 D3
001e13-101b85 A1
001e13-101b8a A1
001e13-101b8f A1
001e13-101b91 A1
001e13-101b96 A1
001e4a-068f80 A1
001e4a-069150 A1
001e4a-069450 D3
0020d2-393b1c B20
0020d2-39468a A1
0020d2-395457 A1
0020d2-395fb2 A1
0020d2-39a2c2 B19
00241d-6c30a2 A1
08006f-826947 A1
20fdf1-baab99 A1
20fdf1-ef1b9e A1
20fdf1-f504a2 A1
20fdf1-f6189e A1
20fdf1-f61ef6 A1
20fdf1-f62344 A1
20fdf1-f62466 A1
20fdf1-f62e5e A1
3c4a92-232400 A1
3c4a92-334600 A1
3c4a92-33c100 A1
443192-9a4b60 D20
443192-aeac60 A1
443192-aed5e0 A1
443192-aedda0 A1
443192-ae120 A1
443192-af2500 A1
443192-af2580 A1
443192-af26a0 A1
7446a0-de9b08 A1
78acc0-fbf60f A1
984be1-09e1af A1

[47;1H[2K-- MORE --, next page: Space, next line: Enter, quit: Control-
C[47;1H[47;1H[2K[47;1H[1;47r[47;1H b499ba-3cec00 A1
b499ba-a62e0d A1
b8af67-168bff A1
b8af67-16921d A1
b8af67-169427 A1

b8af67-16950f A1
b8af67-169583 A1
b8af67-169e93 A1
b8af67-1911d1 A1
b8af67-191ab7 A1
c09134-960680 A1
c09134-96f480 A1
c09134-f54700 A1
c09134-fbc800 A1
f06281-5f1800 A1
000585-29e81f A2
0010f6-467808 C1
000585-29e81f A2
001d70-187fef A1
000585-29e81f A2
000cce-d95821 A1
000585-29e81f A2
b0faeb-ad61c1 A1
000142-a9c4d8 A1
000585-29e81f A2
000a6b-0281b7 A1
000a6b-028337 A1
000a6b-028351 A1
001827-016223 B18
001827-0179ce B16
0030d6-0cf7cd B17
0060b9-88d13f A1
0060b9-8c2271 A1
0060b9-8ce10c A1
0060b9-8e1a20 A1
0060b9-8e1a38 A1
0060b9-8e1aa7 A1
0060b9-8e1bdc A1
0060b9-8e1be6 A1
0060b9-b2825b A1
0060b9-b60c19 A1
0060b9-b60c1a A1
0060b9-b60c36 A1
0060b9-b60c37 A1
0060b9-b60c39 A1
0060b9-b60c50 A1

[47;1H[2K-- MORE --, next page: Space, next line: Enter, quit: Control-C[47;1H[47;1H[2K[47;1H[1;47r[47;1H 0060b9-b60c99 A1

0060b9-b60ca2 A1
0060b9-b60ca3 A1
0060b9-b60ca9 A1
0060b9-b60caa A1
0060b9-b60caf A1
0060b9-b60cc6 A1

0060b9-b60cc7 A1
0060b9-b60ccf A1
0060b9-b61995 A1
0060b9-b61996 A1
0060b9-b61997 A1
0060b9-b61998 A1
0060b9-b619a9 A1
0060b9-b619b0 A1
0060b9-b619b1 A1
0060b9-b619b2 A1
0060b9-b61a29 A1
0060b9-b61a2a A1
0060b9-b61a2b A1
0060b9-b61a2c A1
0060b9-b61a32 A1
0060b9-b61a39 A1
0060b9-b61a3a A1
0060b9-b61a3b A1
0060b9-b61a3c A1
0060b9-b61a3d A1
0060b9-b61a4e A1
0060b9-b61a4f A1
0060b9-b61a50 A1
0060b9-b61a51 A1
0060b9-b61a52 A1
0060b9-b61a65 A1
0060b9-b61a66 A1
0060b9-b61a67 A1
0060b9-b61a68 A1
0060b9-b61a69 A1
0060b9-b61a6f A1
0060b9-b61a70 A1
0060b9-b73f9f A1
0060b9-b73fa0 A1
0060b9-b74246 A1
0060b9-b74314 A1
0060b9-b7431a A1
0020d2-393b1c B20
0020d2-39468a A1
[47;1H[2K-- MORE --, next page: Space, next line: Enter, quit: Control-
C[47;1H[47;1H[2K[47;1H[1;47r[47;1H 0020d2-395457 A1
0020d2-395fb2 A1
0020d2-39a2c2 B19
000822-3f1f0a C20
000c29-b09b22 A1
001f33-f50010 A1
001f3c-40d347 C8
00e3b2-916546 D3
041bba-e59f43 C24

04e536-55f5f4 A1
 145a05-5c5446 D3
 1499e2-bbfd95 A1
 181eb0-bdddfd D20
 2c54cf-e8b4a7 A1
 30a8db-6df094 A1
 30f7c5-0fe6cd D3
 34be00-3e4d3d C19
 40b0fa-631995 C24
 40f308-3a2576 C7
 40f308-edc126 A1
 50465d-0ff98b A1
 54271e-6aaf4b C21
 54724f-1baee5 C24
 600308-aa0df6 C24
 701a04-ea2199 A1
 784b87-c9b480 C22
 78a3e4-989d77 D20
 805719-c6000d C20
 881fa1-04c852 A1
 88c9d0-b6866d D3
 a0821f-a8fa4e C24
 a4c361-6f12f2 A1
 accf5c-b9c3f7 A1
 accf5c-c1ca2c A1
 ccfa00-b3f562 D3
 dc3ef8-f8d8cf C24
 e88d28-a6b586 C20
 f0f61c-3973af C24
 fc1f19-f4ad4e C24
 000585-29e81f A2
 8851fb-d98f00 A1

[1;47r[47;1H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRND_8212#
 [47;1H[47;23H[47;1H[?25h[47;23H[47;23H [47;23H[?25h[47;24H[?25h[47;23H[47;23H
 [47;23H[47;23Hs[47;23H[?25h[47;24H[47;24Hh[47;24H[?25h[47;25H[?25h[47;1H[1;47r[47
 ;1H[1;47r[47;1H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRND_8212#
 [47;1H[47;23Hshow
 [47;1H[?25h[47;28H[47;28Hl[47;28H[?25h[47;29H[47;29Hl[47;29H[?25h[47;30H[47;30Hd[
 47;30H[?25h[47;31H[47;31Hp[47;31H[?25h[47;32H[47;32H
 [47;32H[?25h[47;33H[?25h[47;1H[1;47r[47;1H
 auto-provision Show LLDP auto-provision related info for radio-ports.
 config Show LLDP configuration information.
 info Show LLDP information about the remote or local device.
 stats Show LLDP statistics.
 [1;47r[47;1H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRND_8212#
 [47;1H[47;23Hshow lldp
 [47;1H[?25h[47;33H[47;33Hi[47;33H[?25h[47;34H[47;34Hn[47;34H[?25h[47;35H[47;35Hf[

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47;35H[?25h[47;36H[47;36Ho[47;36H[?25h[47;37H[47;0HE[47;1H[47;37H[47;1H[2K[47;1
H[?25h[47;1H[1;47r[47;1HIncomplete input: info
[1;47r[47;1H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRND_8212#
[47;1H[47;23H[47;1H[?25h[47;23H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRN
D_8212# [47;1H[47;23Hshow lldp
info[47;1H[?25h[47;37H[?25h[47;1H[1;47r[47;1H[1;47r[47;1H[47;1H[2K[47;1H[?25h[47;1
H[47;1HAntoniadou_GRND_8212# [47;1H[47;23Hshow lldp info
[47;1H[?25h[47;38H[?25h[47;37H[47;37H [47;37H[47;37H
[47;37H[?25h[47;38H[?25h[47;1H[1;47r[47;1H
local-device      Show LLDP local device information.
remote-device     Show LLDP remote device information.
[1;47r[47;1H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRND_8212#
[47;1H[47;23Hshow lldp info
[47;1H[?25h[47;38H[47;38Hr[47;38H[?25h[47;39H[47;39He[47;39H[?25h[47;40H[?25h[47;
1H[1;47r[47;1H[1;47r[47;1H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRND_8212
# [47;1H[47;23Hshow lldp info remote-device
[47;1H[?25h[47;52H[47;0HE[47;1H[47;52H[47;1H[2K[47;1H[?25h[47;1H[1;47r[47;1H
LLDP Remote Devices Information

```

LocalPort	ChassisId	PortId	PortDescr	SysName
A1	3c 4a 92 33 46 00	3	A3	ANTONIADOU_3rd_8212
C1	sisyfos	Fas...		
C9	00 1b 3f ed 2d 60	23	Port #23	PROCURVE J9080A
D20	CN43G6731G	eth0		
D20	44 31 92 9a 4b 60	44 ...	Port 1	Estiatorio

```

[1;47r[47;1H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRND_8212#
[47;1H[47;23H[47;1H[?25h[47;23H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRN
D_8212# [47;1H[47;23Hshow lldp info remote-device
[47;1H[?25h[47;52H[?25h[47;51H[47;51H [47;51H[?25h[47;50H[47;50H
[47;50H[?25h[47;49H[47;49H [47;49H[?25h[47;48H[47;48H [47;48H[?25h[47;47H[47;47H
[47;47H[?25h[47;46H[47;46H [47;46H[?25h[47;45H[47;45H [47;45H[?25h[47;44H[47;44H
[47;44H[?25h[47;43H[47;43H [47;43H[?25h[47;42H[47;42H [47;42H[?25h[47;41H[47;41H
[47;41H[?25h[47;40H[47;40H [47;40H[?25h[47;39H[47;39H [47;39H[?25h[47;38H[47;38H
[47;38H[?25h[47;37H[47;37H [47;37H[47;37H
[47;37H[?25h[47;38H[47;38Hl[47;38H[?25h[47;39H[47;39Ho[47;39H[?25h[47;40H[47;40H
c[47;40H[?25h[47;41H[?25h[47;1H[1;47r[47;1H[1;47r[47;1H[47;1H[2K[47;1H[?25h[47;1H[
47;1HAntoniadou_GRND_8212# [47;1H[47;23Hshow lldp info local-device
[47;1H[?25h[47;51H[47;0HE[47;1H[47;51H[47;1H[2K[47;1H[?25h[47;1H[1;47r[47;1H
LLDP Local Device Information

```

```

Chassis Type : mac-address
Chassis Id  : 3c 4a 92 2a 82 00
System Name : Antoniadou_GRND_8212
System Description : ProCurve J9091A Switch 8212zl, revision K.15.02.0005...
System Capabilities Supported:bridge, router
System Capabilities Enabled:bridge

```

Management Address :
Type:ipv4
Address:10.10.20.105

LLDP Port Information

Port	PortType	PortId	PortDesc
------	----------	--------	----------

A1	local	1	A1
A2	local	2	A2
A3	local	3	A3
A4	local	4	A4
A5	local	5	A5
A6	local	6	A6
A7	local	7	A7
A8	local	8	A8
A9	local	9	A9
A10	local	10	A10
A11	local	11	A11
A12	local	12	A12
A13	local	13	A13
A14	local	14	A14
A15	local	15	A15
A16	local	16	A16
A17	local	17	A17
A18	local	18	A18
A19	local	19	A19
A20	local	20	A20
A21	local	21	A21
A22	local	22	A22
A23	local	23	A23
A24	local	24	A24
B1	local	25	B1
B2	local	26	B2
B3	local	27	B3
B4	local	28	B4

[47;1H[2K-- MORE --, next page: Space, next line: Enter, quit: Control-C[47;1H[47;1H[2K[47;1H[1;47r[47;1H B5 local 29 B5

B6	local	30	B6
B7	local	31	B7
B8	local	32	B8
B9	local	33	B9
B10	local	34	B10
B11	local	35	B11
B12	local	36	B12
B13	local	37	B13
B14	local	38	B14
B15	local	39	B15

B16	local	40	B16
B17	local	41	B17
B18	local	42	B18
B19	local	43	B19
B20	local	44	B20
B21	local	45	B21
B22	local	46	B22
C1	local	49	C1
C2	local	50	C2
C3	local	51	C3
C4	local	52	C4
C5	local	53	C5
C6	local	54	C6
C7	local	55	C7
C8	local	56	C8
C9	local	57	C9
C10	local	58	C10
C11	local	59	C11
C12	local	60	C12
C13	local	61	C13
C14	local	62	C14
C15	local	63	C15
C16	local	64	C16
C17	local	65	C17
C18	local	66	C18
C19	local	67	C19
C20	local	68	C20
C21	local	69	C21
C22	local	70	C22
C23	local	71	C23
C24	local	72	C24
D1	local	73	D1
D2	local	74	D2
D3	local	75	D3
D4	local	76	D4

[47;1H[2K-- MORE --, next page: Space, next line: Enter, quit: Control-

C[47;1H[47;1H[2K[47;1H[1;47r[47;1H D5 local 77 D5

D6	local	78	D6
D7	local	79	D7
D8	local	80	D8
D9	local	81	D9
D10	local	82	D10
D11	local	83	D11
D12	local	84	D12
D13	local	85	D13
D14	local	86	D14
D15	local	87	D15
D16	local	88	D16
D17	local	89	D17

D18	local	90	D18
D19	local	91	D19
D20	local	92	D20
D21	local	93	D21
D22	local	94	D22
D23	local	95	D23
D24	local	96	D24
E1	local	97	E1
E2	local	98	E2
E3	local	99	E3
E4	local	100	E4
E5	local	101	E5
E6	local	102	E6
E7	local	103	E7
E8	local	104	E8
E9	local	105	E9
E10	local	106	E10
E11	local	107	E11
E12	local	108	E12
E13	local	109	E13
E14	local	110	E14
E15	local	111	E15
E16	local	112	E16
E17	local	113	E17
E18	local	114	E18
E19	local	115	E19
E20	local	116	E20
E21	local	117	E21
E22	local	118	E22
E23	local	119	E23
E24	local	120	E24
F1	local	121	F1
F2	local	122	F2

[47;1H[2K-- MORE --, next page: Space, next line: Enter, quit: Control-C[47;1H[47;1H[2K[47;1H[1;47r[47;1H F3 local 123 F3

F4	local	124	F4
F5	local	125	F5
F6	local	126	F6
F7	local	127	F7
F8	local	128	F8
F9	local	129	F9
F10	local	130	F10
F11	local	131	F11
F12	local	132	F12
F13	local	133	F13
F14	local	134	F14
F15	local	135	F15
F16	local	136	F16
F17	local	137	F17

F18	local	138	F18
F19	local	139	F19
F20	local	140	F20
F21	local	141	F21
F22	local	142	F22
F23	local	143	F23
F24	local	144	F24
G1	local	145	G1
G2	local	146	G2
G3	local	147	G3
G4	local	148	G4
G5	local	149	G5
G6	local	150	G6
G7	local	151	G7
G8	local	152	G8
G9	local	153	G9
G10	local	154	G10
G11	local	155	G11
G12	local	156	G12
G13	local	157	G13
G14	local	158	G14
G15	local	159	G15
G16	local	160	G16
G17	local	161	G17
G18	local	162	G18
G19	local	163	G19
G20	local	164	G20
G21	local	165	G21
G22	local	166	G22
G23	local	167	G23
G24	local	168	G24

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[47;1H[2K-- MORE --, next page: Space, next line: Enter, quit: Control-
C[47;1H[47;1H[2K[47;1H[1;47r[47;1H
[1;47r[47;1H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRND_8212#
[47;1H[47;23H[47;1H[?25h[47;23H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRN
D_8212# [47;1H[47;23Hshow lldp info local-device
[47;1H[?25h[47;51H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRND_8212#
[47;1H[47;23Hshow lldp info remote-device
[47;1H[?25h[47;52H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRND_8212#
[47;1H[47;23Hshow lldp
info[47;1H[?25h[47;37H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRND_8212#
[47;1H[47;23Hshow mac-address
[47;1H[?25h[47;40H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRND_8212#
[47;1H[47;23Hshow modules
[47;1H[?25h[47;36H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRND_8212#
[47;1H[47;23Hdisplay
memory[47;1H[?25h[47;37H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRND_8212
# [47;1H[47;23Hshow system
temp[47;1H[?25h[47;39H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRND_8212#
```

```

[47;1H[47;23Hshow system power-supply
[47;1H[?25h[47;48H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRND_8212#
[47;1H[47;23Hshow system
fans[47;1H[?25h[47;39H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRND_8212#
[47;1H[47;23Hshow system information
[47;1H[?25h[47;47H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRND_8212#
[47;1H[47;23Hshow system [47;1H[?25h[47;35H[?25h[47;34H[47;34H
[47;34H[?25h[47;33H[47;33H [47;33H[?25h[47;32H[47;32H [47;32H[?25h[47;31H[47;31H
[47;31H[?25h[47;30H[47;30H [47;30H[?25h[47;29H[47;29H [47;29H[?25h[47;28H[47;28H
[47;28H[?25h[47;27H[47;27H [47;27H[?25h[47;26H[47;26H [47;26H[?25h[47;25H[47;25H
[47;25H[?25h[47;24H[47;24H [47;24H[?25h[47;23H[47;23H
[47;23H[47;23He[47;23H[?25h[47;24H[47;24Hx[47;24H[?25h[47;25H[47;25Hi[47;25H[?25
h[47;26H[47;26Ht[47;26H[?25h[47;27H[47;0HE[47;1H[47;27H[47;1H[2K[47;1H[?25h[47;1
H[1;47r[47;1H[1;47r[47;1H[47;1H[2K[47;1H[?25h[47;1H[47;1HAntoniadou_GRND_8212>
[47;1H[47;23H[47;1H[?25h[47;23H[47;23He[47;23H[?25h[47;24H[47;24Hx[47;24H[?25h[4
7;25H[47;25Hi[47;25H[?25h[47;26H[47;26Ht[47;26H[?25h[47;27H[47;0HE[47;1H[47;27H[
47;1H[2K[47;1H[?25h[47;1H[1;47r[47;1H[1;47r[47;1H[47;1H[2K[47;1H[?25h[47;1H[47;1H
Do you want to log out [y/n]?
[47;1H[47;31H[47;1H[?25h[47;31H[47;31Hy[47;31H[?25h[47;32H[47;0HE[47;1H[47;32H[
47;1H[2K[47;1H[?25h[47;1H[1;47r[47;1H[2J[?7l[1;47r[?6l[47;1H[?25h[47;1H[?6l[1;0r[?7l[
2J[47;1H[1;1H[2K[47;1H10.10.20.105_25_09_2014_09_44_19 DISCONNECT

```

ΠΑΡΑΡΤΗΜΑ Γ

ΠΛΑΝΟ ΚΑΤΑΝΟΜΗΣ IPv4 ΔΙΕΥΘΥΝΣΕΩΝ

AUEB IP ADDRESS PLAN

AUEB IP ADDRESS PLAN																																										
	0	8	16	24	32	40	48	56	64	72	80	88	96	104	112	120	128	136	144	152	160	168	176	184	192	200	208	216	224	232	240	248										
	7	15	23	31	39	47	55	63	71	79	87	95	103	111	119	127	135	143	151	159	167	175	183	191	199	207	215	223	231	239	247	255										
195.251.248.0 / 24	Central																cslab																									
195.251.249.0 / 24	Central								Lab MOP				Elpidos2				Lab Stat Risk				dmst								Lab ODE				Vancouver Offices									
195.251.250.0 / 24	Patision 80 Offices								Logistirio								Lab Marketing				mcm								mcm				Teleduc		CompCentre							
195.251.251.0 / 24	DET Patision				Lab DET CC																				Library								Offices Palio Derigny				Lab OIK_P80					
195.251.252.0 / 24	Lab DPM (IPL)								Lab CCS																Lab heltrun								Lab islab									
195.251.253.0 / 24	Lab AIS (aislab) (Lab Logist)								Lab Stats								Hosted Serve		Euro Lab		Euro Lab				A41				φ. Προσωπ		Lab IRN											
195.251.254.0 / 24									grad_stats (Offices E ???)								Ydras Offices								Career				Offices Kentrik													
195.251.255.0 / 24	NOC								Hosted Access				servers				kousou				Servers				P2P																	
195.251.232.0 / 24	Lab DSci				OikonPhd				Lab Oikon				Lab Dsup								Gram_E				finance				Lab_mkt (ή 710)				Lab Workgroup									
195.251.233.0 / 24	eyelpidon offices								Gram_E				WRC		DeosPhd		Trans Agora		rooms_E		rooms		Lab R902				Lab R610				Lab_msl											
195.251.234.0 / 24	Lab Polyzos				Lab Grad CS				Lab Trans		Offices E		Lab_msl				Offices Derigny								Offices Antoniadoy																	
195.251.235.0 / 24	Kodrigktonos Offices																Kentriko Offices																									
83.212.204.0 / 24	ΕΛΚΕ		IST-OIS		Offices E #2				Library #2				ces Δερigny				PHD Doma				Branded				Patision 95				Gram_E ?													
83.212.205.0 / 24	Lab_Doma_pt_Derigny								Γραμματείες Προπτυχιακών κλπ Διοικητικές Υπηρεσίες (Γιάννης Παπαδόπουλος- 219)																																	
83.212.206.0 / 24	IP Telephony				Elpidos																																					
83.212.207.0 / 24	Neolaies																																									
83.212.208.0 / 20	DSL Δίοδος																																									
	160	164	168	172	176	180	184	188																																		
	163	167	171	175	179	183	187	191																																		
195.251.255.160/27	ELKE		CORE		MOD		Librar		Loois		MCM		Juno		2Fire		wall																P2P - Point to Point subnets									

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