NIAMS
Network Infrastructure Analytics & Management System

Netzwerkdokumentation vollautomatisiert und somit stets aktuell!

IPv6-Kongress 2014
Donnerstag, 22. Mai 2014

Till Bockenheimer, T&A SYSTEME GmbH

T&A SYSTEME

NIAMS
Network Infrastructure Analytics & Management System

Till Bockenheimer

Till Bockenheimer
Geschäftsführer & Gründer
till.bockenheimer@systeme.de
+49 2324 9258 0

T&A SYSTEME GmbH

Am Walzwerk 1
45527 Hattingen

+49 2324 9258 0

www.systeme.de
www.niams.eu

Über T&A SYSTEME

Typ: Softwareentwickler / Dienstleister / Systemintegrator in den Bereichen Cloud-Services (Private & Public), Collaboration (Portale & UC) sowie Enterprise-Storage-Lösungen

Gründung: Dezember 1994

Größe: 60 Mitarbeiter

Entwicklungen: **Logipad©** seit 2002, auf Windows & iOS
– der elektronische Flugkoffer für Piloten in der zivilen Luftfahrt, auch als Cloud-Variante

NIAMS© seit 2001
– Management, Analyse & Dokumentation von Netzwerken

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Über T&A SYSTEME

Microsoft Partner

Gold	Application Development
Gold	Collaboration and Content
Gold	Communications
Gold	Digital Marketing
Gold	Hosting
Gold	Volume Licensing
Silver	Devices and Deployment
Silver	Identity and Access
Silver	Management and Virtualization
Silver	Messaging
Silver	Midmarket Solution Provider
Silver	Mobility
Silver	OEM
Silver	Server Platform
Silver	Software Asset Management

HITACHI
Hitachi Data Systems
TrueNorth™ Partner
GOLD

Azure Circle

Lync

T&A SYSTEME plant, implementiert und unterstützt den Betrieb für

- Microsoft Collaboration-Lösungen: Exchange, SharePoint, Lync
- Data Center-Infrastrukturen als private Cloud und als Unified Plattform für Lync

T&A SYSTEME ist einer von zwei deutschen Premier Support for Lync Partnern (PSLP)

→ Entwicklung von NIAMS© Software zur Planung und Qualitätssicherung

NIAMS

Network Infrastructure Analytics & Management System

Mit NIAMS-Software die wichtigsten Informationen über Ihr Netzwerk für alle IT-Bereiche stets aktuell

- NIAMS© Device Manager
- NIAMS© Route Analytics
- NIAMS© IPv6 Migrator
- NIAMS© Business Service
- NIAMS© Connectoren

NIAMS
Network Infrastructure Analytics & Management System

NIAMS© Architektur

NIAMS© Route Analytics

- Geräteerkennung per Auto Discover
- Beschafft Konfiguration, Asset, Layer2- und Layer3-Informationen zu Geräten
- Nutzt Telnet, SSHv1/v2 und SNMPv1/v2/v3

NIAMS© Device Manager

- Universelle Datenbeschaffung
- Verteilen von Konfigurationsänderungen
- Nutzt Telnet, SSHv1/v2, CLI, NIAMS© Makro Language und Regular Expression

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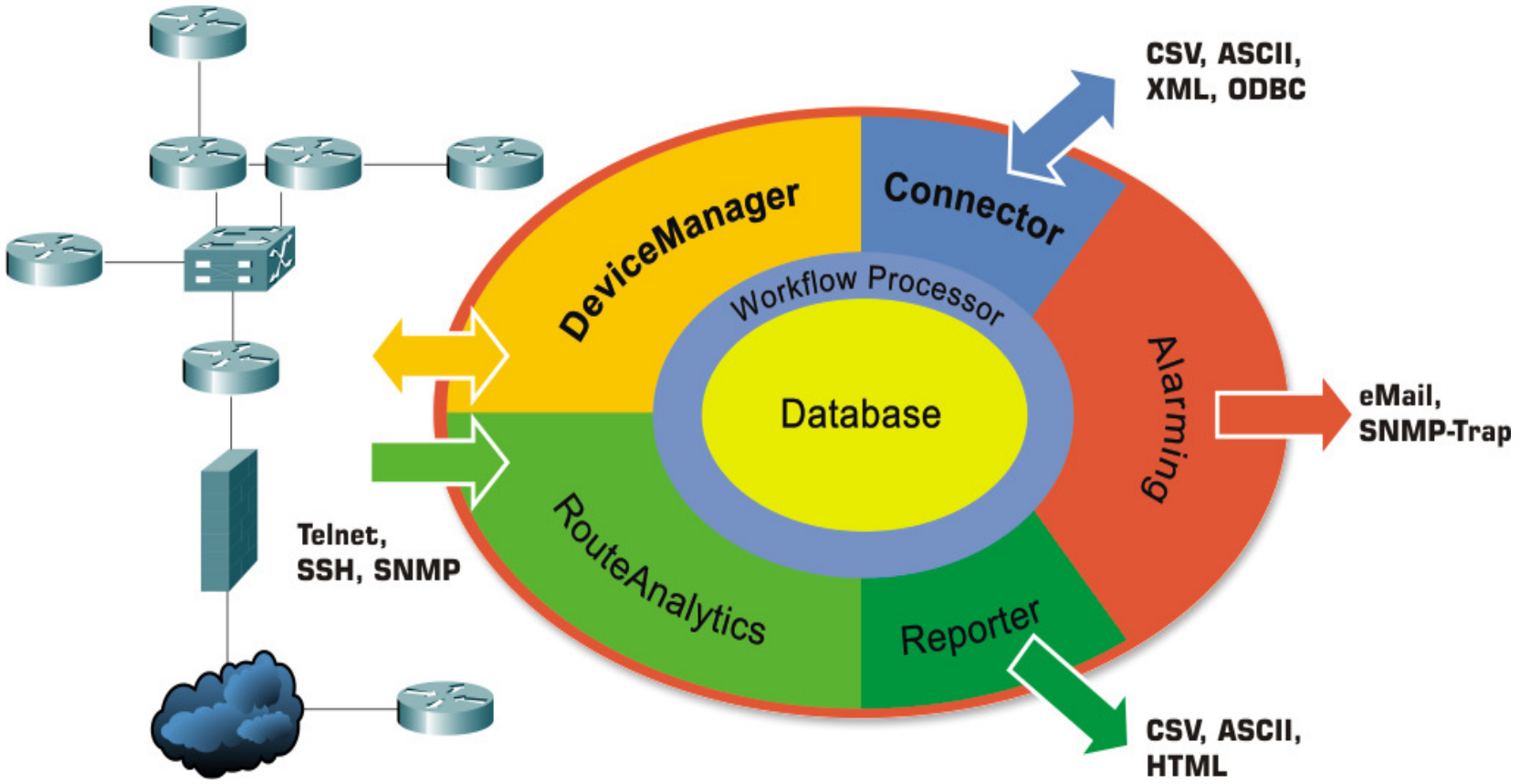
NIAMS© Architektur



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NIAMS© Architektur

- Verarbeitung jedes einzelnen Devices in eigenem Prozess
  - Unterstützung von Multiprozessor/Multicore-Hardware
- Skalierbar
  - vom Consulting Notebook bis zum Server Grid mit 255 Knoten
  - für kleine Netze, bis zu Carrier Netzen
- Vollständige Daten-/Routing-Snapshots zu definierten Zeiten über das gesamte Netz oder Teilbereiche
- Auswertung nach Device Gruppen und nach Business Services

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NIAMS© Architektur

- Speicherung in Flat File-Datenbank
    - Höchste Performance für Massendatenspeicherung
    - Freidefinierbare Felder und Menüs
    - Bidirektionale Datenaustausch mit externen Systemen
- Export der NIAMS Reporting Daten in MS SQL-DB
    - Daten für Reporting via Webservice
    - z.B. Nodefinder, Asset und iPad Statusreport

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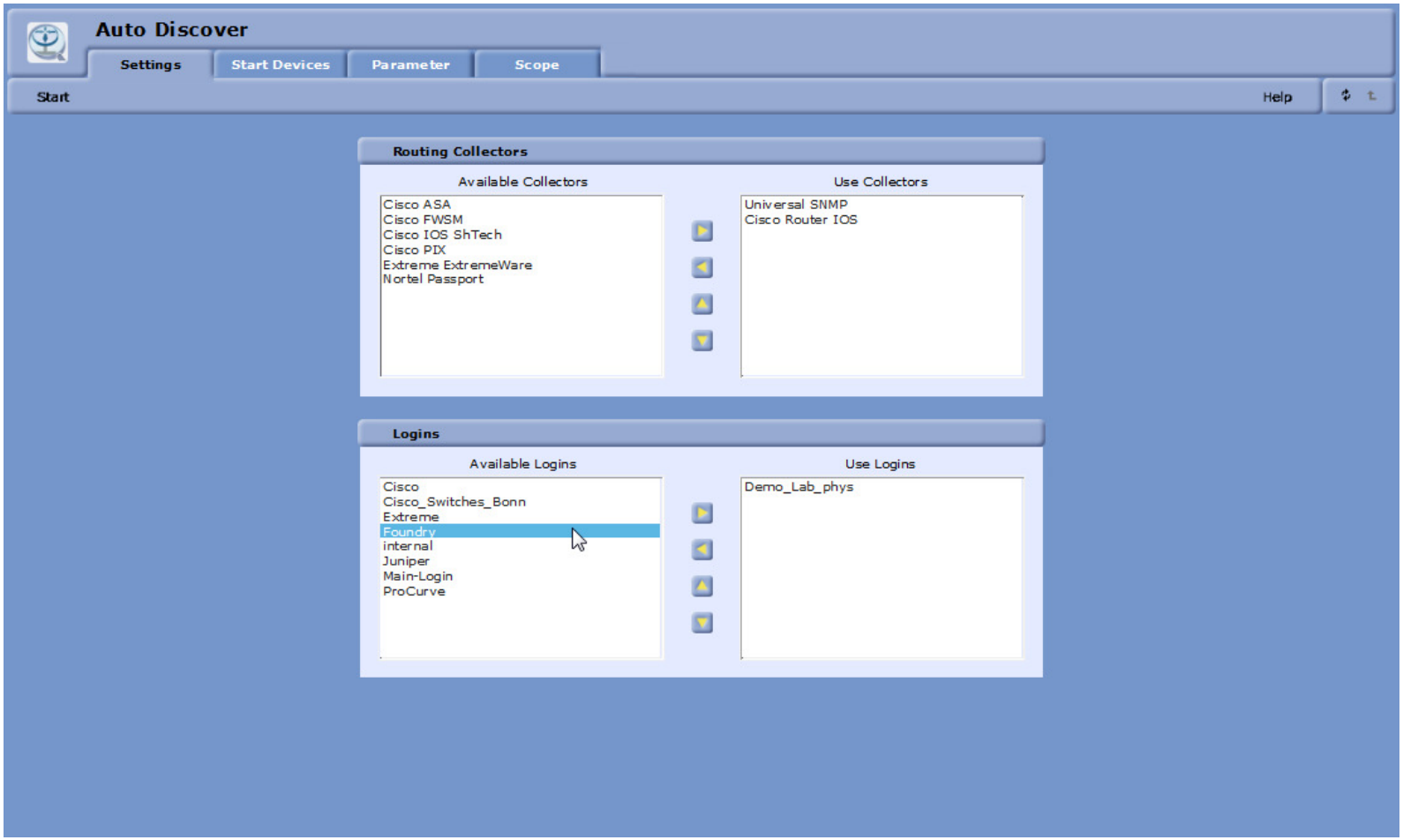
NIAMS© Route Analytics / Auto Discover



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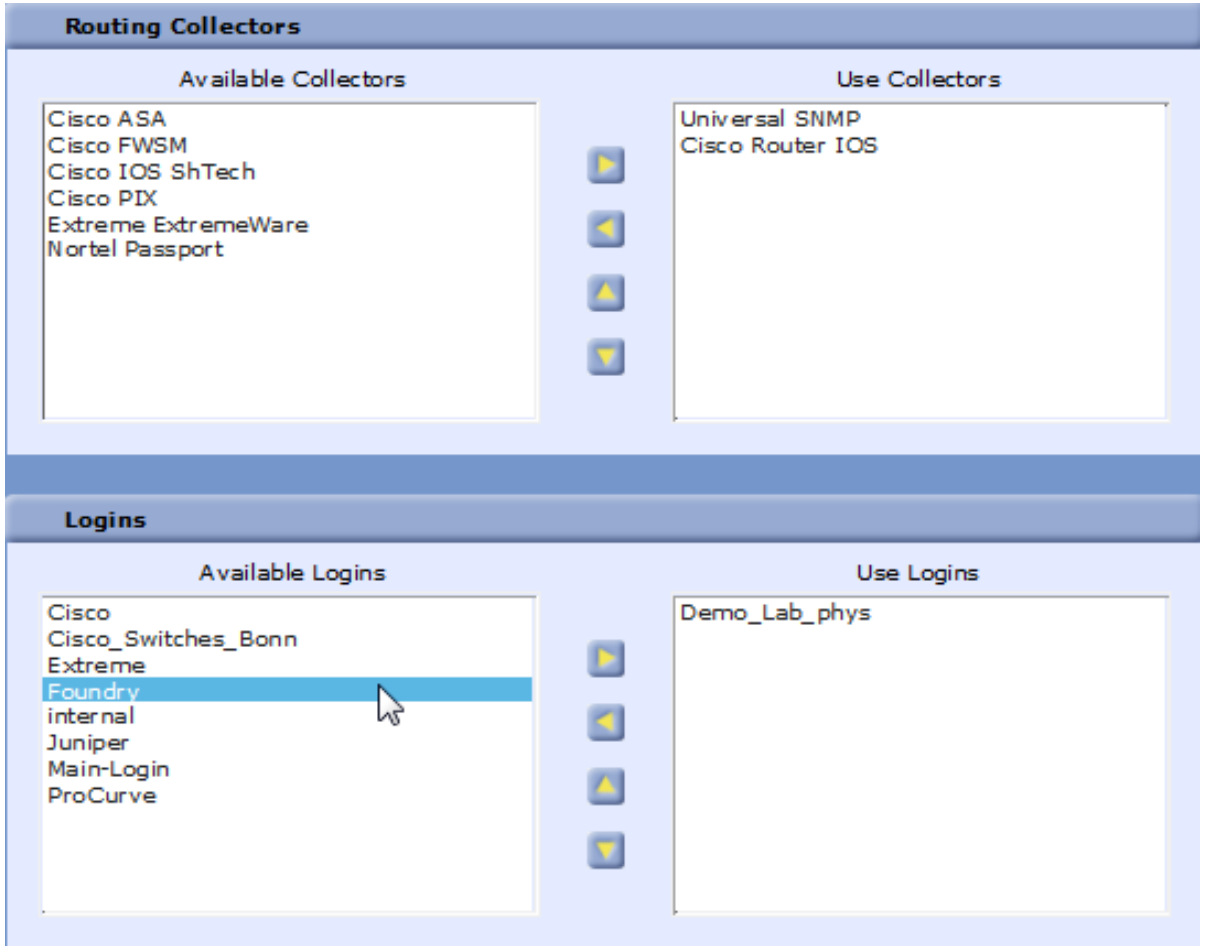
NIAMS© Route Analytics / Auto Discover



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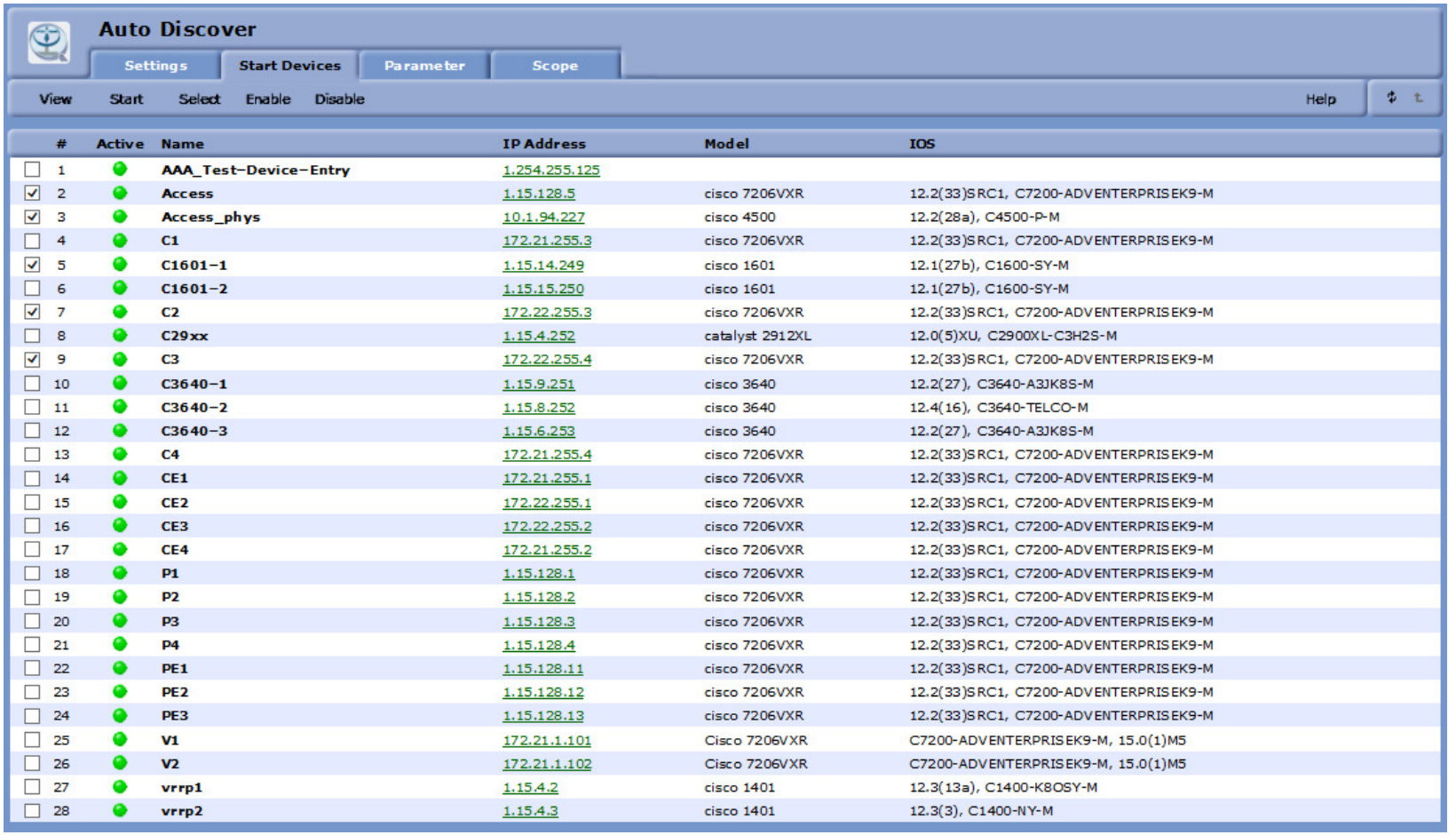
NIAMS© Route Analytics / Auto Discover



	#	Active	Name	IP Address	Model	IOS
☐	1		AAA_Test-Device-Entry	1.254.255.125		
☑	2		Access	1.15.128.5	cisco 7206VXR	12.2(33)SRC1, C7200-ADVENTERPRISEK9-M
☑	3		Access_phys	10.1.94.227	cisco 4500	12.2(28a), C4500-P-M
☐	4		C1	172.21.255.3	cisco 7206VXR	12.2(33)SRC1, C7200-ADVENTERPRISEK9-M
☑	5		C1601-1	1.15.14.249	cisco 1601	12.1(27b), C1600-SY-M
☐	6		C1601-2	1.15.15.250	cisco 1601	12.1(27b), C1600-SY-M
☑	7		C2	172.22.255.3	cisco 7206VXR	12.2(33)SRC1, C7200-ADVENTERPRISEK9-M
☐	8		C29xx	1.15.4.252	catalyst 2912XL	12.0(5)XU, C2900XL-C3H2S-M
☑	9		C3	172.22.255.4	cisco 7206VXR	12.2(33)SRC1, C7200-ADVENTERPRISEK9-M
☐	10		C3640-1	1.15.9.251	cisco 3640	12.2(27), C3640-A3JK8S-M
☐	11		C3640-2	1.15.8.252	cisco 3640	12.4(16), C3640-TELCO-M
☐	12		C3640-3	1.15.6.253	cisco 3640	12.2(27), C3640-A3JK8S-M
☐	13		C4	172.21.255.4	cisco 7206VXR	12.2(33)SRC1, C7200-ADVENTERPRISEK9-M
☐	14		CE1	172.21.255.1	cisco 7206VXR	12.2(33)SRC1, C7200-ADVENTERPRISEK9-M
☐	15		CE2	172.22.255.1	cisco 7206VXR	12.2(33)SRC1, C7200-ADVENTERPRISEK9-M
☐	16		CE3	172.22.255.2	cisco 7206VXR	12.2(33)SRC1, C7200-ADVENTERPRISEK9-M
☐	17		CE4	172.21.255.2	cisco 7206VXR	12.2(33)SRC1, C7200-ADVENTERPRISEK9-M
☐	18		P1	1.15.128.1	cisco 7206VXR	12.2(33)SRC1, C7200-ADVENTERPRISEK9-M
☐	19		P2	1.15.128.2	cisco 7206VXR	12.2(33)SRC1, C7200-ADVENTERPRISEK9-M
☐	20		P3	1.15.128.3	cisco 7206VXR	12.2(33)SRC1, C7200-ADVENTERPRISEK9-M
☐	21		P4	1.15.128.4	cisco 7206VXR	12.2(33)SRC1, C7200-ADVENTERPRISEK9-M
☐	22		PE1	1.15.128.11	cisco 7206VXR	12.2(33)SRC1, C7200-ADVENTERPRISEK9-M
☐	23		PE2	1.15.128.12	cisco 7206VXR	12.2(33)SRC1, C7200-ADVENTERPRISEK9-M
☐	24		PE3	1.15.128.13	cisco 7206VXR	12.2(33)SRC1, C7200-ADVENTERPRISEK9-M
☐	25		V1	172.21.1.101	Cisco 7206VXR	C7200-ADVENTERPRISEK9-M, 15.0(1)M5
☐	26		V2	172.21.1.102	Cisco 7206VXR	C7200-ADVENTERPRISEK9-M, 15.0(1)M5
☐	27		vrrp1	1.15.4.2	cisco 1401	12.3(13a), C1400-K8OSY-M
☐	28		vrrp2	1.15.4.3	cisco 1401	12.3(3), C1400-NY-M

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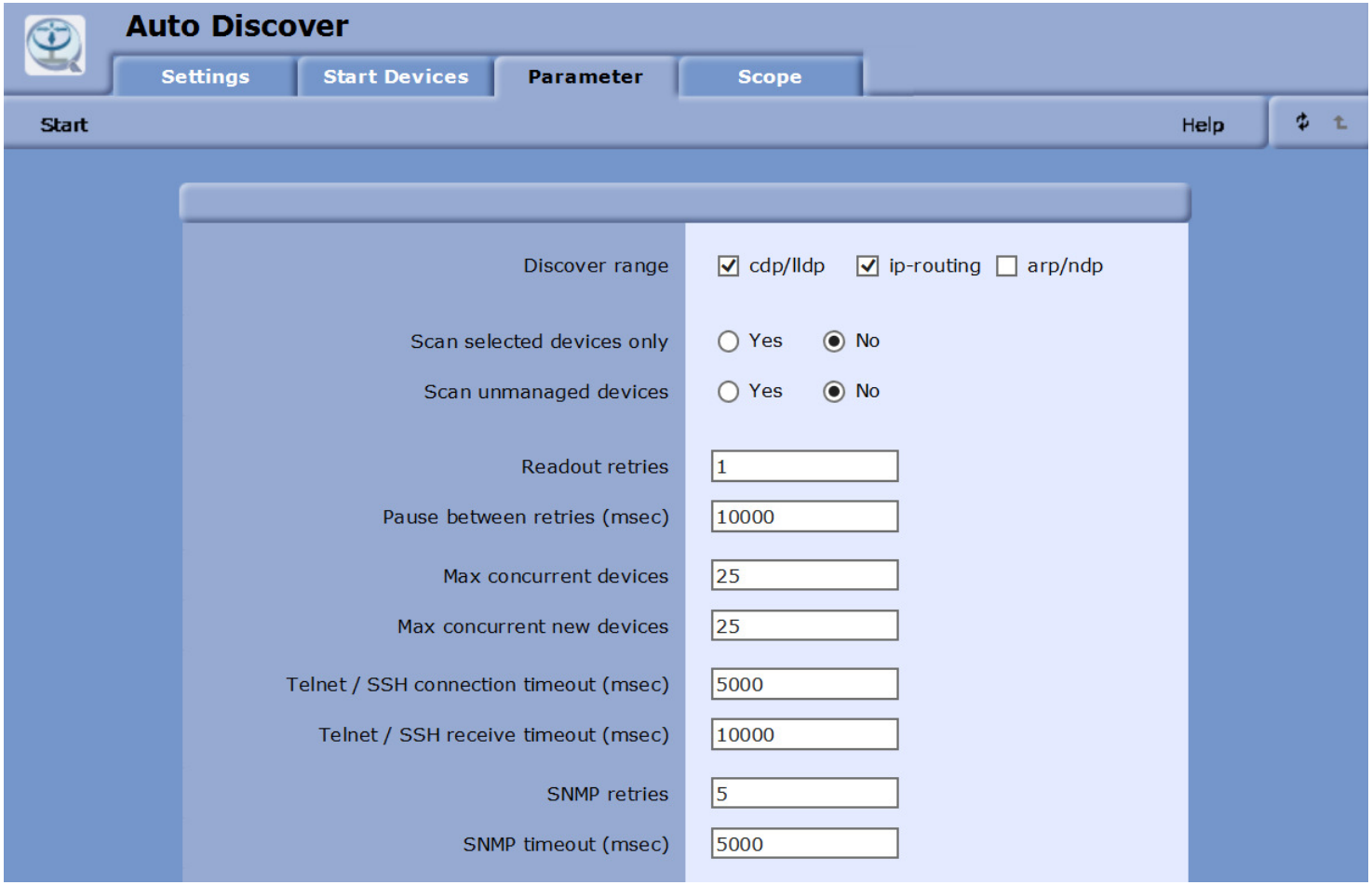
NIAMS© Route Analytics / Auto Discover



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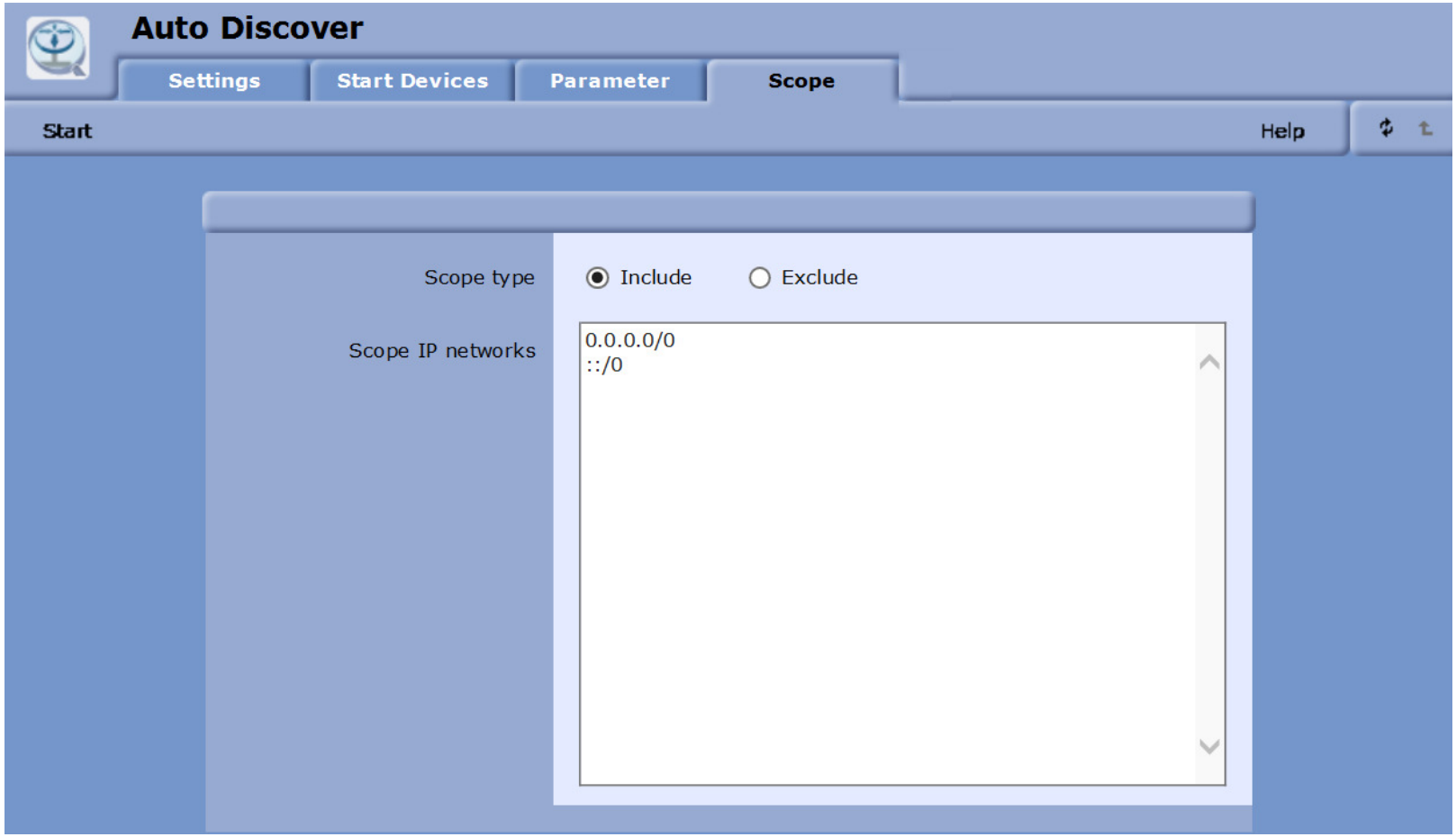
NIAMS© Route Analytics / Auto Discover



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NIAMS© Route Analytics / Route Query

- Beschaffung spezieller Geräte-Informationen per NIAMS Routing Collector via SSH, Telnet oder SNMP
  - Interface-Informationen, IP-Adressen
  - IP(v4/v6) Forwarding Tabellen inkl. VRF
  - MAC/Port Forwarding Tabellen
  - MAC, ARP, LLDP/CDP, NDP, Spanning Tree, VLANs
  - Geräte Konfiguration, Asset

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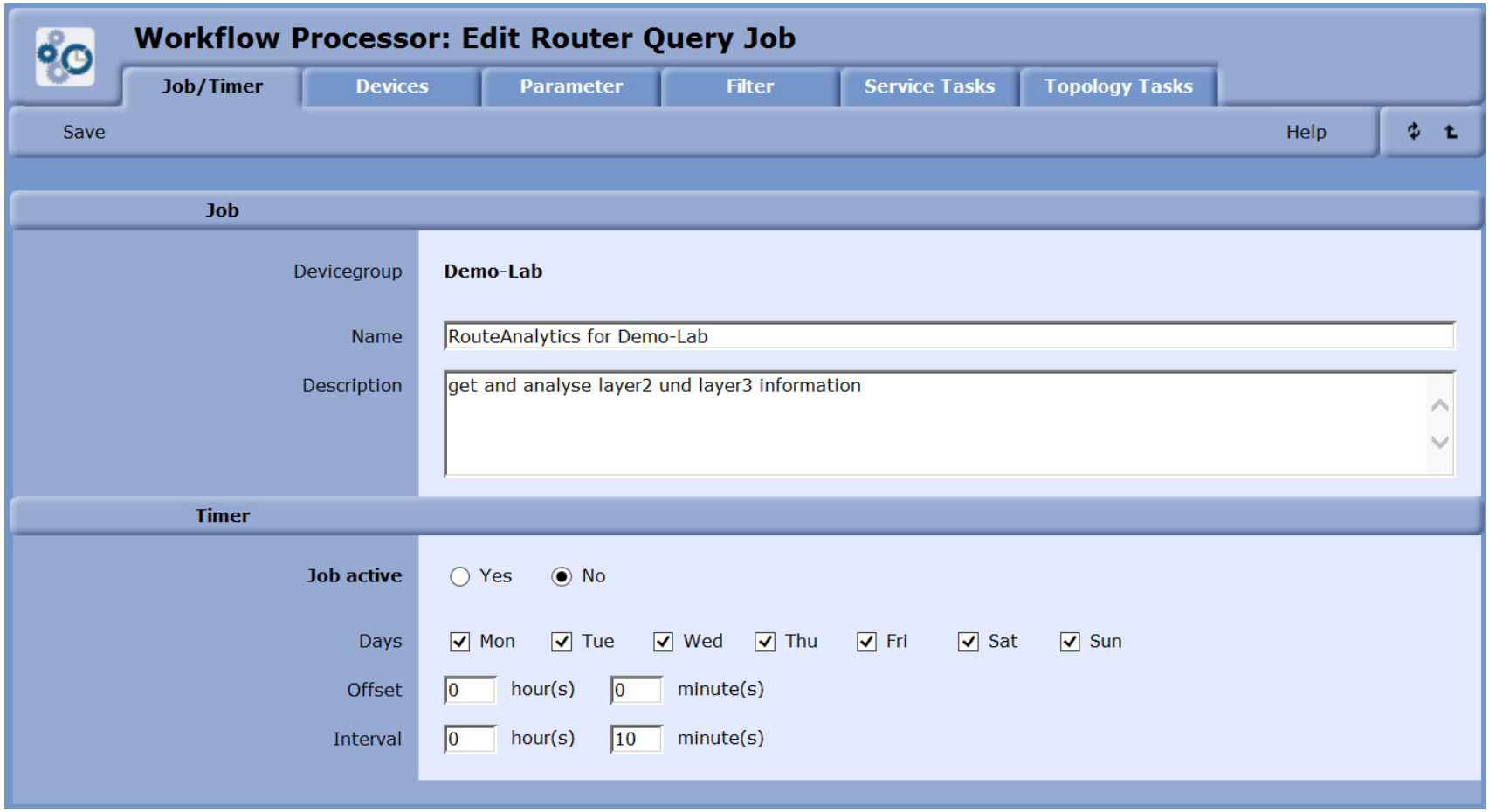
NIAMS© Route Analytics / Route Query



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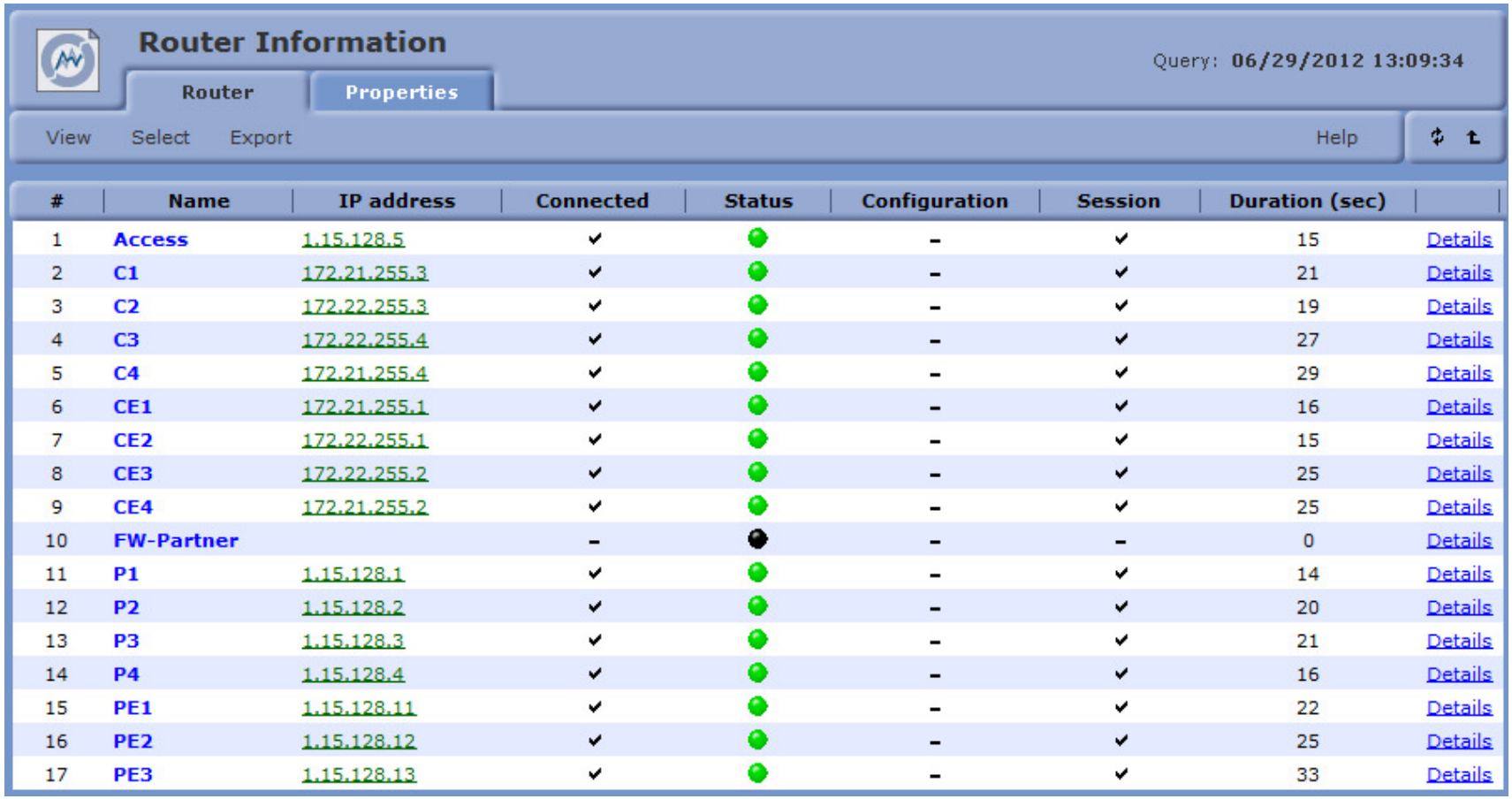
NIAMS© Route Analytics / Route Query



Router Information

Query: 06/29/2012 13:09:34

Router | Properties

View | Select | Export | Help

#	Name	IP address	Connected	Status	Configuration	Session	Duration (sec)	
1	Access	1.15.128.5	✔		-	✔	15	Details
2	C1	172.21.255.3	✔		-	✔	21	Details
3	C2	172.22.255.3	✔		-	✔	19	Details
4	C3	172.22.255.4	✔		-	✔	27	Details
5	C4	172.21.255.4	✔		-	✔	29	Details
6	CE1	172.21.255.1	✔		-	✔	16	Details
7	CE2	172.22.255.1	✔		-	✔	15	Details
8	CE3	172.22.255.2	✔		-	✔	25	Details
9	CE4	172.21.255.2	✔		-	✔	25	Details
10	FW-Partner		-		-	-	0	Details
11	P1	1.15.128.1	✔		-	✔	14	Details
12	P2	1.15.128.2	✔		-	✔	20	Details
13	P3	1.15.128.3	✔		-	✔	21	Details
14	P4	1.15.128.4	✔		-	✔	16	Details
15	PE1	1.15.128.11	✔		-	✔	22	Details
16	PE2	1.15.128.12	✔		-	✔	25	Details
17	PE3	1.15.128.13	✔		-	✔	33	Details

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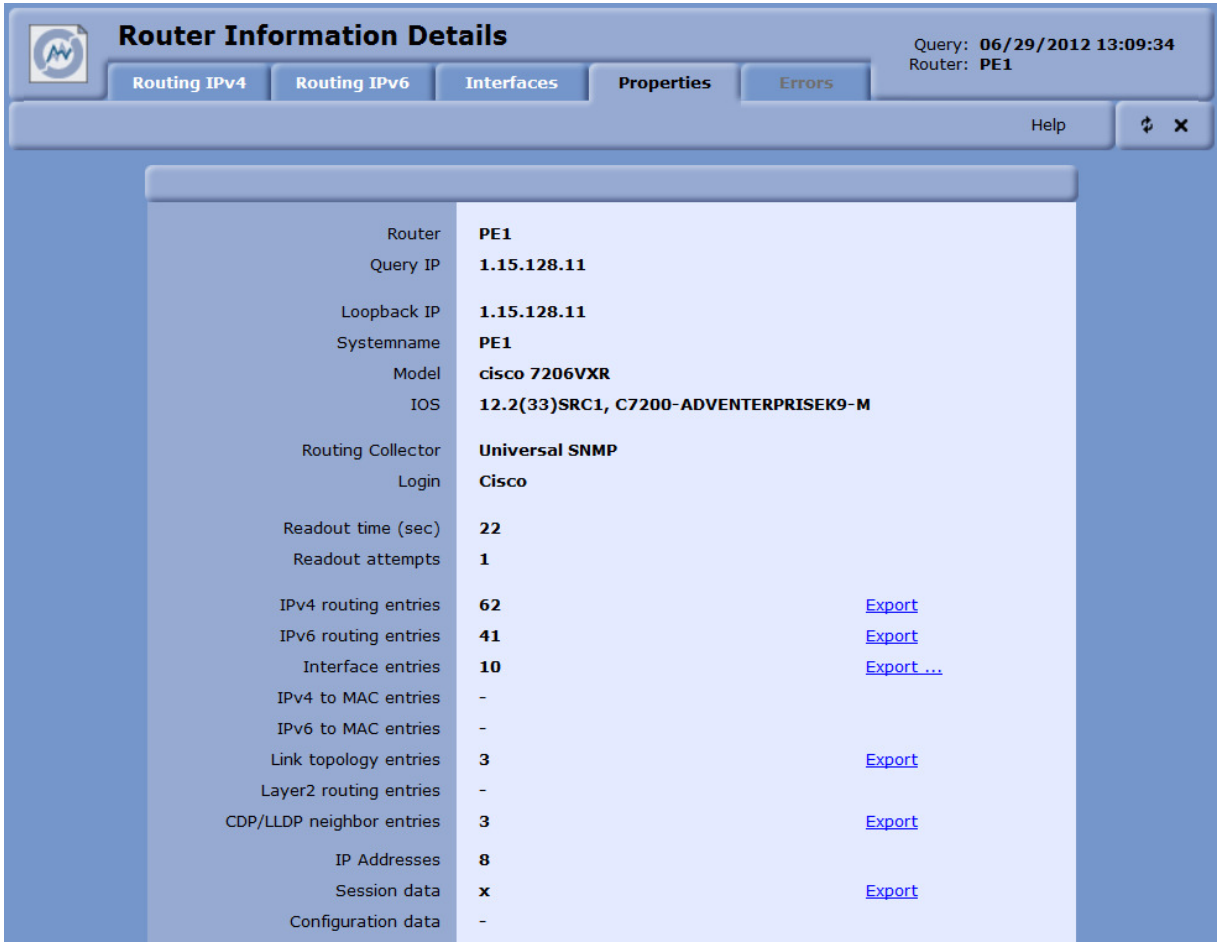
NIAMS© Route Analytics / Route Query



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#	Flags	Protocol	Distance	Metric	Destination	NextHop	Interface	VRF
1		BGP	n.a.	31	fc00:0:0:47::/64	*fe80::c803:8ff:feb5:0*	Serial1/0	customer1
2		OSPF	n.a.	85	fc00:0:0:47::/64	fe80::c805:8ff:fec4:0	Serial1/1	global
3		OSPF	n.a.	20	fc00:1:15:128::1/128	fe80::c805:8ff:fec4:0	Serial1/1	global
4		OSPF	n.a.	20	fc00:1:15:128::2/128	fe80::c804:8ff:fec4:0	Serial1/2	global
5		OSPF	n.a.	20	fc00:1:15:128::3/128	fe80::c805:8ff:fec4:0	Serial1/1	global
6		OSPF	n.a.	20	fc00:1:15:128::3/128	fe80::c804:8ff:fec4:0	Serial1/2	global
7		OSPF	n.a.	20	fc00:1:15:128::4/128	fe80::c805:8ff:fec4:0	Serial1/1	global
8		OSPF	n.a.	20	fc00:1:15:128::4/128	fe80::c804:8ff:fec4:0	Serial1/2	global
9		BGP	n.a.	31	fc00:1:15:128::5/128	*fe80::c803:8ff:feb5:0*	Serial1/0	customer1
10		OSPF	n.a.	85	fc00:1:15:128::5/128	fe80		
11	C	Connected	n.a.	0	fc00:1:15:128::11/128			
12		OSPF	n.a.	20	fc00:1:15:128::12/128	fe80		
13		OSPF	n.a.	20	fc00:1:15:128::13/128	fe80		
14	C	Connected	n.a.	0	fc00:15:129::/64			1
15	C	Connected	n.a.	0	fc00:15:129::1/128			1
16		BGP	n.a.	0	fc00:15:129:8::/64	1.15.		1
17		BGP	n.a.	0	fc00:15:129:16::/64	1.15.		1
18		BGP	n.a.	31	fc00:15:129:252::/64	*fe80::c803:8ff:feb5:0*	Serial1/0	customer1
19		OSPF	n.a.	20	fc00:15:129:252::/64	fe80::c805:8ff:fec4:0	Serial1/1	global

Nexthop

Router: **CE1**

IP address: **fe80::c803:8ff:feb5:0**

Interface: **FastEthernet0/0**

Net: **fe80::c803:8ff:feb5:0/128**

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NIAMS© Route Analytics / Route Query

#	IF Name	MAC Address	IP Address	HW Type	Physical Status	Line Status	MTU	Bandwidth	VRF
1	FastEthernet0/0	0xca0008a60000		ethernet-csmacd	down	down	1500	100 MBit/s	global
2	Serial1/0	n.a.	1.15.129.1/30 fc00:15:129::1/64 fe80::c800:8ff:fea6:0/128	propPointToPointSerial	up	up	1500	1544 kBit/s	customer1
3	Serial1/1	n.a.	fe80::c800:8ff:fea6:0/128	propPointToPointSerial	up	up	1500	1544 kBit/s	global
4	Serial1/2	n.a.	fe80::c800:8ff:fea6:0/128	propPointToPointSerial	up	up	1500	1544 kBit/s	global
5	Serial1/3	n.a.		propPointToPointSerial	down	down	1500	1544 kBit/s	global
6	Null0	n.a.		other	up	up	1500	10 GBit/s	customer1
7	Loopback0	n.a.	1.15.128.11/32 fc00:1:15:128::11/128 fe80::c800:8ff:fea6:0/128	softwareLoopback	up	up	1514	8 GBit/s	global
8	Serial1/1-mpls layer	n.a.		mpls	up	up	1500	1544 kBit/s	global
9	Serial1/2-mpls la			mpls	up	up	1500	1544 kBit/s	global
10	Serial1/3-mpls la			mpls	down	down	1500	1544 kBit/s	global

Interface counter

Name: **Serial1/1-mpls layer**

InBytes: **7941347**
InPackets: **72724**
InDiscardPackets: **0**
InErrorPackets: **0**
OutBytes: **21749932**
OutPackets: **247404**
OutDiscardPackets: **0**
OutErrorPackets: **0**

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NIAMS© Device Manager

- Beschaffung und Verteilung beliebiger Informationen per SSH oder Telnet via CLI
- Informationen werden mit Hilfe der Geräte-Befehlssätze und NIAMS Makro Language beschafft und optional per RegEx verarbeitet

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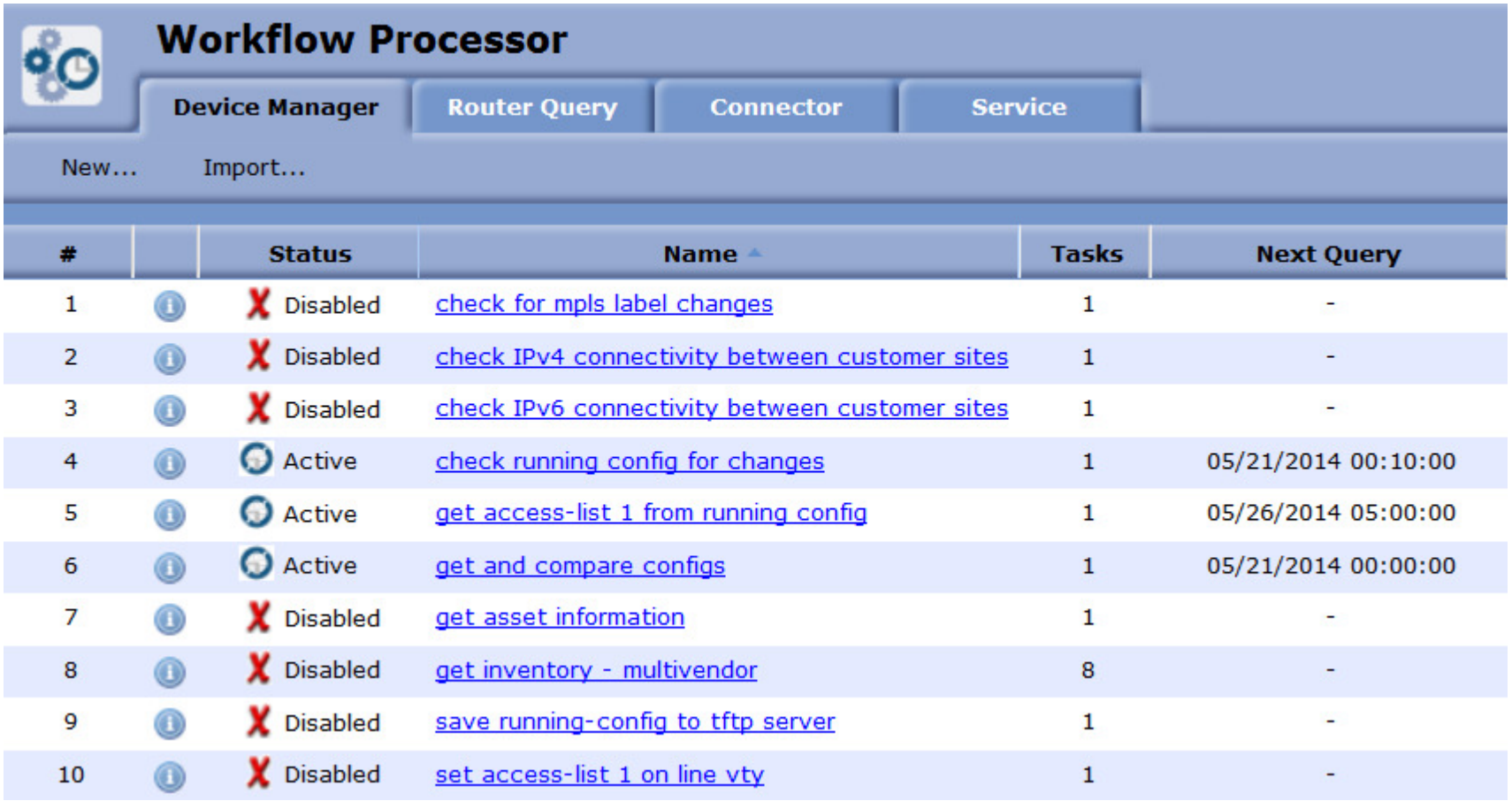
NIAMS© Device Manager



#		Status	Name	Tasks	Next Query
1		Disabled	check for mpls label changes	1	-
2		Disabled	check IPv4 connectivity between customer sites	1	-
3		Disabled	check IPv6 connectivity between customer sites	1	-
4		Active	check running config for changes	1	05/21/2014 00:10:00
5		Active	get access-list 1 from running config	1	05/26/2014 05:00:00
6		Active	get and compare configs	1	05/21/2014 00:00:00
7		Disabled	get asset information	1	-
8		Disabled	get inventory - multivendor	8	-
9		Disabled	save running-config to tftp server	1	-
10		Disabled	set access-list 1 on line vty	1	-

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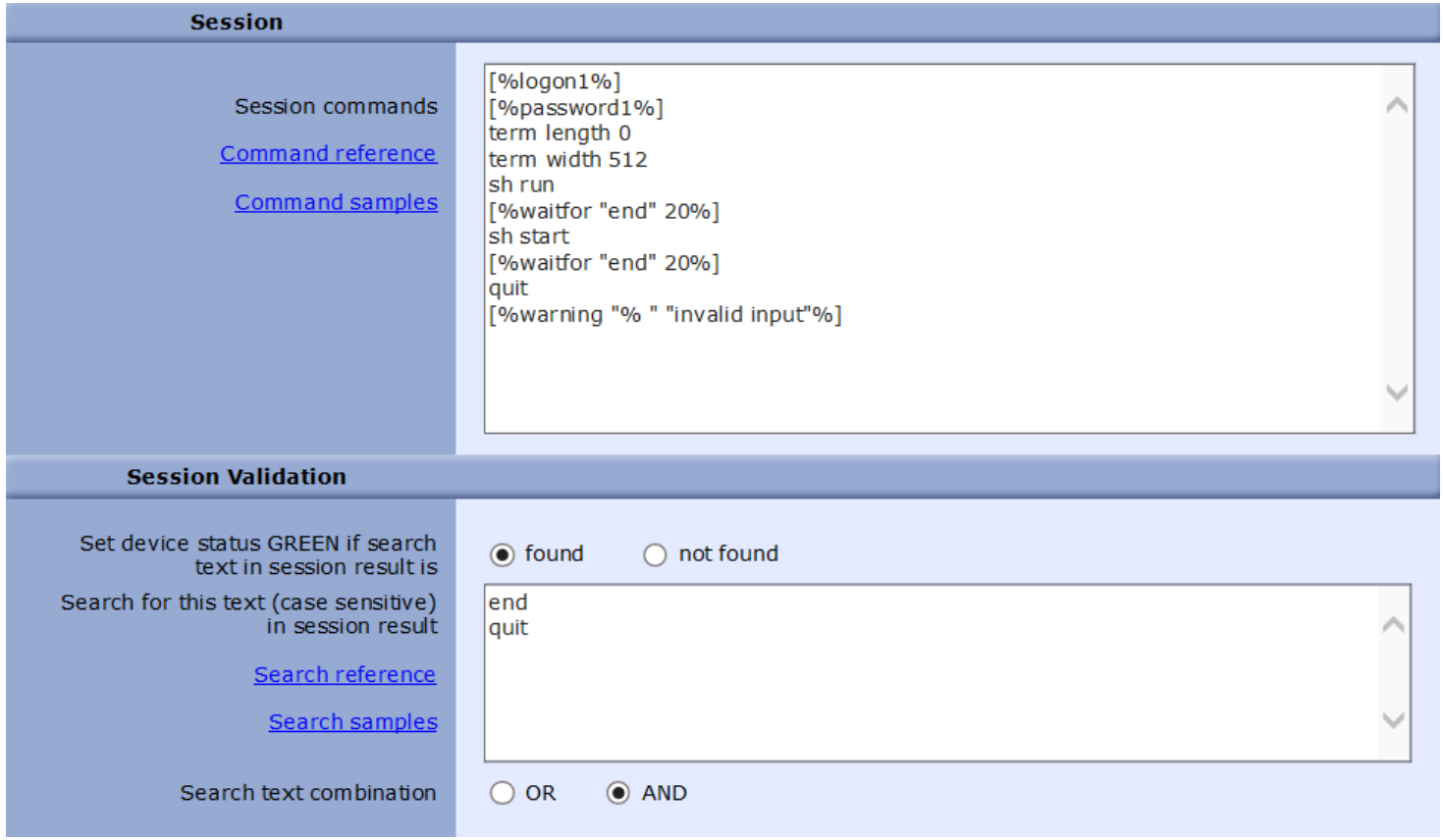
NIAMS© Device Manager (Bsp. „get and compare configs“)



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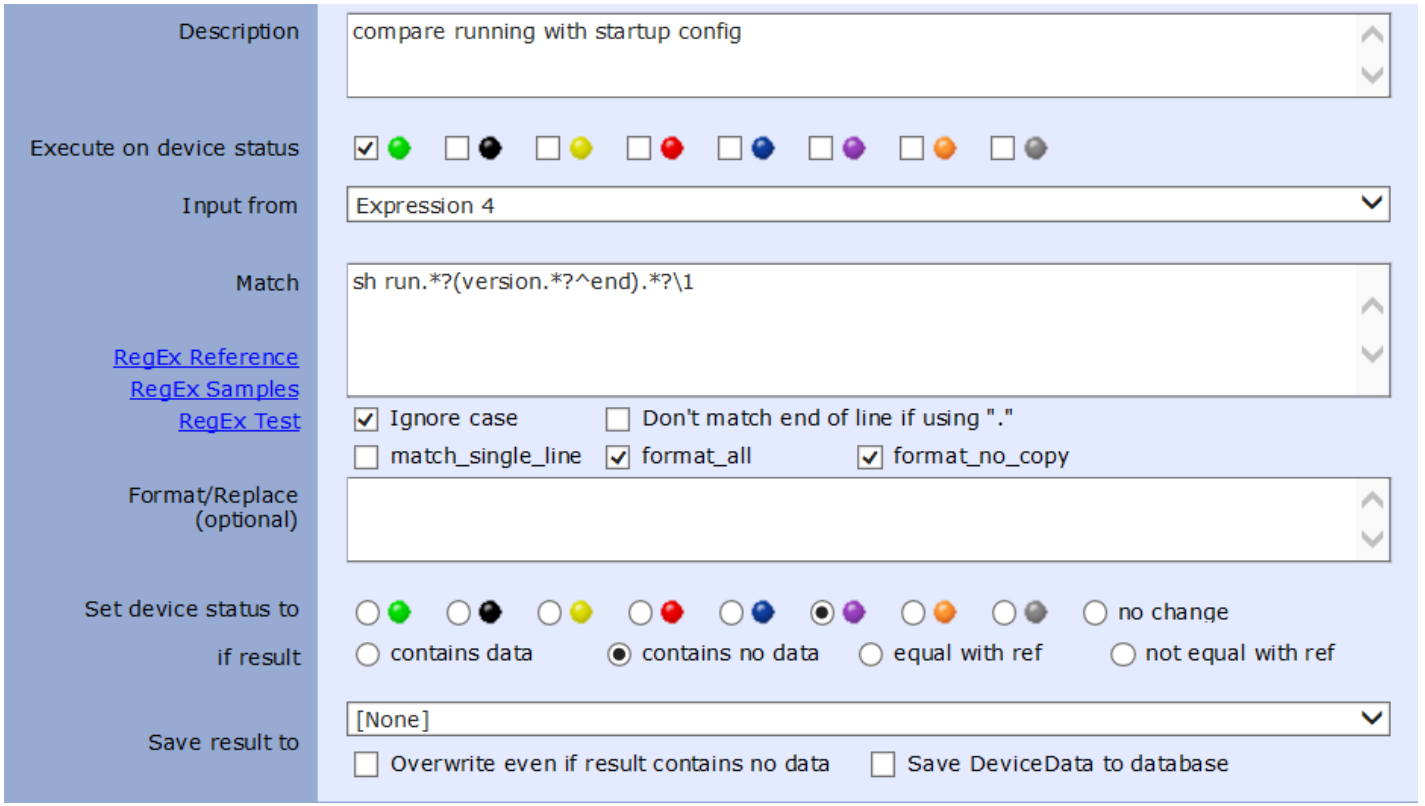
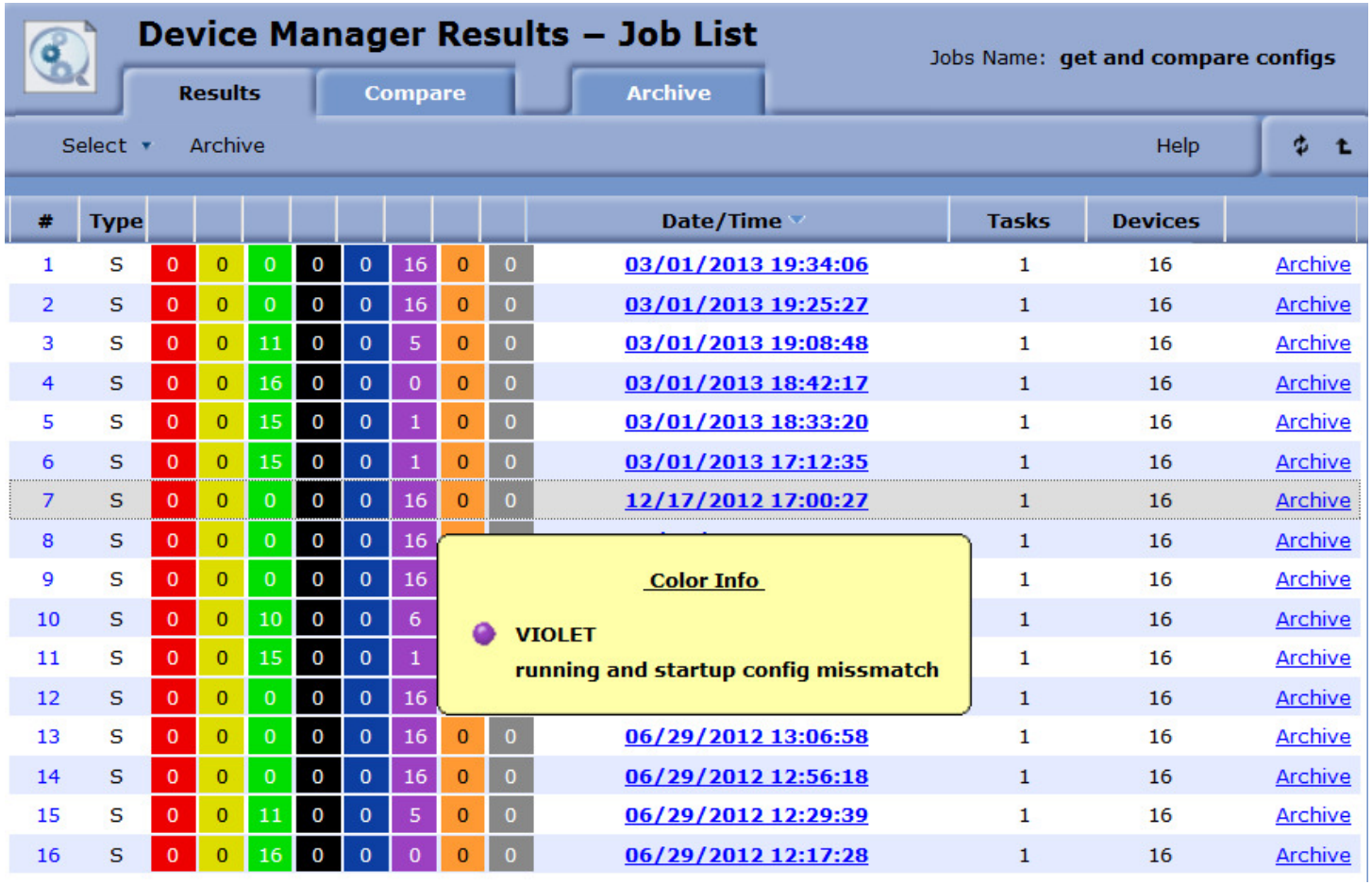
NIAMS© Device Manager (Bsp. „get and compare configs“)



NIAMS© Device Manager (Bsp. „get and compare configs“)



#	Type									Date/Time	Tasks	Devices	
1	S	0	0	0	0	0	16	0	0	03/01/2013 19:34:06	1	16	Archive
2	S	0	0	0	0	0	16	0	0	03/01/2013 19:25:27	1	16	Archive
3	S	0	0	11	0	0	5	0	0	03/01/2013 19:08:48	1	16	Archive
4	S	0	0	16	0	0	0	0	0	03/01/2013 18:42:17	1	16	Archive
5	S	0	0	15	0	0	1	0	0	03/01/2013 18:33:20	1	16	Archive
6	S	0	0	15	0	0	1	0	0	03/01/2013 17:12:35	1	16	Archive
7	S	0	0	0	0	0	16	0	0	12/17/2012 17:00:27	1	16	Archive
8	S	0	0	0	0	0	16				1	16	Archive
9	S	0	0	0	0	0	16				1	16	Archive
10	S	0	0	10	0	0	6				1	16	Archive
11	S	0	0	15	0	0	1				1	16	Archive
12	S	0	0	0	0	0	16				1	16	Archive
13	S	0	0	0	0	0	16	0	0	06/29/2012 13:06:58	1	16	Archive
14	S	0	0	0	0	0	16	0	0	06/29/2012 12:56:18	1	16	Archive
15	S	0	0	11	0	0	5	0	0	06/29/2012 12:29:39	1	16	Archive
16	S	0	0	16	0	0	0	0	0	06/29/2012 12:17:28	1	16	Archive

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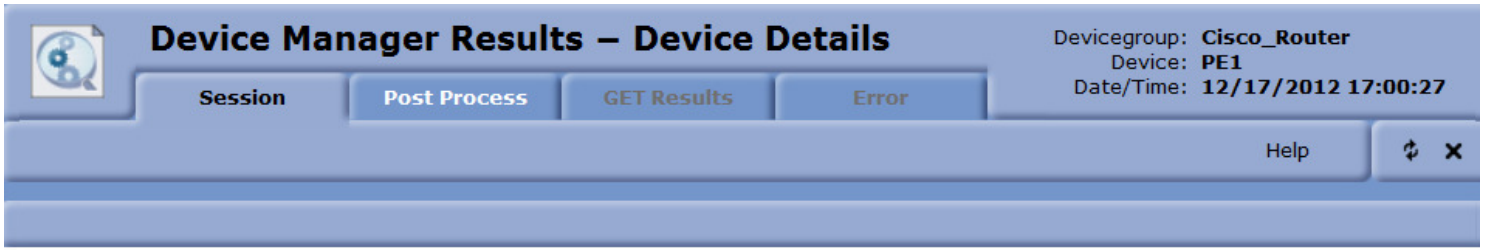
NIAMS© Device Manager (Bsp. „get and compare configs“)




```
User Access Verification

Password:
PE1>ena
Password:
PE1#term length 0
PE1#term width 512
PE1#sh run
Building configuration...

Current configuration : 3042 bytes
!
version 12.2
service timestamps debug datetime msec
service timestamps log datetime msec
service password-encryption
!
hostname PE1
!
boot-start-marker
boot-end-marker
!
vrf definition customer1
 rd 65500:10
```

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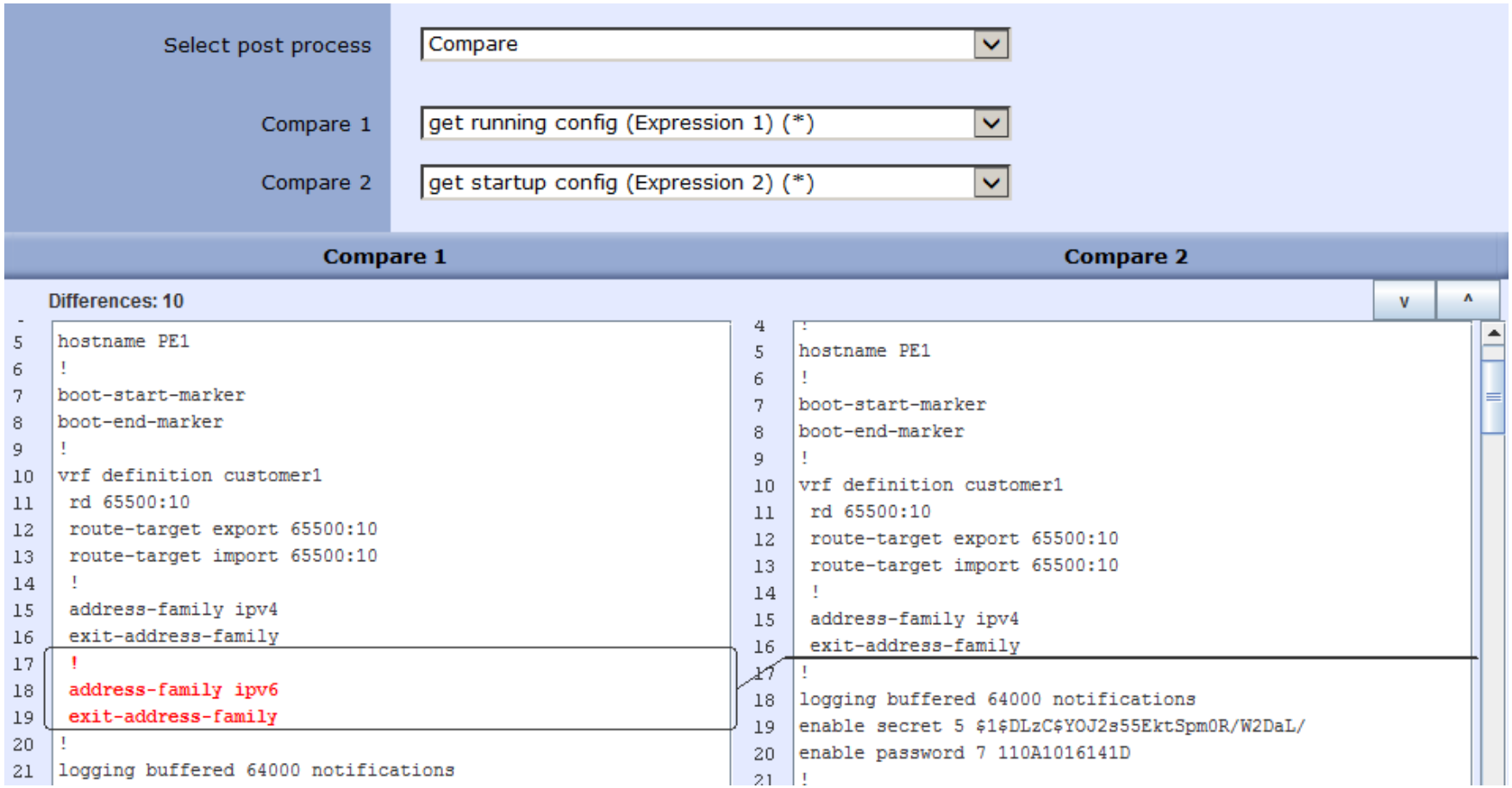

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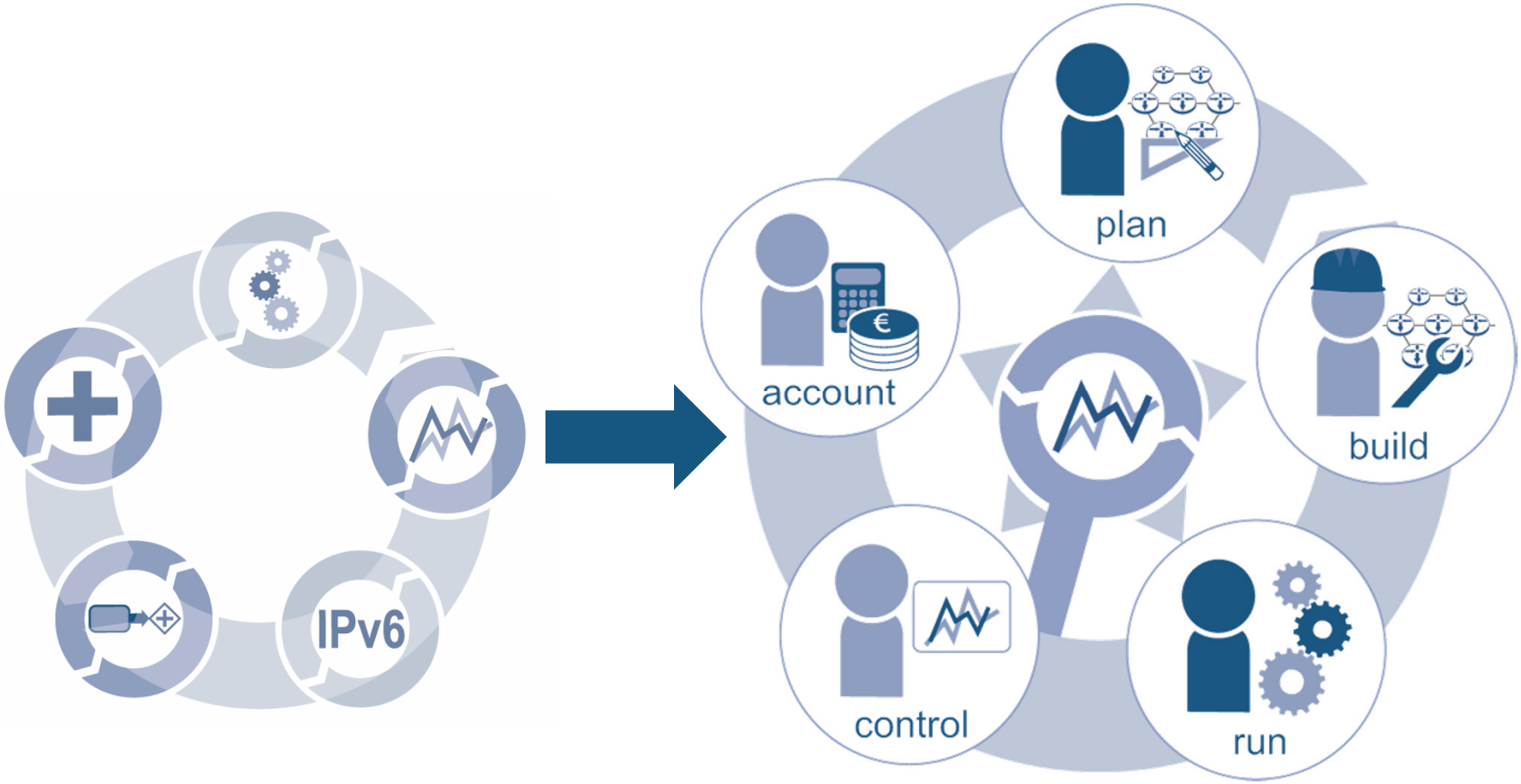
NIAMS© Reporting



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Netzwerkdokumentation (Layer2 & Layer3) in Microsoft Visio™

- Individuell anpassbare Darstellung mit Echtdaten-Aktualisierung
- In Microsoft Visio™ (ab Version 2003)

Anwendungen:

- Planung und Implementation von Änderungen
- Troubleshooting

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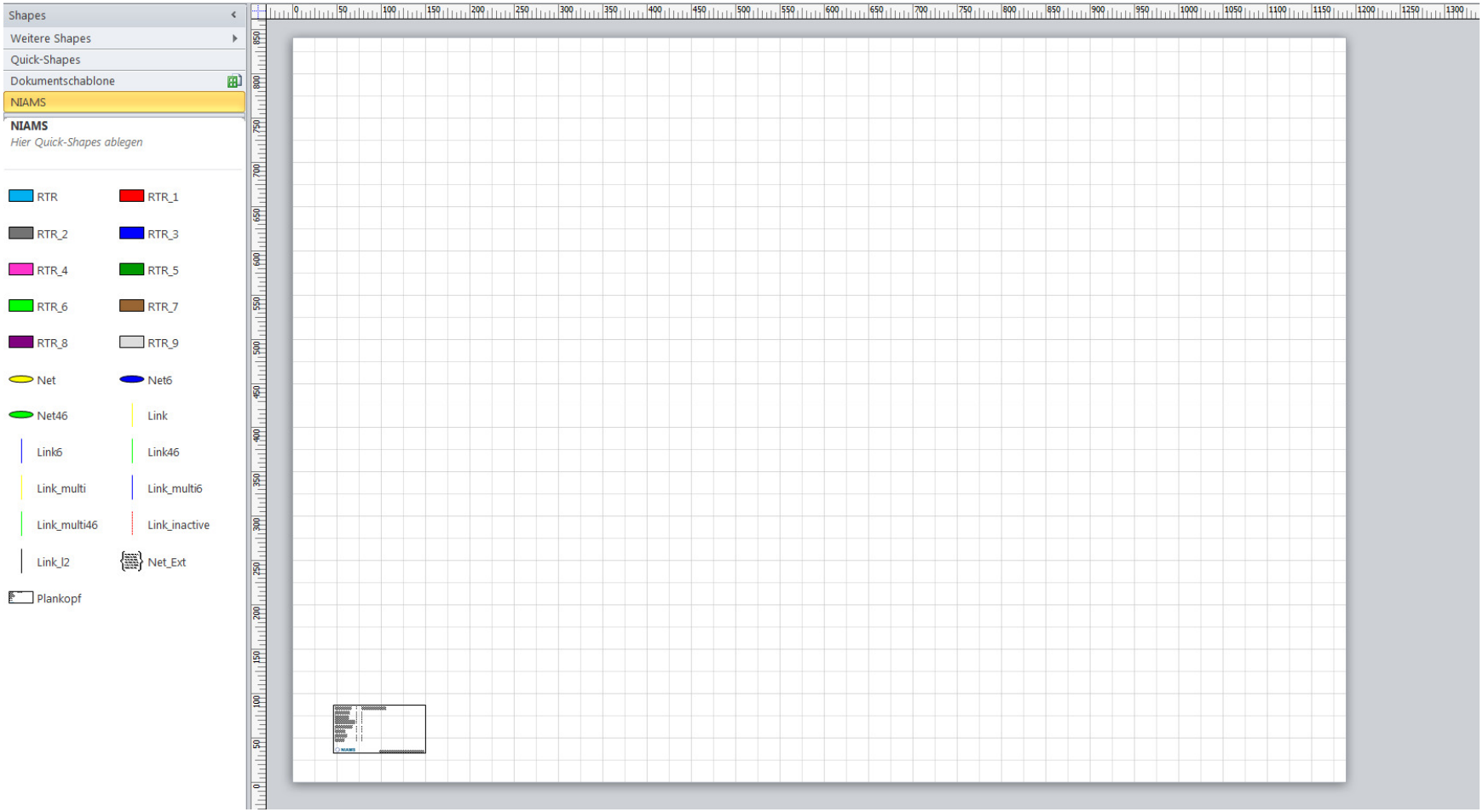
Network Infrastructure Analytics & Management System

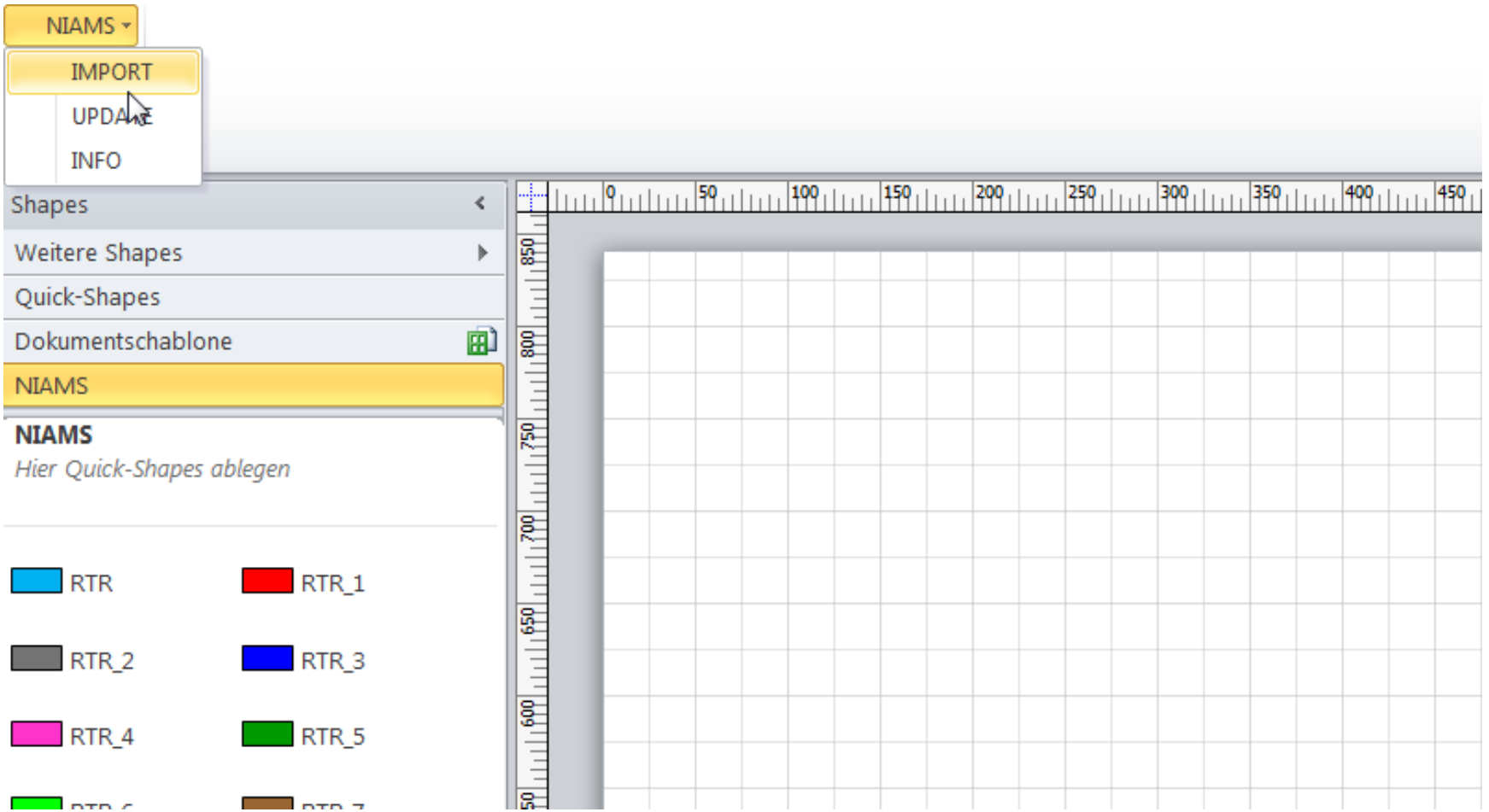
Netzwerkdokumentation (Layer2 & Layer3) in Microsoft Visio™



T&A SYSTEME

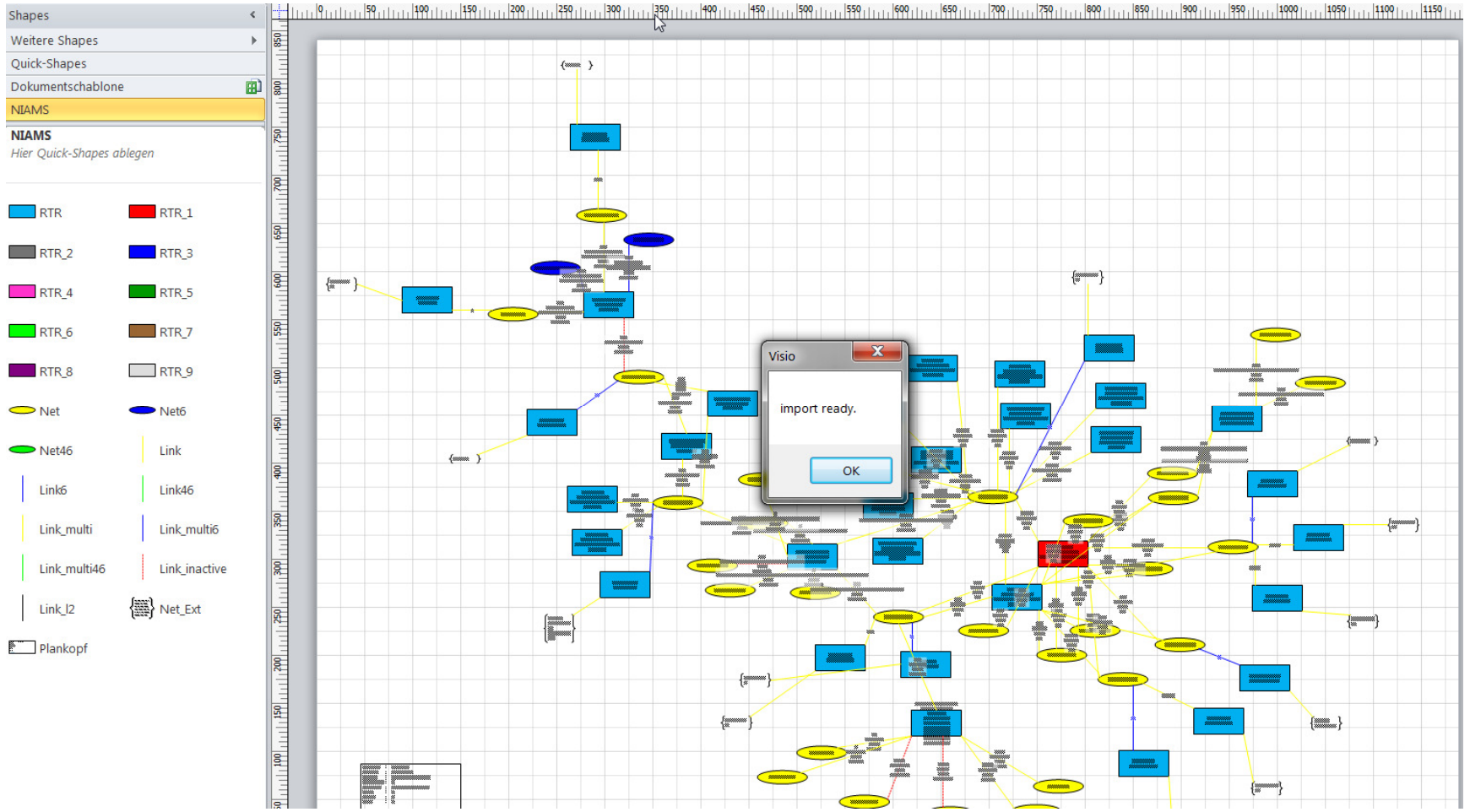
NIAMS
Network Infrastructure Analytics & Management System

Netzwerkdokumentation (Layer2 & Layer3) in Microsoft Visio™



NIAMS
Network Infrastructure Analytics & Management System

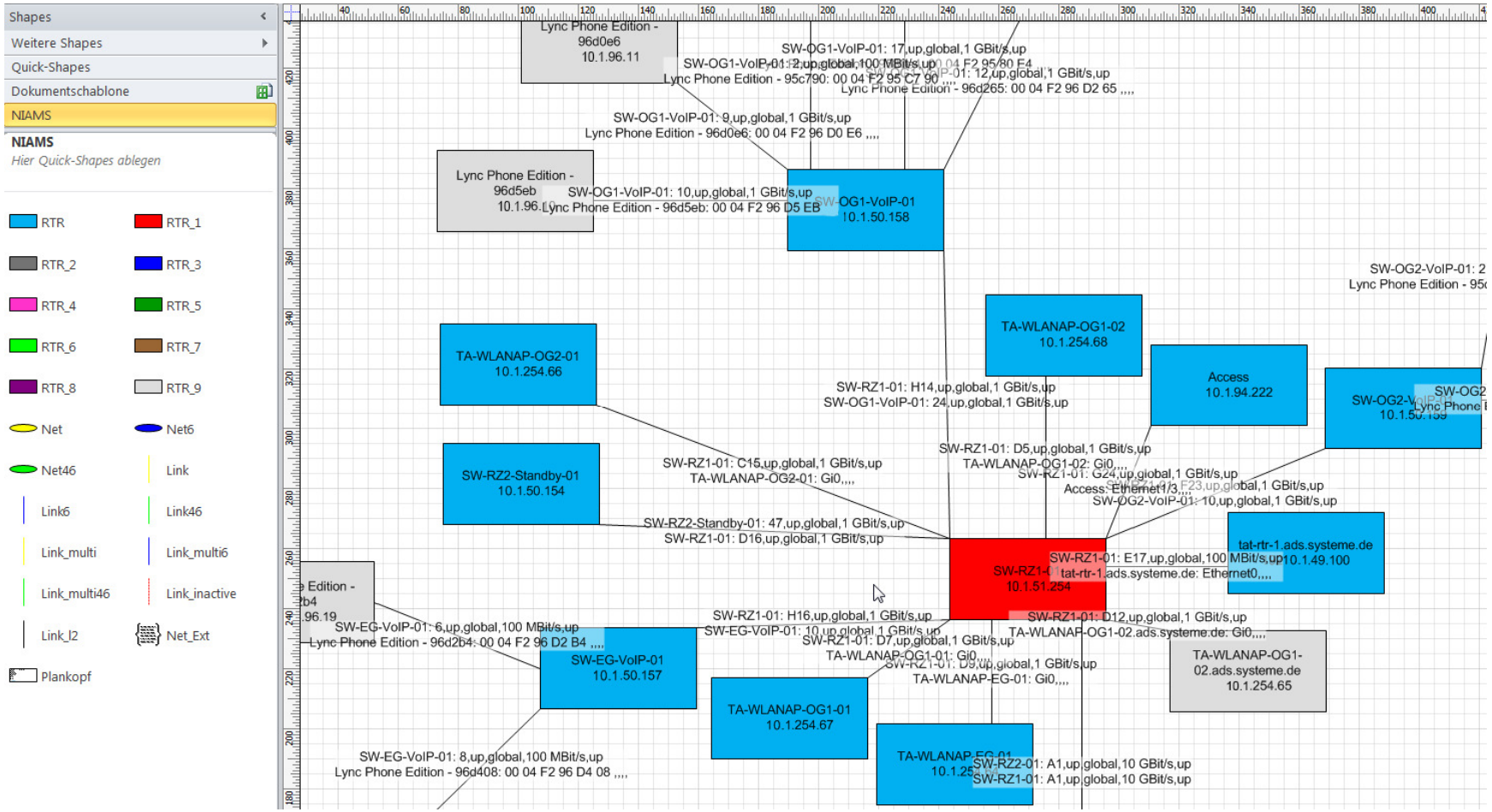
Netzwerkdokumentation (Layer2 & Layer3) in Microsoft Visio™



T&A SYSTEME

NIAMS
Network Infrastructure Analytics & Management System

Netzwerkdokumentation (Layer2 & Layer3) in Microsoft Visio™



T&A SYSTEME

NIAMS
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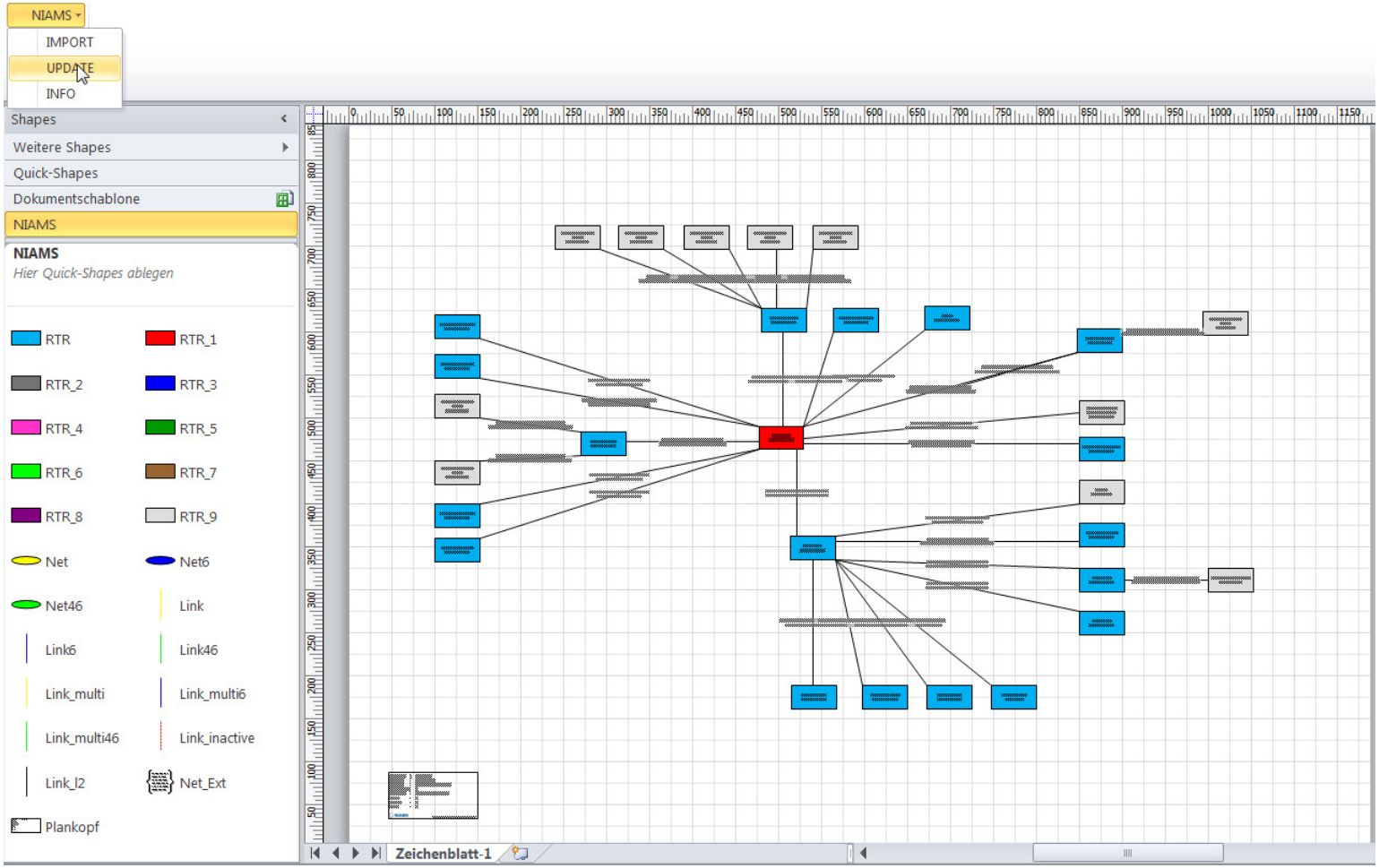
Netzwerkdokumentation (Layer2 & Layer3) in Microsoft Visio™



T&A SYSTEME

NIAMS
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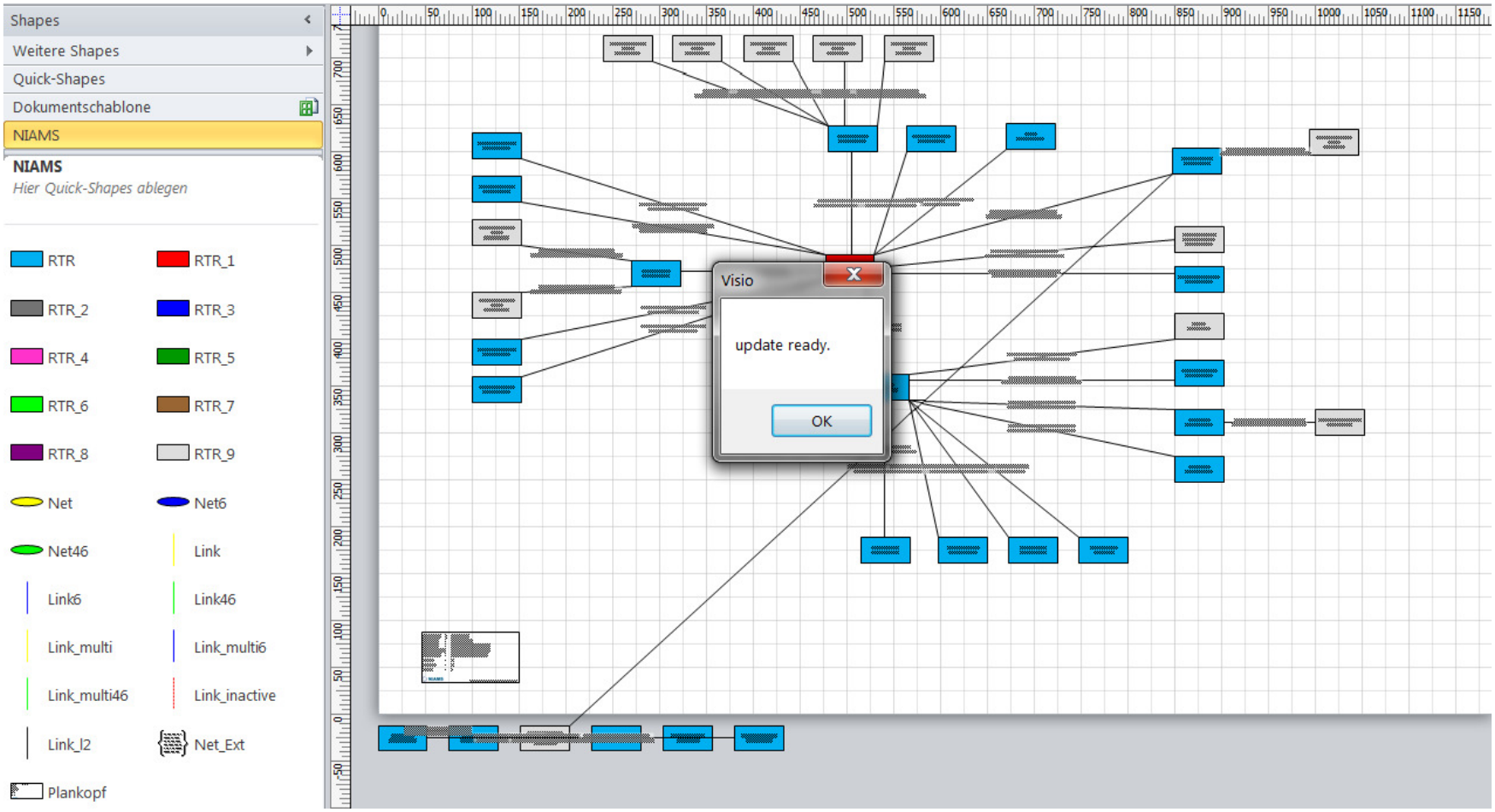
Netzwerkdokumentation (Layer2 & Layer3) in Microsoft Visio™



T&A SYSTEME

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3D-Netzwerkdokumentation mit Visualisierung

- Überschneidungsfreie, vollautomatische Visualisierung auch großer Infrastrukturen (> 10.000 Komponenten)

- Visualisierung von Topologie-Änderungen und Interface-Fehlerzuständen im zeitlichen Verlauf

NIAMS
Network Infrastructure Analytics & Management System

3D-Netzwerkdokumentation

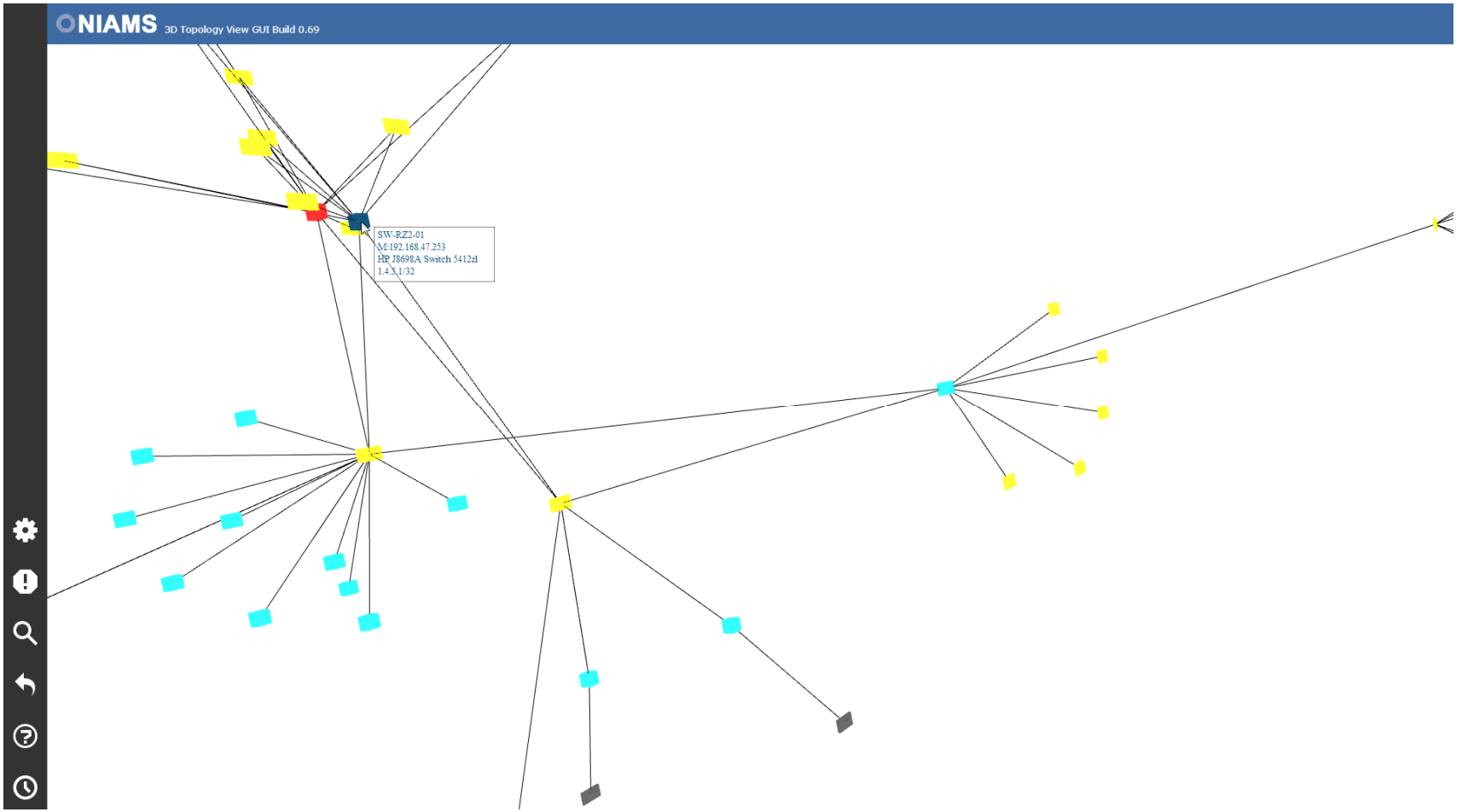
- Liste aller auffälligen Interfaces und der Möglichkeit zum Zoom auf eine ausgewählte Störung
- Alle Funktionen sind sowohl per Maus, als auch per Touch nutzbar

Anwendungen:

- Controlling
- Troubleshooting

NIAMS
Network Infrastructure Analytics & Management System

3D-Netzwerkdokumentation



T&A SYSTEME

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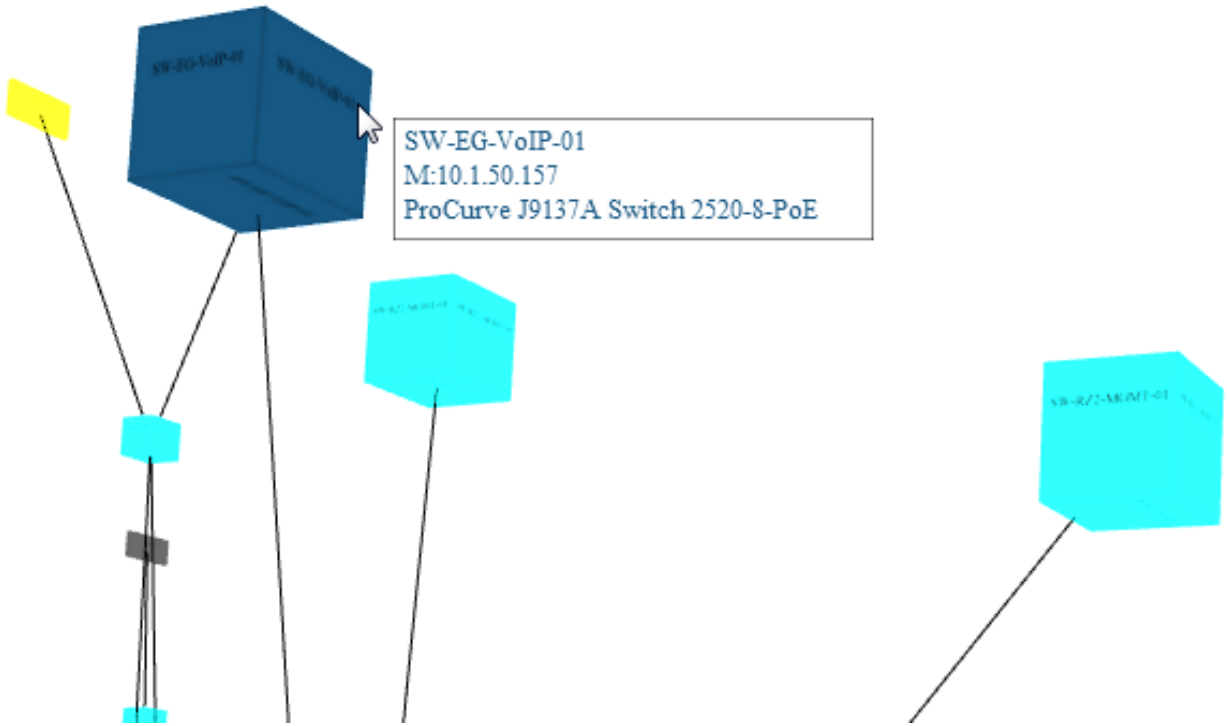
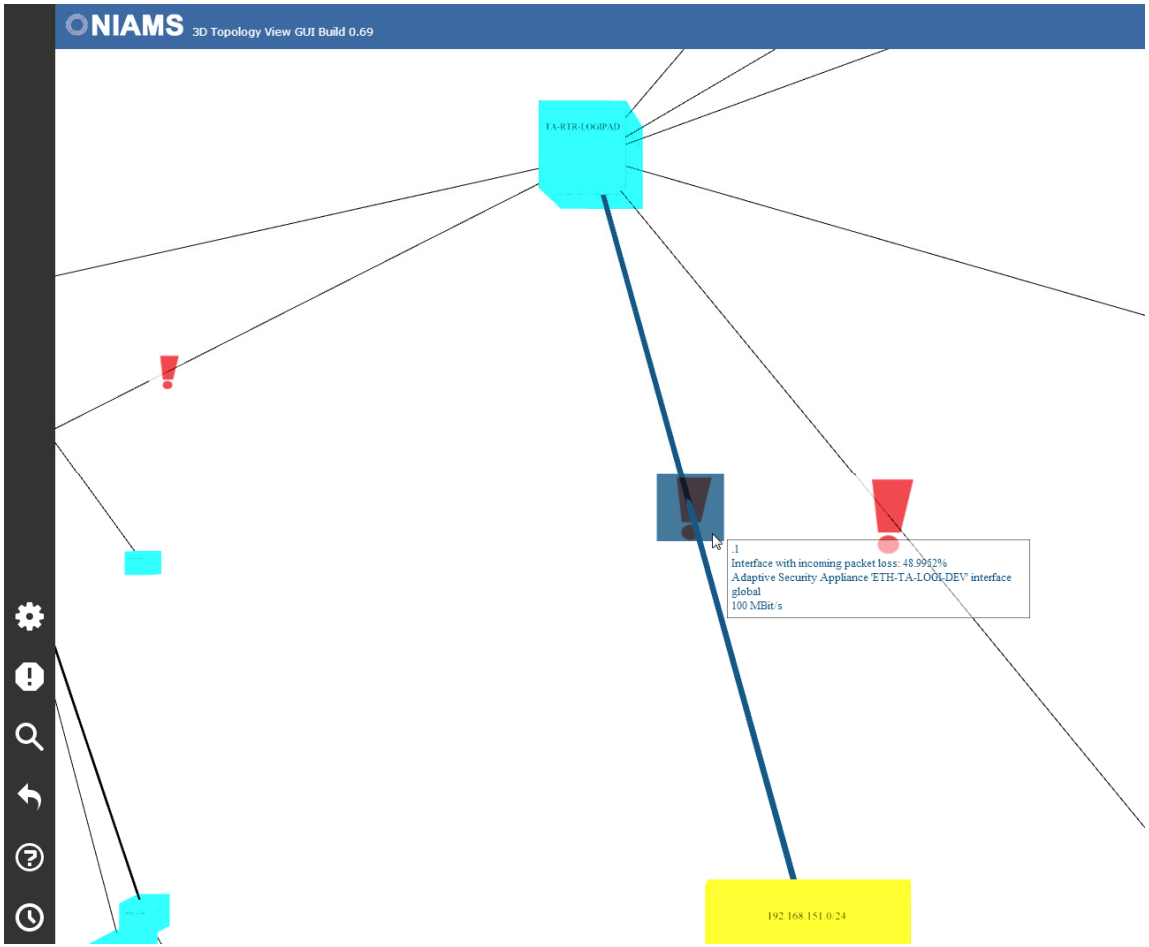
3D-Netzwerkdokumentation



NIAMS
Network Infrastructure Analytics & Management System

3D-Netzwerkdokumentation



T&A SYSTEME

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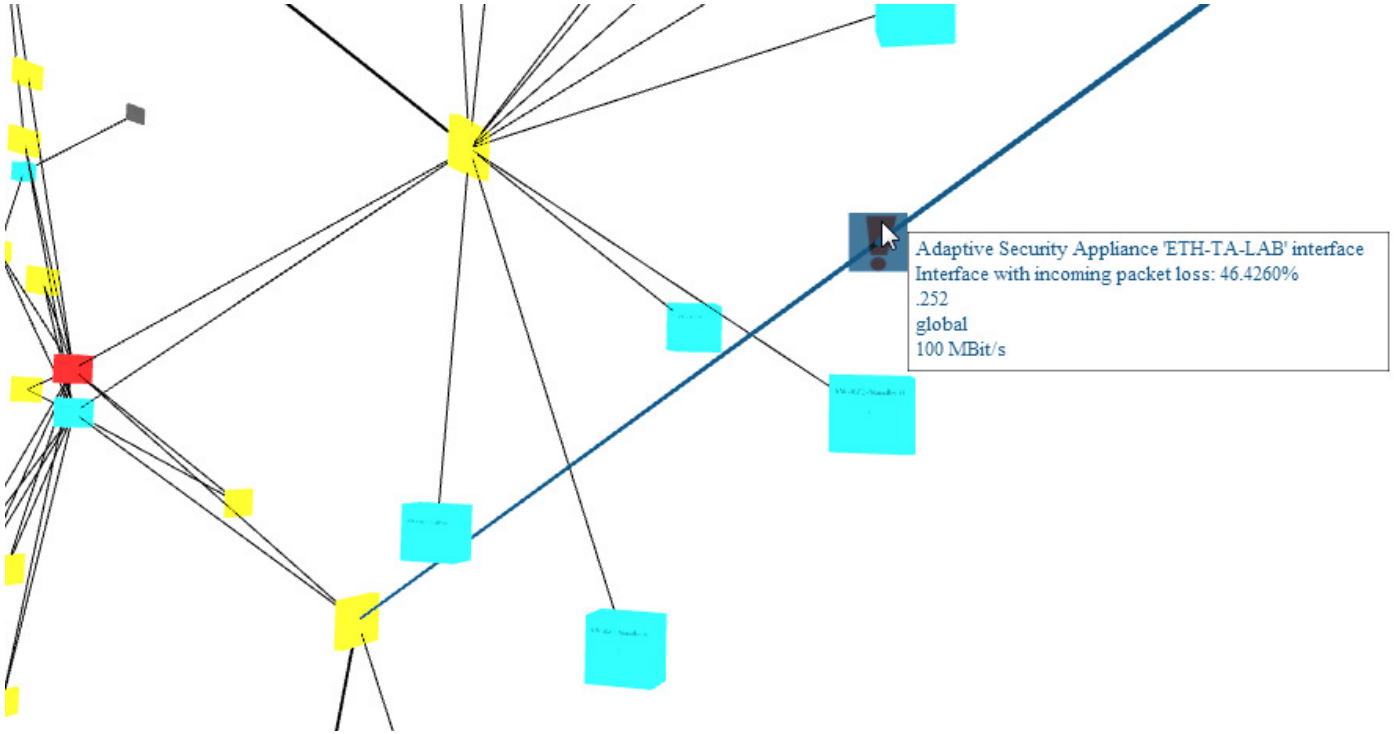
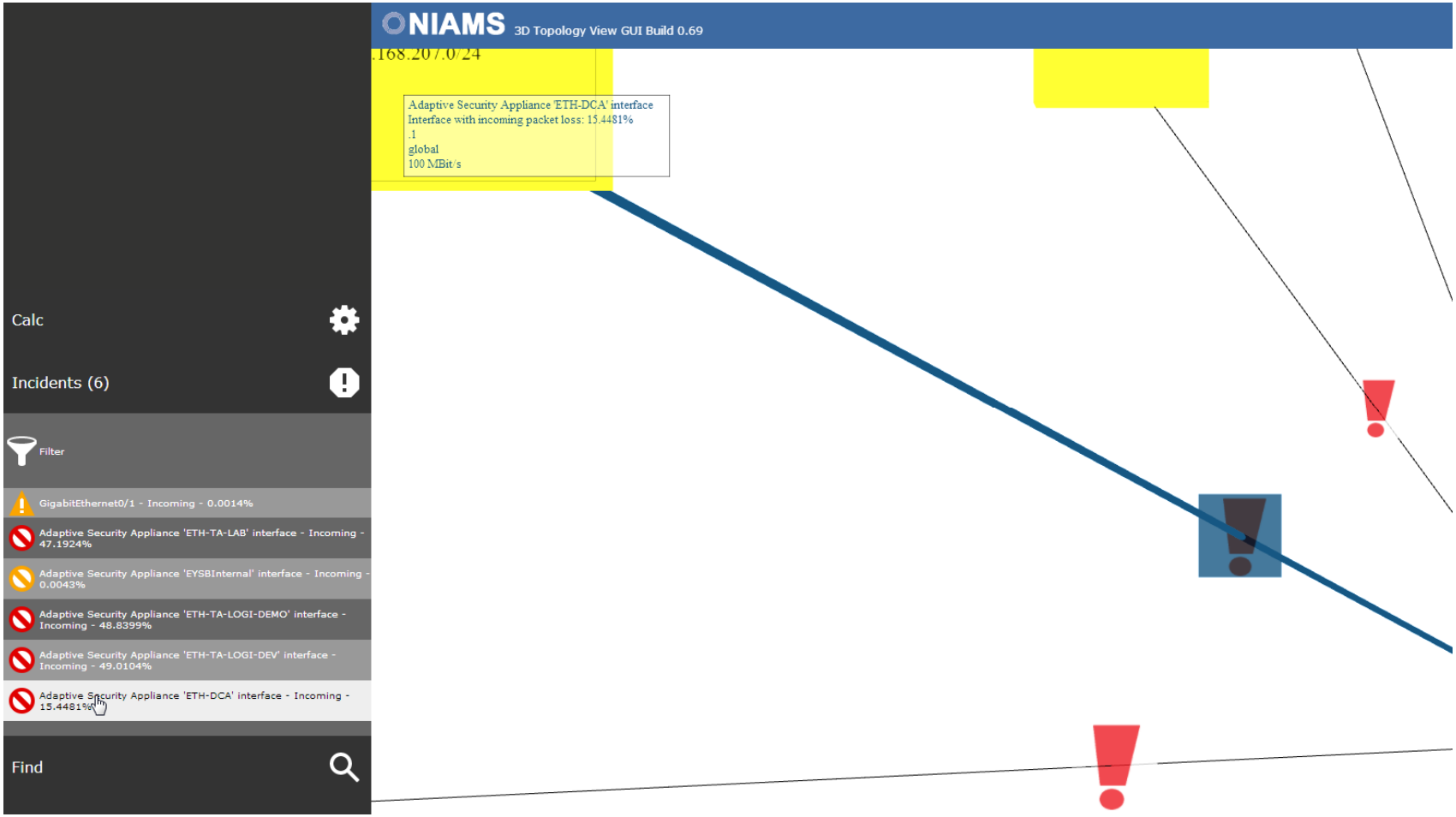
Network Infrastructure Analytics & Management System

3D-Netzwerkdokumentation



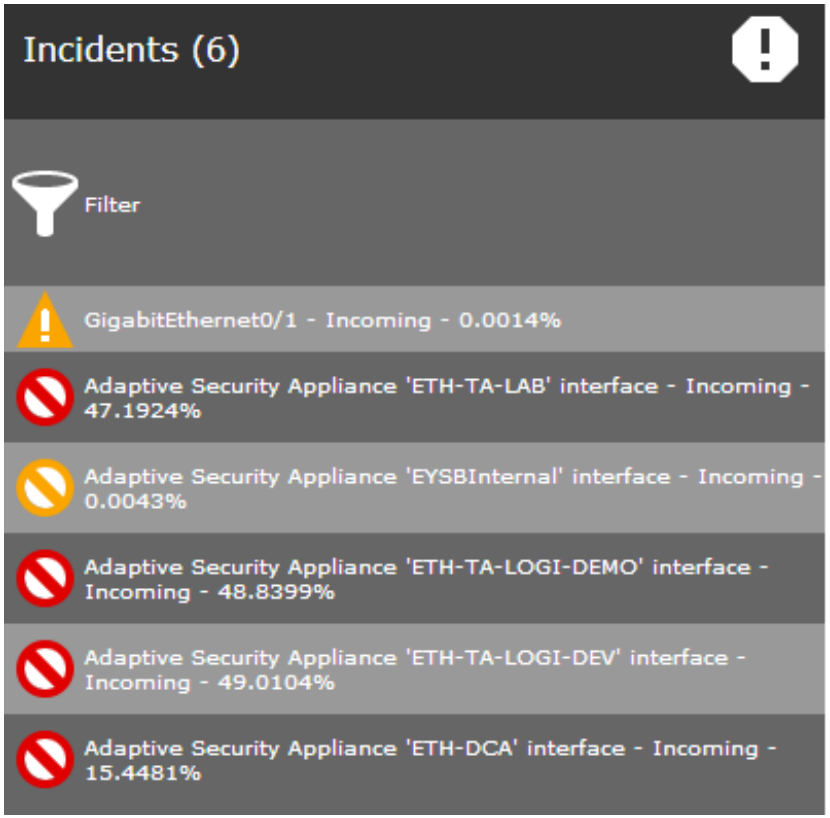
NIAMS
Network Infrastructure Analytics & Management System

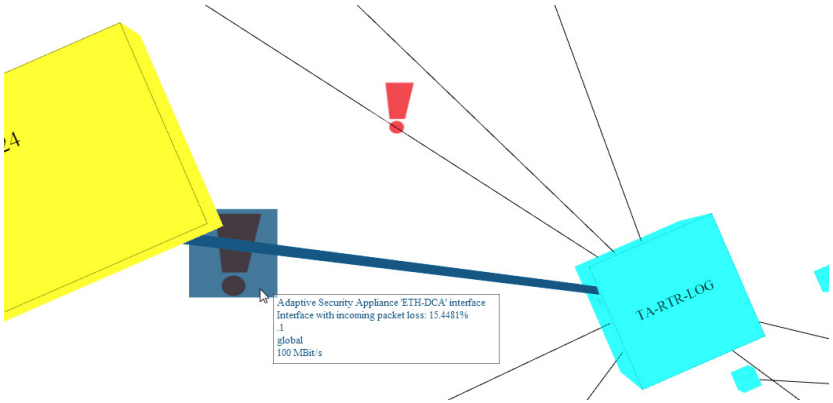
3D-Netzwerkdokumentation



NIAMS
Network Infrastructure Analytics & Management System

3D-Netzwerkdokumentation

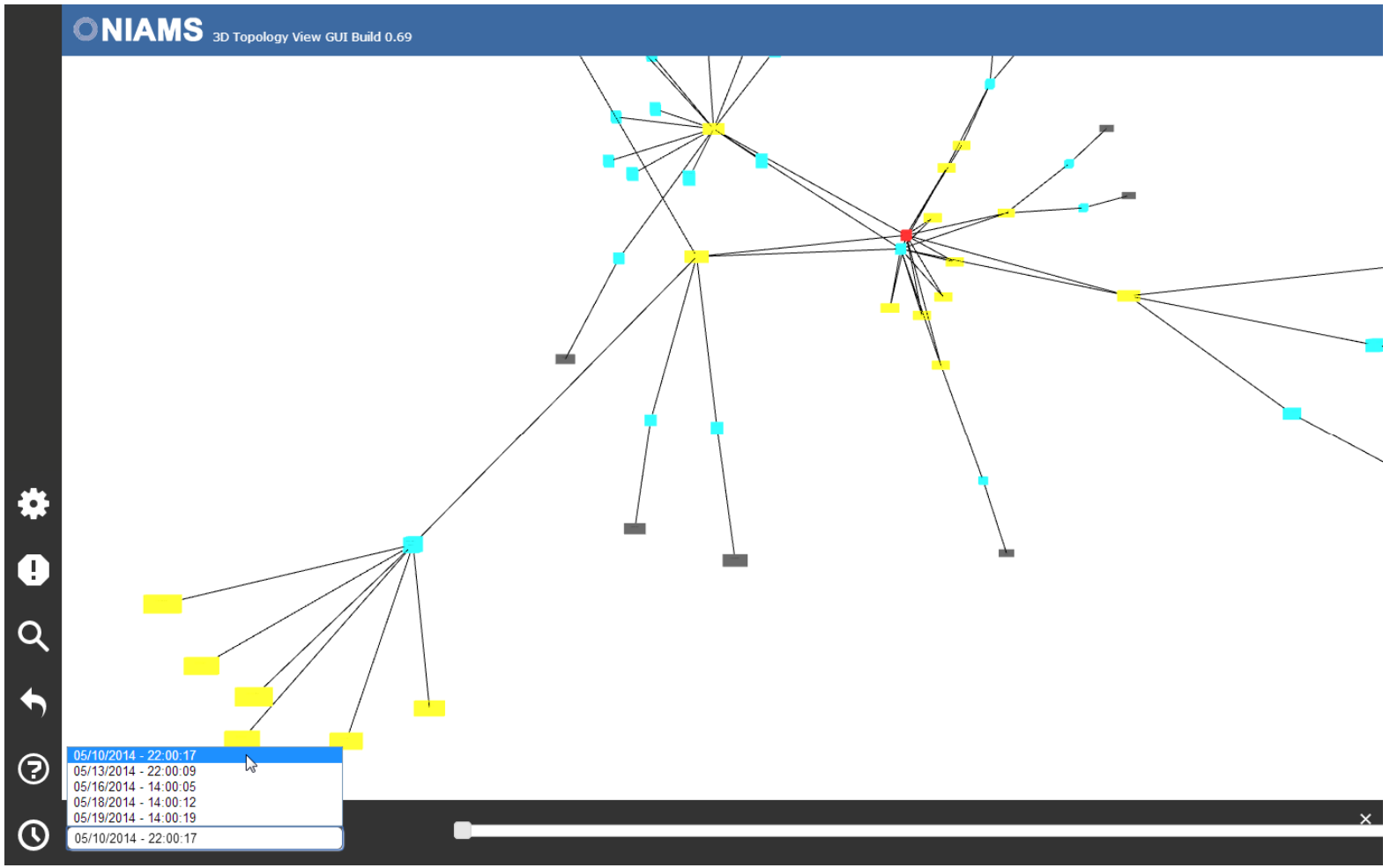




T&A SYSTEME

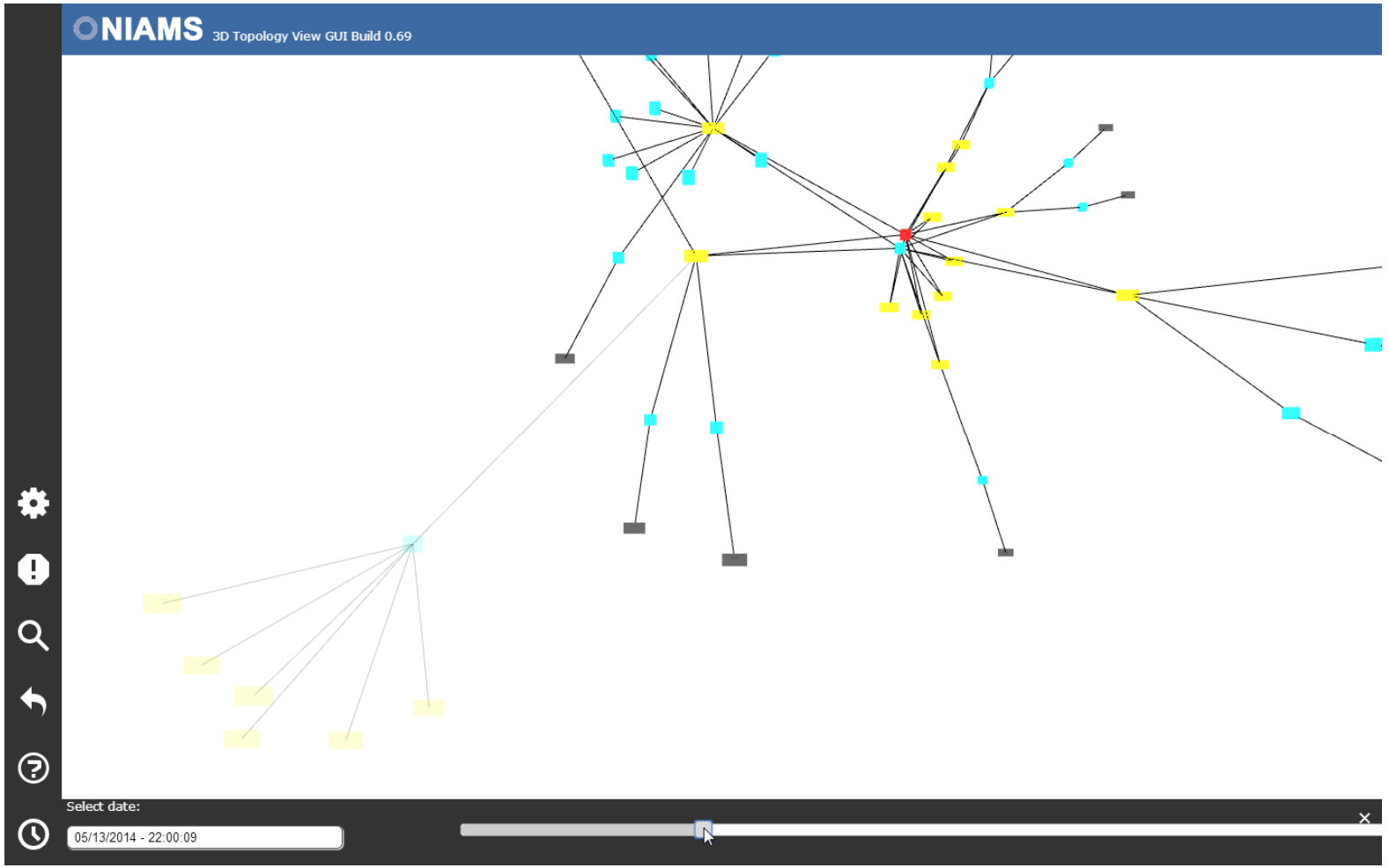
NIAMS
Network Infrastructure Analytics & Management System

3D-Netzwerkdokumentation



NIAMS
Network Infrastructure Analytics & Management System

3D-Netzwerkdokumentation



T&A SYSTEME

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Network Infrastructure Analytics & Management System

Endgeräte Report

- Report über einen Zeitraum, Zeitpunkt oder den jeweils letzten Zeitpunkt, zu dem ein oder mehrere Endgeräte am Netzwerk aktiv waren

  - Endgeräte DNS
  - Endgeräte IP
  - Endgeräte MAC/Vendor
  - Switch Port/Portfehlerstatistik
  - Switch Attribute (z.B. Standort)

NIAMS
Network Infrastructure Analytics & Management System

Endgeräte Report

- Ausgabe nach Endgeräte-MAC oder nach Switch/Port
- Konfigurierbarer Filter auf beliebige Felder

Anwendungen:

- Planung
- Controlling
- Leistungsverrechnung
- Troubleshooting

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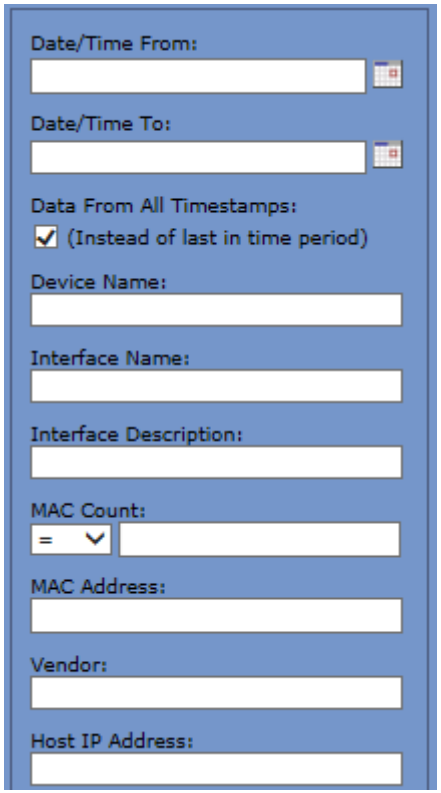
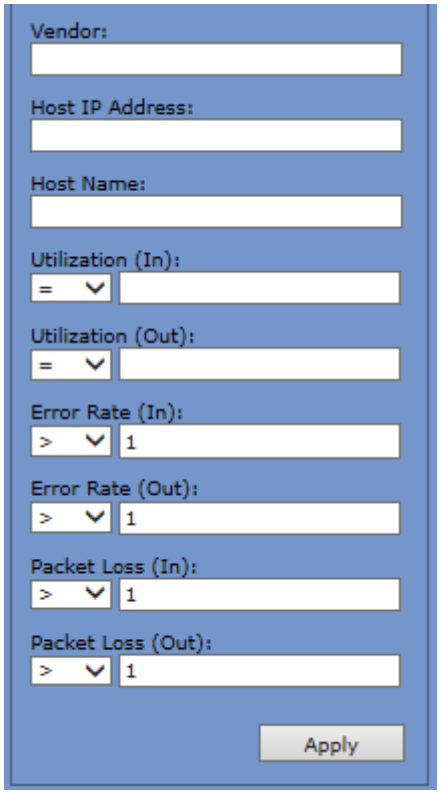
Endgeräte Report





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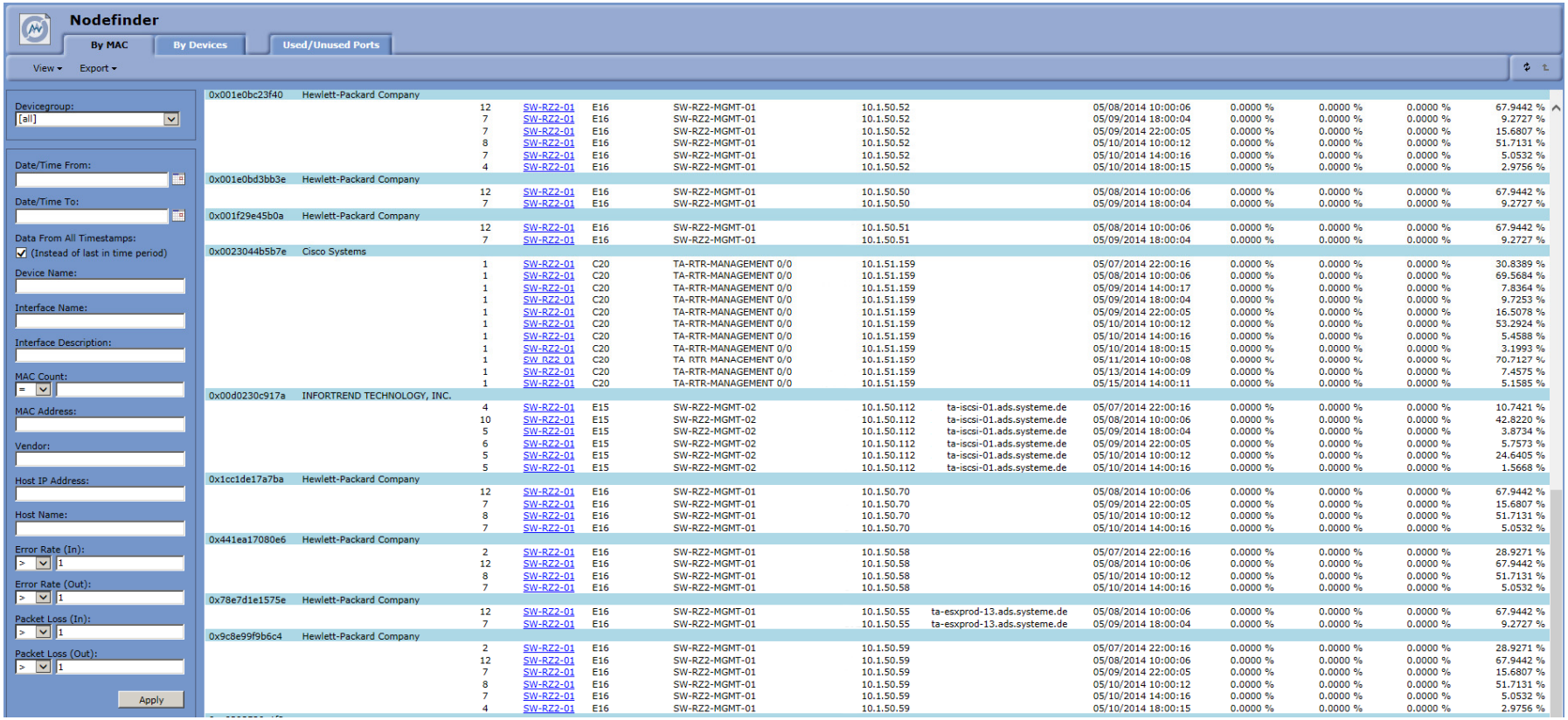
Network Infrastructure Analytics & Management System

Endgeräte Report



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		7	SW-RZ2-01	E16	SW-RZ2-MGMT-01	10.1.50.52		05/09/2014 18:00:04	0.0000 %	0.0000 %	0.0000 %	9.2727 %
		7	SW-RZ2-01	E16	SW-RZ2-MGMT-01	10.1.50.52		05/09/2014 22:00:05	0.0000 %	0.0000 %	0.0000 %	15.6807 %
		8	SW-RZ2-01	E16	SW-RZ2-MGMT-01	10.1.50.52		05/10/2014 10:00:12	0.0000 %	0.0000 %	0.0000 %	51.7131 %
		7	SW-RZ2-01	E16	SW-RZ2-MGMT-01	10.1.50.52		05/10/2014 14:00:16	0.0000 %	0.0000 %	0.0000 %	5.0532 %
		4	SW-RZ2-01	E16	SW-RZ2-MGMT-01	10.1.50.52		05/10/2014 18:00:15	0.0000 %	0.0000 %	0.0000 %	2.9756 %
0x001e0bd3bb3e	Hewlett-Packard Company											
		12	SW-RZ2-01	E16	SW-RZ2-MGMT-01	10.1.50.50		05/08/2014 10:00:06	0.0000 %	0.0000 %	0.0000 %	67.9442 %
		7	SW-RZ2-01	E16	SW-RZ2-MGMT-01	10.1.50.50		05/09/2014 18:00:04	0.0000 %	0.0000 %	0.0000 %	9.2727 %
0x001f29e45b0a	Hewlett-Packard Company											
		12	SW-RZ2-01	E16	SW-RZ2-MGMT-01	10.1.50.51		05/08/2014 10:00:06	0.0000 %	0.0000 %	0.0000 %	67.9442 %
		7	SW-RZ2-01	E16	SW-RZ2-MGMT-01	10.1.50.51		05/09/2014 18:00:04	0.0000 %	0.0000 %	0.0000 %	9.2727 %
0x0023044b5b7e	Cisco Systems											
		1	SW-RZ2-01	C20	TA-RTR-MANAGEMENT 0/0	10.1.51.159		05/07/2014 22:00:16	0.0000 %	0.0000 %	0.0000 %	30.8389 %
		1	SW-RZ2-01	C20	TA-RTR-MANAGEMENT 0/0	10.1.51.159		05/08/2014 10:00:06	0.0000 %	0.0000 %	0.0000 %	69.5684 %
		1	SW-RZ2-01	C20	TA-RTR-MANAGEMENT 0/0	10.1.51.159		05/09/2014 14:00:17	0.0000 %	0.0000 %	0.0000 %	7.8364 %
		1	SW-RZ2-01	C20	TA-RTR-MANAGEMENT 0/0	10.1.51.159		05/09/2014 18:00:04	0.0000 %	0.0000 %	0.0000 %	9.7253 %
		1	SW-RZ2-01	C20	TA-RTR-MANAGEMENT 0/0	10.1.51.159		05/09/2014 22:00:05	0.0000 %	0.0000 %	0.0000 %	16.5078 %
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		1	SW-RZ2-01	C20	TA-RTR-MANAGEMENT 0/0	10.1.51.159		05/10/2014 14:00:16	0.0000 %	0.0000 %	0.0000 %	5.4588 %
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		1	SW-RZ2-01	C20	TA-RTR-MANAGEMENT 0/0	10.1.51.159		05/11/2014 10:00:08	0.0000 %	0.0000 %	0.0000 %	70.7127 %
		1	SW-RZ2-01	C20	TA-RTR-MANAGEMENT 0/0	10.1.51.159		05/13/2014 14:00:09	0.0000 %	0.0000 %	0.0000 %	7.4575 %
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0x00d0230c917a	INFORTREND TECHNOLOGY, INC.											
		4	SW-RZ2-01	E15	SW-RZ2-MGMT-02	10.1.50.112	ta-iscsi-01.ads.systeme.de	05/07/2014 22:00:16	0.0000 %	0.0000 %	0.0000 %	10.7421 %
		10	SW-RZ2-01	E15	SW-RZ2-MGMT-02	10.1.50.112	ta-iscsi-01.ads.systeme.de	05/08/2014 10:00:06	0.0000 %	0.0000 %	0.0000 %	42.8220 %
		5	SW-RZ2-01	E15	SW-RZ2-MGMT-02	10.1.50.112	ta-iscsi-01.ads.systeme.de	05/09/2014 18:00:04	0.0000 %	0.0000 %	0.0000 %	3.8734 %
		6	SW-RZ2-01	E15	SW-RZ2-MGMT-02	10.1.50.112	ta-iscsi-01.ads.systeme.de	05/09/2014 22:00:05	0.0000 %	0.0000 %	0.0000 %	5.7573 %
		5	SW-RZ2-01	E15	SW-RZ2-MGMT-02	10.1.50.112	ta-iscsi-01.ads.systeme.de	05/10/2014 10:00:12	0.0000 %	0.0000 %	0.0000 %	24.6405 %
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		8	SW-RZ2-01	E16	SW-RZ2-MGMT-01	10.1.50.70		05/10/2014 10:00:12	0.0000 %	0.0000 %	0.0000 %	51.7131 %
		7	SW-RZ2-01	E16	SW-RZ2-MGMT-01	10.1.50.70		05/10/2014 14:00:16	0.0000 %	0.0000 %	0.0000 %	5.0532 %
0x441ea17080e6	Hewlett-Packard Company											
		2	SW-RZ2-01	E16	SW-RZ2-MGMT-01	10.1.50.58		05/07/2014 22:00:16	0.0000 %	0.0000 %	0.0000 %	28.9271 %
		12	SW-RZ2-01	E16	SW-RZ2-MGMT-01	10.1.50.58		05/08/2014 10:00:06	0.0000 %	0.0000 %	0.0000 %	67.9442 %
		8	SW-RZ2-01	E16	SW-RZ2-MGMT-01	10.1.50.58		05/10/2014 10:00:12	0.0000 %	0.0000 %	0.0000 %	51.7131 %
		7	SW-RZ2-01	E16	SW-RZ2-MGMT-01	10.1.50.58		05/10/2014 14:00:16	0.0000 %	0.0000 %	0.0000 %	5.0532 %
0x78e7d1e1575e	Hewlett-Packard Company											
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0x9c8e99f9b6c4	Hewlett-Packard Company											
		2	SW-RZ2-01	E16	SW-RZ2-MGMT-01	10.1.50.59		05/07/2014 22:00:16	0.0000 %	0.0000 %	0.0000 %	28.9271 %
		12	SW-RZ2-01	E16	SW-RZ2-MGMT-01	10.1.50.59		05/08/2014 10:00:06	0.0000 %	0.0000 %	0.0000 %	67.9442 %
		7	SW-RZ2-01	E16	SW-RZ2-MGMT-01	10.1.50.59		05/09/2014 22:00:05	0.0000 %	0.0000 %	0.0000 %	15.6807 %
		8	SW-RZ2-01	E16	SW-RZ2-MGMT-01	10.1.50.59		05/10/2014 10:00:12	0.0000 %	0.0000 %	0.0000 %	51.7131 %
		7	SW-RZ2-01	E16	SW-RZ2-MGMT-01	10.1.50.59		05/10/2014 14:00:16	0.0000 %	0.0000 %	0.0000 %	5.0532 %
		4	SW-RZ2-01	E16	SW-RZ2-MGMT-01	10.1.50.59		05/10/2014 18:00:15	0.0000 %	0.0000 %	0.0000 %	2.9756 %

NIAMS
Network Infrastructure Analytics & Management System

Endgeräte Report

Devicegroup: [all]

Date/Time From:

Date/Time To:

Data From All Timestamps:
☑ (Instead of last in time period)

Device Name:

Interface Name:

Interface Description:

MAC Count: =

MAC Address:

Vendor:

Host IP Address:

Host Name:

Error Rate (In): > 1

Error Rate (Out): > 1

Packet Loss (In): > 1

Packet Loss (Out): > 1

0x001e0bc23f40	Hewlett-Packard Company				
		12	SW-RZ2-01	E16	SW-RZ2-MGMT-01
		7	SW-RZ2-01	E16	SW-RZ2-MGMT-01
		7	SW-RZ2-01	E16	SW-RZ2-MGMT-01
		8	SW-RZ2-01	E16	SW-RZ2-MGMT-01
		7	SW-RZ2-01	E16	SW-RZ2-MGMT-01
		4	SW-RZ2-01	E16	SW-RZ2-MGMT-01
0x001e0bd3bb3e	Hewlett-Packard Company				
		12	SW-RZ2-01	E16	SW-RZ2-MGMT-01
		7	SW-RZ2-01	E16	SW-RZ2-MGMT-01
0x001f29e45b0a	Hewlett-Packard Company				
		12	SW-RZ2-01	E16	SW-RZ2-MGMT-01
		7	SW-RZ2-01	E16	SW-RZ2-MGMT-01
0x0023044b5b7e	Cisco Systems				
		1	SW-RZ2-01	C20	TA-RTR-MANAGEMENT 0/0
		1	SW-RZ2-01	C20	TA-RTR-MANAGEMENT 0/0
		1	SW-RZ2-01	C20	TA-RTR-MANAGEMENT 0/0
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		1	SW-RZ2-01	C20	TA-RTR-MANAGEMENT 0/0
		1	SW-RZ2-01	C20	TA-RTR-MANAGEMENT 0/0
		1	SW-RZ2-01	C20	TA-RTR-MANAGEMENT 0/0
		1	SW-RZ2-01	C20	TA-RTR-MANAGEMENT 0/0
		1	SW-RZ2-01	C20	TA-RTR-MANAGEMENT 0/0
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		1	SW-RZ2-01	C20	TA-RTR-MANAGEMENT 0/0
0x00d0230c917a	INFORTREND TECHNOLOGY, INC.				
		4	SW-RZ2-01	E15	SW-RZ2-MGMT-02
		10	SW-RZ2-01	E15	SW-RZ2-MGMT-02
		5	SW-RZ2-01	E15	SW-RZ2-MGMT-02
		6	SW-RZ2-01	E15	SW-RZ2-MGMT-02
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		5	SW-RZ2-01	E15	SW-RZ2-MGMT-02
0x1cc1de17a7ba	Hewlett-Packard Company				
		12	SW-RZ2-01	E16	SW-RZ2-MGMT-01
		7	SW-RZ2-01	E16	SW-RZ2-MGMT-01
		8	SW-RZ2-01	E16	SW-RZ2-MGMT-01
		7	SW-RZ2-01	E16	SW-RZ2-MGMT-01
0x441ea17080e6	Hewlett-Packard Company				
		2	SW-RZ2-01	E16	SW-RZ2-MGMT-01
		12	SW-RZ2-01	E16	SW-RZ2-MGMT-01
		8	SW-RZ2-01	E16	SW-RZ2-MGMT-01
		7	SW-RZ2-01	E16	SW-RZ2-MGMT-01
0x78e7d1e1575e	Hewlett-Packard Company				
		12	SW-RZ2-01	E16	SW-RZ2-MGMT-01
		7	SW-RZ2-01	E16	SW-RZ2-MGMT-01
0x9c8e99f9b6c4	Hewlett-Packard Company				
		2	SW-RZ2-01	E16	SW-RZ2-MGMT-01
		12	SW-RZ2-01	E16	SW-RZ2-MGMT-01
		7	SW-RZ2-01	E16	SW-RZ2-MGMT-01

NIAMS
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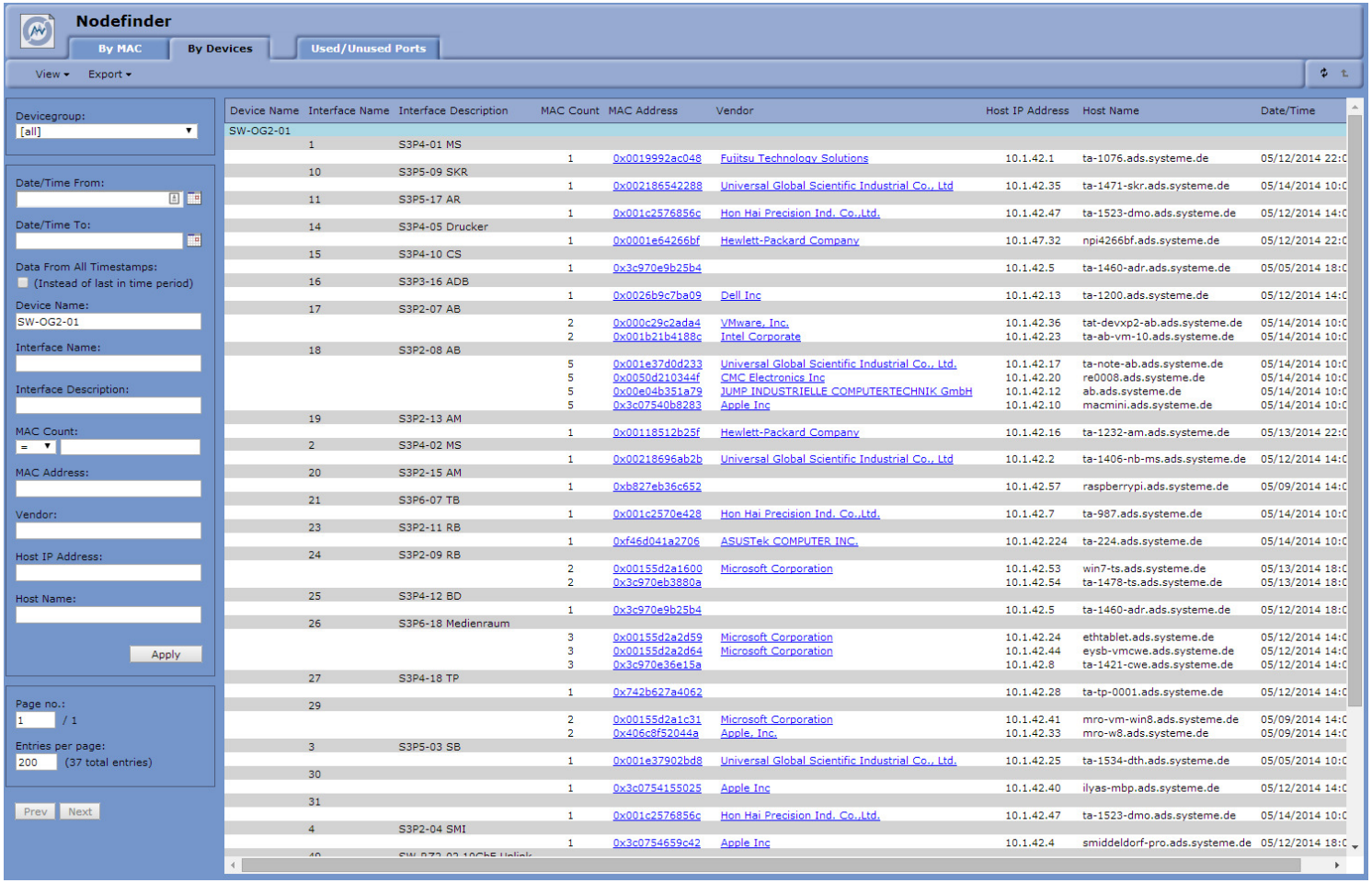
Endgeräte Report

E15	SW-RZ2-MGMT-02	10.1.50.112	ta-iscsi-01.ads.systeme.de	05/07/2014 22:00:16	0.0000 %	0.0000 %	0.0000 %	10.7421 %
E15	SW-RZ2-MGMT-02	10.1.50.112	ta-iscsi-01.ads.systeme.de	05/08/2014 10:00:06	0.0000 %	0.0000 %	0.0000 %	42.8220 %
E15	SW-RZ2-MGMT-02	10.1.50.112	ta-iscsi-01.ads.systeme.de	05/09/2014 18:00:04	0.0000 %	0.0000 %	0.0000 %	3.8734 %
E15	SW-RZ2-MGMT-02	10.1.50.112	ta-iscsi-01.ads.systeme.de	05/09/2014 22:00:05	0.0000 %	0.0000 %	0.0000 %	5.7573 %
E15	SW-RZ2-MGMT-02	10.1.50.112	ta-iscsi-01.ads.systeme.de	05/10/2014 10:00:12	0.0000 %	0.0000 %	0.0000 %	24.6405 %
E15	SW-RZ2-MGMT-02	10.1.50.112	ta-iscsi-01.ads.systeme.de	05/10/2014 14:00:16	0.0000 %	0.0000 %	0.0000 %	1.5668 %
E16	SW-RZ2-MGMT-01	10.1.50.70		05/08/2014 10:00:06	0.0000 %	0.0000 %	0.0000 %	67.9442 %
E16	SW-RZ2-MGMT-01	10.1.50.70		05/09/2014 22:00:05	0.0000 %	0.0000 %	0.0000 %	15.6807 %
E16	SW-RZ2-MGMT-01	10.1.50.70		05/10/2014 10:00:12	0.0000 %	0.0000 %	0.0000 %	51.7131 %
E16	SW-RZ2-MGMT-01	10.1.50.70		05/10/2014 14:00:16	0.0000 %	0.0000 %	0.0000 %	5.0532 %
E16	SW-RZ2-MGMT-01	10.1.50.58		05/07/2014 22:00:16	0.0000 %	0.0000 %	0.0000 %	28.9271 %
E16	SW-RZ2-MGMT-01	10.1.50.58		05/08/2014 10:00:06	0.0000 %	0.0000 %	0.0000 %	67.9442 %
E16	SW-RZ2-MGMT-01	10.1.50.58		05/10/2014 10:00:12	0.0000 %	0.0000 %	0.0000 %	51.7131 %
E16	SW-RZ2-MGMT-01	10.1.50.58		05/10/2014 14:00:16	0.0000 %	0.0000 %	0.0000 %	5.0532 %
E16	SW-RZ2-MGMT-01	10.1.50.55	ta-esxprod-13.ads.systeme.de	05/08/2014 10:00:06	0.0000 %	0.0000 %	0.0000 %	67.9442 %
E16	SW-RZ2-MGMT-01	10.1.50.55	ta-esxprod-13.ads.systeme.de	05/09/2014 18:00:04	0.0000 %	0.0000 %	0.0000 %	9.2727 %
E16	SW-RZ2-MGMT-01	10.1.50.59		05/07/2014 22:00:16	0.0000 %	0.0000 %	0.0000 %	28.9271 %
E16	SW-RZ2-MGMT-01	10.1.50.59		05/08/2014 10:00:06	0.0000 %	0.0000 %	0.0000 %	67.9442 %
E16	SW-RZ2-MGMT-01	10.1.50.59		05/09/2014 22:00:05	0.0000 %	0.0000 %	0.0000 %	15.6807 %
E16	SW-RZ2-MGMT-01	10.1.50.59		05/10/2014 10:00:12	0.0000 %	0.0000 %	0.0000 %	51.7131 %
E16	SW-RZ2-MGMT-01	10.1.50.59		05/10/2014 14:00:16	0.0000 %	0.0000 %	0.0000 %	5.0532 %
E16	SW-RZ2-MGMT-01	10.1.50.59		05/10/2014 18:00:15	0.0000 %	0.0000 %	0.0000 %	2.9756 %

NIAMS
Network Infrastructure Analytics & Management System

Endgeräte Report



Device Name	Interface Name	Interface Description	MAC Count	MAC Address	Vendor	Host IP Address	Host Name	Date/Time
SW-OG2-01								
	1	S3P4-01 MS						
			1	0x0019992ac048	Fujitsu Technology Solutions	10.1.42.1	ta-1076.ads.systeme.de	05/12/2014 22:0
	10	S3P5-09 SKR						
			1	0x002186542288	Universal Global Scientific Industrial Co., Ltd	10.1.42.35	ta-1471-skr.ads.systeme.de	05/14/2014 10:0
	11	S3P5-17 AR						
			1	0x001c2576856c	Hon Hai Precision Ind. Co.,Ltd.	10.1.42.47	ta-1523-dmo.ads.systeme.de	05/12/2014 14:0
	14	S3P4-05 Drucker						
			1	0x0001e64266bf	Hewlett-Packard Company	10.1.47.32	npi4266bf.ads.systeme.de	05/12/2014 22:0
	15	S3P4-10 CS						
			1	0x3c970e9b25b4		10.1.42.5	ta-1460-adr.ads.systeme.de	05/05/2014 18:0
	16	S3P3-16 ADB						
			1	0x0026b9c7ba09	Dell Inc	10.1.42.13	ta-1200.ads.systeme.de	05/12/2014 14:0
	17	S3P2-07 AB						
			2	0x000c29c2ada4	VMware, Inc.	10.1.42.36	tat-devxp2-ab.ads.systeme.de	05/14/2014 10:0
			2	0x001b21b4188c	Intel Corporate	10.1.42.23	ta-ab-vm-10.ads.systeme.de	05/14/2014 10:0
	18	S3P2-08 AB						
			5	0x001e37d0d233	Universal Global Scientific Industrial Co., Ltd.	10.1.42.17	ta-note-ab.ads.systeme.de	05/14/2014 10:0
			5	0x0050d210344f	CMC Electronics Inc	10.1.42.20	re0008.ads.systeme.de	05/14/2014 10:0
			5	0x00e04b351a79	JUMP INDUSTRIELLE COMPUTERTECHNIK GmbH	10.1.42.12	ab.ads.systeme.de	05/14/2014 10:0
			5	0x3c07540b8283	Apple Inc	10.1.42.10	macmini.ads.systeme.de	05/14/2014 10:0
	19	S3P2-13 AM						
			1	0x00118512b25f	Hewlett-Packard Company	10.1.42.16	ta-1232-am.ads.systeme.de	05/13/2014 22:0
	2	S3P4-02 MS						
			1	0x00218696ab2b	Universal Global Scientific Industrial Co., Ltd	10.1.42.2	ta-1406-nb-ms.ads.systeme.de	05/12/2014 14:0
	20	S3P2-15 AM						
			1	0xb827eb36c652		10.1.42.57	raspberrypi.ads.systeme.de	05/09/2014 14:0
	21	S3P6-07 TB						
			1	0x001c2570e428	Hon Hai Precision Ind. Co.,Ltd.	10.1.42.7	ta-987.ads.systeme.de	05/14/2014 10:0
	23	S3P2-11 RB						
			1	0xf46d041a2706	ASUSTek COMPUTER INC.	10.1.42.224	ta-224.ads.systeme.de	05/14/2014 10:0
	24	S3P2-09 RB						
			2	0x00155d2a1600	Microsoft Corporation	10.1.42.53	win7-ts.ads.systeme.de	05/13/2014 18:0
			2	0x3c970eb3880a		10.1.42.54	ta-1478-ts.ads.systeme.de	05/13/2014 18:0
	25	S3P4-12 BD						
			1	0x3c970e9b25b4		10.1.42.5	ta-1460-adr.ads.systeme.de	05/12/2014 18:0
	26	S3P6-18 Medienraum						
			3	0x00155d2a2d59	Microsoft Corporation	10.1.42.24	ethtablet.ads.systeme.de	05/12/2014 14:0
			3	0x00155d2a2d64	Microsoft Corporation	10.1.42.44	eysb-vmcwe.ads.systeme.de	05/12/2014 14:0
			3	0x3c970e36e15a		10.1.42.8	ta-1421-cwe.ads.systeme.de	05/12/2014 14:0
	27	S3P4-18 TP						
			1	0x742b627a4062		10.1.42.28	ta-tp-0001.ads.systeme.de	05/12/2014 14:0
	29							
			2	0x00155d2a1c31	Microsoft Corporation	10.1.42.41	mro-vm-win8.ads.systeme.de	05/09/2014 14:0
			2	0x406c8f52044a	Apple, Inc.	10.1.42.33	mro-w8.ads.systeme.de	05/09/2014 14:0
	3	S3P5-03 SB						
			1	0x001e37902bd8	Universal Global Scientific Industrial Co., Ltd.	10.1.42.25	ta-1534-dth.ads.systeme.de	05/05/2014 10:0
	30							
			1	0x3c0754155025	Apple Inc	10.1.42.40	ilyas-mbp.ads.systeme.de	05/12/2014 14:0
	31							
			1	0x001c2576856c	Hon Hai Precision Ind. Co.,Ltd.	10.1.42.47	ta-1523-dmo.ads.systeme.de	05/14/2014 10:0
	4	S3P2-04 SMI						
			1	0x3c0754659c42	Apple Inc	10.1.42.4	smiddeldorf-pro.ads.systeme.de	05/12/2014 18:0

T&A SYSTEME

NIAMS
Network Infrastructure Analytics & Management System

Endgeräte Report

Device Name	Interface Name	Interface Description	MAC Count	MAC Address	Vendor	Host IP Address	Host Name
SW-OG2-01							
	1	S3P4-01 MS					
			1	0x0019992ac048	Fujitsu Technology Solutions	10.1.42.1	ta-1076.ads.systeme.de
	10	S3P5-09 SKR					
			1	0x002186542288	Universal Global Scientific Industrial Co., Ltd	10.1.42.35	ta-1471-skr.ads.systeme.de
	11	S3P5-17 AR					
			1	0x001c2576856c	Hon Hai Precision Ind. Co.,Ltd.	10.1.42.47	ta-1523-dmo.ads.systeme.de
	14	S3P4-05 Drucker					
			1	0x0001e64266bf	Hewlett-Packard Company	10.1.47.32	npi4266bf.ads.systeme.de
	15	S3P4-10 CS					
			1	0x3c970e9b25b4		10.1.42.5	ta-1460-adr.ads.systeme.de
	16	S3P3-16 ADB					
			1	0x0026b9c7ba09	Dell Inc	10.1.42.13	ta-1200.ads.systeme.de
	17	S3P2-07 AB					
			2	0x000c29c2ada4	VMware, Inc.	10.1.42.36	tat-devxp2-ab.ads.systeme.de
			2	0x001b21b4188c	Intel Corporate	10.1.42.23	ta-ab-vm-10.ads.systeme.de
	18	S3P2-08 AB					
			5	0x001e37d0d233	Universal Global Scientific Industrial Co., Ltd.	10.1.42.17	ta-note-ab.ads.systeme.de
			5	0x0050d210344f	CMC Electronics Inc	10.1.42.20	re0008.ads.systeme.de
			5	0x00e04b351a79	JUMP INDUSTRIELLE COMPUTERTECHNIK GmbH	10.1.42.12	ab.ads.systeme.de
			5	0x3c07540b8283	Apple Inc	10.1.42.10	macmini.ads.systeme.de

NIAMS
Network Infrastructure Analytics & Management System

Used/Unused Port Report

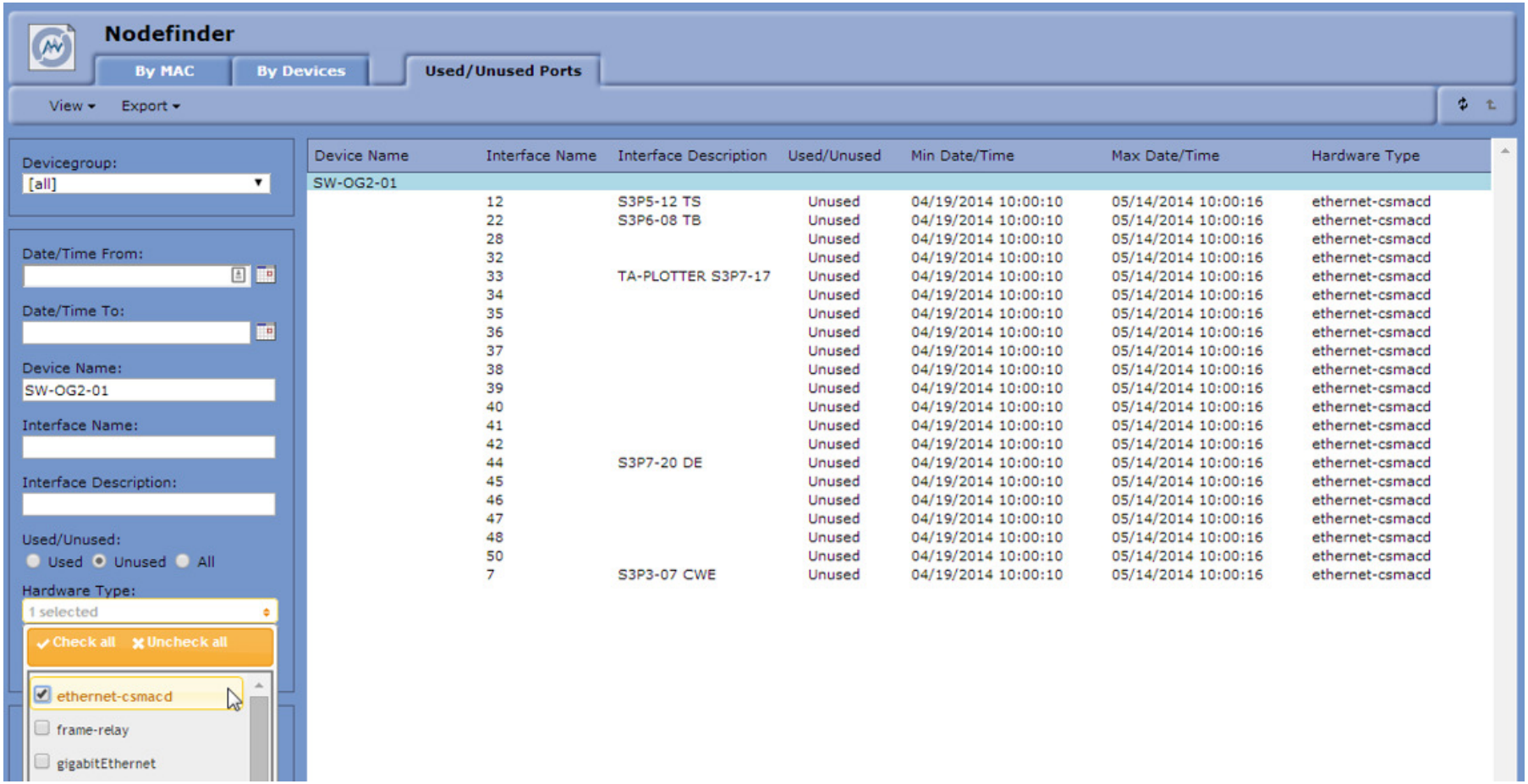
- Report über alle Switch Ports, die in einem definierbaren Zeitraum mindestens einmal (used) oder kein Mal (unused) Datenverkehr hatten
- Konfigurierbarer Filter über beliebige Felder

Anwendungen:

- Controlling
- Leistungsverrechnung
- Ressourcen Planung

NIAMS
Network Infrastructure Analytics & Management System

Used/Unused Port Report



Device Name	Interface Name	Interface Description	Used/Unused	Min Date/Time	Max Date/Time	Hardware Type
SW-OG2-01						
	12	S3P5-12 TS	Unused	04/19/2014 10:00:10	05/14/2014 10:00:16	ethernet-csmacd
	22	S3P6-08 TB	Unused	04/19/2014 10:00:10	05/14/2014 10:00:16	ethernet-csmacd
	28		Unused	04/19/2014 10:00:10	05/14/2014 10:00:16	ethernet-csmacd
	32		Unused	04/19/2014 10:00:10	05/14/2014 10:00:16	ethernet-csmacd
	33	TA-PLOTTER S3P7-17	Unused	04/19/2014 10:00:10	05/14/2014 10:00:16	ethernet-csmacd
	34		Unused	04/19/2014 10:00:10	05/14/2014 10:00:16	ethernet-csmacd
	35		Unused	04/19/2014 10:00:10	05/14/2014 10:00:16	ethernet-csmacd
	36		Unused	04/19/2014 10:00:10	05/14/2014 10:00:16	ethernet-csmacd
	37		Unused	04/19/2014 10:00:10	05/14/2014 10:00:16	ethernet-csmacd
	38		Unused	04/19/2014 10:00:10	05/14/2014 10:00:16	ethernet-csmacd
	39		Unused	04/19/2014 10:00:10	05/14/2014 10:00:16	ethernet-csmacd
	40		Unused	04/19/2014 10:00:10	05/14/2014 10:00:16	ethernet-csmacd
	41		Unused	04/19/2014 10:00:10	05/14/2014 10:00:16	ethernet-csmacd
	42		Unused	04/19/2014 10:00:10	05/14/2014 10:00:16	ethernet-csmacd
	44	S3P7-20 DE	Unused	04/19/2014 10:00:10	05/14/2014 10:00:16	ethernet-csmacd
	45		Unused	04/19/2014 10:00:10	05/14/2014 10:00:16	ethernet-csmacd
	46		Unused	04/19/2014 10:00:10	05/14/2014 10:00:16	ethernet-csmacd
	47		Unused	04/19/2014 10:00:10	05/14/2014 10:00:16	ethernet-csmacd
	48		Unused	04/19/2014 10:00:10	05/14/2014 10:00:16	ethernet-csmacd
	50		Unused	04/19/2014 10:00:10	05/14/2014 10:00:16	ethernet-csmacd
	7	S3P3-07 CWE	Unused	04/19/2014 10:00:10	05/14/2014 10:00:16	ethernet-csmacd

NIAMS
Network Infrastructure Analytics & Management System

Used/Unused Port Report

Device Name	Interface Name	Interface Description	Used/Unused	Min Date/Time	Max Date/Time
SW-OG2-01					
	12	S3P5-12 TS	Unused	04/19/2014 10:00:10	05/14/2014 10:00:16
	22	S3P6-08 TB	Unused	04/19/2014 10:00:10	05/14/2014 10:00:16
	28		Unused	04/19/2014 10:00:10	05/14/2014 10:00:16
	32		Unused	04/19/2014 10:00:10	05/14/2014 10:00:16
	33	TA-PLOTTER S3P7-17	Unused	04/19/2014 10:00:10	05/14/2014 10:00:16
	34		Unused	04/19/2014 10:00:10	05/14/2014 10:00:16
	35		Unused	04/19/2014 10:00:10	05/14/2014 10:00:16
	36		Unused	04/19/2014 10:00:10	05/14/2014 10:00:16
	37		Unused	04/19/2014 10:00:10	05/14/2014 10:00:16
	38		Unused	04/19/2014 10:00:10	05/14/2014 10:00:16
	39		Unused	04/19/2014 10:00:10	05/14/2014 10:00:16
	40		Unused	04/19/2014 10:00:10	05/14/2014 10:00:16
	41		Unused	04/19/2014 10:00:10	05/14/2014 10:00:16
	42		Unused	04/19/2014 10:00:10	05/14/2014 10:00:16
	44	S3P7-20 DE	Unused	04/19/2014 10:00:10	05/14/2014 10:00:16
	45		Unused	04/19/2014 10:00:10	05/14/2014 10:00:16
	46		Unused	04/19/2014 10:00:10	05/14/2014 10:00:16
	47		Unused	04/19/2014 10:00:10	05/14/2014 10:00:16
	48		Unused	04/19/2014 10:00:10	05/14/2014 10:00:16
	50		Unused	04/19/2014 10:00:10	05/14/2014 10:00:16
	7	S3P3-07 CWE	Unused	04/19/2014 10:00:10	05/14/2014 10:00:16

NIAMS
Network Infrastructure Analytics & Management System

Asset Report

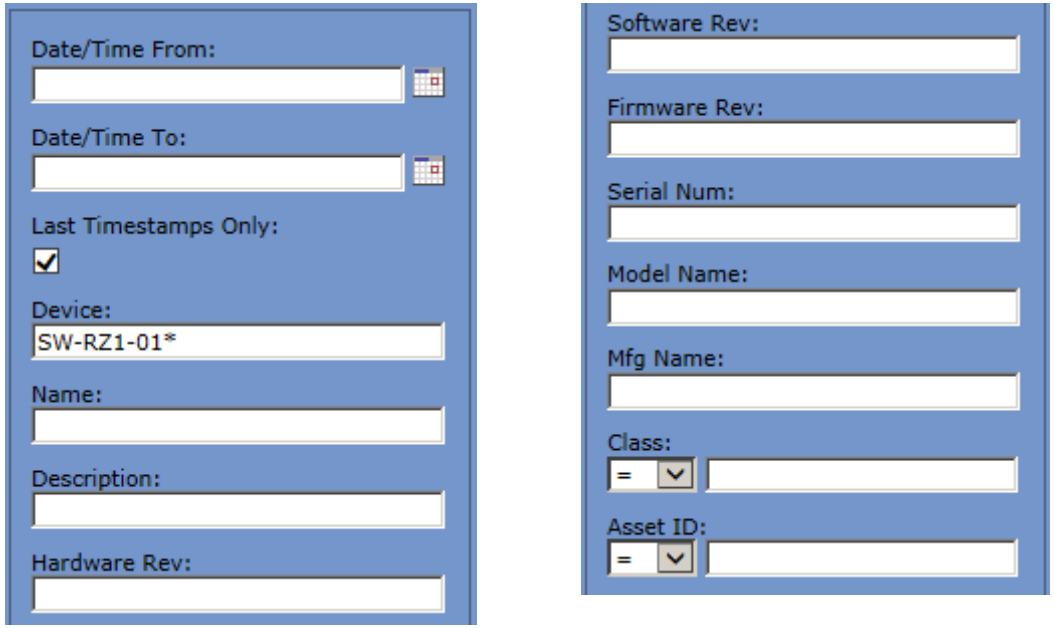
- Report über das vollständige Inventar aller Netzwerk Komponenten zu einem Zeitpunkt oder im zeitlichen Verlauf
- Konfigurierbarer Filter über beliebige Felder

Anwendungen:

- Controlling
- Leistungsverrechnung
- Ressourcen Planung
- Troubleshooting (z.B. Hardware Replacement)

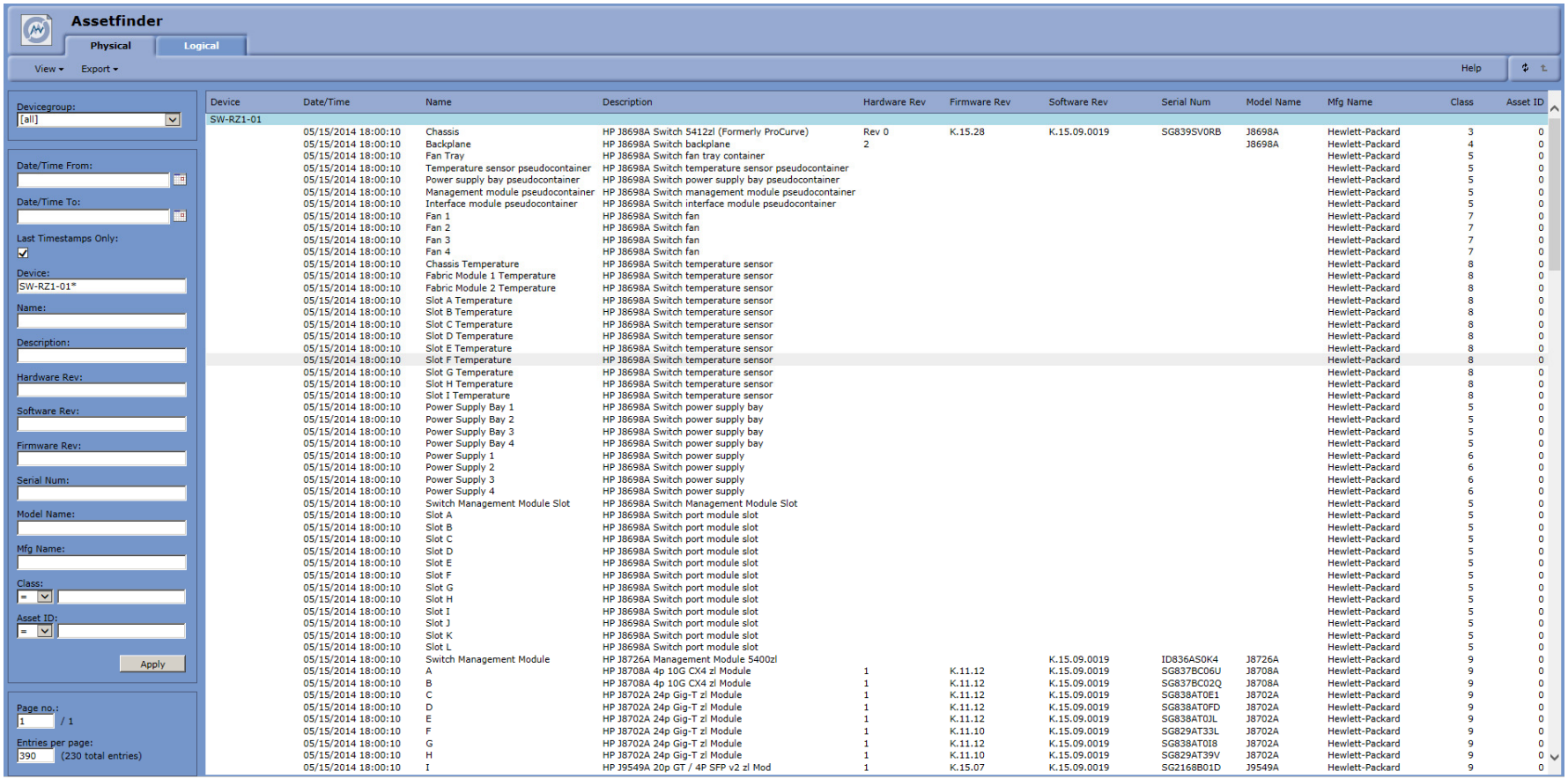
NIAMS
Network Infrastructure Analytics & Management System

Asset Report



NIAMS
Network Infrastructure Analytics & Management System

Asset Report



Device	Date/Time	Name	Description	Hardware Rev	Firmware Rev	Software Rev	Serial Num	Model Name	Mfg Name	Class	Asset ID
SW-RZ1-01											
	05/15/2014 18:00:10	Chassis	HP J8698A Switch 5412zl (Formerly ProCurve)	Rev 0	K.15.28	K.15.09.0019	SG839SV0RB	J8698A	Hewlett-Packard	3	0
	05/15/2014 18:00:10	Backplane	HP J8698A Switch backplane	2				J8698A	Hewlett-Packard	4	0
	05/15/2014 18:00:10	Fan Tray	HP J8698A Switch fan tray container						Hewlett-Packard	5	0
	05/15/2014 18:00:10	Temperature sensor pseudocontainer	HP J8698A Switch temperature sensor pseudocontainer						Hewlett-Packard	5	0
	05/15/2014 18:00:10	Power supply bay pseudocontainer	HP J8698A Switch power supply bay pseudocontainer						Hewlett-Packard	5	0
	05/15/2014 18:00:10	Management module pseudocontainer	HP J8698A Switch management module pseudocontainer						Hewlett-Packard	5	0
	05/15/2014 18:00:10	Interface module pseudocontainer	HP J8698A Switch interface module pseudocontainer						Hewlett-Packard	5	0
	05/15/2014 18:00:10	Fan 1	HP J8698A Switch fan						Hewlett-Packard	7	0
	05/15/2014 18:00:10	Fan 2	HP J8698A Switch fan						Hewlett-Packard	7	0
	05/15/2014 18:00:10	Fan 3	HP J8698A Switch fan						Hewlett-Packard	7	0
	05/15/2014 18:00:10	Fan 4	HP J8698A Switch fan						Hewlett-Packard	7	0
	05/15/2014 18:00:10	Chassis Temperature	HP J8698A Switch temperature sensor						Hewlett-Packard	8	0
	05/15/2014 18:00:10	Fabric Module 1 Temperature	HP J8698A Switch temperature sensor						Hewlett-Packard	8	0
	05/15/2014 18:00:10	Fabric Module 2 Temperature	HP J8698A Switch temperature sensor						Hewlett-Packard	8	0
	05/15/2014 18:00:10	Slot A Temperature	HP J8698A Switch temperature sensor						Hewlett-Packard	8	0
	05/15/2014 18:00:10	Slot B Temperature	HP J8698A Switch temperature sensor						Hewlett-Packard	8	0
	05/15/2014 18:00:10	Slot C Temperature	HP J8698A Switch temperature sensor						Hewlett-Packard	8	0
	05/15/2014 18:00:10	Slot D Temperature	HP J8698A Switch temperature sensor						Hewlett-Packard	8	0
	05/15/2014 18:00:10	Slot E Temperature	HP J8698A Switch temperature sensor						Hewlett-Packard	8	0
	05/15/2014 18:00:10	Slot F Temperature	HP J8698A Switch temperature sensor						Hewlett-Packard	8	0
	05/15/2014 18:00:10	Slot G Temperature	HP J8698A Switch temperature sensor						Hewlett-Packard	8	0
	05/15/2014 18:00:10	Slot H Temperature	HP J8698A Switch temperature sensor						Hewlett-Packard	8	0
	05/15/2014 18:00:10	Slot I Temperature	HP J8698A Switch temperature sensor						Hewlett-Packard	8	0
	05/15/2014 18:00:10	Power Supply Bay 1	HP J8698A Switch power supply bay						Hewlett-Packard	5	0
	05/15/2014 18:00:10	Power Supply Bay 2	HP J8698A Switch power supply bay						Hewlett-Packard	5	0
	05/15/2014 18:00:10	Power Supply Bay 3	HP J8698A Switch power supply bay						Hewlett-Packard	5	0
	05/15/2014 18:00:10	Power Supply Bay 4	HP J8698A Switch power supply bay						Hewlett-Packard	5	0
	05/15/2014 18:00:10	Power Supply 1	HP J8698A Switch power supply						Hewlett-Packard	6	0
	05/15/2014 18:00:10	Power Supply 2	HP J8698A Switch power supply						Hewlett-Packard	6	0
	05/15/2014 18:00:10	Power Supply 3	HP J8698A Switch power supply						Hewlett-Packard	6	0
	05/15/2014 18:00:10	Power Supply 4	HP J8698A Switch power supply						Hewlett-Packard	6	0
	05/15/2014 18:00:10	Switch Management Module Slot	HP J8698A Switch Management Module Slot						Hewlett-Packard	5	0
	05/15/2014 18:00:10	Slot A	HP J8698A Switch port module slot						Hewlett-Packard	5	0
	05/15/2014 18:00:10	Slot B	HP J8698A Switch port module slot						Hewlett-Packard	5	0
	05/15/2014 18:00:10	Slot C	HP J8698A Switch port module slot						Hewlett-Packard	5	0
	05/15/2014 18:00:10	Slot D	HP J8698A Switch port module slot						Hewlett-Packard	5	0
	05/15/2014 18:00:10	Slot E	HP J8698A Switch port module slot						Hewlett-Packard	5	0
	05/15/2014 18:00:10	Slot F	HP J8698A Switch port module slot						Hewlett-Packard	5	0
	05/15/2014 18:00:10	Slot G	HP J8698A Switch port module slot						Hewlett-Packard	5	0
	05/15/2014 18:00:10	Slot H	HP J8698A Switch port module slot						Hewlett-Packard	5	0
	05/15/2014 18:00:10	Slot I	HP J8698A Switch port module slot						Hewlett-Packard	5	0
	05/15/2014 18:00:10	Slot J	HP J8698A Switch port module slot						Hewlett-Packard	5	0
	05/15/2014 18:00:10	Slot K	HP J8698A Switch port module slot						Hewlett-Packard	5	0
	05/15/2014 18:00:10	Slot L	HP J8698A Switch port module slot						Hewlett-Packard	5	0
	05/15/2014 18:00:10	Switch Management Module	HP J8726A Management Module 5400zl			K.15.09.0019	ID836AS0K4	J8726A	Hewlett-Packard	9	0
	05/15/2014 18:00:10	A	HP J8708A 4p 10G CX4 zl Module	1	K.11.12	K.15.09.0019	SG837BC06U	J8708A	Hewlett-Packard	9	0
	05/15/2014 18:00:10	B	HP J8708A 4p 10G CX4 zl Module	1	K.11.12	K.15.09.0019	SG837BC02Q	J8708A	Hewlett-Packard	9	0
	05/15/2014 18:00:10	C	HP J8702A 24p Gig-T zl Module	1	K.11.12	K.15.09.0019	SG838AT0E1	J8702A	Hewlett-Packard	9	0
	05/15/2014 18:00:10	D	HP J8702A 24p Gig-T zl Module	1	K.11.12	K.15.09.0019	SG838AT0FD	J8702A	Hewlett-Packard	9	0
	05/15/2014 18:00:10	E	HP J8702A 24p Gig-T zl Module	1	K.11.12	K.15.09.0019	SG838AT0JL	J8702A	Hewlett-Packard	9	0
	05/15/2014 18:00:10	F	HP J8702A 24p Gig-T zl Module	1	K.11.10	K.15.09.0019	SG829AT33L	J8702A	Hewlett-Packard	9	0
	05/15/2014 18:00:10	G	HP J8702A 24p Gig-T zl Module	1	K.11.12	K.15.09.0019	SG838AT0I8	J8702A	Hewlett-Packard	9	0
	05/15/2014 18:00:10	H	HP J8702A 24p Gig-T zl Module	1	K.11.10	K.15.09.0019	SG829AT39V	J8702A	Hewlett-Packard	9	0
	05/15/2014 18:00:10	I	HP J9549A 20p GT / 4P SFP v2 zl Mod	1	K.15.07	K.15.09.0019	SG2168B01D	J9549A	Hewlett-Packard	9	0

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Asset Report

Device	Date/Time	Name	Description
SW-RZ1-01			
	05/15/2014 18:00:10	Chassis	HP J8698A Switch 5412zl (Formerly ProCurve)
	05/15/2014 18:00:10	Backplane	HP J8698A Switch backplane
	05/15/2014 18:00:10	Fan Tray	HP J8698A Switch fan tray container
	05/15/2014 18:00:10	Temperature sensor pseudocontainer	HP J8698A Switch temperature sensor pseudocontainer
	05/15/2014 18:00:10	Power supply bay pseudocontainer	HP J8698A Switch power supply bay pseudocontainer
	05/15/2014 18:00:10	Management module pseudocontainer	HP J8698A Switch management module pseudocontainer
	05/15/2014 18:00:10	Interface module pseudocontainer	HP J8698A Switch interface module pseudocontainer
	05/15/2014 18:00:10	Fan 1	HP J8698A Switch fan
	05/15/2014 18:00:10	Fan 2	HP J8698A Switch fan
	05/15/2014 18:00:10	Fan 3	HP J8698A Switch fan
	05/15/2014 18:00:10	Fan 4	HP J8698A Switch fan
	05/15/2014 18:00:10	Chassis Temperature	HP J8698A Switch temperature sensor
	05/15/2014 18:00:10	Fabric Module 1 Temperature	HP J8698A Switch temperature sensor
	05/15/2014 18:00:10	Fabric Module 2 Temperature	HP J8698A Switch temperature sensor
	05/15/2014 18:00:10	Slot A Temperature	HP J8698A Switch temperature sensor
	05/15/2014 18:00:10	Slot B Temperature	HP J8698A Switch temperature sensor
	05/15/2014 18:00:10	Slot C Temperature	HP J8698A Switch temperature sensor
	05/15/2014 18:00:10	Slot D Temperature	HP J8698A Switch temperature sensor
	05/15/2014 18:00:10	Slot E Temperature	HP J8698A Switch temperature sensor
	05/15/2014 18:00:10	Slot F Temperature	HP J8698A Switch temperature sensor
	05/15/2014 18:00:10	Slot G Temperature	HP J8698A Switch temperature sensor
	05/15/2014 18:00:10	Slot H Temperature	HP J8698A Switch temperature sensor
	05/15/2014 18:00:10	Slot I Temperature	HP J8698A Switch temperature sensor
	05/15/2014 18:00:10	Power Supply Bay 1	HP J8698A Switch power supply bay
	05/15/2014 18:00:10	Power Supply Bay 2	HP J8698A Switch power supply bay
	05/15/2014 18:00:10	Power Supply Bay 3	HP J8698A Switch power supply bay
	05/15/2014 18:00:10	Power Supply Bay 4	HP J8698A Switch power supply bay
	05/15/2014 18:00:10	Power Supply 1	HP J8698A Switch power supply
	05/15/2014 18:00:10	Power Supply 2	HP J8698A Switch power supply
	05/15/2014 18:00:10	Power Supply 3	HP J8698A Switch power supply
	05/15/2014 18:00:10	Power Supply 4	HP J8698A Switch power supply

NIAMS
Network Infrastructure Analytics & Management System

Path Visualizer & Analyzer

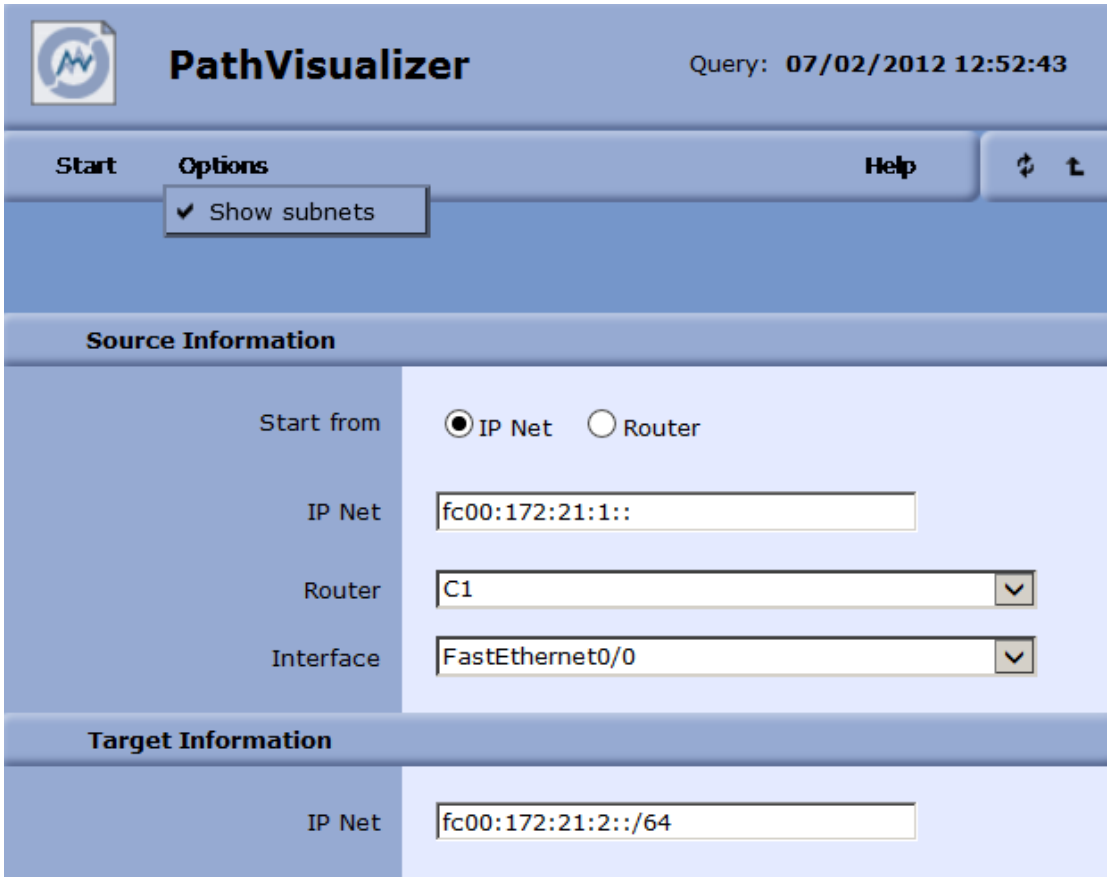
- Grafische Darstellung der Kommunikationspfade zwischen IP Teilnehmern zu einem bestimmten Zeitpunkt oder im zeitlichen Vergleich
- Bericht über Auffälligkeiten zu einem bestimmten Zeitpunkt oder zu auffälligen Änderungen zwischen zwei wählbaren Zeitpunkten

Anwendungen:

- Planung von Änderungen
- Troubleshooting

NIAMS
Network Infrastructure Analytics & Management System

Path Visualizer



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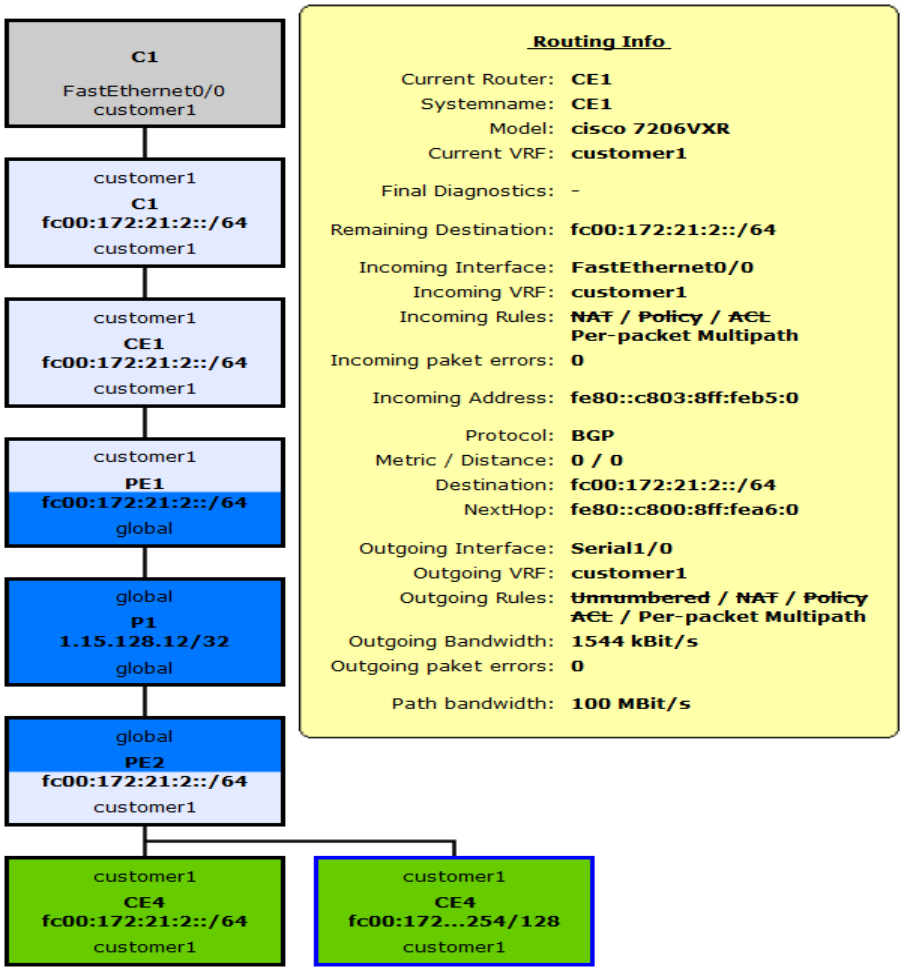
Network Infrastructure Analytics & Management System

Path Visualizer



T&A SYSTEME

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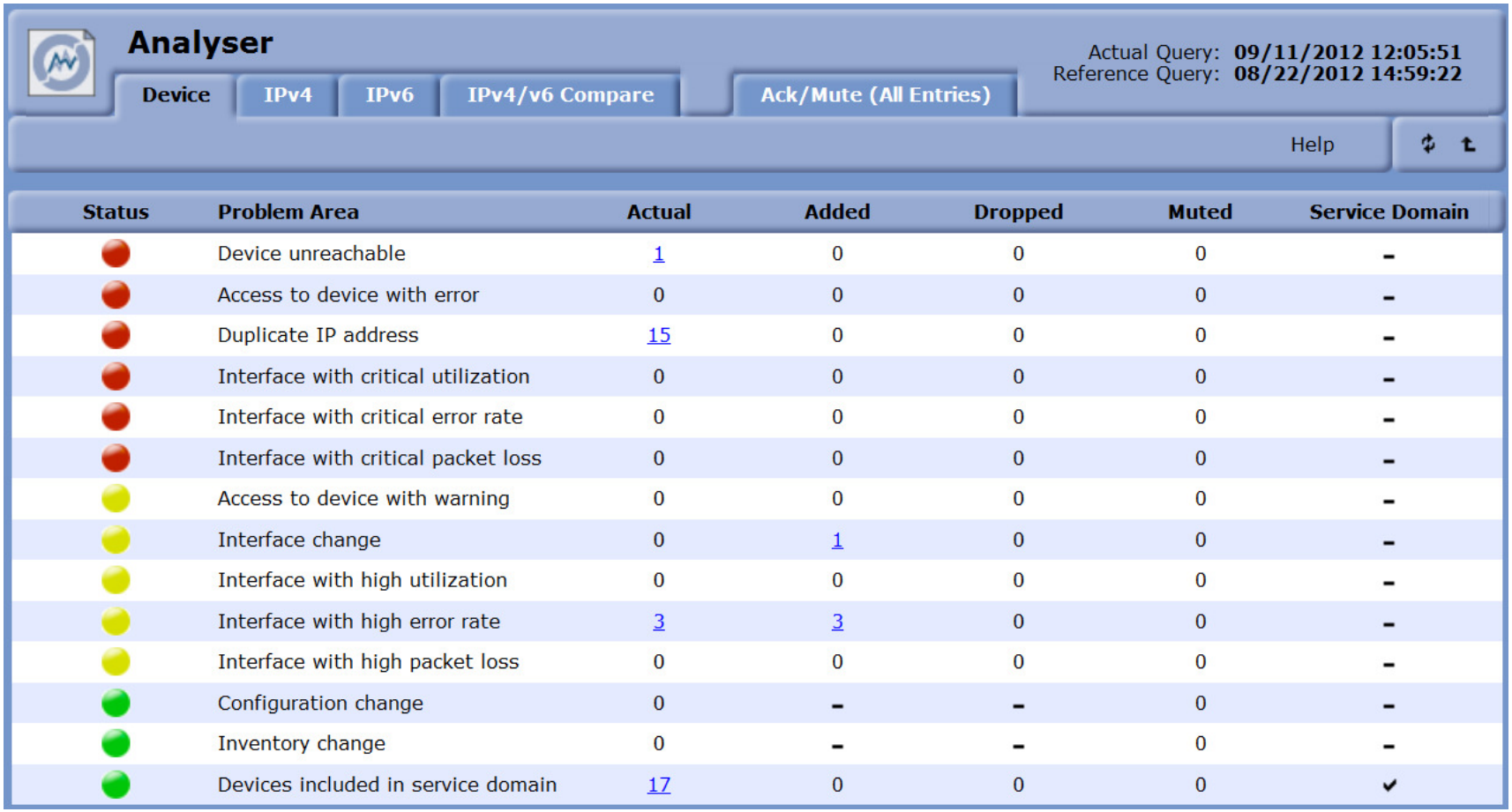
Analyzer



Analyser

Device | IPv4 | IPv6 | IPv4/v6 Compare | Ack/Mute (All Entries)

Actual Query: **09/11/2012 12:05:51**
Reference Query: **08/22/2012 14:59:22**

Help

Status	Problem Area	Actual	Added	Dropped	Muted	Service Domain
🔴	Device unreachable	1	0	0	0	-
🔴	Access to device with error	0	0	0	0	-
🔴	Duplicate IP address	15	0	0	0	-
🔴	Interface with critical utilization	0	0	0	0	-
🔴	Interface with critical error rate	0	0	0	0	-
🔴	Interface with critical packet loss	0	0	0	0	-
🟡	Access to device with warning	0	0	0	0	-
🟡	Interface change	0	1	0	0	-
🟡	Interface with high utilization	0	0	0	0	-
🟡	Interface with high error rate	3	3	0	0	-
🟡	Interface with high packet loss	0	0	0	0	-
🟢	Configuration change	0	-	-	0	-
🟢	Inventory change	0	-	-	0	-
🟢	Devices included in service domain	17	0	0	0	✔

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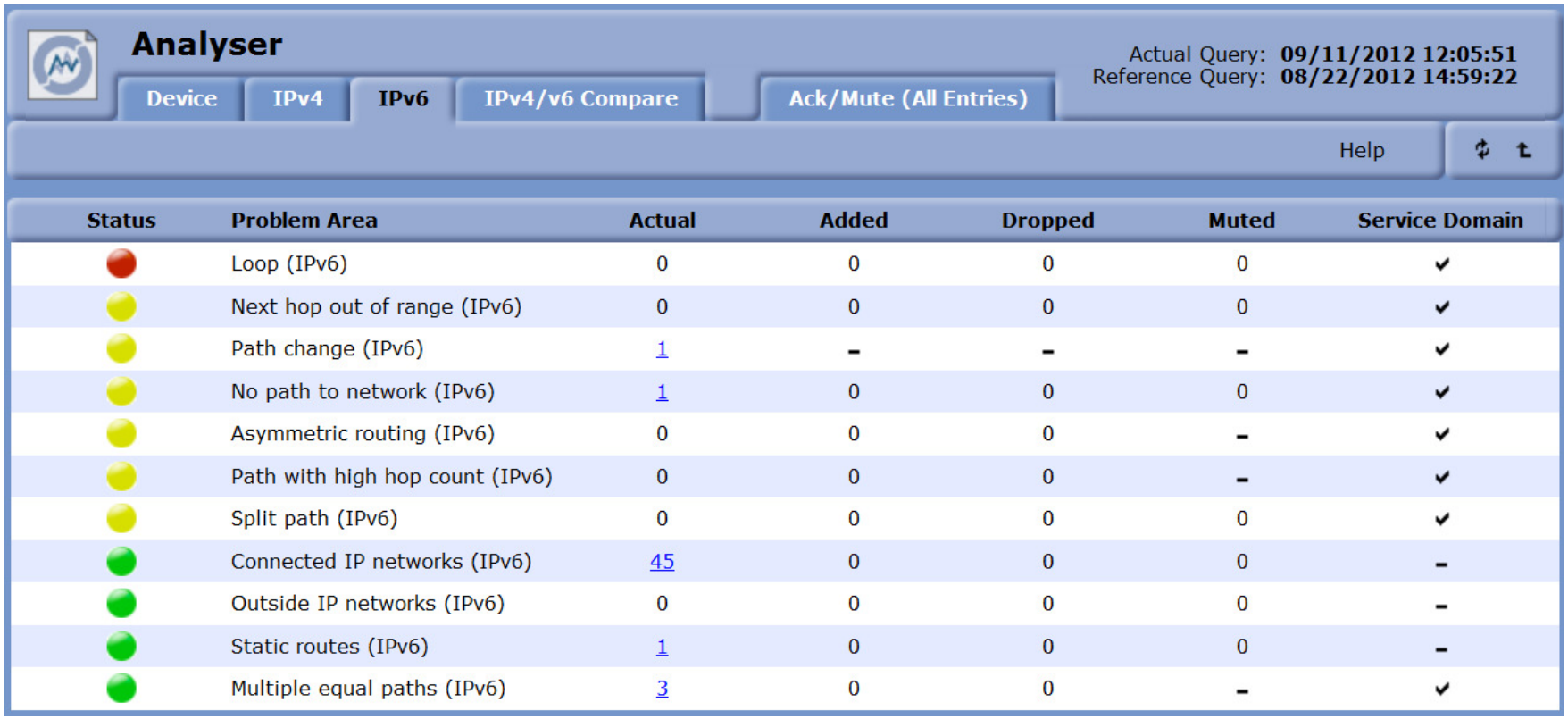
Analyzer



Analyser

Actual Query: **09/11/2012 12:05:51**
Reference Query: **08/22/2012 14:59:22**

Device | IPv4 | IPv6 | IPv4/v6 Compare | Ack/Mute (All Entries)

Help

Status	Problem Area	Actual	Added	Dropped	Muted	Service Domain
🔴	Loop (IPv6)	0	0	0	0	✔
🟡	Next hop out of range (IPv6)	0	0	0	0	✔
🟡	Path change (IPv6)	1	-	-	-	✔
🟡	No path to network (IPv6)	1	0	0	0	✔
🟡	Asymmetric routing (IPv6)	0	0	0	-	✔
🟡	Path with high hop count (IPv6)	0	0	0	-	✔
🟡	Split path (IPv6)	0	0	0	0	✔
🟢	Connected IP networks (IPv6)	45	0	0	0	-
🟢	Outside IP networks (IPv6)	0	0	0	0	-
🟢	Static routes (IPv6)	1	0	0	0	-
🟢	Multiple equal paths (IPv6)	3	0	0	-	✔

NIAMS
Network Infrastructure Analytics & Management System

Analyzer

Analyser

Device | IPv4 | IPv6 | IPv4/v6 Compare | Ack/Mute (All Entries)

Actual Query: **09/11/2012 12:05:51**
Reference Query: **08/22/2012 14:59:22**

Help

Status	Problem Area	Actual	Added	Dropped	Muted	Service Domain
🟡	IP net mismatch (IPv4/v6)	1	0	0	0	-
🟡	IP net mismatch per device (IPv4/v6)	1	0	0	0	-
🟡	Path difference (IPv4/v6)	0	0	0	0	✔
🟢	IP net match (IPv4/v6)	45	0	0	0	-

NIAMS
Network Infrastructure Analytics & Management System

IP Netze Report

- Liste aller gemanagten und aller extern gerouteten IP-Netze zu einem bestimmten Zeitpunkt oder im zeitlichen Vergleich

Anwendungen:

- Controlling
- Planung von Änderungen
- Troubleshooting

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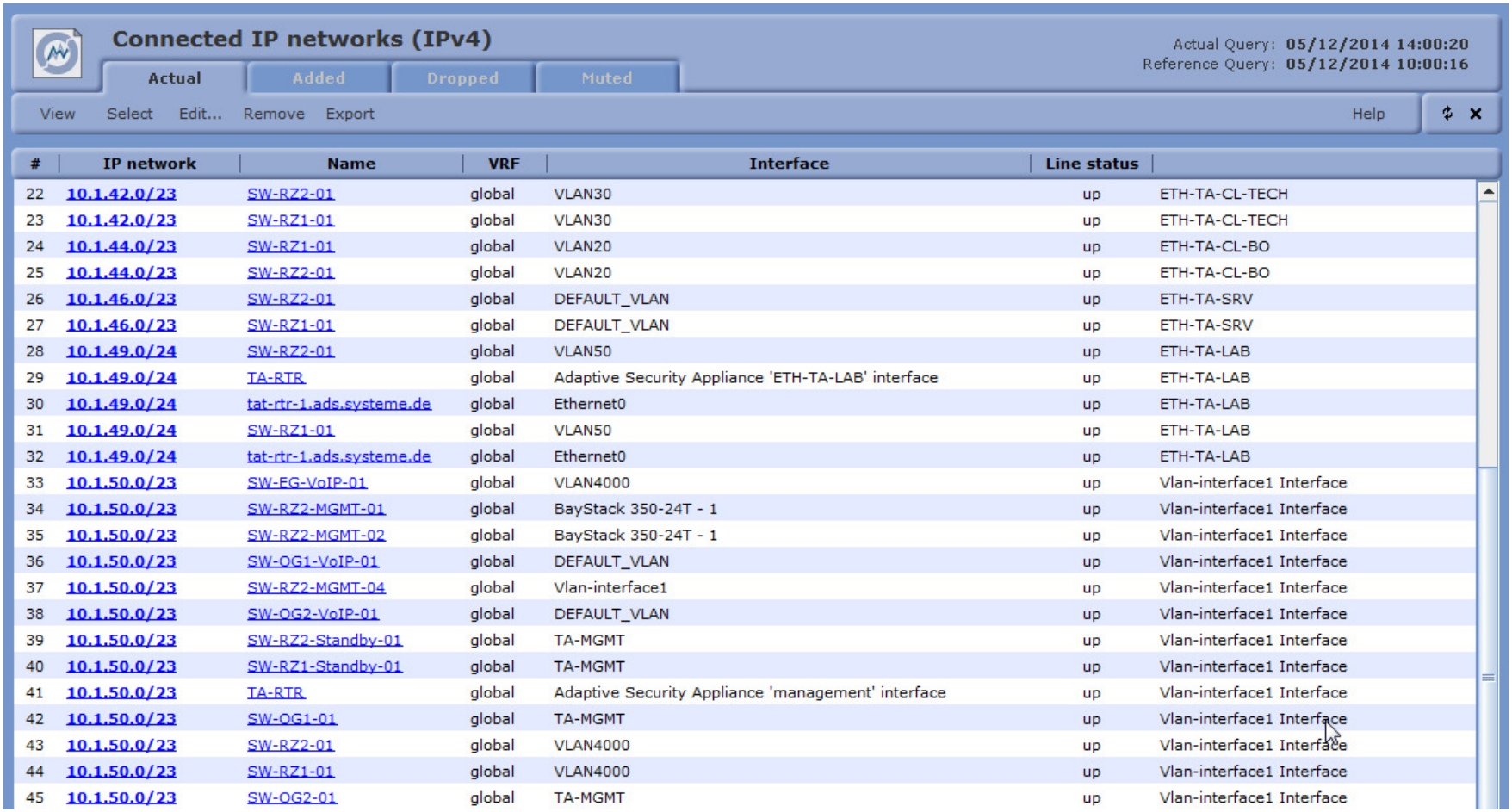
Network Infrastructure Analytics & Management System

IP Netze Report



Connected IP networks (IPv4)

Actual Query: 05/12/2014 14:00:20
Reference Query: 05/12/2014 10:00:16

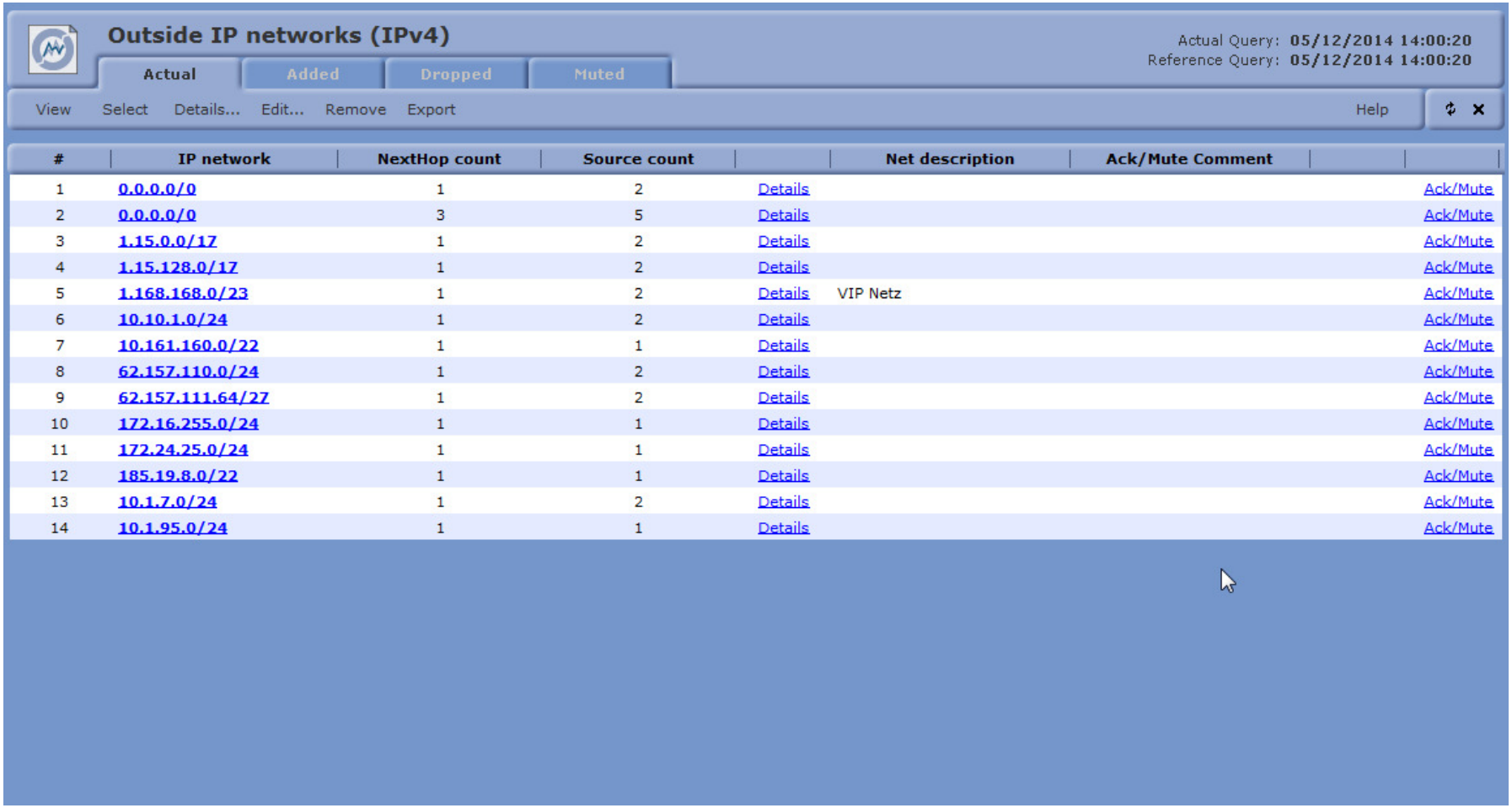
Actual | Added | Dropped | Muted

View Select Edit... Remove Export Help

#	IP network	Name	VRF	Interface	Line status	
22	10.1.42.0/23	SW-RZ2-01	global	VLAN30	up	ETH-TA-CL-TECH
23	10.1.42.0/23	SW-RZ1-01	global	VLAN30	up	ETH-TA-CL-TECH
24	10.1.44.0/23	SW-RZ1-01	global	VLAN20	up	ETH-TA-CL-BO
25	10.1.44.0/23	SW-RZ2-01	global	VLAN20	up	ETH-TA-CL-BO
26	10.1.46.0/23	SW-RZ2-01	global	DEFAULT_VLAN	up	ETH-TA-SRV
27	10.1.46.0/23	SW-RZ1-01	global	DEFAULT_VLAN	up	ETH-TA-SRV
28	10.1.49.0/24	SW-RZ2-01	global	VLAN50	up	ETH-TA-LAB
29	10.1.49.0/24	TA-RTR	global	Adaptive Security Appliance 'ETH-TA-LAB' interface	up	ETH-TA-LAB
30	10.1.49.0/24	tat-rtr-1.ads.systeme.de	global	Ethernet0	up	ETH-TA-LAB
31	10.1.49.0/24	SW-RZ1-01	global	VLAN50	up	ETH-TA-LAB
32	10.1.49.0/24	tat-rtr-1.ads.systeme.de	global	Ethernet0	up	ETH-TA-LAB
33	10.1.50.0/23	SW-EG-VoIP-01	global	VLAN4000	up	Vlan-interface1 Interface
34	10.1.50.0/23	SW-RZ2-MGMT-01	global	BayStack 350-24T - 1	up	Vlan-interface1 Interface
35	10.1.50.0/23	SW-RZ2-MGMT-02	global	BayStack 350-24T - 1	up	Vlan-interface1 Interface
36	10.1.50.0/23	SW-OG1-VoIP-01	global	DEFAULT_VLAN	up	Vlan-interface1 Interface
37	10.1.50.0/23	SW-RZ2-MGMT-04	global	Vlan-interface1	up	Vlan-interface1 Interface
38	10.1.50.0/23	SW-OG2-VoIP-01	global	DEFAULT_VLAN	up	Vlan-interface1 Interface
39	10.1.50.0/23	SW-RZ2-Standby-01	global	TA-MGMT	up	Vlan-interface1 Interface
40	10.1.50.0/23	SW-RZ1-Standby-01	global	TA-MGMT	up	Vlan-interface1 Interface
41	10.1.50.0/23	TA-RTR	global	Adaptive Security Appliance 'management' interface	up	Vlan-interface1 Interface
42	10.1.50.0/23	SW-OG1-01	global	TA-MGMT	up	Vlan-interface1 Interface
43	10.1.50.0/23	SW-RZ2-01	global	VLAN4000	up	Vlan-interface1 Interface
44	10.1.50.0/23	SW-RZ1-01	global	VLAN4000	up	Vlan-interface1 Interface
45	10.1.50.0/23	SW-OG2-01	global	TA-MGMT	up	Vlan-interface1 Interface

NIAMS
Network Infrastructure Analytics & Management System

IP Netze Report



Outside IP networks (IPv4)

Actual Query: 05/12/2014 14:00:20
Reference Query: 05/12/2014 14:00:20

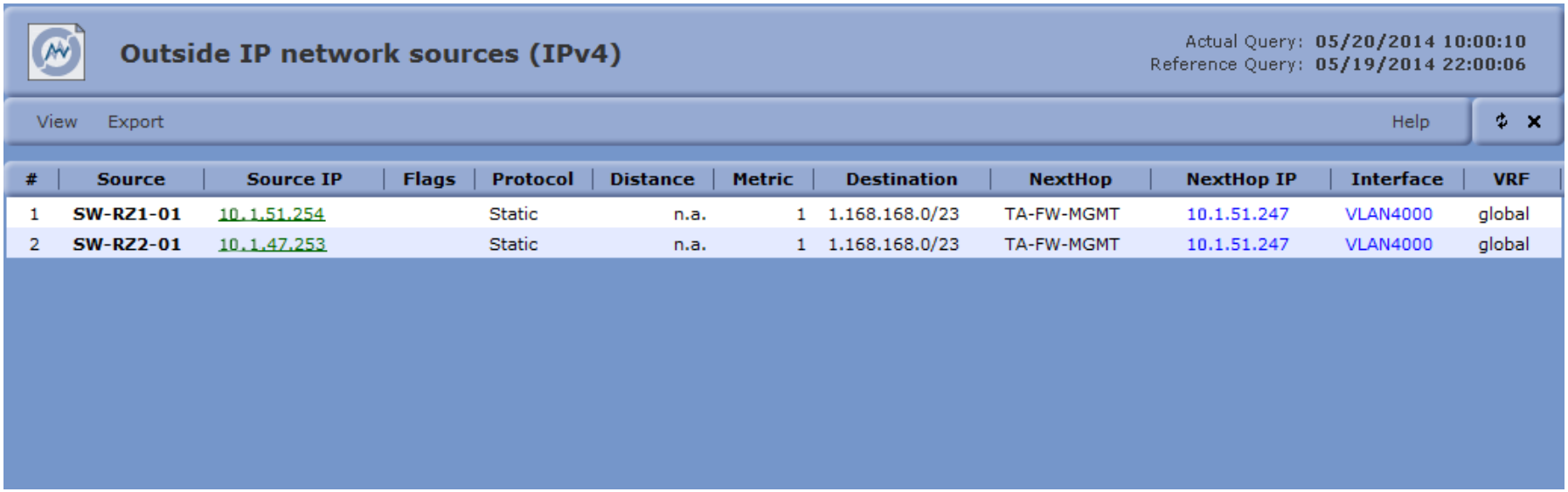
Actual | Added | Dropped | Muted

View Select Details... Edit... Remove Export Help

#	IP network	NextHop count	Source count		Net description	Ack/Mute Comment	
1	0.0.0.0/0	1	2	Details			Ack/Mute
2	0.0.0.0/0	3	5	Details			Ack/Mute
3	1.15.0.0/17	1	2	Details			Ack/Mute
4	1.15.128.0/17	1	2	Details			Ack/Mute
5	1.168.168.0/23	1	2	Details	VIP Netz		Ack/Mute
6	10.10.1.0/24	1	2	Details			Ack/Mute
7	10.161.160.0/22	1	1	Details			Ack/Mute
8	62.157.110.0/24	1	2	Details			Ack/Mute
9	62.157.111.64/27	1	2	Details			Ack/Mute
10	172.16.255.0/24	1	1	Details			Ack/Mute
11	172.24.25.0/24	1	1	Details			Ack/Mute
12	185.19.8.0/22	1	1	Details			Ack/Mute
13	10.1.7.0/24	1	2	Details			Ack/Mute
14	10.1.95.0/24	1	1	Details			Ack/Mute

NIAMS
Network Infrastructure Analytics & Management System

IP Netze Report



Outside IP network sources (IPv4)

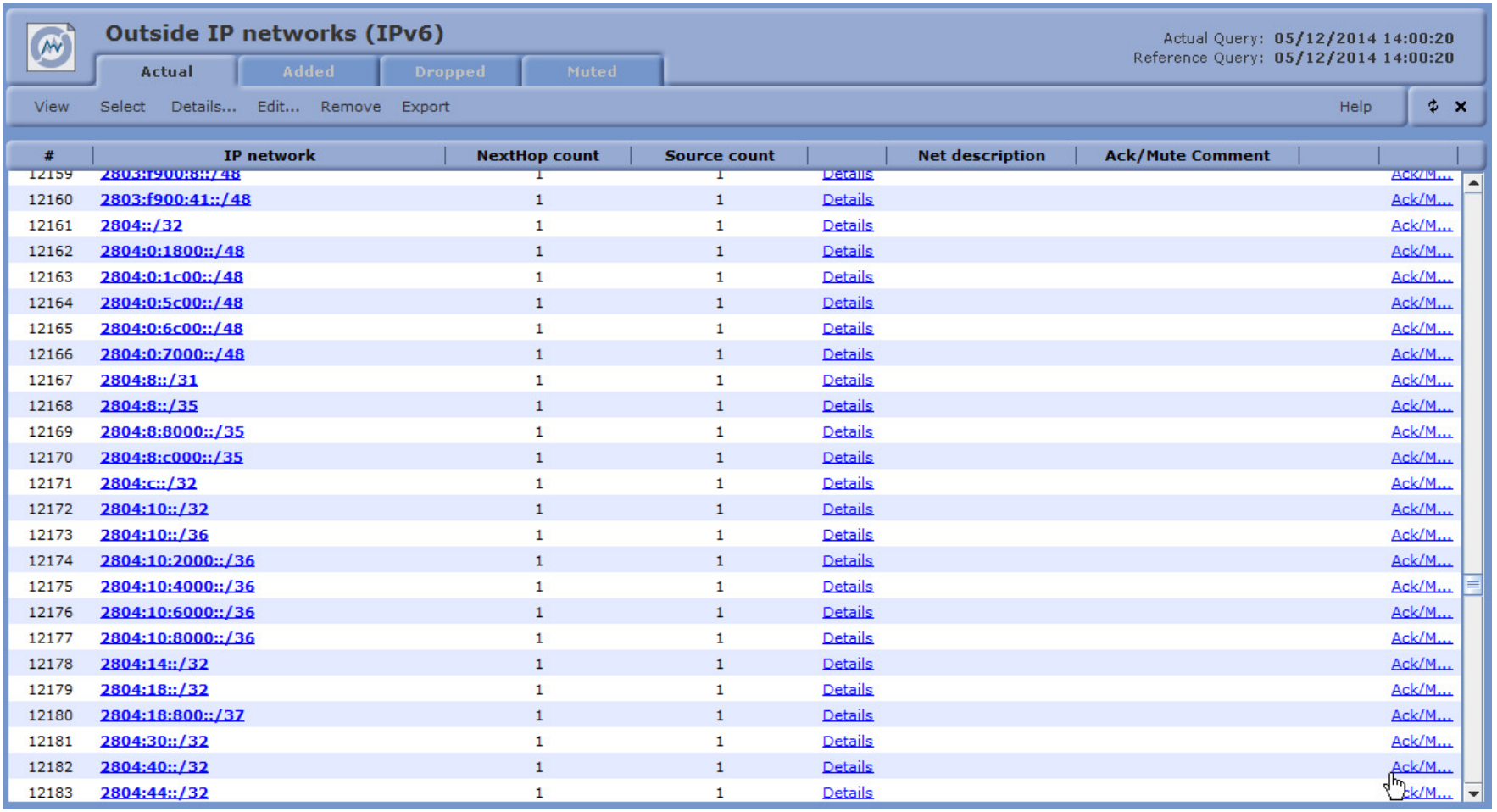
Actual Query: 05/20/2014 10:00:10
Reference Query: 05/19/2014 22:00:06

View Export Help

#	Source	Source IP	Flags	Protocol	Distance	Metric	Destination	NextHop	NextHop IP	Interface	VRF
1	SW-RZ1-01	10.1.51.254		Static	n.a.	1	1.168.168.0/23	TA-FW-MGMT	10.1.51.247	VLAN4000	global
2	SW-RZ2-01	10.1.47.253		Static	n.a.	1	1.168.168.0/23	TA-FW-MGMT	10.1.51.247	VLAN4000	global

NIAMS
Network Infrastructure Analytics & Management System

IP Netze Report



Outside IP networks (IPv6)

Actual Query: 05/12/2014 14:00:20
Reference Query: 05/12/2014 14:00:20

Actual | Added | Dropped | Muted

View | Select | Details... | Edit... | Remove | Export | Help

#	IP network	NextHop count	Source count		Net description	Ack/Mute Comment	
12159	2803:f900:8::/48	1	1	Details			Ack/M...
12160	2803:f900:41::/48	1	1	Details			Ack/M...
12161	2804::/32	1	1	Details			Ack/M...
12162	2804:0:1800::/48	1	1	Details			Ack/M...
12163	2804:0:1c00::/48	1	1	Details			Ack/M...
12164	2804:0:5c00::/48	1	1	Details			Ack/M...
12165	2804:0:6c00::/48	1	1	Details			Ack/M...
12166	2804:0:7000::/48	1	1	Details			Ack/M...
12167	2804:8::/31	1	1	Details			Ack/M...
12168	2804:8::/35	1	1	Details			Ack/M...
12169	2804:8:8000::/35	1	1	Details			Ack/M...
12170	2804:8:c000::/35	1	1	Details			Ack/M...
12171	2804:c::/32	1	1	Details			Ack/M...
12172	2804:10::/32	1	1	Details			Ack/M...
12173	2804:10::/36	1	1	Details			Ack/M...
12174	2804:10:2000::/36	1	1	Details			Ack/M...
12175	2804:10:4000::/36	1	1	Details			Ack/M...
12176	2804:10:6000::/36	1	1	Details			Ack/M...
12177	2804:10:8000::/36	1	1	Details			Ack/M...
12178	2804:14::/32	1	1	Details			Ack/M...
12179	2804:18::/32	1	1	Details			Ack/M...
12180	2804:18:800::/37	1	1	Details			Ack/M...
12181	2804:30::/32	1	1	Details			Ack/M...
12182	2804:40::/32	1	1	Details			Ack/M...
12183	2804:44::/32	1	1	Details			Ack/M...

NIAMS
Network Infrastructure Analytics & Management System

Risikoreport zu Gerätekonfigurationen

NIAMS

Network Device Configuration Risk Report

This summary ist based on Nipper Security Reports.

A total number of 12 devices were analyzed.

THURSDAY, 15 MAY 2014

1 Summary

Issue	Risk	Count	Devices
Unrestricted Outbound Administrative Access	INFO	3	Ref. 2
SSH Protocol Version 1 Supported	MEDIUM	3	Ref. 3
Potentially Unused Network Interfaces	INFO	2	Ref. 4
Interfaces Were Configured With No Filtering	MEDIUM	3	Ref. 5
Access Allowed To Clear Text Protocol Services	LOW	3	Ref. 6
All Permit ACE Do Not Log	INFO	3	Ref. 7
CDP Was Enabled On Multiple Interfaces	LOW	1	Ref. 8
Dictionary-Based SNMP Trap	INFO	4	Ref. 9
ICMP Redirect Messages Were Enabled	INFO	3	Ref. 10
No Administrative Host Access Restrictions	MEDIUM	9	Ref. 11
Weak SNMP Community Strings Were Configured	LOW	7	Ref. 12
No SNMP TFTP Server List ACL Configured	LOW	2	Ref. 13
Access Allowed To Potentially Dangerous Services	INFO	3	Ref. 14
All Deny ACE Do Not Log	INFO	2	Ref. 15
ICMP Unreachable Messages Were Enabled	LOW	2	Ref. 16
SNMP Access Without Network Filtering	INFO	3	Ref. 17
Switch Port Security Disabled	LOW	2	Ref. 18
A User Was Configured With No Password	CRITICAL	7	Ref. 19
Clear Text Telnet Service Enabled	HIGH	2	Ref. 20
BOOTP Service Enabled	LOW	2	Ref. 21
Weak SNMP Traps	INFO	9	Ref. 22
Weak SSL Cipher Supported	LOW	1	Ref. 23
Weak Filtering Of Source, Destination And Services	LOW	1	Ref. 24
Users Were Configured With Weak Passwords	LOW	3	Ref. 25
No Connection Timeout	MEDIUM	9	Ref. 26
ACEs Allows Access From A Network Source Address	INFO	3	Ref. 27
Switch Port Trunking Was Enabled	MEDIUM	2	Ref. 28
CDP Was Enabled On An Interface	LOW	2	Ref. 29
SNMP Write Access Was Enabled	LOW	6	Ref. 30
SNMP Community Strings Without A View	INFO	3	Ref. 31
Outbound Administrative Access Configured	INFO	3	Ref. 32
DNS Lookups Enabled	INFO	9	Ref. 33
Proxy ARP Was Enabled	INFO	3	Ref. 34
No Post Logon Banner Message	INFO	3	Ref. 35
Clear Text TFTP Service Enabled	MEDIUM	9	Ref. 36
Clear Text SNMP In Use	INFO	12	Ref. 37
Access Allowed To Potentially Unnecessary Services	INFO	3	Ref. 38
MOP Enabled	INFO	3	Ref. 39
Clear Text HTTP Service Enabled	MEDIUM	9	Ref. 40
ACE Allows Access Between Any Source, Destination And Service	LOW	2	Ref. 41
No Pre-Logon Banner Message	LOW	12	Ref. 42
Weak SNMP Trap	INFO	3	Ref. 43

NIAMS
Network Infrastructure Analytics & Management System

Risikoreport zu Gerätekonfigurationen

2.3. No Connection Timeout

Overall: MEDIUM
Impact: HIGH
Ease: MODERATE
Fix: QUICK

2.3.1. Finding

The connection timeout setting is used by HP ProCurve devices to identify unused connections that can be closed. The system resources used by HP ProCurve devices can then be freed. A connection could become unused for a number of reasons; the network connection may have been disrupted, a connection may not have been properly terminated or an administrator may have left their computer with a connection open.

Nipper determined that there was no connection timeout configured on SW-RZ2-01.

2.3.2. Impact

If a connection is not properly terminated, it may be possible for an attacker to make use of the connection in order to gain access to the device. If successful, the attacker would gain access with the privileges of the previous user.

2.3.3. Ease

For an attacker with physical access to SW-RZ2-01, gaining access through a console port that had not been terminated would be trivial. The attacker, who may legitimately have access to the server room, would simply have to attach a console cable to their computer.

With clear text protocol services being offered by SW-RZ2-01, monitoring the network traffic would reveal a lot of information about the connection. The attacker may even be able to capture the authentication credentials, so would not have to attempt to take over a connection.

With cryptographically secure services, gaining access to an unterminated connection could prove more difficult. The attacker may have to exploit a weakness in the protocol to gain access.

2.3.4. Recommendation

Nipper recommends that a timeout period of 10 minutes should be configured for connections to SW-RZ2-01.

An inactivity timeout can be configured with the following command:

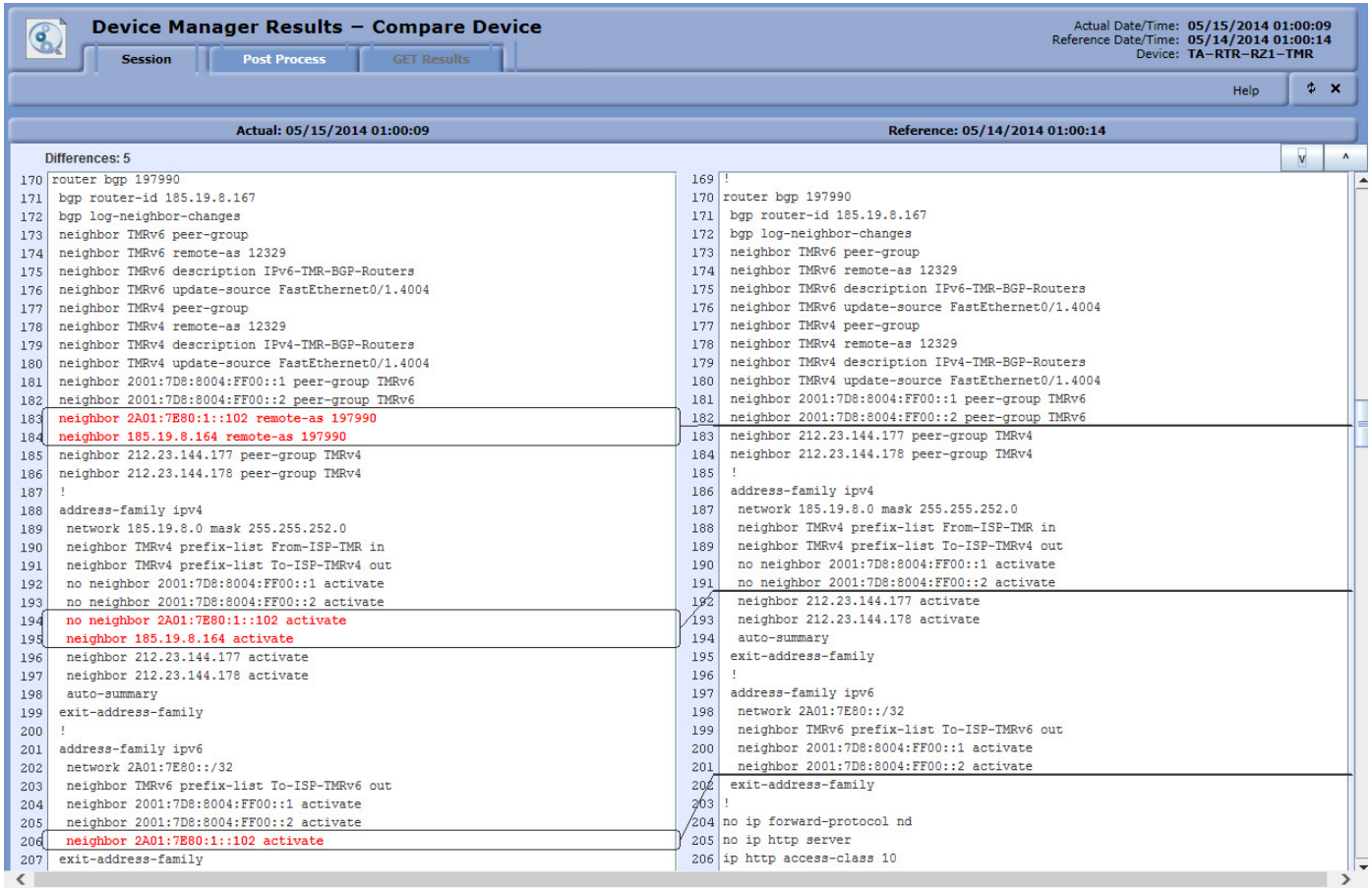
```
console inactivity-timer timeout-minutes
```

Related security issues:

- Clear Text HTTP Service Enabled (see section 2.2);
- Clear Text Trivial File Transfer Protocol (TFTP) Service Enabled (see section 2.4).

NIAMS
Network Infrastructure Analytics & Management System

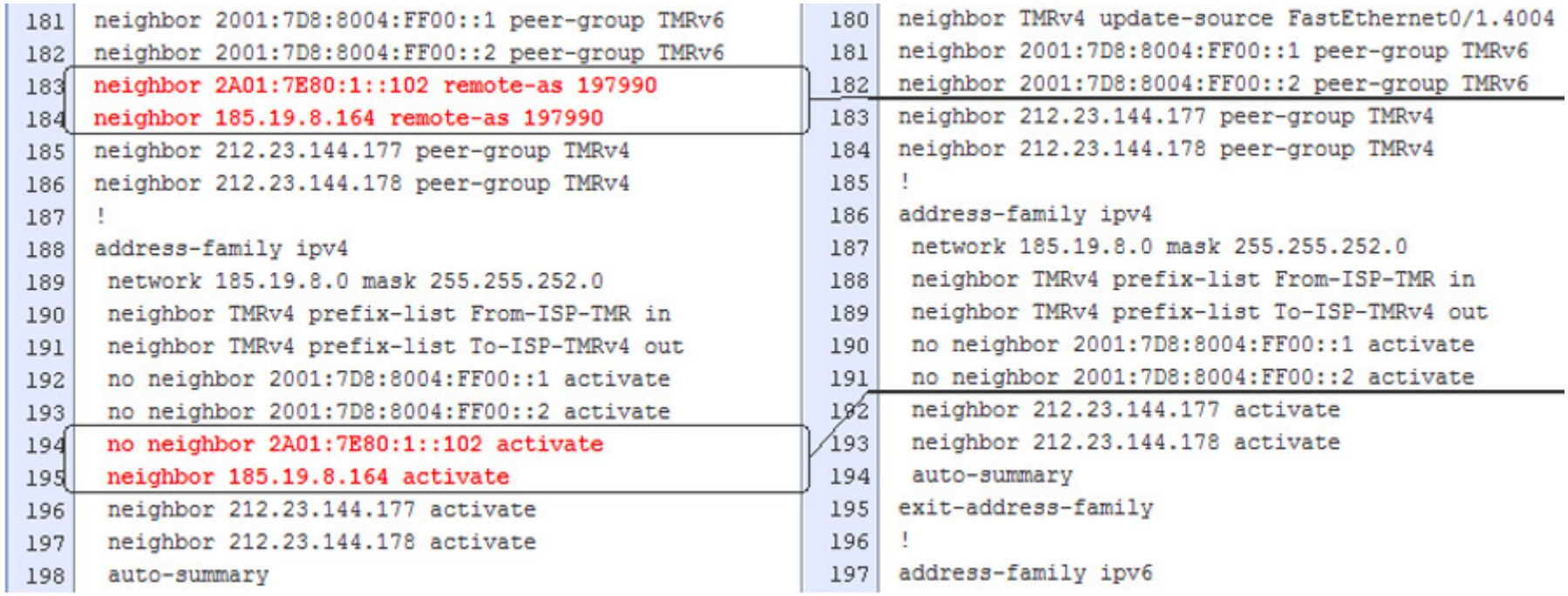
Change Report zu Gerätekonfigurationen



T&A SYSTEME

NIAMS
Network Infrastructure Analytics & Management System

Change Report zu Gerätekonfigurationen



```
181  neighbor 2001:7D8:8004:FF00::1 peer-group TMRv6
182  neighbor 2001:7D8:8004:FF00::2 peer-group TMRv6
183  neighbor 2A01:7E80:1::102 remote-as 197990
184  neighbor 185.19.8.164 remote-as 197990
185  neighbor 212.23.144.177 peer-group TMRv4
186  neighbor 212.23.144.178 peer-group TMRv4
187  !
188  address-family ipv4
189   network 185.19.8.0 mask 255.255.252.0
190   neighbor TMRv4 prefix-list From-ISP-TMR in
191   neighbor TMRv4 prefix-list To-ISP-TMRv4 out
192   no neighbor 2001:7D8:8004:FF00::1 activate
193   no neighbor 2001:7D8:8004:FF00::2 activate
194   no neighbor 2A01:7E80:1::102 activate
195   neighbor 185.19.8.164 activate
196   neighbor 212.23.144.177 activate
197   neighbor 212.23.144.178 activate
198   auto-summary
```

```
180  neighbor TMRv4 update-source FastEthernet0/1.4004
181  neighbor 2001:7D8:8004:FF00::1 peer-group TMRv6
182  neighbor 2001:7D8:8004:FF00::2 peer-group TMRv6
183  neighbor 212.23.144.177 peer-group TMRv4
184  neighbor 212.23.144.178 peer-group TMRv4
185  !
186  address-family ipv4
187   network 185.19.8.0 mask 255.255.252.0
188   neighbor TMRv4 prefix-list From-ISP-TMR in
189   neighbor TMRv4 prefix-list To-ISP-TMRv4 out
190   no neighbor 2001:7D8:8004:FF00::1 activate
191   no neighbor 2001:7D8:8004:FF00::2 activate
192   neighbor 212.23.144.177 activate
193   neighbor 212.23.144.178 activate
194   auto-summary
195  exit-address-family
196  !
197  address-family ipv6
```

NIAMS
Network Infrastructure Analytics & Management System

Status Dashboard für iPad

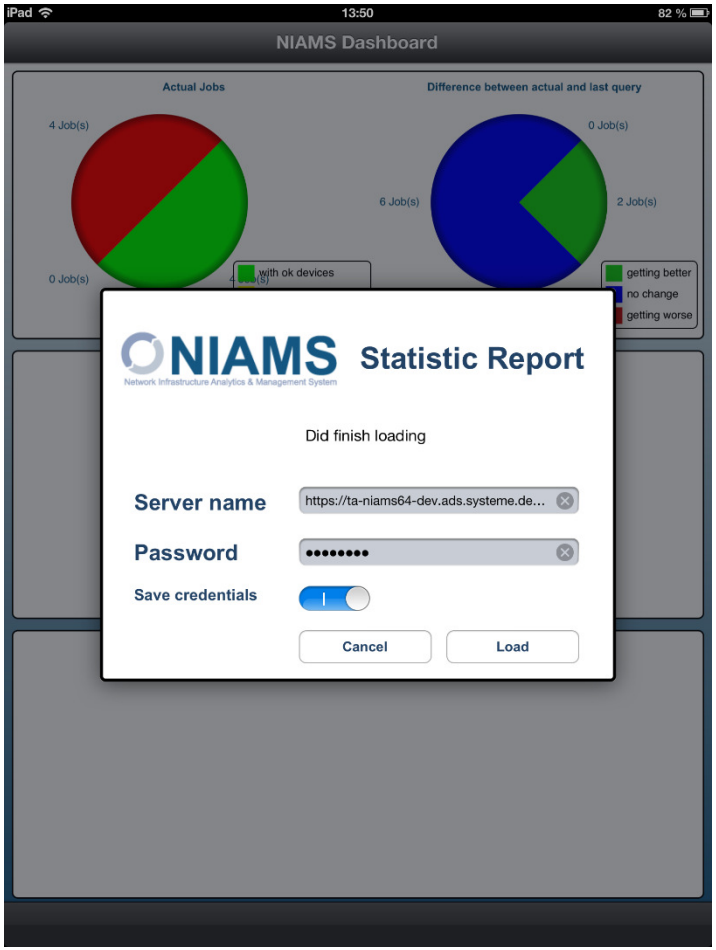
- Ganzheitlicher Überblick mit Drilldown über alle NIAMS-Jobs und deren aktuellem Status, sowie Statusänderungen

Anwendung:

- Monitoring von Projektfortschritten und Entwicklung der Netzwerkqualität

NIAMS
Network Infrastructure Analytics & Management System

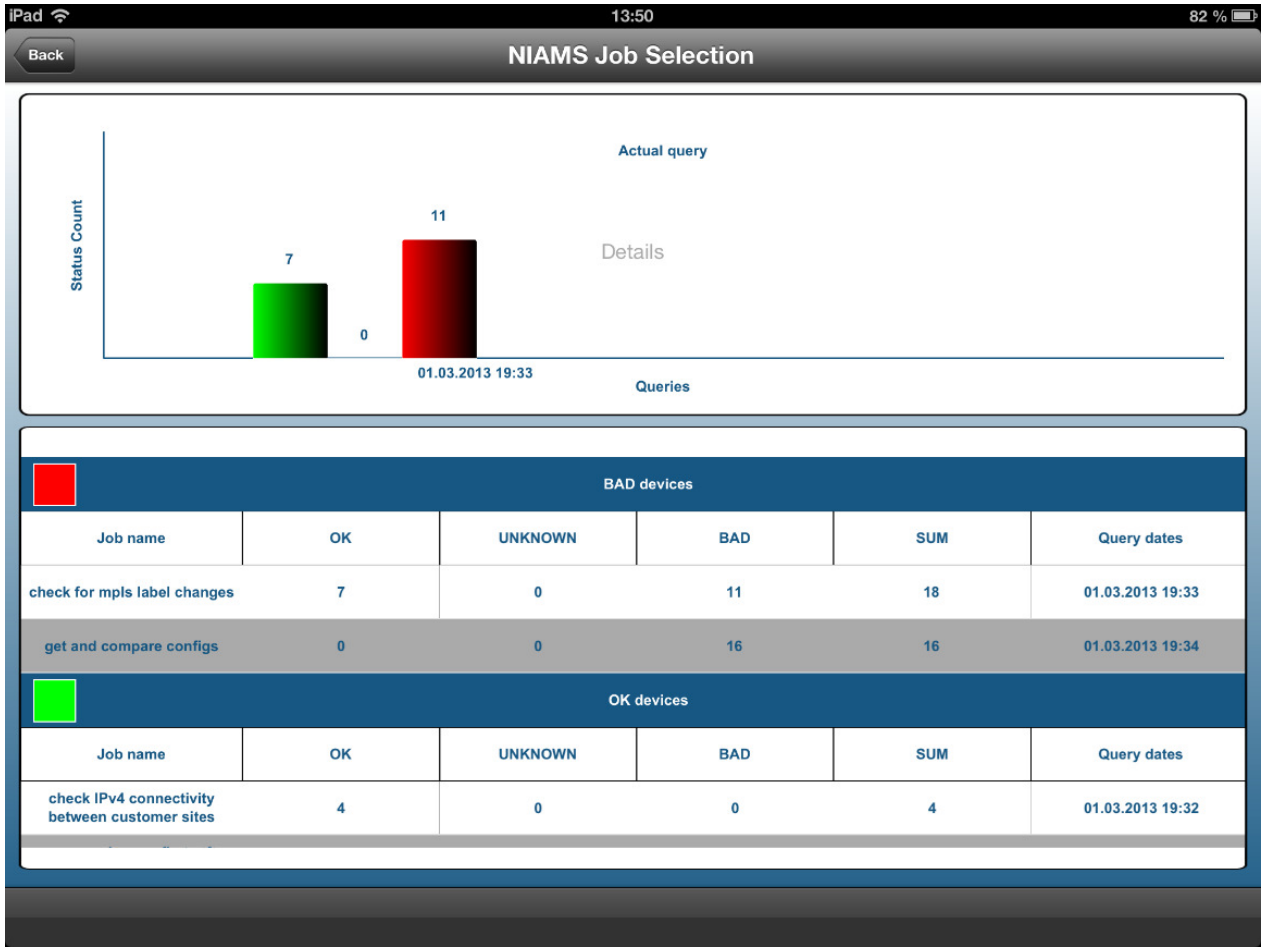
Status Dashboard für iPad



T&A SYSTEME

NIAMS
Network Infrastructure Analytics & Management System

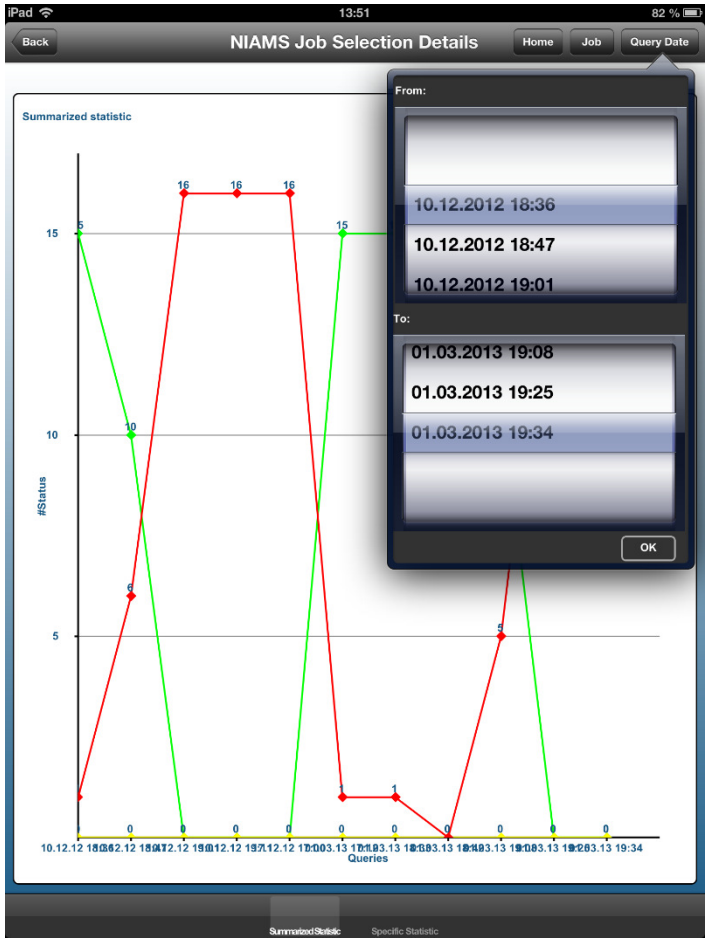
Status Dashboard für iPad



T&A SYSTEME

NIAMS
Network Infrastructure Analytics & Management System

Status Dashboard für iPad



T&A SYSTEME

NIAMS
Network Infrastructure Analytics & Management System

Über NIAMS©

System

- Benutzersprache: Englisch
- Läuft auf allen Windows 64-Bit Systemen
- Benötigt Microsoft SQL Server (ab Express Edition)

Sicherheit

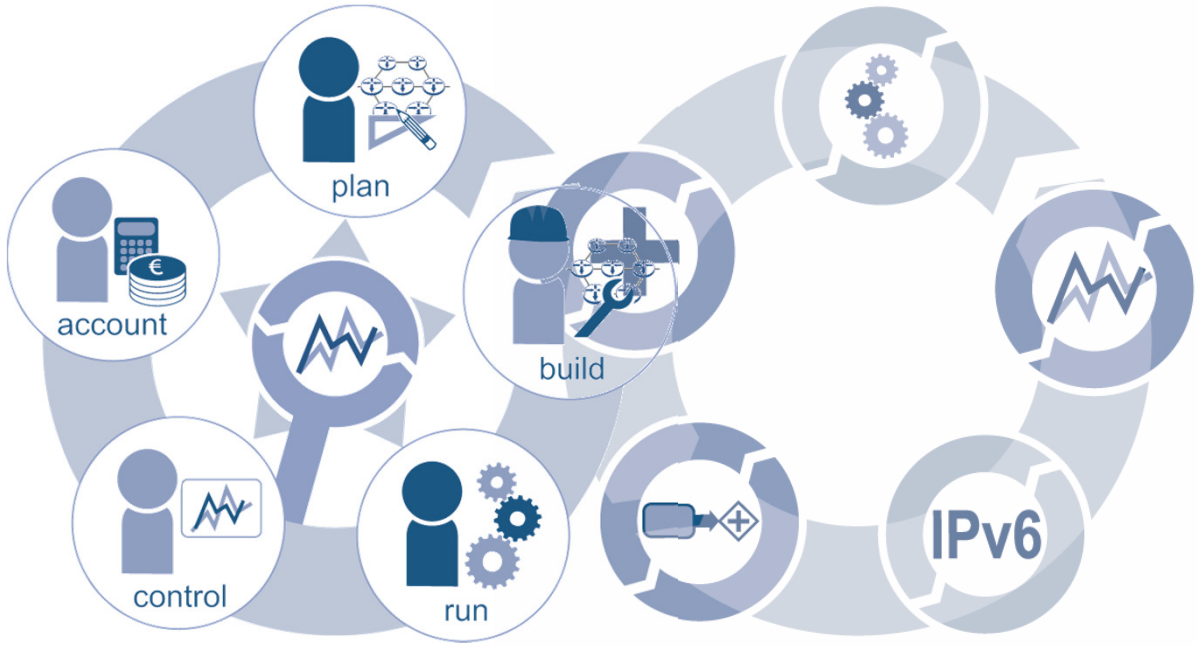
- Granulare Benutzer-/Gruppen Berechtigungen
- 4-Augen Modus (Admin + Auditor)
- Daten mit AES256 und Zugriff per HTTPS verschlüsselt

Kompatibilität und Integration

- Alle Funktionen unterstützen IPv4 und IPv6
- Alle Reports als CSV und im MS Excel Format verfügbar
- Datenaustausch mit Fremdsystemen mittels NIAMS Connectoren (z.B. für CA Spectrum, Men&Mice IPAM)
- Alle Funktionen & Reports direkt per URL erreichbar

NIAMS
Network Infrastructure Analytics & Management System

Mit NIAMS-Software die wichtigsten Informationen über Ihr Netzwerk für alle IT-Bereiche stets aktuell



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Network Infrastructure Analytics & Management System

Vielen Dank für Ihre Aufmerksamkeit!

Mehr Informationen zu NIAMS©, Gutschein für eine Freifahrt durch Ihr Netzwerk, sowie Live-Demo an Stand 3 im Foyer

Besuchen Sie uns an **Stand 3** im Foyer!

Entdecken Sie demnächst auf www.niams.eu:

- Ihre NIAMS-Netzwerkdokumentation
  in einer Testversion: Ab KW 26 (16. Juni) downloaden
  und 60 Tage kostenlos testen
- PDF zu diesem Vortrag